TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 180-39026-1

Job Description: Sparrows Point Trust Offshore Investigat

For:
EA Engineering, Science, and Technology
225 Schilling Circle
Hunt Valley, MD 21031

Attention: Sanita Corum

Approved for release.
Carrie L Gamber
Senior Project Manager
12/11/2014 2:50 PM

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12/11/2014

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CASE NARRATIVE

Client: EA Engineering, Science, and Technology

Project: Sparrows Point Trust Offshore Investigation

Report Number: 180-39026-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 11/18/2014; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.8º C, 3.0º C and 3.7º C.

One out of two amber glass 250 ml unpreserved bottles received broken for sample ST-UNNAMED-111614 (180-39026-2)

Sample ST-018-111614 (180-39026-1) had one unpreserved voa vial received with headspace.

VOLATILES

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

SEMIVOLATILES

Surrogate recovery for the following samples were outside control limits: ST-018-111614 (180-39026-1), ST-DUP1-111614 (180-39026-3). Re-extraction and/or re-analysis was performed outside of holding time with acceptable results; however, the surrogates did not confirm. Both sets of data have been reported.

PCB

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

METALS

Antimony, Lead and Thallium were detected in method blank MB 180-126109/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

GENERAL CHEMISTRY

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

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Instrument ID: CHHP4 Analysis Batch Number: 123648

Lab Sample ID: IC 180-123648/4 Client Sample ID:

Date Analyzed: 11/03/14 12:22 Lab File ID: 4110304.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acrolein	2.37	Poor chromatography	journetp	11/03/14 12:19
Acetone	2.53	Poor chromatography	journetp	11/03/14 15:52
1,4-Dioxane	7.07	Poor chromatography	journetp	11/03/14 12:19

Lab Sample ID: IC 180-123648/5 Client Sample ID:

Date Analyzed: 11/03/14 12:49 Lab File ID: 4110305.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acrolein	2.36	Poor chromatography	journetp	11/03/14 15:54
Allyl chloride	2.83	Poor chromatography	journetp	11/03/14 12:19

Lab Sample ID: IC 180-123648/6 Client Sample ID:

Date Analyzed: 11/03/14 13:15 Lab File ID: 4110306.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorofluoromethane	1.96	Poor chromatography	journetp	11/03/14 14:13

Lab Sample ID: IC 180-123648/12 Client Sample ID:

Date Analyzed: 11/03/14 16:24 Lab File ID: 4110312.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acrolein	2.37	Poor chromatography	journetp	11/03/14 15:55

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Instrument ID: CHHP4 Analysis Batch Number: 125014

Lab Sample ID: IC 180-125014/2 Client Sample ID:

Date Analyzed: 11/13/14 12:52 Lab File ID: 4111302.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	1.66	Poor chromatography	journetp	11/13/14 12:35
Dichlorofluoromethane	1.94	Poor chromatography	journetp	11/13/14 12:35

Lab Sample ID: ICIS 180-125014/5 Client Sample ID:

Date Analyzed: 11/13/14 15:08 Lab File ID: 4111305.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethyl ether	2.23	Poor chromatography	journetp	11/13/14 15:51

Lab Sample ID: IC 180-125014/6 Client Sample ID:

Date Analyzed: 11/13/14 15:34 Lab File ID: 4111306.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethyl ether	2.23	Poor chromatography	journetp	11/13/14 15:52

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Instrument ID: CH731 Analysis Batch Number: 125450

Lab Sample ID: IC 180-125450/3 Client Sample ID:

Date Analyzed: 11/18/14 04:22 Lab File ID: V1118003.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	1.85	Poor chromatography	piccolinov	11/18/14 07:26
N-Nitrosodimethylamine	2.52	Poor chromatography	piccolinov	11/18/14 07:26
Pyridine	2.62	Poor chromatography	piccolinov	11/18/14 07:26
2,4-Dinitrophenol	9.16	Poor chromatography	piccolinov	11/18/14 07:26
Di-n-octyl phthalate	15.29	Poor chromatography	piccolinov	11/18/14 07:26
7,12-Dimethylbenz(a)anthracene	16.15	Poor chromatography	piccolinov	11/18/14 07:26
Benzo[b]fluoranthene	16.17	Poor chromatography	piccolinov	11/18/14 07:26
Benzo[e]pyrene	16.76	Poor chromatography	piccolinov	11/18/14 07:26
Benzo[a]pyrene	16.86	Poor chromatography	piccolinov	11/18/14 07:26
Dibenz(a,h)anthracene	19.24	Poor chromatography	piccolinov	11/18/14 07:26
Benzo[g,h,i]perylene	19.81	Poor chromatography	piccolinov	11/18/14 07:26

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Instrument ID: CH731 Analysis Batch Number: 125450

Lab Sample ID: IC 180-125450/4 Client Sample ID:

Date Analyzed: 11/18/14 04:50 Lab File ID: V1118004.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	1.86	Poor chromatography	piccolino v	11/18/14 07:27
N-Nitrosodimethylamine	2.52	Poor chromatography	piccolino v	11/18/14 07:27
Pyridine	2.59	Poor chromatography	piccolino v	11/18/14 07:27
7,12-Dimethylbenz(a)anthracene	16.15	Poor chromatography	piccolino v	11/18/14 07:27

Lab Sample ID: IC 180-125450/5 Client Sample ID:

Date Analyzed: 11/18/14 05:19 Lab File ID: V1118005.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Pyridine	2.59	Poor chromatography	piccolino v	11/18/14 07:28
Dibenz(a,h)anthracene	19.23	Poor chromatography	piccolino v	11/18/14 07:28

Lab Sample ID: IC 180-125450/10 Client Sample ID:

Date Analyzed: 11/18/14 07:43 Lab File ID: V1118010.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.26	Poor chromatography	piccolino v	11/18/14 08:25

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Instrument ID: CH731 Analysis Batch Number: 126233

Lab Sample ID: CCVIS 180-126233/3 Client Sample ID:

Date Analyzed: 11/24/14 12:00 Lab File ID: V1124003.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.20	Poor chromatography	piccolino v	11/24/14 12:51

Lab Sample ID: LCSD 180-125791/3-A Client Sample ID:

Date Analyzed: 11/24/14 15:53 Lab File ID: V1124010.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.23	Poor chromatography	piccolino v	11/25/14 03:52

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Instrument ID: CH732 Analysis Batch Number: 124766

Lab Sample ID: IC 180-124766/3 Client Sample ID:

Date Analyzed: 11/12/14 10:20 Lab File ID: D1112003.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Pyridine	2.34	Poor chromatography	piccolino v	11/12/14 11:06
Chrysene	14.73	Poor chromatography	piccolino v	11/12/14 11:06
Di-n-octyl phthalate	15.97	Poor chromatography	piccolino v	11/12/14 11:06
Benzo[b]fluoranthene	16.84	Poor chromatography	piccolino v	11/12/14 11:06
Benzo[e]pyrene	17.40	Poor chromatography	piccolino v	11/12/14 11:06
Indeno[1,2,3-cd]pyrene	20.13	Poor chromatography	piccolino v	11/12/14 11:06
Dibenz(a,h)anthracene	20.16	Poor chromatography	piccolino v	11/12/14 11:06

Lab Sample ID: IC 180-124766/4 Client Sample ID:

Date Analyzed: 11/12/14 10:46 Lab File ID: D1112004.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Pyridine	2.32	Poor chromatography	piccolino v	11/12/14 11:38
Benzoic acid	7.25	Poor chromatography	piccolino v	11/12/14 11:38
Dibenz(a,h)anthracene	20.20	Poor chromatography	piccolino v	11/12/14 11:38

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Instrument ID: CH732 Analysis Batch Number: 124766

Lab Sample ID: ICIS 180-124766/6 Client Sample ID:

Date Analyzed: 11/12/14 11:40 Lab File ID: D1112006.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.27	Poor chromatography	piccolino v	11/12/14 12:07

Lab Sample ID: IC 180-124766/10 Client Sample ID:

Date Analyzed: 11/12/14 13:29 Lab File ID: D1112010.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.33	Poor chromatography	piccolino v	11/12/14 13:56
Caprolactam	7.98	Poor chromatography	piccolino v	11/12/14 13:56
Benzo[g,h,i]perylene	20.93	Poor chromatography	piccolino v	11/12/14 13:56

SAMPLE SUMMARY

Client: EA Engineering, Science, and Technology Job Number: 180-39026-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
180-39026-1	ST-018-111614	Water	11/16/2014 1808	11/18/2014 0935
180-39026-2	ST-UNNAMED-111614	Water	11/16/2014 1855	11/18/2014 0935
180-39026-3	ST-DUP1-111614	Water	11/16/2014 0000	11/18/2014 0935
180-39026-4	ST-014-111614	Water	11/16/2014 1915	11/18/2014 0935
180-39026-5	TRIP BLANK	Water	11/16/2014 0000	11/18/2014 0935

EXECUTIVE SUMMARY - Detections

Client: EA Engineering, Science, and Technology Job Number: 180-39026-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
180-39026-1	**ST-018-111614**					
Bis(2-ethylhexyl) phthalate		2.0		1.9	ug/L	8270D LL
Naphthalene		0.16	J	0.19	ug/L	8270D LL
Phenanthrene		0.075	J	0.19	ug/L	8270D LL
HEM (Oil & Grease)		2.0	J	5.2	mg/L	1664B
Cyanide, Total		40		10	ug/L	9014
Total Suspended Solids		3.6		2.0	mg/L	SM 2540D
Total Recoverable						
Arsenic		3.4		1.0	ug/L	6020A
Chromium		3.7		2.0	ug/L	6020A
Lead		0.63	J B	1.0	ug/L	6020A
Selenium		2.3	J	5.0	ug/L	6020A
Thallium		0.058	J B	1.0	ug/L	6020A
Antimony		0.60	J B	2.0	ug/L	6020A
Nickel		0.30	J	1.0	ug/L	6020A
Zinc		1.6	J	5.0	ug/L	6020A
Copper		1.3	J	2.0	ug/L	6020A
180-39026-2	**ST-UNNAMED-111614**					
HEM (Oil & Grease)		2.0	J	5.2	mg/L	1664B
Total Suspended Solids		2.0		2.0	mg/L	SM 2540D
Total Recoverable						
Chromium		0.96	J	2.0	ug/L	6020A
Lead		0.27	J B	1.0	ug/L	6020A
Antimony		0.51	J B	2.0	ug/L	6020A
Nickel		1.5		1.0	ug/L	6020A
Zinc		10		5.0	ug/L	6020A
Copper		1.1	J	2.0	ug/L	6020A
180-39026-3	**ST-DUP1-111614**					
Butyl benzyl phthalate		0.51	J	0.96	ug/L	8270D LL
HEM (Oil & Grease)		2.0	J	5.2	mg/L	1664B
Total Suspended Solids		3.2		2.0	mg/L	SM 2540D
Total Recoverable						
Arsenic		0.67	J	1.0	ug/L	6020A
Chromium		1.0	J	2.0	ug/L	6020A
Lead		0.28	J B	1.0	ug/L	6020A
Selenium		0.45	J	5.0	ug/L	6020A
Antimony		0.33	J B	2.0	ug/L	6020A
Nickel		1.9		1.0	ug/L	6020A
Zinc		14		5.0	ug/L	6020A
Copper		1.1	J	2.0	ug/L	6020A

EXECUTIVE SUMMARY - Detections

Client: EA Engineering, Science, and Technology Job Number: 180-39026-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
180-39026-4	**ST-014-111614**					
Chloroform		1.0	J	5.0	ug/L	8260C
Anthracene		0.050	J	0.19	ug/L	8270D LL
Butyl benzyl phthalate		0.35	J	0.96	ug/L	8270D LL
Fluoranthene		0.11	J	0.19	ug/L	8270D LL
Fluorene		0.14	J	0.19	ug/L	8270D LL
Phenanthrene		0.19		0.19	ug/L	8270D LL
Pyrene		0.078	J	0.19	ug/L	8270D LL
Cyanide, Total		4.3	J	10	ug/L	9014
Total Suspended Solids		2.4		2.0	mg/L	SM 2540D
Total Recoverable						
Chromium		1.2	J	2.0	ug/L	6020A
Lead		0.17	J B	1.0	ug/L	6020A
Antimony		0.42	J B	2.0	ug/L	6020A
Nickel		4.1		1.0	ug/L	6020A
Zinc		10		5.0	ug/L	6020A
Copper		0.69	J	2.0	ug/L	6020A

METHOD SUMMARY

Client: EA Engineering, Science, and Technology Job Number: 180-39026-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds by GC/MS	TAL PIT	SW846 8260C	
Purge and Trap	TAL PIT		SW846 5030C
Semivolatile Organic Compounds by GC/MS - Low Level	TAL PIT	SW846 8270D LL	
Liquid-Liquid Extraction (Continuous)	TAL PIT		SW846 3520C
Polychlorinated Biphenyls (PCBs) (GC)	TAL PIT	SW846 8082A	
Liquid-Liquid Extraction (Separatory Funnel)	TAL PIT		SW846 3510C
Metals (ICP/MS)	TAL PIT	SW846 6020A	
Preparation, Total Recoverable or Dissolved Metals	TAL PIT		SW846 3005A
Mercury (CVAA)	TAL PIT	SW846 7470A	
Preparation, Mercury	TAL PIT		SW846 7470A
HEM and SGT-HEM	TAL PIT	1664B 1664B	
HEM and SGT-HEM (SPE)	TAL PIT		1664B 1664B
Cyanide	TAL PIT	SW846 9014	
Cyanide, Distillation	TAL PIT		SW846 9010C
Solids, Total Suspended (TSS)	TAL PIT	SM SM 2540D	

Lab References:

TAL PIT = TestAmerica Pittsburgh

Method References:

1664B = EPA-821-98-002

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

METHOD / ANALYST SUMMARY

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Method	Analyst	Analyst ID
SW846 8260C	Journet, Patrick	PJJ
SW846 8270D LL	Piccolino, Vincent	VVP
SW846 8082A	Oravec, John	JMO
SW846 6020A	Ferguson, Caitlin N	CNF
SW846 7470A	McGrath, Lauren E	LEM
1664B 1664B	Klingman, Neil A	NAK
SW846 9014	Johnson, Paul	PGJ
SM SM 2540D	Swanson, Jim	JWS

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Client Sample ID: **ST-018-111614**

Lab Sample ID: 180-39026-1
Client Matrix: Water

Date Sampled: 11/16/2014 1808
Date Received: 11/18/2014 0935

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	180-125940	Instrument ID:	CHHP4
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	4112108.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/21/2014 1259			Final Weight/Volume:	5 mL
Prep Date:	11/21/2014 1259				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		1.0	5.0
1,1,2,2-Tetrachloroethane	ND		0.93	5.0
1,1,2-Trichloroethane	ND		1.2	5.0
1,1-Dichloroethane	ND		1.0	5.0
1,1-Dichloroethene	ND		1.1	5.0
1,2-Dichlorobenzene	ND		0.68	5.0
1,2-Dichloroethane	ND		0.96	5.0
1,2-Dichloropropane	ND		1.3	5.0
1,3-Dichlorobenzene	ND		0.51	5.0
1,4-Dichlorobenzene	ND		0.53	5.0
2-Chloroethyl vinyl ether	ND		1.9	10
Acrolein	ND		5.7	100
Acrylonitrile	ND		9.0	50
Benzene	ND		0.99	5.0
Bromoform	ND		1.1	5.0
Bromomethane	ND		1.6	5.0
Carbon tetrachloride	ND		1.1	5.0
Chlorobenzene	ND		0.53	5.0
Chloroform	ND		1.0	5.0
Chloromethane	ND		1.4	5.0
Chlorodibromomethane	ND		0.65	5.0
cis-1,3-Dichloropropene	ND		0.73	5.0
Dichlorobromomethane	ND		0.93	5.0
Ethylbenzene	ND		0.62	5.0
Methylene Chloride	ND		1.1	5.0
Tetrachloroethene	ND		0.82	5.0
Toluene	ND		0.85	5.0
trans-1,2-Dichloroethene	ND		0.75	5.0
trans-1,3-Dichloropropene	ND		0.58	5.0
Trichloroethene	ND		0.80	5.0
Vinyl chloride	ND		1.3	5.0
Chloroethane	ND		0.75	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	84		62 - 123
4-Bromofluorobenzene (Surr)	83		75 - 120
Dibromofluoromethane (Surr)	94		80 - 120
Toluene-d8 (Surr)	101		80 - 120

Client: EA Engineering, Science, and Technology | Job Number: 180-39026-1

Client Sample ID: **ST-UNNAMED-111614**

Lab Sample ID: 180-39026-2 | Date Sampled: 11/16/2014 1855
Client Matrix: Water | Date Received: 11/18/2014 0935

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	180-125940	Instrument ID:	CHHP4
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	4112109.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/21/2014 1326			Final Weight/Volume:	5 mL
Prep Date:	11/21/2014 1326				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		1.0	5.0
1,1,2,2-Tetrachloroethane	ND		0.93	5.0
1,1,2-Trichloroethane	ND		1.2	5.0
1,1-Dichloroethane	ND		1.0	5.0
1,1-Dichloroethene	ND		1.1	5.0
1,2-Dichlorobenzene	ND		0.68	5.0
1,2-Dichloroethane	ND		0.96	5.0
1,2-Dichloropropane	ND		1.3	5.0
1,3-Dichlorobenzene	ND		0.51	5.0
1,4-Dichlorobenzene	ND		0.53	5.0
2-Chloroethyl vinyl ether	ND		1.9	10
Acrolein	ND		5.7	100
Acrylonitrile	ND		9.0	50
Benzene	ND		0.99	5.0
Bromoform	ND		1.1	5.0
Bromomethane	ND		1.6	5.0
Carbon tetrachloride	ND		1.1	5.0
Chlorobenzene	ND		0.53	5.0
Chloroform	ND		1.0	5.0
Chloromethane	ND		1.4	5.0
Chlorodibromomethane	ND		0.65	5.0
cis-1,3-Dichloropropene	ND		0.73	5.0
Dichlorobromomethane	ND		0.93	5.0
Ethylbenzene	ND		0.62	5.0
Methylene Chloride	ND		1.1	5.0
Tetrachloroethene	ND		0.82	5.0
Toluene	ND		0.85	5.0
trans-1,2-Dichloroethene	ND		0.75	5.0
trans-1,3-Dichloropropene	ND		0.58	5.0
Trichloroethene	ND		0.80	5.0
Vinyl chloride	ND		1.3	5.0
Chloroethane	ND		0.75	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	75		62 - 123
4-Bromofluorobenzene (Surr)	76		75 - 120
Dibromofluoromethane (Surr)	84		80 - 120
Toluene-d8 (Surr)	90		80 - 120

Client: EA Engineering, Science, and Technology | Job Number: 180-39026-1

Client Sample ID: **ST-DUP1-111614**

Lab Sample ID: 180-39026-3 | Date Sampled: 11/16/2014 0000
Client Matrix: Water | Date Received: 11/18/2014 0935

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	180-125940	Instrument ID:	CHHP4
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	4112110.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/21/2014 1353			Final Weight/Volume:	5 mL
Prep Date:	11/21/2014 1353				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		1.0	5.0
1,1,2,2-Tetrachloroethane	ND		0.93	5.0
1,1,2-Trichloroethane	ND		1.2	5.0
1,1-Dichloroethane	ND		1.0	5.0
1,1-Dichloroethene	ND		1.1	5.0
1,2-Dichlorobenzene	ND		0.68	5.0
1,2-Dichloroethane	ND		0.96	5.0
1,2-Dichloropropane	ND		1.3	5.0
1,3-Dichlorobenzene	ND		0.51	5.0
1,4-Dichlorobenzene	ND		0.53	5.0
2-Chloroethyl vinyl ether	ND		1.9	10
Acrolein	ND		5.7	100
Acrylonitrile	ND		9.0	50
Benzene	ND		0.99	5.0
Bromoform	ND		1.1	5.0
Bromomethane	ND		1.6	5.0
Carbon tetrachloride	ND		1.1	5.0
Chlorobenzene	ND		0.53	5.0
Chloroform	ND		1.0	5.0
Chloromethane	ND		1.4	5.0
Chlorodibromomethane	ND		0.65	5.0
cis-1,3-Dichloropropene	ND		0.73	5.0
Dichlorobromomethane	ND		0.93	5.0
Ethylbenzene	ND		0.62	5.0
Methylene Chloride	ND		1.1	5.0
Tetrachloroethene	ND		0.82	5.0
Toluene	ND		0.85	5.0
trans-1,2-Dichloroethene	ND		0.75	5.0
trans-1,3-Dichloropropene	ND		0.58	5.0
Trichloroethene	ND		0.80	5.0
Vinyl chloride	ND		1.3	5.0
Chloroethane	ND		0.75	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	77		62 - 123
4-Bromofluorobenzene (Surr)	81		75 - 120
Dibromofluoromethane (Surr)	91		80 - 120
Toluene-d8 (Surr)	99		80 - 120

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Client Sample ID: **ST-014-111614**

Lab Sample ID: 180-39026-4
Client Matrix: Water

Date Sampled: 11/16/2014 1915
Date Received: 11/18/2014 0935

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	180-125940	Instrument ID:	CHHP4
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	4112111.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/21/2014 1419			Final Weight/Volume:	5 mL
Prep Date:	11/21/2014 1419				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		1.0	5.0
1,1,2,2-Tetrachloroethane	ND		0.93	5.0
1,1,2-Trichloroethane	ND		1.2	5.0
1,1-Dichloroethane	ND		1.0	5.0
1,1-Dichloroethene	ND		1.1	5.0
1,2-Dichlorobenzene	ND		0.68	5.0
1,2-Dichloroethane	ND		0.96	5.0
1,2-Dichloropropane	ND		1.3	5.0
1,3-Dichlorobenzene	ND		0.51	5.0
1,4-Dichlorobenzene	ND		0.53	5.0
2-Chloroethyl vinyl ether	ND		1.9	10
Acrolein	ND		5.7	100
Acrylonitrile	ND		9.0	50
Benzene	ND		0.99	5.0
Bromoform	ND		1.1	5.0
Bromomethane	ND		1.6	5.0
Carbon tetrachloride	ND		1.1	5.0
Chlorobenzene	ND		0.53	5.0
Chloroform	1.0	J	1.0	5.0
Chloromethane	ND		1.4	5.0
Chlorodibromomethane	ND		0.65	5.0
cis-1,3-Dichloropropene	ND		0.73	5.0
Dichlorobromomethane	ND		0.93	5.0
Ethylbenzene	ND		0.62	5.0
Methylene Chloride	ND		1.1	5.0
Tetrachloroethene	ND		0.82	5.0
Toluene	ND		0.85	5.0
trans-1,2-Dichloroethene	ND		0.75	5.0
trans-1,3-Dichloropropene	ND		0.58	5.0
Trichloroethene	ND		0.80	5.0
Vinyl chloride	ND		1.3	5.0
Chloroethane	ND		0.75	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	78		62 - 123
4-Bromofluorobenzene (Surr)	78		75 - 120
Dibromofluoromethane (Surr)	87		80 - 120
Toluene-d8 (Surr)	97		80 - 120

Client: EA Engineering, Science, and Technology | Job Number: 180-39026-1

Client Sample ID: **TRIP BLANK**

Lab Sample ID: 180-39026-5 | Date Sampled: 11/16/2014 0000
Client Matrix: Water | Date Received: 11/18/2014 0935

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	180-125940	Instrument ID:	CHHP4
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	4112107.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	11/21/2014 1232			Final Weight/Volume:	5 mL
Prep Date:	11/21/2014 1232				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		1.0	5.0
1,1,2,2-Tetrachloroethane	ND		0.93	5.0
1,1,2-Trichloroethane	ND		1.2	5.0
1,1-Dichloroethane	ND		1.0	5.0
1,1-Dichloroethene	ND		1.1	5.0
1,2-Dichlorobenzene	ND		0.68	5.0
1,2-Dichloroethane	ND		0.96	5.0
1,2-Dichloropropane	ND		1.3	5.0
1,3-Dichlorobenzene	ND		0.51	5.0
1,4-Dichlorobenzene	ND		0.53	5.0
2-Chloroethyl vinyl ether	ND		1.9	10
Acrolein	ND		5.7	100
Acrylonitrile	ND		9.0	50
Benzene	ND		0.99	5.0
Bromoform	ND		1.1	5.0
Bromomethane	ND		1.6	5.0
Carbon tetrachloride	ND		1.1	5.0
Chlorobenzene	ND		0.53	5.0
Chloroform	ND		1.0	5.0
Chloromethane	ND		1.4	5.0
Chlorodibromomethane	ND		0.65	5.0
cis-1,3-Dichloropropene	ND		0.73	5.0
Dichlorobromomethane	ND		0.93	5.0
Ethylbenzene	ND		0.62	5.0
Methylene Chloride	ND		1.1	5.0
Tetrachloroethene	ND		0.82	5.0
Toluene	ND		0.85	5.0
trans-1,2-Dichloroethene	ND		0.75	5.0
trans-1,3-Dichloropropene	ND		0.58	5.0
Trichloroethene	ND		0.80	5.0
Vinyl chloride	ND		1.3	5.0
Chloroethane	ND		0.75	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	73		62 - 123
4-Bromofluorobenzene (Surr)	75		75 - 120
Dibromofluoromethane (Surr)	80		80 - 120
Toluene-d8 (Surr)	92		80 - 120

Client: EA Engineering, Science, and Technology | Job Number: 180-39026-1

Client Sample ID: **ST-018-111614**

Lab Sample ID: 180-39026-1 | Date Sampled: 11/16/2014 1808
Client Matrix: Water | Date Received: 11/18/2014 0935

8270D LL Semivolatile Organic Compounds by GC/MS - Low Level

Analysis Method:	8270D LL	Analysis Batch:	180-126233	Instrument ID:	CH731
Prep Method:	3520C	Prep Batch:	180-125791	Lab File ID:	V1124016.D
Dilution:	1.0			Initial Weight/Volume:	260 mL
Analysis Date:	11/24/2014 1840			Final Weight/Volume:	0.25 mL
Prep Date:	11/20/2014 0907			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.028	0.19
Acenaphthylene	ND		0.021	0.19
Anthracene	ND		0.018	0.19
Benzidine	ND		4.6	19
Benzo[a]anthracene	ND		0.035	0.19
Benzo[b]fluoranthene	ND		0.047	0.19
Benzo[k]fluoranthene	ND		0.029	0.19
Benzoic acid	ND		1.6	4.8
Benzo[g,h,i]perylene	ND		0.028	0.19
Benzo[a]pyrene	ND		0.027	0.19
Bis(2-chloroethoxy)methane	ND		0.13	0.96
Bis(2-chloroethyl)ether	ND		0.030	0.96
Bis(2-ethylhexyl) phthalate	2.0		0.42	1.9
2,2'-oxybis[1-chloropropane]	ND		0.023	0.96
4-Bromophenyl phenyl ether	ND		0.11	0.96
4-Chlorophenyl phenyl ether	ND		0.077	0.96
2-Chloronaphthalene	ND		0.030	0.19
Butyl benzyl phthalate	ND		0.21	0.96
Chrysene	ND		0.030	0.19
Dibenz(a,h)anthracene	ND		0.026	0.19
Di-n-butyl phthalate	ND		0.23	0.96
Di-n-octyl phthalate	ND		0.20	0.96
Diethyl phthalate	ND		0.29	0.96
Dimethyl phthalate	ND		0.18	0.96
3,3'-Dichlorobenzidine	ND		0.14	0.96
2,4-Dinitrotoluene	ND		0.21	0.96
2,6-Dinitrotoluene	ND		0.13	0.96
2-Chlorophenol	ND		0.22	0.96
2,4-Dichlorophenol	ND		0.065	0.96
2,4-Dimethylphenol	ND		0.16	0.96
2,4-Dinitrophenol	ND		2.4	4.8
2-Nitrophenol	ND		0.11	0.96
2,4,6-Trichlorophenol	ND		0.29	0.96
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.11	0.96
1,2,4-Trichlorobenzene	ND		0.082	0.96
4-Chloro-3-methylphenol	ND		0.16	0.96
4-Nitrophenol	ND		0.77	4.8
4,6-Dinitro-2-methylphenol	ND		1.5	4.8
Fluoranthene	ND		0.020	0.19
Fluorene	ND		0.023	0.19
Hexachlorobenzene	ND		0.059	0.96
Hexachlorobutadiene	ND		0.090	0.96
Hexachlorocyclopentadiene	ND		0.13	0.96
Hexachloroethane	ND		0.13	0.96
Indeno[1,2,3-cd]pyrene	ND		0.042	0.19
Isophorone	ND		0.071	0.96

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Client Sample ID: **ST-018-111614**

Lab Sample ID: 180-39026-1
Client Matrix: Water

Date Sampled: 11/16/2014 1808
Date Received: 11/18/2014 0935

8270D LL Semivolatile Organic Compounds by GC/MS - Low Level

Analysis Method:	8270D LL	Analysis Batch:	180-126233	Instrument ID:	CH731
Prep Method:	3520C	Prep Batch:	180-125791	Lab File ID:	V1124016.D
Dilution:	1.0			Initial Weight/Volume:	260 mL
Analysis Date:	11/24/2014 1840			Final Weight/Volume:	0.25 mL
Prep Date:	11/20/2014 0907			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	0.16	J	0.022	0.19
Nitrobenzene	ND		0.14	1.9
N-Nitrosodi-n-propylamine	ND		0.048	0.96
N-Nitrosodimethylamine	ND		0.11	0.96
N-Nitrosodiphenylamine	ND		0.12	0.96
Phenanthrene	0.075	J	0.040	0.19
Pyrene	ND		0.022	0.19
Pentachlorophenol	ND		0.48	0.96
Phenol	ND		0.053	0.96

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	25	X	30 - 150
2-Fluorobiphenyl	56		30 - 150
2-Fluorophenol (Surr)	3	X	30 - 150
Nitrobenzene-d5 (Surr)	54		30 - 150
Phenol-d5 (Surr)	12	X	30 - 150
Terphenyl-d14 (Surr)	66		10 - 150

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Client Sample ID: **ST-018-111614**

Lab Sample ID: 180-39026-1
Client Matrix: Water

Date Sampled: 11/16/2014 1808
Date Received: 11/18/2014 0935

8270D LL Semivolatile Organic Compounds by GC/MS - Low Level

Analysis Method:	8270D LL	Analysis Batch:	180-126682	Instrument ID:	CH732
Prep Method:	3520C	Prep Batch:	180-126402	Lab File ID:	D1128022.D
Dilution:	1.0			Initial Weight/Volume:	260 mL
Analysis Date:	11/28/2014 2145	Run Type:	RE	Final Weight/Volume:	0.25 mL
Prep Date:	11/25/2014 0959			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	0.029	J H	0.028	0.19
Acenaphthylene	ND	H	0.021	0.19
Anthracene	0.024	J H	0.018	0.19
Benzidine	ND	H	4.6	19
Benzo[a]anthracene	ND	H	0.035	0.19
Benzo[b]fluoranthene	ND	H	0.047	0.19
Benzo[k]fluoranthene	ND	H	0.029	0.19
Benzoic acid	ND	H	1.6	4.8
Benzo[g,h,i]perylene	ND	H	0.028	0.19
Benzo[a]pyrene	ND	H	0.027	0.19
Bis(2-chloroethoxy)methane	ND	H	0.13	0.96
Bis(2-chloroethyl)ether	ND	H	0.030	0.96
Bis(2-ethylhexyl) phthalate	1.5	J H	0.42	1.9
2,2'-oxybis[1-chloropropane]	ND	H	0.023	0.96
4-Bromophenyl phenyl ether	ND	H	0.11	0.96
4-Chlorophenyl phenyl ether	ND	H	0.077	0.96
2-Chloronaphthalene	ND	H	0.030	0.19
Butyl benzyl phthalate	0.41	J H	0.21	0.96
Chrysene	ND	H	0.030	0.19
Dibenz(a,h)anthracene	ND	H	0.026	0.19
Di-n-butyl phthalate	ND	H	0.23	0.96
Di-n-octyl phthalate	ND	H	0.20	0.96
Diethyl phthalate	ND	H	0.29	0.96
Dimethyl phthalate	ND	H	0.18	0.96
3,3'-Dichlorobenzidine	ND	H	0.14	0.96
2,4-Dinitrotoluene	ND	H	0.21	0.96
2,6-Dinitrotoluene	ND	H	0.13	0.96
2-Chlorophenol	ND	H	0.22	0.96
2,4-Dichlorophenol	ND	H	0.065	0.96
2,4-Dimethylphenol	ND	H	0.16	0.96
2,4-Dinitrophenol	ND	H	2.4	4.8
2-Nitrophenol	ND	H	0.11	0.96
2,4,6-Trichlorophenol	ND	H	0.29	0.96
1,2-Diphenylhydrazine(as Azobenzene)	ND	H	0.11	0.96
1,2,4-Trichlorobenzene	ND	H	0.082	0.96
4-Chloro-3-methylphenol	ND	H	0.16	0.96
4-Nitrophenol	ND	H	0.77	4.8
4,6-Dinitro-2-methylphenol	ND	H	1.5	4.8
Fluoranthene	0.028	J H	0.020	0.19
Fluorene	0.025	J H	0.023	0.19
Hexachlorobenzene	ND	H	0.059	0.96
Hexachlorobutadiene	ND	H	0.090	0.96
Hexachlorocyclopentadiene	ND	H	0.13	0.96
Hexachloroethane	ND	H	0.13	0.96
Indeno[1,2,3-cd]pyrene	ND	H	0.042	0.19
Isophorone	ND	H	0.071	0.96

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Client Sample ID: **ST-018-111614**

Lab Sample ID: 180-39026-1
Client Matrix: Water

Date Sampled: 11/16/2014 1808
Date Received: 11/18/2014 0935

8270D LL Semivolatile Organic Compounds by GC/MS - Low Level

Analysis Method:	8270D LL	Analysis Batch:	180-126682	Instrument ID:	CH732
Prep Method:	3520C	Prep Batch:	180-126402	Lab File ID:	D1128022.D
Dilution:	1.0			Initial Weight/Volume:	260 mL
Analysis Date:	11/28/2014 2145	Run Type:	RE	Final Weight/Volume:	0.25 mL
Prep Date:	11/25/2014 0959			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	0.050	J H	0.022	0.19
Nitrobenzene	ND	H	0.14	1.9
N-Nitrosodi-n-propylamine	ND	H	0.048	0.96
N-Nitrosodimethylamine	ND	H	0.11	0.96
N-Nitrosodiphenylamine	ND	H	0.12	0.96
Phenanthrene	0.061	J H	0.040	0.19
Pyrene	ND	H	0.022	0.19
Pentachlorophenol	ND	H	0.48	0.96
Phenol	0.14	J H	0.053	0.96

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	59		30 - 150
2-Fluorobiphenyl	67		30 - 150
2-Fluorophenol (Surr)	38		30 - 150
Nitrobenzene-d5 (Surr)	66		30 - 150
Phenol-d5 (Surr)	53		30 - 150
Terphenyl-d14 (Surr)	71		10 - 150

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Client Sample ID: **ST-UNNAMED-111614**

Lab Sample ID: 180-39026-2
Client Matrix: Water

Date Sampled: 11/16/2014 1855
Date Received: 11/18/2014 0935

8270D LL Semivolatile Organic Compounds by GC/MS - Low Level

Analysis Method:	8270D LL	Analysis Batch:	180-126233	Instrument ID:	CH731
Prep Method:	3520C	Prep Batch:	180-125791	Lab File ID:	V1124017.D
Dilution:	1.0			Initial Weight/Volume:	260 mL
Analysis Date:	11/24/2014 1908			Final Weight/Volume:	0.25 mL
Prep Date:	11/20/2014 0907			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.028	0.19
Acenaphthylene	ND		0.021	0.19
Anthracene	ND		0.018	0.19
Benzidine	ND		4.6	19
Benzo[a]anthracene	ND		0.035	0.19
Benzo[b]fluoranthene	ND		0.047	0.19
Benzo[k]fluoranthene	ND		0.029	0.19
Benzoic acid	ND		1.6	4.8
Benzo[g,h,i]perylene	ND		0.028	0.19
Benzo[a]pyrene	ND		0.027	0.19
Bis(2-chloroethoxy)methane	ND		0.13	0.96
Bis(2-chloroethyl)ether	ND		0.030	0.96
Bis(2-ethylhexyl) phthalate	ND		0.42	1.9
2,2'-oxybis[1-chloropropane]	ND		0.023	0.96
4-Bromophenyl phenyl ether	ND		0.11	0.96
4-Chlorophenyl phenyl ether	ND		0.077	0.96
2-Chloronaphthalene	ND		0.030	0.19
Butyl benzyl phthalate	ND		0.21	0.96
Chrysene	ND		0.030	0.19
Dibenz(a,h)anthracene	ND		0.026	0.19
Di-n-butyl phthalate	ND		0.23	0.96
Di-n-octyl phthalate	ND		0.20	0.96
Diethyl phthalate	ND		0.29	0.96
Dimethyl phthalate	ND		0.18	0.96
3,3'-Dichlorobenzidine	ND		0.14	0.96
2,4-Dinitrotoluene	ND		0.21	0.96
2,6-Dinitrotoluene	ND		0.13	0.96
2-Chlorophenol	ND		0.22	0.96
2,4-Dichlorophenol	ND		0.065	0.96
2,4-Dimethylphenol	ND		0.16	0.96
2,4-Dinitrophenol	ND		2.4	4.8
2-Nitrophenol	ND		0.11	0.96
2,4,6-Trichlorophenol	ND		0.29	0.96
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.11	0.96
1,2,4-Trichlorobenzene	ND		0.082	0.96
4-Chloro-3-methylphenol	ND		0.16	0.96
4-Nitrophenol	ND		0.77	4.8
4,6-Dinitro-2-methylphenol	ND		1.5	4.8
Fluoranthene	ND		0.020	0.19
Fluorene	ND		0.023	0.19
Hexachlorobenzene	ND		0.059	0.96
Hexachlorobutadiene	ND		0.090	0.96
Hexachlorocyclopentadiene	ND		0.13	0.96
Hexachloroethane	ND		0.13	0.96
Indeno[1,2,3-cd]pyrene	ND		0.042	0.19
Isophorone	ND		0.071	0.96

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Client Sample ID: **ST-UNNAMED-111614**

Lab Sample ID: 180-39026-2
Client Matrix: Water

Date Sampled: 11/16/2014 1855
Date Received: 11/18/2014 0935

8270D LL Semivolatile Organic Compounds by GC/MS - Low Level

Analysis Method:	8270D LL	Analysis Batch:	180-126233	Instrument ID:	CH731
Prep Method:	3520C	Prep Batch:	180-125791	Lab File ID:	V1124017.D
Dilution:	1.0			Initial Weight/Volume:	260 mL
Analysis Date:	11/24/2014 1908			Final Weight/Volume:	0.25 mL
Prep Date:	11/20/2014 0907			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	ND		0.022	0.19
Nitrobenzene	ND		0.14	1.9
N-Nitrosodi-n-propylamine	ND		0.048	0.96
N-Nitrosodimethylamine	ND		0.11	0.96
N-Nitrosodiphenylamine	ND		0.12	0.96
Phenanthrene	ND		0.040	0.19
Pyrene	ND		0.022	0.19
Pentachlorophenol	ND		0.48	0.96
Phenol	ND		0.053	0.96

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	73		30 - 150
2-Fluorobiphenyl	65		30 - 150
2-Fluorophenol (Surr)	47		30 - 150
Nitrobenzene-d5 (Surr)	58		30 - 150
Phenol-d5 (Surr)	58		30 - 150
Terphenyl-d14 (Surr)	56		10 - 150

Client: EA Engineering, Science, and Technology | Job Number: 180-39026-1

Client Sample ID: **ST-DUP1-111614**

Lab Sample ID: 180-39026-3 | Date Sampled: 11/16/2014 0000
Client Matrix: Water | Date Received: 11/18/2014 0935

8270D LL Semivolatile Organic Compounds by GC/MS - Low Level

Analysis Method:	8270D LL	Analysis Batch:	180-126233	Instrument ID:	CH731
Prep Method:	3520C	Prep Batch:	180-125791	Lab File ID:	V1124018.D
Dilution:	1.0			Initial Weight/Volume:	260 mL
Analysis Date:	11/24/2014 1935			Final Weight/Volume:	0.25 mL
Prep Date:	11/20/2014 0907			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.028	0.19
Acenaphthylene	ND		0.021	0.19
Anthracene	ND		0.018	0.19
Benzidine	ND		4.6	19
Benzo[a]anthracene	ND		0.035	0.19
Benzo[b]fluoranthene	ND		0.047	0.19
Benzo[k]fluoranthene	ND		0.029	0.19
Benzoic acid	ND		1.6	4.8
Benzo[g,h,i]perylene	ND		0.028	0.19
Benzo[a]pyrene	ND		0.027	0.19
Bis(2-chloroethoxy)methane	ND		0.13	0.96
Bis(2-chloroethyl)ether	ND		0.030	0.96
Bis(2-ethylhexyl) phthalate	ND		0.42	1.9
2,2'-oxybis[1-chloropropane]	ND		0.023	0.96
4-Bromophenyl phenyl ether	ND		0.11	0.96
4-Chlorophenyl phenyl ether	ND		0.077	0.96
2-Chloronaphthalene	ND		0.030	0.19
Butyl benzyl phthalate	0.51	J	0.21	0.96
Chrysene	ND		0.030	0.19
Dibenz(a,h)anthracene	ND		0.026	0.19
Di-n-butyl phthalate	ND		0.23	0.96
Di-n-octyl phthalate	ND		0.20	0.96
Diethyl phthalate	ND		0.29	0.96
Dimethyl phthalate	ND		0.18	0.96
3,3'-Dichlorobenzidine	ND		0.14	0.96
2,4-Dinitrotoluene	ND		0.21	0.96
2,6-Dinitrotoluene	ND		0.13	0.96
2-Chlorophenol	ND		0.22	0.96
2,4-Dichlorophenol	ND		0.065	0.96
2,4-Dimethylphenol	ND		0.16	0.96
2,4-Dinitrophenol	ND		2.4	4.8
2-Nitrophenol	ND		0.11	0.96
2,4,6-Trichlorophenol	ND		0.29	0.96
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.11	0.96
1,2,4-Trichlorobenzene	ND		0.082	0.96
4-Chloro-3-methylphenol	ND		0.16	0.96
4-Nitrophenol	ND		0.77	4.8
4,6-Dinitro-2-methylphenol	ND		1.5	4.8
Fluoranthene	ND		0.020	0.19
Fluorene	ND		0.023	0.19
Hexachlorobenzene	ND		0.059	0.96
Hexachlorobutadiene	ND		0.090	0.96
Hexachlorocyclopentadiene	ND		0.13	0.96
Hexachloroethane	ND		0.13	0.96
Indeno[1,2,3-cd]pyrene	ND		0.042	0.19
Isophorone	ND		0.071	0.96

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Client Sample ID: **ST-DUP1-111614**

Lab Sample ID: 180-39026-3
Client Matrix: Water

Date Sampled: 11/16/2014 0000
Date Received: 11/18/2014 0935

8270D LL Semivolatile Organic Compounds by GC/MS - Low Level

Analysis Method:	8270D LL	Analysis Batch:	180-126233	Instrument ID:	CH731
Prep Method:	3520C	Prep Batch:	180-125791	Lab File ID:	V1124018.D
Dilution:	1.0			Initial Weight/Volume:	260 mL
Analysis Date:	11/24/2014 1935			Final Weight/Volume:	0.25 mL
Prep Date:	11/20/2014 0907			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	ND		0.022	0.19
Nitrobenzene	ND		0.14	1.9
N-Nitrosodi-n-propylamine	ND		0.048	0.96
N-Nitrosodimethylamine	ND		0.11	0.96
N-Nitrosodiphenylamine	ND		0.12	0.96
Phenanthrene	ND		0.040	0.19
Pyrene	ND		0.022	0.19
Pentachlorophenol	ND		0.48	0.96
Phenol	ND		0.053	0.96

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	62		30 - 150
2-Fluorobiphenyl	76		30 - 150
2-Fluorophenol (Surr)	26	X	30 - 150
Nitrobenzene-d5 (Surr)	70		30 - 150
Phenol-d5 (Surr)	44		30 - 150
Terphenyl-d14 (Surr)	74		10 - 150

Client: EA Engineering, Science, and Technology | Job Number: 180-39026-1

Client Sample ID: **ST-DUP1-111614**

Lab Sample ID: 180-39026-3 | Date Sampled: 11/16/2014 0000
Client Matrix: Water | Date Received: 11/18/2014 0935

8270D LL Semivolatile Organic Compounds by GC/MS - Low Level

Analysis Method:	8270D LL	Analysis Batch:	180-126682	Instrument ID:	CH732
Prep Method:	3520C	Prep Batch:	180-126402	Lab File ID:	D1128023.D
Dilution:	1.0			Initial Weight/Volume:	260 mL
Analysis Date:	11/28/2014 2211	Run Type:	RE	Final Weight/Volume:	0.25 mL
Prep Date:	11/25/2014 0959			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND	H	0.028	0.19
Acenaphthylene	ND	H	0.021	0.19
Anthracene	0.019	J H	0.018	0.19
Benzidine	ND	H	4.6	19
Benzo[a]anthracene	ND	H	0.035	0.19
Benzo[b]fluoranthene	ND	H	0.047	0.19
Benzo[k]fluoranthene	ND	H	0.029	0.19
Benzoic acid	ND	H	1.6	4.8
Benzo[g,h,i]perylene	ND	H	0.028	0.19
Benzo[a]pyrene	ND	H	0.027	0.19
Bis(2-chloroethoxy)methane	ND	H	0.13	0.96
Bis(2-chloroethyl)ether	ND	H	0.030	0.96
Bis(2-ethylhexyl) phthalate	0.42	J H	0.42	1.9
2,2'-oxybis[1-chloropropane]	ND	H	0.023	0.96
4-Bromophenyl phenyl ether	ND	H	0.11	0.96
4-Chlorophenyl phenyl ether	ND	H	0.077	0.96
2-Chloronaphthalene	ND	H	0.030	0.19
Butyl benzyl phthalate	0.47	J H	0.21	0.96
Chrysene	ND	H	0.030	0.19
Dibenz(a,h)anthracene	ND	H	0.026	0.19
Di-n-butyl phthalate	ND	H	0.23	0.96
Di-n-octyl phthalate	ND	H	0.20	0.96
Diethyl phthalate	0.53	J H	0.29	0.96
Dimethyl phthalate	ND	H	0.18	0.96
3,3'-Dichlorobenzidine	ND	H	0.14	0.96
2,4-Dinitrotoluene	ND	H	0.21	0.96
2,6-Dinitrotoluene	ND	H	0.13	0.96
2-Chlorophenol	ND	H	0.22	0.96
2,4-Dichlorophenol	ND	H	0.065	0.96
2,4-Dimethylphenol	ND	H	0.16	0.96
2,4-Dinitrophenol	ND	H	2.4	4.8
2-Nitrophenol	ND	H	0.11	0.96
2,4,6-Trichlorophenol	ND	H	0.29	0.96
1,2-Diphenylhydrazine(as Azobenzene)	ND	H	0.11	0.96
1,2,4-Trichlorobenzene	ND	H	0.082	0.96
4-Chloro-3-methylphenol	ND	H	0.16	0.96
4-Nitrophenol	ND	H	0.77	4.8
4,6-Dinitro-2-methylphenol	ND	H	1.5	4.8
Fluoranthene	ND	H	0.020	0.19
Fluorene	ND	H	0.023	0.19
Hexachlorobenzene	ND	H	0.059	0.96
Hexachlorobutadiene	ND	H	0.090	0.96
Hexachlorocyclopentadiene	ND	H	0.13	0.96
Hexachloroethane	ND	H	0.13	0.96
Indeno[1,2,3-cd]pyrene	ND	H	0.042	0.19
Isophorone	ND	H	0.071	0.96

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Client Sample ID: **ST-DUP1-111614**

Lab Sample ID: 180-39026-3
Client Matrix: Water

Date Sampled: 11/16/2014 0000
Date Received: 11/18/2014 0935

8270D LL Semivolatile Organic Compounds by GC/MS - Low Level

Analysis Method:	8270D LL	Analysis Batch:	180-126682	Instrument ID:	CH732
Prep Method:	3520C	Prep Batch:	180-126402	Lab File ID:	D1128023.D
Dilution:	1.0			Initial Weight/Volume:	260 mL
Analysis Date:	11/28/2014 2211	Run Type:	RE	Final Weight/Volume:	0.25 mL
Prep Date:	11/25/2014 0959			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	ND	H	0.022	0.19
Nitrobenzene	ND	H	0.14	1.9
N-Nitrosodi-n-propylamine	ND	H	0.048	0.96
N-Nitrosodimethylamine	ND	H	0.11	0.96
N-Nitrosodiphenylamine	ND	H	0.12	0.96
Phenanthrene	ND	H	0.040	0.19
Pyrene	ND	H	0.022	0.19
Pentachlorophenol	ND	H	0.48	0.96
Phenol	ND	H	0.053	0.96

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	71		30 - 150
2-Fluorobiphenyl	68		30 - 150
2-Fluorophenol (Surr)	34		30 - 150
Nitrobenzene-d5 (Surr)	63		30 - 150
Phenol-d5 (Surr)	54		30 - 150
Terphenyl-d14 (Surr)	76		10 - 150

Client: EA Engineering, Science, and Technology | Job Number: 180-39026-1

Client Sample ID: **ST-014-111614**

Lab Sample ID: 180-39026-4 | Date Sampled: 11/16/2014 1915
Client Matrix: Water | Date Received: 11/18/2014 0935

8270D LL Semivolatile Organic Compounds by GC/MS - Low Level

Analysis Method:	8270D LL	Analysis Batch:	180-126233	Instrument ID:	CH731
Prep Method:	3520C	Prep Batch:	180-125791	Lab File ID:	V1124019.D
Dilution:	1.0			Initial Weight/Volume:	260 mL
Analysis Date:	11/24/2014 2002			Final Weight/Volume:	0.25 mL
Prep Date:	11/20/2014 0907			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.028	0.19
Acenaphthylene	ND		0.021	0.19
Anthracene	0.050	J	0.018	0.19
Benzidine	ND		4.6	19
Benzo[a]anthracene	ND		0.035	0.19
Benzo[b]fluoranthene	ND		0.047	0.19
Benzo[k]fluoranthene	ND		0.029	0.19
Benzoic acid	ND		1.6	4.8
Benzo[g,h,i]perylene	ND		0.028	0.19
Benzo[a]pyrene	ND		0.027	0.19
Bis(2-chloroethoxy)methane	ND		0.13	0.96
Bis(2-chloroethyl)ether	ND		0.030	0.96
Bis(2-ethylhexyl) phthalate	ND		0.42	1.9
2,2'-oxybis[1-chloropropane]	ND		0.023	0.96
4-Bromophenyl phenyl ether	ND		0.11	0.96
4-Chlorophenyl phenyl ether	ND		0.077	0.96
2-Chloronaphthalene	ND		0.030	0.19
Butyl benzyl phthalate	0.35	J	0.21	0.96
Chrysene	ND		0.030	0.19
Dibenz(a,h)anthracene	ND		0.026	0.19
Di-n-butyl phthalate	ND		0.23	0.96
Di-n-octyl phthalate	ND		0.20	0.96
Diethyl phthalate	ND		0.29	0.96
Dimethyl phthalate	ND		0.18	0.96
3,3'-Dichlorobenzidine	ND		0.14	0.96
2,4-Dinitrotoluene	ND		0.21	0.96
2,6-Dinitrotoluene	ND		0.13	0.96
2-Chlorophenol	ND		0.22	0.96
2,4-Dichlorophenol	ND		0.065	0.96
2,4-Dimethylphenol	ND		0.16	0.96
2,4-Dinitrophenol	ND		2.4	4.8
2-Nitrophenol	ND		0.11	0.96
2,4,6-Trichlorophenol	ND		0.29	0.96
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.11	0.96
1,2,4-Trichlorobenzene	ND		0.082	0.96
4-Chloro-3-methylphenol	ND		0.16	0.96
4-Nitrophenol	ND		0.77	4.8
4,6-Dinitro-2-methylphenol	ND		1.5	4.8
Fluoranthene	0.11	J	0.020	0.19
Fluorene	0.14	J	0.023	0.19
Hexachlorobenzene	ND		0.059	0.96
Hexachlorobutadiene	ND		0.090	0.96
Hexachlorocyclopentadiene	ND		0.13	0.96
Hexachloroethane	ND		0.13	0.96
Indeno[1,2,3-cd]pyrene	ND		0.042	0.19
Isophorone	ND		0.071	0.96

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Client Sample ID: **ST-014-111614**

Lab Sample ID: 180-39026-4
Client Matrix: Water

Date Sampled: 11/16/2014 1915
Date Received: 11/18/2014 0935

8270D LL Semivolatile Organic Compounds by GC/MS - Low Level

Analysis Method:	8270D LL	Analysis Batch:	180-126233	Instrument ID:	CH731
Prep Method:	3520C	Prep Batch:	180-125791	Lab File ID:	V1124019.D
Dilution:	1.0			Initial Weight/Volume:	260 mL
Analysis Date:	11/24/2014 2002			Final Weight/Volume:	0.25 mL
Prep Date:	11/20/2014 0907			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	ND		0.022	0.19
Nitrobenzene	ND		0.14	1.9
N-Nitrosodi-n-propylamine	ND		0.048	0.96
N-Nitrosodimethylamine	ND		0.11	0.96
N-Nitrosodiphenylamine	ND		0.12	0.96
Phenanthrene	0.19		0.040	0.19
Pyrene	0.078	J	0.022	0.19
Pentachlorophenol	ND		0.48	0.96
Phenol	ND		0.053	0.96

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	66		30 - 150
2-Fluorobiphenyl	56		30 - 150
2-Fluorophenol (Surr)	41		30 - 150
Nitrobenzene-d5 (Surr)	55		30 - 150
Phenol-d5 (Surr)	51		30 - 150
Terphenyl-d14 (Surr)	65		10 - 150

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Client Sample ID: **ST-018-111614**

Lab Sample ID: 180-39026-1
Client Matrix: Water

Date Sampled: 11/16/2014 1808
Date Received: 11/18/2014 0935

8082A Polychlorinated Biphenyls (PCBs) (GC)

Analysis Method:	8082A	Analysis Batch:	180-127055	Instrument ID:	CHGC16
Prep Method:	3510C	Prep Batch:	180-126039	Initial Weight/Volume:	1060 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Analysis Date:	12/04/2014 0636			Injection Volume:	1 uL
Prep Date:	11/21/2014 1615			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	ND		0.0024	0.0094
PCB-1221	ND		0.0039	0.0094
PCB-1232	ND		0.0037	0.0094
PCB-1242	ND		0.0018	0.0094
PCB-1248	ND		0.0025	0.0094
PCB-1254	ND		0.0028	0.0094
PCB-1260	ND		0.0016	0.0094

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	128		60 - 135
Tetrachloro-m-xylene (Surr)	87		25 - 150

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Client Sample ID: **ST-018-111614**

Lab Sample ID: 180-39026-1
Client Matrix: Water

Date Sampled: 11/16/2014 1808
Date Received: 11/18/2014 0935

8082A Polychlorinated Biphenyls (PCBs) (GC)

Analysis Method:	8082A	Analysis Batch:	180-127055	Instrument ID:	CHGC16
Prep Method:	3510C	Prep Batch:	180-126039	Initial Weight/Volume:	1060 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Analysis Date:	12/04/2014 0636			Injection Volume:	1 uL
Prep Date:	11/21/2014 1615			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	120		60 - 135
Tetrachloro-m-xylene (Surr)	86		25 - 150

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Client Sample ID: **ST-UNNAMED-111614**

Lab Sample ID: 180-39026-2
Client Matrix: Water

Date Sampled: 11/16/2014 1855
Date Received: 11/18/2014 0935

8082A Polychlorinated Biphenyls (PCBs) (GC)

Analysis Method:	8082A	Analysis Batch:	180-127055	Instrument ID:	CHGC16
Prep Method:	3510C	Prep Batch:	180-126039	Initial Weight/Volume:	1060 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Analysis Date:	12/04/2014 0656			Injection Volume:	1 uL
Prep Date:	11/21/2014 1615			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	ND		0.0024	0.0094
PCB-1221	ND		0.0039	0.0094
PCB-1232	ND		0.0037	0.0094
PCB-1242	ND		0.0018	0.0094
PCB-1248	ND		0.0025	0.0094
PCB-1254	ND		0.0028	0.0094
PCB-1260	ND		0.0016	0.0094

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	120		60 - 135
Tetrachloro-m-xylene (Surr)	79		25 - 150

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Client Sample ID: **ST-UNNAMED-111614**

Lab Sample ID: 180-39026-2
Client Matrix: Water

Date Sampled: 11/16/2014 1855
Date Received: 11/18/2014 0935

8082A Polychlorinated Biphenyls (PCBs) (GC)

Analysis Method:	8082A	Analysis Batch:	180-127055	Instrument ID:	CHGC16
Prep Method:	3510C	Prep Batch:	180-126039	Initial Weight/Volume:	1060 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Analysis Date:	12/04/2014 0656			Injection Volume:	1 uL
Prep Date:	11/21/2014 1615			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	112		60 - 135
Tetrachloro-m-xylene (Surr)	78		25 - 150

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Client Sample ID: **ST-DUP1-111614**

Lab Sample ID: 180-39026-3
Client Matrix: Water

Date Sampled: 11/16/2014 0000
Date Received: 11/18/2014 0935

8082A Polychlorinated Biphenyls (PCBs) (GC)

Analysis Method:	8082A	Analysis Batch:	180-127055	Instrument ID:	CHGC16
Prep Method:	3510C	Prep Batch:	180-126039	Initial Weight/Volume:	1060 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Analysis Date:	12/04/2014 0715			Injection Volume:	1 uL
Prep Date:	11/21/2014 1615			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	ND		0.0024	0.0094
PCB-1221	ND		0.0039	0.0094
PCB-1232	ND		0.0037	0.0094
PCB-1242	ND		0.0018	0.0094
PCB-1248	ND		0.0025	0.0094
PCB-1254	ND		0.0028	0.0094
PCB-1260	ND		0.0016	0.0094

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	122		60 - 135
Tetrachloro-m-xylene (Surr)	93		25 - 150

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Client Sample ID: **ST-DUP1-111614**

Lab Sample ID: 180-39026-3
Client Matrix: Water

Date Sampled: 11/16/2014 0000
Date Received: 11/18/2014 0935

8082A Polychlorinated Biphenyls (PCBs) (GC)

Analysis Method:	8082A	Analysis Batch:	180-127055	Instrument ID:	CHGC16
Prep Method:	3510C	Prep Batch:	180-126039	Initial Weight/Volume:	1060 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Analysis Date:	12/04/2014 0715			Injection Volume:	1 uL
Prep Date:	11/21/2014 1615			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	113		60 - 135
Tetrachloro-m-xylene (Surr)	91		25 - 150

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Client Sample ID: **ST-014-111614**

Lab Sample ID: 180-39026-4
Client Matrix: Water

Date Sampled: 11/16/2014 1915
Date Received: 11/18/2014 0935

8082A Polychlorinated Biphenyls (PCBs) (GC)

Analysis Method:	8082A	Analysis Batch:	180-127055	Instrument ID:	CHGC16
Prep Method:	3510C	Prep Batch:	180-126039	Initial Weight/Volume:	1060 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Analysis Date:	12/04/2014 0735			Injection Volume:	1 uL
Prep Date:	11/21/2014 1615			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	ND		0.0024	0.0094
PCB-1221	ND		0.0039	0.0094
PCB-1232	ND		0.0037	0.0094
PCB-1242	ND		0.0018	0.0094
PCB-1248	ND		0.0025	0.0094
PCB-1254	ND		0.0028	0.0094
PCB-1260	ND		0.0016	0.0094

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	126		60 - 135
Tetrachloro-m-xylene (Surr)	100		25 - 150

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Client Sample ID: **ST-014-111614**

Lab Sample ID: 180-39026-4
Client Matrix: Water

Date Sampled: 11/16/2014 1915
Date Received: 11/18/2014 0935

8082A Polychlorinated Biphenyls (PCBs) (GC)

Analysis Method:	8082A	Analysis Batch:	180-127055	Instrument ID:	CHGC16
Prep Method:	3510C	Prep Batch:	180-126039	Initial Weight/Volume:	1060 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Analysis Date:	12/04/2014 0735			Injection Volume:	1 uL
Prep Date:	11/21/2014 1615			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	117		60 - 135
Tetrachloro-m-xylene (Surr)	98		25 - 150

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Client Sample ID: **ST-018-111614**

Lab Sample ID: 180-39026-1
Client Matrix: Water

Date Sampled: 11/16/2014 1808
Date Received: 11/18/2014 0935

6020A Metals (ICP/MS)-Total Recoverable

Analysis Method:	6020A	Analysis Batch:	180-127095	Instrument ID:	M
Prep Method:	3005A	Prep Batch:	180-126109	Lab File ID:	M41203A.xml
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	12/03/2014 1047			Final Weight/Volume:	50 mL
Prep Date:	11/23/2014 0831				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Arsenic	3.4		0.29	1.0
Cadmium	ND		0.11	1.0
Chromium	3.7		0.54	2.0
Lead	0.63	J B	0.019	1.0
Selenium	2.3	J	0.42	5.0
Silver	ND		0.036	1.0
Beryllium	ND		0.037	1.0
Thallium	0.058	J B	0.015	1.0
Antimony	0.60	J B	0.019	2.0
Nickel	0.30	J	0.17	1.0
Zinc	1.6	J	0.96	5.0
Copper	1.3	J	0.24	2.0

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	180-126657	Instrument ID:	K
Prep Method:	7470A	Prep Batch:	180-126586	Lab File ID:	R41126D.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	11/26/2014 1732			Final Weight/Volume:	50 mL
Prep Date:	11/26/2014 1207				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	ND		0.038	0.20

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Client Sample ID: **ST-UNNAMED-111614**

Lab Sample ID: 180-39026-2
Client Matrix: Water

Date Sampled: 11/16/2014 1855
Date Received: 11/18/2014 0935

6020A Metals (ICP/MS)-Total Recoverable

Analysis Method:	6020A	Analysis Batch:	180-127095	Instrument ID:	M
Prep Method:	3005A	Prep Batch:	180-126109	Lab File ID:	M41203A.xml
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	12/03/2014 1100			Final Weight/Volume:	50 mL
Prep Date:	11/23/2014 0831				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Arsenic	ND		0.29	1.0
Cadmium	ND		0.11	1.0
Chromium	0.96	J	0.54	2.0
Lead	0.27	J B	0.019	1.0
Selenium	ND		0.42	5.0
Silver	ND		0.036	1.0
Beryllium	ND		0.037	1.0
Thallium	ND		0.015	1.0
Antimony	0.51	J B	0.019	2.0
Nickel	1.5		0.17	1.0
Zinc	10		0.96	5.0
Copper	1.1	J	0.24	2.0

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	180-126657	Instrument ID:	K
Prep Method:	7470A	Prep Batch:	180-126586	Lab File ID:	R41126D.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	11/26/2014 1733			Final Weight/Volume:	50 mL
Prep Date:	11/26/2014 1207				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	ND		0.038	0.20

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Client Sample ID: **ST-DUP1-111614**

Lab Sample ID: 180-39026-3
Client Matrix: Water

Date Sampled: 11/16/2014 0000
Date Received: 11/18/2014 0935

6020A Metals (ICP/MS)-Total Recoverable

Analysis Method:	6020A	Analysis Batch:	180-127095	Instrument ID:	M
Prep Method:	3005A	Prep Batch:	180-126109	Lab File ID:	M41203A.xml
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	12/03/2014 1104			Final Weight/Volume:	50 mL
Prep Date:	11/23/2014 0831				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Arsenic	0.67	J	0.29	1.0
Cadmium	ND		0.11	1.0
Chromium	1.0	J	0.54	2.0
Lead	0.28	J B	0.019	1.0
Selenium	0.45	J	0.42	5.0
Silver	ND		0.036	1.0
Beryllium	ND		0.037	1.0
Thallium	ND		0.015	1.0
Antimony	0.33	J B	0.019	2.0
Nickel	1.9		0.17	1.0
Zinc	14		0.96	5.0
Copper	1.1	J	0.24	2.0

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	180-126657	Instrument ID:	K
Prep Method:	7470A	Prep Batch:	180-126586	Lab File ID:	R41126D.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	11/26/2014 1735			Final Weight/Volume:	50 mL
Prep Date:	11/26/2014 1207				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	ND		0.038	0.20

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Client Sample ID: **ST-014-111614**

Lab Sample ID: 180-39026-4
Client Matrix: Water

Date Sampled: 11/16/2014 1915
Date Received: 11/18/2014 0935

6020A Metals (ICP/MS)-Total Recoverable

Analysis Method:	6020A	Analysis Batch:	180-127095	Instrument ID:	M
Prep Method:	3005A	Prep Batch:	180-126109	Lab File ID:	M41203A.xml
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	12/03/2014 1107			Final Weight/Volume:	50 mL
Prep Date:	11/23/2014 0831				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Arsenic	ND		0.29	1.0
Cadmium	ND		0.11	1.0
Chromium	1.2	J	0.54	2.0
Lead	0.17	J B	0.019	1.0
Selenium	ND		0.42	5.0
Silver	ND		0.036	1.0
Beryllium	ND		0.037	1.0
Thallium	ND		0.015	1.0
Antimony	0.42	J B	0.019	2.0
Nickel	4.1		0.17	1.0
Zinc	10		0.96	5.0
Copper	0.69	J	0.24	2.0

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	180-126657	Instrument ID:	K
Prep Method:	7470A	Prep Batch:	180-126586	Lab File ID:	R41126D.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	11/26/2014 1737			Final Weight/Volume:	50 mL
Prep Date:	11/26/2014 1207				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	ND		0.038	0.20

General Chemistry

Client Sample ID: **ST-018-111614**

Lab Sample ID: 180-39026-1 Date Sampled: 11/16/2014 1808
Client Matrix: Water Date Received: 11/18/2014 0935

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
HEM (Oil & Grease)	2.0	J	mg/L	1.6	5.2	1.0	1664B
Analysis Batch: 180-126598	Analysis Date: 11/26/2014 1159						
Prep Batch: 180-126560	Prep Date: 11/26/2014 1159						
Cyanide, Total	40		ug/L	2.5	10	1.0	9014
Analysis Batch: 180-126605	Analysis Date: 11/26/2014 1433						
Prep Batch: 180-126579	Prep Date: 11/26/2014 1115						
Total Suspended Solids	3.6		mg/L	2.0	2.0	1.0	SM 2540D
Analysis Batch: 180-125730	Analysis Date: 11/19/2014 1443						

General Chemistry

Client Sample ID: **ST-UNNAMED-111614**

Lab Sample ID: 180-39026-2 Date Sampled: 11/16/2014 1855
Client Matrix: Water Date Received: 11/18/2014 0935

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
HEM (Oil & Grease)	2.0	J	mg/L	1.6	5.2	1.0	1664B
Analysis Batch: 180-126598	Analysis Date: 11/26/2014 1159						
Prep Batch: 180-126560	Prep Date: 11/26/2014 1159						
Cyanide, Total	ND		ug/L	2.5	10	1.0	9014
Analysis Batch: 180-126605	Analysis Date: 11/26/2014 1443						
Prep Batch: 180-126579	Prep Date: 11/26/2014 1115						
Total Suspended Solids	2.0		mg/L	2.0	2.0	1.0	SM 2540D
Analysis Batch: 180-125730	Analysis Date: 11/19/2014 1443						

General Chemistry

Client Sample ID: **ST-DUP1-111614**

Lab Sample ID: 180-39026-3 Date Sampled: 11/16/2014 0000
Client Matrix: Water Date Received: 11/18/2014 0935

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
HEM (Oil & Grease)	2.0	J	mg/L	1.6	5.2	1.0	1664B
Analysis Batch: 180-126598	Analysis Date: 11/26/2014 1159						
Prep Batch: 180-126560	Prep Date: 11/26/2014 1159						
Cyanide, Total	ND		ug/L	2.5	10	1.0	9014
Analysis Batch: 180-126605	Analysis Date: 11/26/2014 1446						
Prep Batch: 180-126579	Prep Date: 11/26/2014 1115						
Total Suspended Solids	3.2		mg/L	2.0	2.0	1.0	SM 2540D
Analysis Batch: 180-125730	Analysis Date: 11/19/2014 1443						

General Chemistry

Client Sample ID: **ST-014-111614**

Lab Sample ID: 180-39026-4 Date Sampled: 11/16/2014 1915
Client Matrix: Water Date Received: 11/18/2014 0935

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
HEM (Oil & Grease)	ND		mg/L	1.6	5.2	1.0	1664B
Analysis Batch: 180-126598	Analysis Date: 11/26/2014 1159						
Prep Batch: 180-126560	Prep Date: 11/26/2014 1159						
Cyanide, Total	4.3	J	ug/L	2.5	10	1.0	9014
Analysis Batch: 180-126605	Analysis Date: 11/26/2014 1448						
Prep Batch: 180-126579	Prep Date: 11/26/2014 1115						
Total Suspended Solids	2.4		mg/L	2.0	2.0	1.0	SM 2540D
Analysis Batch: 180-125730	Analysis Date: 11/19/2014 1443						

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Surrogate Recovery Report

8260C Volatile Organic Compounds by GC/MS

Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	DCA %Rec	TOL %Rec	BFB %Rec
180-39026-1	ST-018-111614	94	84	101	83
180-39026-2	ST-UNNAMED-111614	84	75	90	76
180-39026-3	ST-DUP1-111614	91	77	99	81
180-39026-4	ST-014-111614	87	78	97	78
180-39026-5	TRIP BLANK	80	73	92	75
MB 180-125940/6		82	70	91	77
LCS 180-125940/12		101	98	98	101
180-39026-1 MS	ST-018-111614 MS	98	93	94	92
180-39026-1 MSD	ST-018-111614 MSD	98	94	91	95

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane (Surr)	80-120
DCA = 1,2-Dichloroethane-d4 (Surr)	62-123
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene (Surr)	75-120

Client: EA Engineering, Science, and Technology Job Number: 180-39026-1

Surrogate Recovery Report

8270D LL Semivolatile Organic Compounds by GC/MS - Low Level

Client Matrix: Water

Lab Sample ID	Client Sample ID	2FP %Rec	PHL %Rec	NBZ %Rec	FBP %Rec	TBP %Rec	TPH %Rec
180-39026-1	ST-018-111614	3X	12X	54	56	25X	66
180-39026-1 RE	ST-018-111614 RE	38	53	66	67	59	71
180-39026-2	ST-UNNAMED-111614	47	58	58	65	73	56
180-39026-3	ST-DUP1-111614	26X	44	70	76	62	74
180-39026-3 RE	ST-DUP1-111614 RE	34	54	63	68	71	76
180-39026-4	ST-014-111614	41	51	55	56	66	65
MB 180-125791/1-A		67	61	63	63	54	57
MB 180-126402/1-A		74	75	73	70	71	77
LCS 180-125791/2-A		67	65	64	65	71	58
LCS 180-126402/2-A		74	74	73	71	76	70
LCSD 180-125791/3-A		68	66	64	64	72	59
LCSD 180-126402/3-A		71	70	70	68	74	68

Surrogate	Acceptance Limits
2FP = 2-Fluorophenol (Surr)	30-150
PHL = Phenol-d5 (Surr)	30-150
NBZ = Nitrobenzene-d5 (Surr)	30-150
FBP = 2-Fluorobiphenyl	30-150
TBP = 2,4,6-Tribromophenol (Surr)	30-150
TPH = Terphenyl-d14 (Surr)	10-150

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Surrogate Recovery Report

8082A Polychlorinated Biphenyls (PCBs) (GC)

Client Matrix: Water

Lab Sample ID	Client Sample ID	TCX1 %Rec	TCX2 %Rec	DCB1 %Rec	DCB2 %Rec
180-39026-1	ST-018-111614	87	86	120	128
180-39026-2	ST-UNNAMED-111614	79	78	112	120
180-39026-3	ST-DUP1-111614	93	91	113	122
180-39026-4	ST-014-111614	98	100	117	126
MB 180-126039/1-A		85	82	93	107
LCS 180-126039/4-A		96	91	105	107
LCSD 180-126039/5-A		91	86	105	102

Surrogate	Acceptance Limits
TCX = Tetrachloro-m-xylene (Surr)	25-150
DCB = DCB Decachlorobiphenyl (Surr)	60-135

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Method Blank - Batch: 180-125940

Method: 8260C
Preparation: 5030C

Lab Sample ID:	MB 180-125940/6	Analysis Batch:	180-125940	Instrument ID:	CHHP4
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	4112106.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	11/21/2014 1205	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	11/21/2014 1205				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1,1-Trichloroethane	ND		1.0	5.0
1,1,2,2-Tetrachloroethane	ND		0.93	5.0
1,1,2-Trichloroethane	ND		1.2	5.0
1,1-Dichloroethane	ND		1.0	5.0
1,1-Dichloroethene	ND		1.1	5.0
1,2-Dichlorobenzene	ND		0.68	5.0
1,2-Dichloroethane	ND		0.96	5.0
1,2-Dichloropropane	ND		1.3	5.0
1,3-Dichlorobenzene	ND		0.51	5.0
1,4-Dichlorobenzene	ND		0.53	5.0
2-Chloroethyl vinyl ether	ND		1.9	10
Acrolein	ND		5.7	100
Acrylonitrile	ND		9.0	50
Benzene	ND		0.99	5.0
Bromoform	ND		1.1	5.0
Bromomethane	ND		1.6	5.0
Carbon tetrachloride	ND		1.1	5.0
Chlorobenzene	ND		0.53	5.0
Chloroform	ND		1.0	5.0
Chloromethane	ND		1.4	5.0
Chlorodibromomethane	ND		0.65	5.0
cis-1,3-Dichloropropene	ND		0.73	5.0
Dichlorobromomethane	ND		0.93	5.0
Ethylbenzene	ND		0.62	5.0
Methylene Chloride	ND		1.1	5.0
Tetrachloroethene	ND		0.82	5.0
Toluene	ND		0.85	5.0
trans-1,2-Dichloroethene	ND		0.75	5.0
trans-1,3-Dichloropropene	ND		0.58	5.0
Trichloroethene	ND		0.80	5.0
Vinyl chloride	ND		1.3	5.0
Chloroethane	ND		0.75	5.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	70	62 - 123
4-Bromofluorobenzene (Surr)	77	75 - 120
Dibromofluoromethane (Surr)	82	80 - 120
Toluene-d8 (Surr)	91	80 - 120

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Lab Control Sample - Batch: 180-125940

Method: 8260C
Preparation: 5030C

Lab Sample ID:	LCS 180-125940/12	Analysis Batch:	180-125940	Instrument ID:	CHHP4
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	4112112.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	11/21/2014 1446	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	11/21/2014 1446				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1,1-Trichloroethane	40.0	37.3	93	69 - 134	
1,1,2,2-Tetrachloroethane	40.0	39.5	99	59 - 136	
1,1,2-Trichloroethane	40.0	40.5	101	75 - 126	
1,1-Dichloroethane	40.0	40.1	100	77 - 122	
1,1-Dichloroethene	40.0	37.8	94	69 - 127	
1,2-Dichlorobenzene	40.0	38.1	95	75 - 125	
1,2-Dichloroethane	40.0	38.5	96	63 - 140	
1,2-Dichloropropane	40.0	39.0	98	75 - 114	
1,3-Dichlorobenzene	40.0	38.5	96	76 - 125	
1,4-Dichlorobenzene	40.0	37.8	94	76 - 123	
Benzene	40.0	41.4	103	80 - 120	
Bromoform	40.0	39.2	98	49 - 137	
Bromomethane	40.0	35.4	88	45 - 150	
Carbon tetrachloride	40.0	38.0	95	63 - 139	
Chlorobenzene	40.0	39.6	99	83 - 120	
Chloroform	40.0	39.6	99	77 - 119	
Chloromethane	40.0	37.1	93	49 - 133	
Chlorodibromomethane	40.0	39.5	99	64 - 124	
cis-1,3-Dichloropropene	40.0	38.0	95	74 - 123	
Dichlorobromomethane	40.0	41.7	104	71 - 119	
Ethylbenzene	40.0	41.1	103	79 - 124	
Methylene Chloride	40.0	39.4	98	75 - 120	
Tetrachloroethene	40.0	38.7	97	78 - 126	
Toluene	40.0	41.8	104	80 - 124	
trans-1,2-Dichloroethene	40.0	38.7	97	78 - 120	
trans-1,3-Dichloropropene	40.0	37.6	94	63 - 122	
Trichloroethene	40.0	37.4	93	80 - 120	
Vinyl chloride	40.0	40.9	102	57 - 128	
Chloroethane	40.0	40.6	102	33 - 150	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98	62 - 123
4-Bromofluorobenzene (Surr)	101	75 - 120
Dibromofluoromethane (Surr)	101	80 - 120
Toluene-d8 (Surr)	98	80 - 120

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 180-125940

Method: 8260C
Preparation: 5030C

MS Lab Sample ID:	180-39026-1	Analysis Batch:	180-125940	Instrument ID:	CHHP4
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	4112113.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	11/21/2014 1513			Final Weight/Volume:	5 mL
Prep Date:	11/21/2014 1513				5 mL
Leach Date:	N/A				

MSD Lab Sample ID:	180-39026-1	Analysis Batch:	180-125940	Instrument ID:	CHHP4
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	4112114.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	11/21/2014 1540			Final Weight/Volume:	5 mL
Prep Date:	11/21/2014 1540				5 mL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
1,1,1-Trichloroethane	88	88	69 - 134	0	24		
1,1,2,2-Tetrachloroethane	88	90	59 - 136	2	20		
1,1,2-Trichloroethane	89	92	75 - 126	3	23		
1,1-Dichloroethane	95	93	77 - 122	1	22		
1,1-Dichloroethene	93	89	69 - 127	4	20		
1,2-Dichlorobenzene	90	94	75 - 125	4	20		
1,2-Dichloroethane	91	91	63 - 140	0	25		
1,2-Dichloropropane	91	93	75 - 114	2	20		
1,3-Dichlorobenzene	92	92	76 - 125	0	21		
1,4-Dichlorobenzene	91	91	76 - 123	0	20		
Benzene	96	97	80 - 120	1	20		
Bromoform	90	87	49 - 137	3	20		
Bromomethane	81	85	45 - 150	5	23		
Carbon tetrachloride	88	89	63 - 139	1	25		
Chlorobenzene	90	92	83 - 120	2	20		
Chloroform	94	93	77 - 119	1	20		
Chloromethane	85	86	49 - 133	1	20		
Chlorodibromomethane	94	89	64 - 124	5	20		
cis-1,3-Dichloropropene	90	93	74 - 123	3	20		
Dichlorobromomethane	98	97	71 - 119	1	20		
Ethylbenzene	92	94	79 - 124	2	25		
Methylene Chloride	91	93	75 - 120	2	20		
Tetrachloroethene	85	87	78 - 126	2	25		
Toluene	92	94	80 - 124	2	20		
trans-1,2-Dichloroethene	90	90	78 - 120	1	20		
trans-1,3-Dichloropropene	84	85	63 - 122	2	20		
Trichloroethene	88	88	80 - 120	1	20		
Vinyl chloride	86	94	57 - 128	8	26		
Chloroethane	97	88	33 - 150	9	24		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	93	94	62 - 123
4-Bromofluorobenzene (Surr)	92	95	75 - 120
Dibromofluoromethane (Surr)	98	98	80 - 120

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	94	91	80 - 120

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 180-125940

Method: 8260C
Preparation: 5030C

MS Lab Sample ID:	180-39026-1	Units: ug/L	MSD Lab Sample ID:	180-39026-1	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	11/21/2014 1513		Analysis Date:	11/21/2014 1540	
Prep Date:	11/21/2014 1513		Prep Date:	11/21/2014 1540	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,1,1-Trichloroethane	ND	40.0	40.0	35.3	35.2
1,1,2,2-Tetrachloroethane	ND	40.0	40.0	35.2	36.0
1,1,2-Trichloroethane	ND	40.0	40.0	35.8	36.9
1,1-Dichloroethane	ND	40.0	40.0	37.9	37.4
1,1-Dichloroethene	ND	40.0	40.0	37.1	35.7
1,2-Dichlorobenzene	ND	40.0	40.0	36.1	37.6
1,2-Dichloroethane	ND	40.0	40.0	36.4	36.4
1,2-Dichloropropane	ND	40.0	40.0	36.4	37.2
1,3-Dichlorobenzene	ND	40.0	40.0	36.8	37.0
1,4-Dichlorobenzene	ND	40.0	40.0	36.4	36.6
Benzene	ND	40.0	40.0	38.3	38.7
Bromoform	ND	40.0	40.0	36.0	34.9
Bromomethane	ND	40.0	40.0	32.4	34.2
Carbon tetrachloride	ND	40.0	40.0	35.3	35.7
Chlorobenzene	ND	40.0	40.0	36.0	36.7
Chloroform	ND	40.0	40.0	37.5	37.0
Chloromethane	ND	40.0	40.0	34.0	34.2
Chlorodibromomethane	ND	40.0	40.0	37.6	35.6
cis-1,3-Dichloropropene	ND	40.0	40.0	36.1	37.2
Dichlorobromomethane	ND	40.0	40.0	39.2	38.7
Ethylbenzene	ND	40.0	40.0	36.7	37.5
Methylene Chloride	ND	40.0	40.0	36.5	37.3
Tetrachloroethene	ND	40.0	40.0	34.0	34.7
Toluene	ND	40.0	40.0	36.7	37.5
trans-1,2-Dichloroethene	ND	40.0	40.0	35.9	36.1
trans-1,3-Dichloropropene	ND	40.0	40.0	33.5	34.2
Trichloroethene	ND	40.0	40.0	35.0	35.3
Vinyl chloride	ND	40.0	40.0	34.6	37.6
Chloroethane	ND	40.0	40.0	38.6	35.3

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Method Blank - Batch: 180-125791

Method: 8270D LL
Preparation: 3520C

Lab Sample ID:	MB 180-125791/1-A	Analysis Batch:	180-126233	Instrument ID:	CH731
Client Matrix:	Water	Prep Batch:	180-125791	Lab File ID:	V1124005.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	11/24/2014 1257	Units:	ug/L	Final Weight/Volume:	0.25 mL
Prep Date:	11/20/2014 0907			Injection Volume:	2 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acenaphthene	ND		0.029	0.20
Acenaphthylene	ND		0.022	0.20
Anthracene	ND		0.019	0.20
Benzidine	ND		4.7	20
Benzo[a]anthracene	ND		0.037	0.20
Benzo[b]fluoranthene	ND		0.049	0.20
Benzo[k]fluoranthene	ND		0.030	0.20
Benzoic acid	ND		1.6	5.0
Benzo[g,h,i]perylene	ND		0.029	0.20
Benzo[a]pyrene	ND		0.028	0.20
Bis(2-chloroethoxy)methane	ND		0.13	1.0
Bis(2-chloroethyl)ether	ND		0.032	1.0
Bis(2-ethylhexyl) phthalate	ND		0.44	2.0
2,2'-oxybis[1-chloropropane]	ND		0.024	1.0
4-Bromophenyl phenyl ether	ND		0.12	1.0
4-Chlorophenyl phenyl ether	ND		0.080	1.0
2-Chloronaphthalene	ND		0.031	0.20
Butyl benzyl phthalate	ND		0.21	1.0
Chrysene	ND		0.031	0.20
Dibenz(a,h)anthracene	ND		0.027	0.20
Di-n-butyl phthalate	ND		0.24	1.0
Di-n-octyl phthalate	ND		0.20	1.0
Diethyl phthalate	ND		0.30	1.0
Dimethyl phthalate	ND		0.18	1.0
3,3'-Dichlorobenzidine	ND		0.15	1.0
2,4-Dinitrotoluene	ND		0.21	1.0
2,6-Dinitrotoluene	ND		0.14	1.0
2-Chlorophenol	ND		0.23	1.0
2,4-Dichlorophenol	ND		0.067	1.0
2,4-Dimethylphenol	ND		0.17	1.0
2,4-Dinitrophenol	ND		2.5	5.0
2-Nitrophenol	ND		0.11	1.0
2,4,6-Trichlorophenol	ND		0.30	1.0
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.12	1.0
1,2,4-Trichlorobenzene	ND		0.085	1.0
4-Chloro-3-methylphenol	ND		0.17	1.0
4-Nitrophenol	ND		0.80	5.0
4,6-Dinitro-2-methylphenol	ND		1.6	5.0
Fluoranthene	ND		0.021	0.20
Fluorene	ND		0.024	0.20
Hexachlorobenzene	ND		0.061	1.0
Hexachlorobutadiene	ND		0.094	1.0
Hexachlorocyclopentadiene	ND		0.14	1.0
Hexachloroethane	ND		0.14	1.0
Indeno[1,2,3-cd]pyrene	ND		0.043	0.20

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Method Blank - Batch: 180-125791

Method: 8270D LL
Preparation: 3520C

Lab Sample ID:	MB 180-125791/1-A	Analysis Batch:	180-126233	Instrument ID:	CH731
Client Matrix:	Water	Prep Batch:	180-125791	Lab File ID:	V1124005.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	11/24/2014 1257	Units:	ug/L	Final Weight/Volume:	0.25 mL
Prep Date:	11/20/2014 0907			Injection Volume:	2 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Isophorone	ND		0.074	1.0
Naphthalene	ND		0.023	0.20
Nitrobenzene	ND		0.15	2.0
N-Nitrosodi-n-propylamine	ND		0.050	1.0
N-Nitrosodimethylamine	ND		0.12	1.0
N-Nitrosodiphenylamine	ND		0.12	1.0
Phenanthrene	ND		0.042	0.20
Pyrene	ND		0.023	0.20
Pentachlorophenol	ND		0.50	1.0
Phenol	ND		0.055	1.0

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	54	30 - 150
2-Fluorobiphenyl	63	30 - 150
2-Fluorophenol (Surr)	67	30 - 150
Nitrobenzene-d5 (Surr)	63	30 - 150
Phenol-d5 (Surr)	61	30 - 150
Terphenyl-d14 (Surr)	57	10 - 150

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 180-125791

Method: 8270D LL
Preparation: 3520C

LCS Lab Sample ID:	LCS 180-125791/2-A	Analysis Batch:	180-126233	Instrument ID:	CH731
Client Matrix:	Water	Prep Batch:	180-125791	Lab File ID:	V1124009.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	11/24/2014 1524	Units:	ug/L	Final Weight/Volume:	0.25 mL
Prep Date:	11/20/2014 0907			Injection Volume:	2 uL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 180-125791/3-A	Analysis Batch:	180-126233	Instrument ID:	CH731
Client Matrix:	Water	Prep Batch:	180-125791	Lab File ID:	V1124010.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	11/24/2014 1553	Units:	ug/L	Final Weight/Volume:	0.25 mL
Prep Date:	11/20/2014 0907			Injection Volume:	2 uL
Leach Date:	N/A				

	% Rec.					
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Acenaphthene	65	65	30 - 150	0	35		
Acenaphthylene	67	67	30 - 150	0	35		
Anthracene	65	67	30 - 150	2	35		
Benzidine	24	23	10 - 150	3	35	J	
Benzo[a]anthracene	67	68	30 - 150	1	35		
Benzo[b]fluoranthene	63	65	30 - 150	4	35		
Benzo[k]fluoranthene	68	68	30 - 150	0	35		
Benzoic acid	75	78	10 - 150	4	35		
Benzo[g,h,i]perylene	67	67	30 - 150	0	35		
Benzo[a]pyrene	64	67	30 - 150	4	35		
Bis(2-chloroethoxy)methane	61	64	30 - 150	4	35		
Bis(2-chloroethyl)ether	62	63	30 - 150	2	35		
Bis(2-ethylhexyl) phthalate	64	63	30 - 150	0	35		
2,2'-oxybis[1-chloropropane]	58	59	30 - 150	2	35		
4-Bromophenyl phenyl ether	67	70	30 - 150	3	35		
4-Chlorophenyl phenyl ether	69	68	30 - 150	1	35		
2-Chloronaphthalene	60	60	30 - 150	1	35		
Butyl benzyl phthalate	63	62	30 - 150	2	35		
Chrysene	67	68	30 - 150	2	35		
Dibenz(a,h)anthracene	66	67	30 - 150	1	35		
Di-n-butyl phthalate	63	66	30 - 150	4	35		
Di-n-octyl phthalate	60	63	10 - 150	4	35		
Diethyl phthalate	68	67	30 - 150	2	35		
Dimethyl phthalate	68	68	30 - 150	1	35		
3,3'-Dichlorobenzidine	57	59	10 - 150	3	35		
2,4-Dinitrotoluene	68	68	30 - 150	1	35		
2,6-Dinitrotoluene	67	67	30 - 150	0	35		
2-Chlorophenol	63	64	30 - 150	2	35		
2,4-Dichlorophenol	63	65	30 - 150	3	35		
2,4-Dimethylphenol	63	65	30 - 150	4	35		
2,4-Dinitrophenol	48	45	10 - 150	8	35		
2-Nitrophenol	64	65	30 - 150	2	35		
2,4,6-Trichlorophenol	64	66	30 - 150	2	35		
1,2-Diphenylhydrazine(as Azobenzene)	63	66	30 - 150	4	35		
1,2,4-Trichlorobenzene	66	67	30 - 150	2	35		
4-Chloro-3-methylphenol	67	66	30 - 150	1	35		

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 180-125791

Method: 8270D LL
Preparation: 3520C

LCS Lab Sample ID:	LCS 180-125791/2-A	Analysis Batch:	180-126233	Instrument ID:	CH731
Client Matrix:	Water	Prep Batch:	180-125791	Lab File ID:	V1124009.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	11/24/2014 1524	Units:	ug/L	Final Weight/Volume:	0.25 mL
Prep Date:	11/20/2014 0907			Injection Volume:	2 uL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 180-125791/3-A	Analysis Batch:	180-126233	Instrument ID:	CH731
Client Matrix:	Water	Prep Batch:	180-125791	Lab File ID:	V1124010.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	11/24/2014 1553	Units:	ug/L	Final Weight/Volume:	0.25 mL
Prep Date:	11/20/2014 0907			Injection Volume:	2 uL
Leach Date:	N/A				

	% Rec.					
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
4-Nitrophenol	72	69	30 - 150	4	35		
4,6-Dinitro-2-methylphenol	65	67	30 - 150	3	35		
Fluoranthene	64	67	30 - 150	4	35		
Fluorene	71	71	30 - 150	0	35		
Hexachlorobenzene	66	66	30 - 150	0	35		
Hexachlorobutadiene	68	68	30 - 150	1	35		
Hexachlorocyclopentadiene	71	69	30 - 150	3	35		
Hexachloroethane	67	70	30 - 150	5	35		
Indeno[1,2,3-cd]pyrene	66	66	30 - 150	0	35		
Isophorone	63	66	30 - 150	4	35		
Naphthalene	67	69	30 - 150	3	35		
Nitrobenzene	65	63	30 - 150	3	35		
N-Nitrosodi-n-propylamine	68	70	30 - 150	3	35		
N-Nitrosodimethylamine	64	68	30 - 150	6	35		
N-Nitrosodiphenylamine	65	69	30 - 150	5	35		
Phenanthrene	64	64	30 - 150	1	35		
Pyrene	63	62	30 - 150	3	35		
Pentachlorophenol	59	62	10 - 150	6	35		
Phenol	66	67	30 - 150	2	35		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	71	72	30 - 150
2-Fluorobiphenyl	65	64	30 - 150
2-Fluorophenol (Surr)	67	68	30 - 150
Nitrobenzene-d5 (Surr)	64	64	30 - 150
Phenol-d5 (Surr)	65	66	30 - 150
Terphenyl-d14 (Surr)	58	59	10 - 150

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 180-125791

Method: 8270D LL
Preparation: 3520C

LCS Lab Sample ID:	LCS 180-125791/2-A	Units:	ug/L	LCSD Lab Sample ID:	LCSD 180-125791/3-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	11/24/2014 1524			Analysis Date:	11/24/2014 1553
Prep Date:	11/20/2014 0907			Prep Date:	11/20/2014 0907
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual		LCSD Result/Qual
Acenaphthene	20.0	20.0	13.0		13.0
Acenaphthylene	20.0	20.0	13.4		13.4
Anthracene	20.0	20.0	13.0		13.3
Benzidine	20.0	20.0	4.75	J	ND
Benzo[a]anthracene	20.0	20.0	13.4		13.6
Benzo[b]fluoranthene	20.0	20.0	12.6		13.1
Benzo[k]fluoranthene	20.0	20.0	13.7		13.7
Benzoic acid	20.0	20.0	15.0		15.5
Benzo[g,h,i]perylene	20.0	20.0	13.4		13.4
Benzo[a]pyrene	20.0	20.0	12.9		13.4
Bis(2-chloroethoxy)methane	20.0	20.0	12.2		12.7
Bis(2-chloroethyl)ether	20.0	20.0	12.4		12.7
Bis(2-ethylhexyl) phthalate	20.0	20.0	12.7		12.7
2,2'-oxybis[1-chloropropane]	20.0	20.0	11.6		11.8
4-Bromophenyl phenyl ether	20.0	20.0	13.4		13.9
4-Chlorophenyl phenyl ether	20.0	20.0	13.7		13.6
2-Chloronaphthalene	20.0	20.0	12.0		11.9
Butyl benzyl phthalate	20.0	20.0	12.7		12.4
Chrysene	20.0	20.0	13.4		13.7
Dibenz(a,h)anthracene	20.0	20.0	13.3		13.4
Di-n-butyl phthalate	20.0	20.0	12.5		13.1
Di-n-octyl phthalate	20.0	20.0	12.0		12.5
Diethyl phthalate	20.0	20.0	13.6		13.4
Dimethyl phthalate	20.0	20.0	13.6		13.7
3,3'-Dichlorobenzidine	20.0	20.0	11.4		11.7
2,4-Dinitrotoluene	20.0	20.0	13.6		13.6
2,6-Dinitrotoluene	20.0	20.0	13.5		13.5
2-Chlorophenol	20.0	20.0	12.6		12.8
2,4-Dichlorophenol	20.0	20.0	12.7		13.0
2,4-Dimethylphenol	20.0	20.0	12.6		13.1
2,4-Dinitrophenol	40.0	40.0	19.3		17.8
2-Nitrophenol	20.0	20.0	12.9		13.1
2,4,6-Trichlorophenol	20.0	20.0	12.8		13.1
1,2-Diphenylhydrazine(as Azobenzene)	20.0	20.0	12.6		13.1
1,2,4-Trichlorobenzene	20.0	20.0	13.3		13.5
4-Chloro-3-methylphenol	20.0	20.0	13.4		13.3
4-Nitrophenol	40.0	40.0	28.6		27.6
4,6-Dinitro-2-methylphenol	40.0	40.0	26.1		27.0
Fluoranthene	20.0	20.0	12.8		13.4

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 180-125791

Method: 8270D LL
Preparation: 3520C

LCS Lab Sample ID:	LCS 180-125791/2-A	Units: ug/L		LCSD Lab Sample ID:	LCSD 180-125791/3-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	11/24/2014 1524			Analysis Date:	11/24/2014 1553
Prep Date:	11/20/2014 0907			Prep Date:	11/20/2014 0907
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Fluorene	20.0	20.0	14.3	14.2
Hexachlorobenzene	20.0	20.0	13.2	13.1
Hexachlorobutadiene	20.0	20.0	13.5	13.6
Hexachlorocyclopentadiene	20.0	20.0	14.2	13.8
Hexachloroethane	20.0	20.0	13.3	14.0
Indeno[1,2,3-cd]pyrene	20.0	20.0	13.2	13.1
Isophorone	20.0	20.0	12.6	13.1
Naphthalene	20.0	20.0	13.4	13.8
Nitrobenzene	20.0	20.0	13.0	12.6
N-Nitrosodi-n-propylamine	20.0	20.0	13.6	14.0
N-Nitrosodimethylamine	20.0	20.0	12.8	13.5
N-Nitrosodiphenylamine	20.0	20.0	13.0	13.7
Phenanthrene	20.0	20.0	12.8	12.7
Pyrene	20.0	20.0	12.7	12.3
Pentachlorophenol	40.0	40.0	23.6	25.0
Phenol	20.0	20.0	13.1	13.4

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Method Blank - Batch: 180-126402

Method: 8270D LL
Preparation: 3520C

Lab Sample ID:	MB 180-126402/1-A	Analysis Batch:	180-126682	Instrument ID:	CH732
Client Matrix:	Water	Prep Batch:	180-126402	Lab File ID:	D1128005.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	11/28/2014 1409	Units:	ug/L	Final Weight/Volume:	0.25 mL
Prep Date:	11/25/2014 0959			Injection Volume:	2 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acenaphthene	ND		0.029	0.20
Acenaphthylene	ND		0.022	0.20
Anthracene	ND		0.019	0.20
Benzidine	ND		4.7	20
Benzo[a]anthracene	ND		0.037	0.20
Benzo[b]fluoranthene	ND		0.049	0.20
Benzo[k]fluoranthene	ND		0.030	0.20
Benzoic acid	ND		1.6	5.0
Benzo[g,h,i]perylene	ND		0.029	0.20
Benzo[a]pyrene	ND		0.028	0.20
Bis(2-chloroethoxy)methane	ND		0.13	1.0
Bis(2-chloroethyl)ether	ND		0.032	1.0
Bis(2-ethylhexyl) phthalate	ND		0.44	2.0
2,2'-oxybis[1-chloropropane]	ND		0.024	1.0
4-Bromophenyl phenyl ether	ND		0.12	1.0
4-Chlorophenyl phenyl ether	ND		0.080	1.0
2-Chloronaphthalene	ND		0.031	0.20
Butyl benzyl phthalate	ND		0.21	1.0
Chrysene	ND		0.031	0.20
Dibenz(a,h)anthracene	ND		0.027	0.20
Di-n-butyl phthalate	ND		0.24	1.0
Di-n-octyl phthalate	ND		0.20	1.0
Diethyl phthalate	ND		0.30	1.0
Dimethyl phthalate	ND		0.18	1.0
3,3'-Dichlorobenzidine	ND		0.15	1.0
2,4-Dinitrotoluene	ND		0.21	1.0
2,6-Dinitrotoluene	ND		0.14	1.0
2-Chlorophenol	ND		0.23	1.0
2,4-Dichlorophenol	ND		0.067	1.0
2,4-Dimethylphenol	ND		0.17	1.0
2,4-Dinitrophenol	ND		2.5	5.0
2-Nitrophenol	ND		0.11	1.0
2,4,6-Trichlorophenol	ND		0.30	1.0
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.12	1.0
1,2,4-Trichlorobenzene	ND		0.085	1.0
4-Chloro-3-methylphenol	ND		0.17	1.0
4-Nitrophenol	ND		0.80	5.0
4,6-Dinitro-2-methylphenol	ND		1.6	5.0
Fluoranthene	ND		0.021	0.20
Fluorene	ND		0.024	0.20
Hexachlorobenzene	ND		0.061	1.0
Hexachlorobutadiene	ND		0.094	1.0
Hexachlorocyclopentadiene	ND		0.14	1.0
Hexachloroethane	ND		0.14	1.0
Indeno[1,2,3-cd]pyrene	ND		0.043	0.20

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Method Blank - Batch: 180-126402

Method: 8270D LL
Preparation: 3520C

Lab Sample ID:	MB 180-126402/1-A	Analysis Batch:	180-126682	Instrument ID:	CH732
Client Matrix:	Water	Prep Batch:	180-126402	Lab File ID:	D1128005.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	11/28/2014 1409	Units:	ug/L	Final Weight/Volume:	0.25 mL
Prep Date:	11/25/2014 0959			Injection Volume:	2 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Isophorone	ND		0.074	1.0
Naphthalene	ND		0.023	0.20
Nitrobenzene	ND		0.15	2.0
N-Nitrosodi-n-propylamine	ND		0.050	1.0
N-Nitrosodimethylamine	ND		0.12	1.0
N-Nitrosodiphenylamine	ND		0.12	1.0
Phenanthrene	ND		0.042	0.20
Pyrene	ND		0.023	0.20
Pentachlorophenol	ND		0.50	1.0
Phenol	ND		0.055	1.0

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	71	30 - 150
2-Fluorobiphenyl	70	30 - 150
2-Fluorophenol (Surr)	74	30 - 150
Nitrobenzene-d5 (Surr)	73	30 - 150
Phenol-d5 (Surr)	75	30 - 150
Terphenyl-d14 (Surr)	77	10 - 150

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 180-126402

Method: 8270D LL
Preparation: 3520C

LCS Lab Sample ID:	LCS 180-126402/2-A	Analysis Batch:	180-126682	Instrument ID:	CH732
Client Matrix:	Water	Prep Batch:	180-126402	Lab File ID:	D1128009.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	11/28/2014 1556	Units:	ug/L	Final Weight/Volume:	0.25 mL
Prep Date:	11/25/2014 0959			Injection Volume:	2 uL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 180-126402/3-A	Analysis Batch:	180-126682	Instrument ID:	CH732
Client Matrix:	Water	Prep Batch:	180-126402	Lab File ID:	D1128010.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	11/28/2014 1622	Units:	ug/L	Final Weight/Volume:	0.25 mL
Prep Date:	11/25/2014 0959			Injection Volume:	2 uL
Leach Date:	N/A				

	% Rec.					
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Acenaphthene	73	70	30 - 150	4	35		
Acenaphthylene	76	72	30 - 150	5	35		
Anthracene	78	77	30 - 150	2	35		
Benzidine	22	22	10 - 150	2	35		
Benzo[a]anthracene	78	75	30 - 150	4	35		
Benzo[b]fluoranthene	83	78	30 - 150	7	35		
Benzo[k]fluoranthene	79	78	30 - 150	2	35		
Benzoic acid	57	57	10 - 150	0	35		
Benzo[g,h,i]perylene	82	79	30 - 150	4	35		
Benzo[a]pyrene	81	78	30 - 150	4	35		
Bis(2-chloroethoxy)methane	72	69	30 - 150	3	35		
Bis(2-chloroethyl)ether	73	68	30 - 150	7	35		
Bis(2-ethylhexyl) phthalate	84	80	30 - 150	6	35		
2,2'-oxybis[1-chloropropane]	63	59	30 - 150	7	35		
4-Bromophenyl phenyl ether	73	71	30 - 150	3	35		
4-Chlorophenyl phenyl ether	74	70	30 - 150	5	35		
2-Chloronaphthalene	68	63	30 - 150	6	35		
Butyl benzyl phthalate	84	80	30 - 150	4	35		
Chrysene	77	73	30 - 150	5	35		
Dibenz(a,h)anthracene	84	82	30 - 150	3	35		
Di-n-butyl phthalate	81	79	30 - 150	3	35		
Di-n-octyl phthalate	101	96	10 - 150	5	35		
Diethyl phthalate	78	73	30 - 150	6	35		
Dimethyl phthalate	77	72	30 - 150	6	35		
3,3'-Dichlorobenzidine	71	67	10 - 150	6	35		
2,4-Dinitrotoluene	89	83	30 - 150	6	35		
2,6-Dinitrotoluene	80	76	30 - 150	5	35		
2-Chlorophenol	73	69	30 - 150	7	35		
2,4-Dichlorophenol	75	70	30 - 150	6	35		
2,4-Dimethylphenol	72	70	30 - 150	2	35		
2,4-Dinitrophenol	74	71	10 - 150	4	35		
2-Nitrophenol	79	75	30 - 150	5	35		
2,4,6-Trichlorophenol	75	71	30 - 150	6	35		
1,2-Diphenylhydrazine(as Azobenzene)	76	74	30 - 150	3	35		
1,2,4-Trichlorobenzene	72	68	30 - 150	5	35		
4-Chloro-3-methylphenol	78	74	30 - 150	5	35		

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 180-126402

Method: 8270D LL
Preparation: 3520C

LCS Lab Sample ID:	LCS 180-126402/2-A	Analysis Batch:	180-126682	Instrument ID:	CH732
Client Matrix:	Water	Prep Batch:	180-126402	Lab File ID:	D1128009.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	11/28/2014 1556	Units:	ug/L	Final Weight/Volume:	0.25 mL
Prep Date:	11/25/2014 0959			Injection Volume:	2 uL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 180-126402/3-A	Analysis Batch:	180-126682	Instrument ID:	CH732
Client Matrix:	Water	Prep Batch:	180-126402	Lab File ID:	D1128010.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	11/28/2014 1622	Units:	ug/L	Final Weight/Volume:	0.25 mL
Prep Date:	11/25/2014 0959			Injection Volume:	2 uL
Leach Date:	N/A				

	% Rec.					
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
4-Nitrophenol	84	79	30 - 150	6	35		
4,6-Dinitro-2-methylphenol	77	75	30 - 150	2	35		
Fluoranthene	77	75	30 - 150	3	35		
Fluorene	80	75	30 - 150	6	35		
Hexachlorobenzene	72	71	30 - 150	2	35		
Hexachlorobutadiene	71	69	30 - 150	3	35		
Hexachlorocyclopentadiene	77	75	30 - 150	3	35		
Hexachloroethane	75	71	30 - 150	6	35		
Indeno[1,2,3-cd]pyrene	83	80	30 - 150	4	35		
Isophorone	75	72	30 - 150	4	35		
Naphthalene	74	71	30 - 150	4	35		
Nitrobenzene	74	70	30 - 150	5	35		
N-Nitrosodi-n-propylamine	68	65	30 - 150	6	35		
N-Nitrosodimethylamine	69	66	30 - 150	5	35		
N-Nitrosodiphenylamine	76	74	30 - 150	3	35		
Phenanthrene	77	75	30 - 150	2	35		
Pyrene	75	74	30 - 150	1	35		
Pentachlorophenol	67	65	10 - 150	2	35		
Phenol	72	67	30 - 150	7	35		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	76	74	30 - 150
2-Fluorobiphenyl	71	68	30 - 150
2-Fluorophenol (Surr)	74	71	30 - 150
Nitrobenzene-d5 (Surr)	73	70	30 - 150
Phenol-d5 (Surr)	74	70	30 - 150
Terphenyl-d14 (Surr)	70	68	10 - 150

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 180-126402

Method: 8270D LL
Preparation: 3520C

LCS Lab Sample ID:	LCS 180-126402/2-A	Units: ug/L		LCSD Lab Sample ID:	LCSD 180-126402/3-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	11/28/2014 1556			Analysis Date:	11/28/2014 1622
Prep Date:	11/25/2014 0959			Prep Date:	11/25/2014 0959
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Acenaphthene	20.0	20.0	14.6	14.0
Acenaphthylene	20.0	20.0	15.2	14.4
Anthracene	20.0	20.0	15.7	15.4
Benzidine	20.0	20.0	ND	ND
Benzo[a]anthracene	20.0	20.0	15.6	15.0
Benzo[b]fluoranthene	20.0	20.0	16.7	15.6
Benzo[k]fluoranthene	20.0	20.0	15.9	15.5
Benzoic acid	20.0	20.0	11.4	11.5
Benzo[g,h,i]perylene	20.0	20.0	16.4	15.8
Benzo[a]pyrene	20.0	20.0	16.2	15.6
Bis(2-chloroethoxy)methane	20.0	20.0	14.4	13.9
Bis(2-chloroethyl)ether	20.0	20.0	14.5	13.6
Bis(2-ethylhexyl) phthalate	20.0	20.0	16.9	15.9
2,2'-oxybis[1-chloropropane]	20.0	20.0	12.7	11.8
4-Bromophenyl phenyl ether	20.0	20.0	14.6	14.3
4-Chlorophenyl phenyl ether	20.0	20.0	14.8	14.0
2-Chloronaphthalene	20.0	20.0	13.5	12.7
Butyl benzyl phthalate	20.0	20.0	16.7	16.0
Chrysene	20.0	20.0	15.3	14.6
Dibenz(a,h)anthracene	20.0	20.0	16.9	16.4
Di-n-butyl phthalate	20.0	20.0	16.3	15.9
Di-n-octyl phthalate	20.0	20.0	20.1	19.2
Diethyl phthalate	20.0	20.0	15.6	14.6
Dimethyl phthalate	20.0	20.0	15.3	14.4
3,3'-Dichlorobenzidine	20.0	20.0	14.1	13.4
2,4-Dinitrotoluene	20.0	20.0	17.8	16.7
2,6-Dinitrotoluene	20.0	20.0	15.9	15.1
2-Chlorophenol	20.0	20.0	14.7	13.7
2,4-Dichlorophenol	20.0	20.0	15.0	14.0
2,4-Dimethylphenol	20.0	20.0	14.4	14.1
2,4-Dinitrophenol	40.0	40.0	29.7	28.5
2-Nitrophenol	20.0	20.0	15.9	15.0
2,4,6-Trichlorophenol	20.0	20.0	15.0	14.1
1,2-Diphenylhydrazine(as Azobenzene)	20.0	20.0	15.3	14.8
1,2,4-Trichlorobenzene	20.0	20.0	14.4	13.7
4-Chloro-3-methylphenol	20.0	20.0	15.6	14.9
4-Nitrophenol	40.0	40.0	33.5	31.5
4,6-Dinitro-2-methylphenol	40.0	40.0	30.6	30.0
Fluoranthene	20.0	20.0	15.4	15.0

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 180-126402

Method: 8270D LL
Preparation: 3520C

LCS Lab Sample ID:	LCS 180-126402/2-A	Units: ug/L		LCSD Lab Sample ID:	LCSD 180-126402/3-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	11/28/2014 1556			Analysis Date:	11/28/2014 1622
Prep Date:	11/25/2014 0959			Prep Date:	11/25/2014 0959
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Fluorene	20.0	20.0	15.9	14.9
Hexachlorobenzene	20.0	20.0	14.5	14.2
Hexachlorobutadiene	20.0	20.0	14.2	13.8
Hexachlorocyclopentadiene	20.0	20.0	15.4	14.9
Hexachloroethane	20.0	20.0	15.1	14.2
Indeno[1,2,3-cd]pyrene	20.0	20.0	16.6	15.9
Isophorone	20.0	20.0	14.9	14.3
Naphthalene	20.0	20.0	14.8	14.2
Nitrobenzene	20.0	20.0	14.7	14.0
N-Nitrosodi-n-propylamine	20.0	20.0	13.7	13.0
N-Nitrosodimethylamine	20.0	20.0	13.9	13.2
N-Nitrosodiphenylamine	20.0	20.0	15.3	14.8
Phenanthrene	20.0	20.0	15.4	15.0
Pyrene	20.0	20.0	15.0	14.8
Pentachlorophenol	40.0	40.0	26.7	26.1
Phenol	20.0	20.0	14.4	13.5

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Method Blank - Batch: 180-126039

Method: 8082A
Preparation: 3510C

Lab Sample ID:	MB 180-126039/1-A	Analysis Batch:	180-127055	Instrument ID:	CHGC16
Client Matrix:	Water	Prep Batch:	180-126039	Lab File ID:	120314057.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	12/04/2014 0519	Units:	ug/L	Final Weight/Volume:	1.0 mL
Prep Date:	11/21/2014 1615			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
PCB-1016	ND		0.0025	0.010
PCB-1221	ND		0.0041	0.010
PCB-1232	ND		0.0039	0.010
PCB-1242	ND		0.0019	0.010
PCB-1248	ND		0.0027	0.010
PCB-1254	ND		0.0030	0.010
PCB-1260	ND		0.0017	0.010

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	107	60 - 135
Tetrachloro-m-xylene (Surr)	85	25 - 150

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	93	60 - 135
Tetrachloro-m-xylene (Surr)	82	25 - 150

Client: EA Engineering, Science, and Technology Job Number: 180-39026-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 180-126039

Method: 8082A
Preparation: 3510C

LCS Lab Sample ID:	LCS 180-126039/4-A	Analysis Batch:	180-127055	Instrument ID:	CHGC16
Client Matrix:	Water	Prep Batch:	180-126039	Lab File ID:	120314075.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	12/04/2014 1104	Units:	ug/L	Final Weight/Volume:	1.0 mL
Prep Date:	11/21/2014 1615			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

LCSD Lab Sample ID:	LCSD 180-126039/5-A	Analysis Batch:	180-127055	Instrument ID:	CHGC16
Client Matrix:	Water	Prep Batch:	180-126039	Lab File ID:	120314076.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	12/04/2014 1123	Units:	ug/L	Final Weight/Volume:	1.0 mL
Prep Date:	11/21/2014 1615			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
PCB-1016	90	86	55 - 120	5	25		
PCB-1260	105	104	55 - 120	0	25		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	107	105	60 - 135
Tetrachloro-m-xylene (Surr)	96	91	25 - 150

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	105	102	60 - 135
Tetrachloro-m-xylene (Surr)	91	86	25 - 150

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 180-126039

Method: 8082A
Preparation: 3510C

LCS Lab Sample ID:	LCS 180-126039/4-A	Units:	ug/L	LCSD Lab Sample ID:	LCSD 180-126039/5-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	12/04/2014 1104			Analysis Date:	12/04/2014 1123
Prep Date:	11/21/2014 1615			Prep Date:	11/21/2014 1615
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
PCB-1016	1.00	1.00	0.902	0.861
PCB-1260	1.00	1.00	1.05	1.04

Client: EA Engineering, Science, and Technology Job Number: 180-39026-1

Method Blank - Batch: 180-126109

Method: 6020A
Preparation: 3005A
Total Recoverable

Lab Sample ID:	MB 180-126109/1-A	Analysis Batch:	180-127095	Instrument ID:	M
Client Matrix:	Water	Prep Batch:	180-126109	Lab File ID:	M41203A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	12/03/2014 0930	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	11/23/2014 0831				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Arsenic	ND		0.29	1.0
Cadmium	ND		0.11	1.0
Chromium	ND		0.54	2.0
Lead	0.207	J	0.019	1.0
Selenium	ND		0.42	5.0
Silver	ND		0.036	1.0
Beryllium	ND		0.037	1.0
Thallium	0.0240	J	0.015	1.0
Antimony	0.122	J	0.019	2.0
Nickel	ND		0.17	1.0
Zinc	ND		0.96	5.0
Copper	ND		0.24	2.0

Lab Control Sample - Batch: 180-126109

Method: 6020A
Preparation: 3005A
Total Recoverable

Lab Sample ID:	LCS 180-126109/3-A	Analysis Batch:	180-127095	Instrument ID:	M
Client Matrix:	Water	Prep Batch:	180-126109	Lab File ID:	M41203A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	12/03/2014 0937	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	11/23/2014 0831				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	40.0	33.8	85	80 - 120	
Cadmium	50.0	47.9	96	80 - 120	
Chromium	200	197	99	80 - 120	
Lead	20.0	22.7	114	80 - 120	
Selenium	10.0	8.16	82	80 - 120	
Silver	50.0	51.7	103	80 - 120	
Beryllium	50.0	50.5	101	80 - 120	
Thallium	50.0	56.9	114	80 - 120	
Antimony	500	469	94	80 - 120	
Nickel	500	485	97	80 - 120	
Zinc	500	458	92	80 - 120	
Copper	250	240	96	80 - 120	

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Method Blank - Batch: 180-126586

Method: 7470A
Preparation: 7470A

Lab Sample ID:	MB 180-126586/1-A	Analysis Batch:	180-126657	Instrument ID:	K
Client Matrix:	Water	Prep Batch:	180-126586	Lab File ID:	R41126D.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	11/26/2014 1710	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	11/26/2014 1207				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	ND		0.038	0.20

Lab Control Sample - Batch: 180-126586

Method: 7470A
Preparation: 7470A

Lab Sample ID:	LCS 180-126586/2-A	Analysis Batch:	180-126657	Instrument ID:	K
Client Matrix:	Water	Prep Batch:	180-126586	Lab File ID:	R41126D.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	11/26/2014 1712	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	11/26/2014 1207				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	2.50	2.28	91	80 - 120	

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Method Blank - Batch: 180-126560

Method: 1664B
Preparation: 1664B

Lab Sample ID:	MB 180-126560/1-A	Analysis Batch:	180-126598	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	180-126560	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	11/26/2014 0950	Units:	mg/L	Final Weight/Volume:	1000 mL
Prep Date:	11/26/2014 0950				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
HEM (Oil & Grease)	ND		1.5	5.0

Lab Control Sample - Batch: 180-126560

Method: 1664B
Preparation: 1664B

Lab Sample ID:	LCS 180-126560/2-A	Analysis Batch:	180-126598	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	180-126560	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	11/26/2014 0950	Units:	mg/L	Final Weight/Volume:	1000 mL
Prep Date:	11/26/2014 0950				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
HEM (Oil & Grease)	40.0	32.0	80	78 - 114	

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Method Blank - Batch: 180-126579

Method: 9014
Preparation: 9010C

Lab Sample ID:	MB 180-126579/4-A	Analysis Batch:	180-126605	Instrument ID:	SEAL2
Client Matrix:	Water	Prep Batch:	180-126579	Lab File ID:	112614CNB.csv
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	11/26/2014 1431	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	11/26/2014 1115				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Cyanide, Total	ND		2.5	10

Low Level Control Sample - Batch: 180-126579

Method: 9014
Preparation: 9010C

Lab Sample ID:	LLCS 180-126579/1-A	Analysis Batch:	180-126605	Instrument ID:	SEAL2
Client Matrix:	Water	Prep Batch:	180-126579	Lab File ID:	112614CNB.csv
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	11/26/2014 1424	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	11/26/2014 1115				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cyanide, Total	50.0	47.6	95	90 - 110	

High Level Control Sample - Batch: 180-126579

Method: 9014
Preparation: 9010C

Lab Sample ID:	HLCS 180-126579/2-A	Analysis Batch:	180-126605	Instrument ID:	SEAL2
Client Matrix:	Water	Prep Batch:	180-126579	Lab File ID:	112614CNB.csv
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	11/26/2014 1426	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	11/26/2014 1115				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cyanide, Total	250	243	97	90 - 110	

Lab Control Sample - Batch: 180-126579

Method: 9014
Preparation: 9010C

Lab Sample ID:	LCS 180-126579/3-A	Analysis Batch:	180-126605	Instrument ID:	SEAL2
Client Matrix:	Water	Prep Batch:	180-126579	Lab File ID:	112614CNB.csv
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	11/26/2014 1428	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	11/26/2014 1115				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cyanide, Total	200	194	97	85 - 115	

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 180-126579

Method: 9014
Preparation: 9010C

MS Lab Sample ID:	180-39026-1	Analysis Batch:	180-126605	Instrument ID:	SEAL2
Client Matrix:	Water	Prep Batch:	180-126579	Lab File ID:	112614CNB.csv
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	11/26/2014 1439			Final Weight/Volume:	50 mL
Prep Date:	11/26/2014 1115				
Leach Date:	N/A				

MSD Lab Sample ID:	180-39026-1	Analysis Batch:	180-126605	Instrument ID:	SEAL2
Client Matrix:	Water	Prep Batch:	180-126579	Lab File ID:	112614CNB.csv
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	11/26/2014 1441			Final Weight/Volume:	50 mL
Prep Date:	11/26/2014 1115				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Cyanide, Total	100	99	75 - 125	1	20		

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 180-126579

Method: 9014
Preparation: 9010C

MS Lab Sample ID:	180-39026-1	Units: ug/L		MSD Lab Sample ID:	180-39026-1
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	11/26/2014 1439			Analysis Date:	11/26/2014 1441
Prep Date:	11/26/2014 1115			Prep Date:	11/26/2014 1115
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Cyanide, Total	40	100	100	140	139

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Method Blank - Batch: 180-125730

Method: SM 2540D
Preparation: N/A

Lab Sample ID:	MB 180-125730/2	Analysis Batch:	180-125730	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	11/19/2014 1443	Units:	mg/L	Final Weight/Volume:	250 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Total Suspended Solids	ND		2.0	2.0

Lab Control Sample - Batch: 180-125730

Method: SM 2540D
Preparation: N/A

Lab Sample ID:	LCS 180-125730/1	Analysis Batch:	180-125730	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	11/19/2014 1443	Units:	mg/L	Final Weight/Volume:	250 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Suspended Solids	56.9	50.0	88	80 - 120	

DATA REPORTING QUALIFIERS

Client: EA Engineering, Science, and Technology Job Number: 180-39026-1

Lab Section	Qualifier	Description
GC/MS VOA		
	F1	MS and/or MSD Recovery exceeds the control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC/MS Semi VOA		
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	H	Sample was prepped or analyzed beyond the specified holding time
	X	Surrogate is outside control limits
Metals		
	B	Compound was found in the blank and sample.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
General Chemistry		
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Client: EA Engineering, Science, and Technology Job Number: 180-39026-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:180-125940					
LCS 180-125940/12	Lab Control Sample	T	Water	8260C	
MB 180-125940/6	Method Blank	T	Water	8260C	
180-39026-1	ST-018-111614	T	Water	8260C	
180-39026-1MS	Matrix Spike	T	Water	8260C	
180-39026-1MSD	Matrix Spike Duplicate	T	Water	8260C	
180-39026-2	ST-UNNAMED-111614	T	Water	8260C	
180-39026-3	ST-DUP1-111614	T	Water	8260C	
180-39026-4	ST-014-111614	T	Water	8260C	
180-39026-5	TRIP BLANK	T	Water	8260C	

Report Basis
T = Total

GC/MS Semi VOA					
Prep Batch: 180-125791					
LCS 180-125791/2-A	Lab Control Sample	T	Water	3520C	
LCSD 180-125791/3-A	Lab Control Sample Duplicate	T	Water	3520C	
MB 180-125791/1-A	Method Blank	T	Water	3520C	
180-39026-1	ST-018-111614	T	Water	3520C	
180-39026-2	ST-UNNAMED-111614	T	Water	3520C	
180-39026-3	ST-DUP1-111614	T	Water	3520C	
180-39026-4	ST-014-111614	T	Water	3520C	
Analysis Batch:180-126233					
LCS 180-125791/2-A	Lab Control Sample	T	Water	8270D LL	180-125791
LCSD 180-125791/3-A	Lab Control Sample Duplicate	T	Water	8270D LL	180-125791
MB 180-125791/1-A	Method Blank	T	Water	8270D LL	180-125791
180-39026-1	ST-018-111614	T	Water	8270D LL	180-125791
180-39026-2	ST-UNNAMED-111614	T	Water	8270D LL	180-125791
180-39026-3	ST-DUP1-111614	T	Water	8270D LL	180-125791
180-39026-4	ST-014-111614	T	Water	8270D LL	180-125791
Prep Batch: 180-126402					
LCS 180-126402/2-A	Lab Control Sample	T	Water	3520C	
LCSD 180-126402/3-A	Lab Control Sample Duplicate	T	Water	3520C	
MB 180-126402/1-A	Method Blank	T	Water	3520C	
180-39026-1RE	ST-018-111614	T	Water	3520C	
180-39026-3RE	ST-DUP1-111614	T	Water	3520C	
Analysis Batch:180-126682					
LCS 180-126402/2-A	Lab Control Sample	T	Water	8270D LL	180-126402
LCSD 180-126402/3-A	Lab Control Sample Duplicate	T	Water	8270D LL	180-126402
MB 180-126402/1-A	Method Blank	T	Water	8270D LL	180-126402
180-39026-1RE	ST-018-111614	T	Water	8270D LL	180-126402
180-39026-3RE	ST-DUP1-111614	T	Water	8270D LL	180-126402

Client: EA Engineering, Science, and Technology Job Number: 180-39026-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Report Basis					
T = Total					
GC Semi VOA					
Prep Batch: 180-126039					
LCS 180-126039/4-A	Lab Control Sample	T	Water	3510C	
LCSD 180-126039/5-A	Lab Control Sample Duplicate	T	Water	3510C	
MB 180-126039/1-A	Method Blank	T	Water	3510C	
180-39026-1	ST-018-111614	T	Water	3510C	
180-39026-2	ST-UNNAMED-111614	T	Water	3510C	
180-39026-3	ST-DUP1-111614	T	Water	3510C	
180-39026-4	ST-014-111614	T	Water	3510C	
Analysis Batch:180-127055					
LCS 180-126039/4-A	Lab Control Sample	T	Water	8082A	180-126039
LCSD 180-126039/5-A	Lab Control Sample Duplicate	T	Water	8082A	180-126039
MB 180-126039/1-A	Method Blank	T	Water	8082A	180-126039
180-39026-1	ST-018-111614	T	Water	8082A	180-126039
180-39026-2	ST-UNNAMED-111614	T	Water	8082A	180-126039
180-39026-3	ST-DUP1-111614	T	Water	8082A	180-126039
180-39026-4	ST-014-111614	T	Water	8082A	180-126039
Report Basis					
T = Total					

Client: EA Engineering, Science, and Technology Job Number: 180-39026-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 180-126109					
LCS 180-126109/3-A	Lab Control Sample	R	Water	3005A	
MB 180-126109/1-A	Method Blank	R	Water	3005A	
180-39026-1	ST-018-111614	R	Water	3005A	
180-39026-2	ST-UNNAMED-111614	R	Water	3005A	
180-39026-3	ST-DUP1-111614	R	Water	3005A	
180-39026-4	ST-014-111614	R	Water	3005A	
Prep Batch: 180-126586					
LCS 180-126586/2-A	Lab Control Sample	T	Water	7470A	
MB 180-126586/1-A	Method Blank	T	Water	7470A	
180-39026-1	ST-018-111614	T	Water	7470A	
180-39026-2	ST-UNNAMED-111614	T	Water	7470A	
180-39026-3	ST-DUP1-111614	T	Water	7470A	
180-39026-4	ST-014-111614	T	Water	7470A	
Analysis Batch:180-126657					
LCS 180-126586/2-A	Lab Control Sample	T	Water	7470A	180-126586
MB 180-126586/1-A	Method Blank	T	Water	7470A	180-126586
180-39026-1	ST-018-111614	T	Water	7470A	180-126586
180-39026-2	ST-UNNAMED-111614	T	Water	7470A	180-126586
180-39026-3	ST-DUP1-111614	T	Water	7470A	180-126586
180-39026-4	ST-014-111614	T	Water	7470A	180-126586
Analysis Batch:180-127095					
LCS 180-126109/3-A	Lab Control Sample	R	Water	6020A	180-126109
MB 180-126109/1-A	Method Blank	R	Water	6020A	180-126109
180-39026-1	ST-018-111614	R	Water	6020A	180-126109
180-39026-2	ST-UNNAMED-111614	R	Water	6020A	180-126109
180-39026-3	ST-DUP1-111614	R	Water	6020A	180-126109
180-39026-4	ST-014-111614	R	Water	6020A	180-126109

Report Basis
R = Total Recoverable
T = Total

Client: EA Engineering, Science, and Technology Job Number: 180-39026-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:180-125730					
LCS 180-125730/1	Lab Control Sample	T	Water	SM 2540D	
MB 180-125730/2	Method Blank	T	Water	SM 2540D	
180-39026-1	ST-018-111614	T	Water	SM 2540D	
180-39026-2	ST-UNNAMED-111614	T	Water	SM 2540D	
180-39026-3	ST-DUP1-111614	T	Water	SM 2540D	
180-39026-4	ST-014-111614	T	Water	SM 2540D	
Prep Batch: 180-126560					
LCS 180-126560/2-A	Lab Control Sample	T	Water	1664B	
MB 180-126560/1-A	Method Blank	T	Water	1664B	
180-39026-1	ST-018-111614	T	Water	1664B	
180-39026-2	ST-UNNAMED-111614	T	Water	1664B	
180-39026-3	ST-DUP1-111614	T	Water	1664B	
180-39026-4	ST-014-111614	T	Water	1664B	
Prep Batch: 180-126579					
HLCS 180-126579/2-A	High Level Control Sample	T	Water	9010C	
LCS 180-126579/3-A	Lab Control Sample	T	Water	9010C	
LLCS 180-126579/1-A	Low Level Control Sample	T	Water	9010C	
MB 180-126579/4-A	Method Blank	T	Water	9010C	
180-39026-1	ST-018-111614	T	Water	9010C	
180-39026-1MS	Matrix Spike	T	Water	9010C	
180-39026-1MSD	Matrix Spike Duplicate	T	Water	9010C	
180-39026-2	ST-UNNAMED-111614	T	Water	9010C	
180-39026-3	ST-DUP1-111614	T	Water	9010C	
180-39026-4	ST-014-111614	T	Water	9010C	
Analysis Batch:180-126598					
LCS 180-126560/2-A	Lab Control Sample	T	Water	1664B	180-126560
MB 180-126560/1-A	Method Blank	T	Water	1664B	180-126560
180-39026-1	ST-018-111614	T	Water	1664B	180-126560
180-39026-2	ST-UNNAMED-111614	T	Water	1664B	180-126560
180-39026-3	ST-DUP1-111614	T	Water	1664B	180-126560
180-39026-4	ST-014-111614	T	Water	1664B	180-126560

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:180-126605					
HLCS 180-126579/2-A	High Level Control Sample	T	Water	9014	180-126579
LCS 180-126579/3-A	Lab Control Sample	T	Water	9014	180-126579
LLCS 180-126579/1-A	Low Level Control Sample	T	Water	9014	180-126579
MB 180-126579/4-A	Method Blank	T	Water	9014	180-126579
180-39026-1	ST-018-111614	T	Water	9014	180-126579
180-39026-1MS	Matrix Spike	T	Water	9014	180-126579
180-39026-1MSD	Matrix Spike Duplicate	T	Water	9014	180-126579
180-39026-2	ST-UNNAMED-111614	T	Water	9014	180-126579
180-39026-3	ST-DUP1-111614	T	Water	9014	180-126579
180-39026-4	ST-014-111614	T	Water	9014	180-126579

Report Basis

T = Total

Client: EA Engineering, Science, and Technology Job Number: 180-39026-1

Laboratory Chronicle

Lab ID: 180-39026-1 **Client ID: ST-018-111614**

Sample Date/Time: 11/16/2014 18:08 Received Date/Time: 11/18/2014 09:35

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	180-39026-J-1		180-125940		11/21/2014 12:59	1	TAL PIT	PJJ
A:8260C	180-39026-J-1		180-125940		11/21/2014 12:59	1	TAL PIT	PJJ
P:3520C	180-39026-E-1-A		180-126233	180-125791	11/20/2014 09:07	1	TAL PIT	BJT
A:8270D LL	180-39026-E-1-A		180-126233	180-125791	11/24/2014 18:40	1	TAL PIT	VVP
P:3520C	180-39026-F-1-A	RE	180-126682	180-126402	11/25/2014 09:59	1	TAL PIT	BJT
A:8270D LL	180-39026-F-1-A	RE	180-126682	180-126402	11/28/2014 21:45	1	TAL PIT	VVP
P:3510C	180-39026-C-1-A		180-127055	180-126039	11/21/2014 16:15	1	TAL PIT	CBY
A:8082A	180-39026-C-1-A		180-127055	180-126039	12/04/2014 06:36	1	TAL PIT	JMO
P:3005A	180-39026-I-1-A		180-127095	180-126109	11/23/2014 08:31	1	TAL PIT	SLB
A:6020A	180-39026-I-1-A		180-127095	180-126109	12/03/2014 10:47	1	TAL PIT	CNF
P:7470A	180-39026-I-1-B		180-126657	180-126586	11/26/2014 12:07	1	TAL PIT	LEM
A:7470A	180-39026-I-1-B		180-126657	180-126586	11/26/2014 17:32	1	TAL PIT	LEM
P:1664B	180-39026-A-1-A		180-126598	180-126560	11/26/2014 11:59	1	TAL PIT	NAK
A:1664B	180-39026-A-1-A		180-126598	180-126560	11/26/2014 11:59	1	TAL PIT	NAK
P:9010C	180-39026-H-1-A		180-126605	180-126579	11/26/2014 11:15	1	TAL PIT	PGJ
A:9014	180-39026-H-1-A		180-126605	180-126579	11/26/2014 14:33	1	TAL PIT	PGJ
A:SM 2540D	180-39026-G-1		180-125730		11/19/2014 14:43	1	TAL PIT	JWS

Lab ID: 180-39026-1 MS **Client ID: ST-018-111614**

Sample Date/Time: 11/16/2014 18:08 Received Date/Time: 11/18/2014 09:35

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	180-39026-K-1 MS		180-125940		11/21/2014 15:13	1	TAL PIT	PJJ
A:8260C	180-39026-K-1 MS		180-125940		11/21/2014 15:13	1	TAL PIT	PJJ
P:9010C	180-39026-H-1-B MS		180-126605	180-126579	11/26/2014 11:15	1	TAL PIT	PGJ
A:9014	180-39026-H-1-B MS		180-126605	180-126579	11/26/2014 14:39	1	TAL PIT	PGJ

Lab ID: 180-39026-1 MSD **Client ID: ST-018-111614**

Sample Date/Time: 11/16/2014 18:08 Received Date/Time: 11/18/2014 09:35

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	180-39026-K-1 MSD		180-125940		11/21/2014 15:40	1	TAL PIT	PJJ
A:8260C	180-39026-K-1 MSD		180-125940		11/21/2014 15:40	1	TAL PIT	PJJ
P:9010C	180-39026-H-1-C MSD		180-126605	180-126579	11/26/2014 11:15	1	TAL PIT	PGJ
A:9014	180-39026-H-1-C MSD		180-126605	180-126579	11/26/2014 14:41	1	TAL PIT	PGJ

Client: EA Engineering, Science, and Technology Job Number: 180-39026-1

Laboratory Chronicle

Lab ID: 180-39026-2 **Client ID: ST-UNNAMED-111614**

Sample Date/Time: 11/16/2014 18:55 Received Date/Time: 11/18/2014 09:35

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	180-39026-J-2		180-125940		11/21/2014 13:26	1	TAL PIT	PJJ
A:8260C	180-39026-J-2		180-125940		11/21/2014 13:26	1	TAL PIT	PJJ
P:3520C	180-39026-E-2-A		180-126233	180-125791	11/20/2014 09:07	1	TAL PIT	BJT
A:8270D LL	180-39026-E-2-A		180-126233	180-125791	11/24/2014 19:08	1	TAL PIT	VVP
P:3510C	180-39026-C-2-A		180-127055	180-126039	11/21/2014 16:15	1	TAL PIT	CBY
A:8082A	180-39026-C-2-A		180-127055	180-126039	12/04/2014 06:56	1	TAL PIT	JMO
P:3005A	180-39026-I-2-A		180-127095	180-126109	11/23/2014 08:31	1	TAL PIT	SLB
A:6020A	180-39026-I-2-A		180-127095	180-126109	12/03/2014 11:00	1	TAL PIT	CNF
P:7470A	180-39026-I-2-B		180-126657	180-126586	11/26/2014 12:07	1	TAL PIT	LEM
A:7470A	180-39026-I-2-B		180-126657	180-126586	11/26/2014 17:33	1	TAL PIT	LEM
P:1664B	180-39026-A-2-A		180-126598	180-126560	11/26/2014 11:59	1	TAL PIT	NAK
A:1664B	180-39026-A-2-A		180-126598	180-126560	11/26/2014 11:59	1	TAL PIT	NAK
P:9010C	180-39026-H-2-A		180-126605	180-126579	11/26/2014 11:15	1	TAL PIT	PGJ
A:9014	180-39026-H-2-A		180-126605	180-126579	11/26/2014 14:43	1	TAL PIT	PGJ
A:SM 2540D	180-39026-G-2		180-125730		11/19/2014 14:43	1	TAL PIT	JWS

Lab ID: 180-39026-3 **Client ID: ST-DUP1-111614**

Sample Date/Time: 11/16/2014 00:00 Received Date/Time: 11/18/2014 09:35

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	180-39026-K-3		180-125940		11/21/2014 13:53	1	TAL PIT	PJJ
A:8260C	180-39026-K-3		180-125940		11/21/2014 13:53	1	TAL PIT	PJJ
P:3520C	180-39026-E-3-A		180-126233	180-125791	11/20/2014 09:07	1	TAL PIT	BJT
A:8270D LL	180-39026-E-3-A		180-126233	180-125791	11/24/2014 19:35	1	TAL PIT	VVP
P:3520C	180-39026-F-3-A	RE	180-126682	180-126402	11/25/2014 09:59	1	TAL PIT	BJT
A:8270D LL	180-39026-F-3-A	RE	180-126682	180-126402	11/28/2014 22:11	1	TAL PIT	VVP
P:3510C	180-39026-C-3-A		180-127055	180-126039	11/21/2014 16:15	1	TAL PIT	CBY
A:8082A	180-39026-C-3-A		180-127055	180-126039	12/04/2014 07:15	1	TAL PIT	JMO
P:3005A	180-39026-I-3-A		180-127095	180-126109	11/23/2014 08:31	1	TAL PIT	SLB
A:6020A	180-39026-I-3-A		180-127095	180-126109	12/03/2014 11:04	1	TAL PIT	CNF
P:7470A	180-39026-I-3-B		180-126657	180-126586	11/26/2014 12:07	1	TAL PIT	LEM
A:7470A	180-39026-I-3-B		180-126657	180-126586	11/26/2014 17:35	1	TAL PIT	LEM
P:1664B	180-39026-A-3-A		180-126598	180-126560	11/26/2014 11:59	1	TAL PIT	NAK
A:1664B	180-39026-A-3-A		180-126598	180-126560	11/26/2014 11:59	1	TAL PIT	NAK
P:9010C	180-39026-H-3-A		180-126605	180-126579	11/26/2014 11:15	1	TAL PIT	PGJ
A:9014	180-39026-H-3-A		180-126605	180-126579	11/26/2014 14:46	1	TAL PIT	PGJ
A:SM 2540D	180-39026-G-3		180-125730		11/19/2014 14:43	1	TAL PIT	JWS

Client: EA Engineering, Science, and Technology Job Number: 180-39026-1

Laboratory Chronicle

Lab ID: 180-39026-4 **Client ID:** ST-014-111614

Sample Date/Time: 11/16/2014 19:15 Received Date/Time: 11/18/2014 09:35

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	180-39026-J-4		180-125940		11/21/2014 14:19	1	TAL PIT	PJJ
A:8260C	180-39026-J-4		180-125940		11/21/2014 14:19	1	TAL PIT	PJJ
P:3520C	180-39026-E-4-A		180-126233	180-125791	11/20/2014 09:07	1	TAL PIT	BJT
A:8270D LL	180-39026-E-4-A		180-126233	180-125791	11/24/2014 20:02	1	TAL PIT	VVP
P:3510C	180-39026-C-4-A		180-127055	180-126039	11/21/2014 16:15	1	TAL PIT	CBY
A:8082A	180-39026-C-4-A		180-127055	180-126039	12/04/2014 07:35	1	TAL PIT	JMO
P:3005A	180-39026-I-4-A		180-127095	180-126109	11/23/2014 08:31	1	TAL PIT	SLB
A:6020A	180-39026-I-4-A		180-127095	180-126109	12/03/2014 11:07	1	TAL PIT	CNF
P:7470A	180-39026-I-4-B		180-126657	180-126586	11/26/2014 12:07	1	TAL PIT	LEM
A:7470A	180-39026-I-4-B		180-126657	180-126586	11/26/2014 17:37	1	TAL PIT	LEM
P:1664B	180-39026-A-4-A		180-126598	180-126560	11/26/2014 11:59	1	TAL PIT	NAK
A:1664B	180-39026-A-4-A		180-126598	180-126560	11/26/2014 11:59	1	TAL PIT	NAK
P:9010C	180-39026-H-4-A		180-126605	180-126579	11/26/2014 11:15	1	TAL PIT	PGJ
A:9014	180-39026-H-4-A		180-126605	180-126579	11/26/2014 14:48	1	TAL PIT	PGJ
A:SM 2540D	180-39026-G-4		180-125730		11/19/2014 14:43	1	TAL PIT	JWS

Lab ID: 180-39026-5 **Client ID:** TRIP BLANK

Sample Date/Time: 11/16/2014 00:00 Received Date/Time: 11/18/2014 09:35

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	180-39026-A-5		180-125940		11/21/2014 12:32	1	TAL PIT	PJJ
A:8260C	180-39026-A-5		180-125940		11/21/2014 12:32	1	TAL PIT	PJJ

Client: EA Engineering, Science, and Technology Job Number: 180-39026-1

Laboratory Chronicle

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:5030C	MB 180-125940/6		180-125940		11/21/2014 12:05	1	TAL PIT	PJJ
A:8260C	MB 180-125940/6		180-125940		11/21/2014 12:05	1	TAL PIT	PJJ
P:3520C	MB 180-125791/1-A		180-126233	180-125791	11/20/2014 09:07	1	TAL PIT	BJT
A:8270D LL	MB 180-125791/1-A		180-126233	180-125791	11/24/2014 12:57	1	TAL PIT	VVP
P:3520C	MB 180-126402/1-A		180-126682	180-126402	11/25/2014 09:59	1	TAL PIT	BJT
A:8270D LL	MB 180-126402/1-A		180-126682	180-126402	11/28/2014 14:09	1	TAL PIT	VVP
P:3510C	MB 180-126039/1-A		180-127055	180-126039	11/21/2014 16:15	1	TAL PIT	CBY
A:8082A	MB 180-126039/1-A		180-127055	180-126039	12/04/2014 05:19	1	TAL PIT	JMO
P:3005A	MB 180-126109/1-A		180-127095	180-126109	11/23/2014 08:31	1	TAL PIT	SLB
A:6020A	MB 180-126109/1-A		180-127095	180-126109	12/03/2014 09:30	1	TAL PIT	CNF
P:7470A	MB 180-126586/1-A		180-126657	180-126586	11/26/2014 12:07	1	TAL PIT	LEM
A:7470A	MB 180-126586/1-A		180-126657	180-126586	11/26/2014 17:10	1	TAL PIT	LEM
P:1664B	MB 180-126560/1-A		180-126598	180-126560	11/26/2014 09:50	1	TAL PIT	NAK
A:1664B	MB 180-126560/1-A		180-126598	180-126560	11/26/2014 09:50	1	TAL PIT	NAK
P:9010C	MB 180-126579/4-A		180-126605	180-126579	11/26/2014 11:15	1	TAL PIT	PGJ
A:9014	MB 180-126579/4-A		180-126605	180-126579	11/26/2014 14:31	1	TAL PIT	PGJ
A:SM 2540D	MB 180-125730/2		180-125730		11/19/2014 14:43	1	TAL PIT	JWS

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:5030C	LCS 180-125940/12		180-125940		11/21/2014 14:46	1	TAL PIT	PJJ
A:8260C	LCS 180-125940/12		180-125940		11/21/2014 14:46	1	TAL PIT	PJJ
P:3520C	LCS 180-125791/2-A		180-126233	180-125791	11/20/2014 09:07	1	TAL PIT	BJT
A:8270D LL	LCS 180-125791/2-A		180-126233	180-125791	11/24/2014 15:24	1	TAL PIT	VVP
P:3520C	LCS 180-126402/2-A		180-126682	180-126402	11/25/2014 09:59	1	TAL PIT	BJT
A:8270D LL	LCS 180-126402/2-A		180-126682	180-126402	11/28/2014 15:56	1	TAL PIT	VVP
P:3510C	LCS 180-126039/4-A		180-127055	180-126039	11/21/2014 16:15	1	TAL PIT	CBY
A:8082A	LCS 180-126039/4-A		180-127055	180-126039	12/04/2014 11:04	1	TAL PIT	JMO
P:3005A	LCS 180-126109/3-A		180-127095	180-126109	11/23/2014 08:31	1	TAL PIT	SLB
A:6020A	LCS 180-126109/3-A		180-127095	180-126109	12/03/2014 09:37	1	TAL PIT	CNF
P:7470A	LCS 180-126586/2-A		180-126657	180-126586	11/26/2014 12:07	1	TAL PIT	LEM
A:7470A	LCS 180-126586/2-A		180-126657	180-126586	11/26/2014 17:12	1	TAL PIT	LEM
P:1664B	LCS 180-126560/2-A		180-126598	180-126560	11/26/2014 09:50	1	TAL PIT	NAK
A:1664B	LCS 180-126560/2-A		180-126598	180-126560	11/26/2014 09:50	1	TAL PIT	NAK
P:9010C	LCS 180-126579/3-A		180-126605	180-126579	11/26/2014 11:15	1	TAL PIT	PGJ
A:9014	LCS 180-126579/3-A		180-126605	180-126579	11/26/2014 14:28	1	TAL PIT	PGJ
A:SM 2540D	LCS 180-125730/1		180-125730		11/19/2014 14:43	1	TAL PIT	JWS

Client: EA Engineering, Science, and Technology Job Number: 180-39026-1

Laboratory Chronicle

Lab ID: LCSD **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	LCSD 180-125791/3-A		180-126233	180-125791	11/20/2014 09:07	1	TAL PIT	BJT
A:8270D LL	LCSD 180-125791/3-A		180-126233	180-125791	11/24/2014 15:53	1	TAL PIT	VVP
P:3520C	LCSD 180-126402/3-A		180-126682	180-126402	11/25/2014 09:59	1	TAL PIT	BJT
A:8270D LL	LCSD 180-126402/3-A		180-126682	180-126402	11/28/2014 16:22	1	TAL PIT	VVP
P:3510C	LCSD 180-126039/5-A		180-127055	180-126039	11/21/2014 16:15	1	TAL PIT	CBY
A:8082A	LCSD 180-126039/5-A		180-127055	180-126039	12/04/2014 11:23	1	TAL PIT	JMO

Lab ID: LLCS **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:9010C	LLCS 180-126579/1-A		180-126605	180-126579	11/26/2014 11:15	1	TAL PIT	PGJ
A:9014	LLCS 180-126579/1-A		180-126605	180-126579	11/26/2014 14:24	1	TAL PIT	PGJ

Lab ID: HLCS **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:9010C	HLCS 180-126579/2-A		180-126605	180-126579	11/26/2014 11:15	1	TAL PIT	PGJ
A:9014	HLCS 180-126579/2-A		180-126605	180-126579	11/26/2014 14:26	1	TAL PIT	PGJ

Lab References:
TAL PIT = TestAmerica Pittsburgh

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
GCAR1232CALL4_00007	03/15/15	07/11/14	Hexane, Lot 1241508	250 mL	GCPCBI1232STD_00003	0.125 mL	PCB-1232 Peak 1	0.5 ug/mL
							PCB-1232 Peak 2	0.5 ug/mL
							PCB-1232 Peak 3	0.5 ug/mL
							PCB-1232 Peak 4	0.5 ug/mL
							PCB-1232 Peak 5	0.5 ug/mL
.GCPCBI1232STD_00003	11/30/18		RESTEK, Lot A090290		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
GCAR1242CALL4_00007	03/15/15	07/11/14	Hexane, Lot 1241508	100 mL	GCPCBI1242STD_00003	0.05 mL	PCB-1242 Peak 1	0.5 ug/mL
							PCB-1242 Peak 2	0.5 ug/mL
							PCB-1242 Peak 3	0.5 ug/mL
							PCB-1242 Peak 4	0.5 ug/mL
							PCB-1242 Peak 5	0.5 ug/mL
.GCPCBI1242STD_00003	11/30/18		RESTEK, Lot A090182		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
GCAR1248CALL4_00008	03/15/15	07/11/14	Hexane, Lot 1241508	100 mL	GCPCBI1248STD_00003	0.05 mL	PCB-1248 Peak 1	0.5 ug/mL
							PCB-1248 Peak 2	0.5 ug/mL
							PCB-1248 Peak 3	0.5 ug/mL
							PCB-1248 Peak 4	0.5 ug/mL
							PCB-1248 Peak 5	0.5 ug/mL
.GCPCBI1248STD_00003	04/30/19		RESTEK, Lot A092864		(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
GCAR1660CALL1_00011	03/31/15	09/29/14	HEXANE, Lot 1305300	200 mL	GC1660WORKS_00011	0.02 mL	PCB-1016 Peak 1	0.01 ug/mL
							PCB-1016 Peak 2	0.01 ug/mL
							PCB-1016 Peak 3	0.01 ug/mL
							PCB-1016 Peak 4	0.01 ug/mL
							PCB-1016 Peak 5	0.01 ug/mL
							PCB-1260 Peak 1	0.01 ug/mL
							PCB-1260 Peak 2	0.01 ug/mL
							PCB-1260 Peak 3	0.01 ug/mL
							PCB-1260 Peak 4	0.01 ug/mL
							PCB-1260 Peak 5	0.01 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.0005 ug/mL
							Tetrachloro-m-xylene (Surr)	0.0005 ug/mL
.GC1660WORKS_00011	03/31/15	09/29/14	HEXANE, Lot 1305300	20 mL	GCPCBICAL STD_00001	2 mL	PCB-1016 Peak 1	100 ug/mL
							PCB-1016 Peak 2	100 ug/mL
							PCB-1016 Peak 3	100 ug/mL
							PCB-1016 Peak 4	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1016 Peak 5	100 ug/mL
							PCB-1260 Peak 1	100 ug/mL
							PCB-1260 Peak 2	100 ug/mL
							PCB-1260 Peak 3	100 ug/mL
							PCB-1260 Peak 4	100 ug/mL
							PCB-1260 Peak 5	100 ug/mL
					GCPEST(SURR)S_00005	0.5 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene (Surr)	5 ug/mL
..GCPCBICAL STD_00001	04/30/19		RESTEK, Lot A092844		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..GCPEST(SURR)S_00005	03/20/19		RESTEK, Lot a092633		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
GCAR1660CALL2_00009	03/31/15	09/29/14	HEXANE, Lot 1305300	200 mL	GC1660WORKS_00011	0.1 mL	PCB-1016 Peak 1	0.05 ug/mL
							PCB-1016 Peak 2	0.05 ug/mL
							PCB-1016 Peak 3	0.05 ug/mL
							PCB-1016 Peak 4	0.05 ug/mL
							PCB-1016 Peak 5	0.05 ug/mL
							PCB-1260 Peak 1	0.05 ug/mL
							PCB-1260 Peak 2	0.05 ug/mL
							PCB-1260 Peak 3	0.05 ug/mL
							PCB-1260 Peak 4	0.05 ug/mL
							PCB-1260 Peak 5	0.05 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.0025 ug/mL
							Tetrachloro-m-xylene (Surr)	0.0025 ug/mL
.GC1660WORKS_00011	03/31/15	09/29/14	HEXANE, Lot 1305300	20 mL	GCPCBICAL STD_00001	2 mL	PCB-1016 Peak 1	100 ug/mL
							PCB-1016 Peak 2	100 ug/mL
							PCB-1016 Peak 3	100 ug/mL
							PCB-1016 Peak 4	100 ug/mL
							PCB-1016 Peak 5	100 ug/mL
							PCB-1260 Peak 1	100 ug/mL
							PCB-1260 Peak 2	100 ug/mL
							PCB-1260 Peak 3	100 ug/mL
							PCB-1260 Peak 4	100 ug/mL
							PCB-1260 Peak 5	100 ug/mL
					GCPEST(SURR)S_00005	0.5 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene (Surr)	5 ug/mL
..GCPCBICAL STD_00001	04/30/19		RESTEK, Lot A092844		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..GCPEST(SURR)S_00005	03/20/19		RESTEK, Lot a092633		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
GCAR1660CALL3_00008	03/31/15	09/29/14	HEXANE, Lot 1305300	200 mL	GC1660WORKS_00011	0.4 mL	PCB-1016 Peak 1	0.2 ug/mL
							PCB-1016 Peak 2	0.2 ug/mL
							PCB-1016 Peak 3	0.2 ug/mL
							PCB-1016 Peak 4	0.2 ug/mL
							PCB-1016 Peak 5	0.2 ug/mL
							PCB-1260 Peak 1	0.2 ug/mL
							PCB-1260 Peak 2	0.2 ug/mL
							PCB-1260 Peak 3	0.2 ug/mL
							PCB-1260 Peak 4	0.2 ug/mL
							PCB-1260 Peak 5	0.2 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.01 ug/mL
							Tetrachloro-m-xylene (Surr)	0.01 ug/mL
.GC1660WORKS_00011	03/31/15	09/29/14	HEXANE, Lot 1305300	20 mL	GCPCBICAL STD_00001	2 mL	PCB-1016 Peak 1	100 ug/mL
							PCB-1016 Peak 2	100 ug/mL
							PCB-1016 Peak 3	100 ug/mL
							PCB-1016 Peak 4	100 ug/mL
							PCB-1016 Peak 5	100 ug/mL
							PCB-1260 Peak 1	100 ug/mL
							PCB-1260 Peak 2	100 ug/mL
							PCB-1260 Peak 3	100 ug/mL
							PCB-1260 Peak 4	100 ug/mL
							PCB-1260 Peak 5	100 ug/mL
					GCPEST(SURR)S_00005	0.5 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene (Surr)	5 ug/mL
..GCPCBICAL STD_00001	04/30/19		RESTEK, Lot A092844		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..GCPEST(SURR)S_00005	03/20/19		RESTEK, Lot a092633		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
GCAR1660CALL4_00008	03/31/15	09/29/14	HEAXANE, Lot 1305300	400 mL	GC1660WORKS_00011	2 mL	PCB-1016 Peak 1	0.5 ug/mL
							PCB-1016 Peak 2	0.5 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1016 Peak 3	0.5 ug/mL
							PCB-1016 Peak 4	0.5 ug/mL
							PCB-1016 Peak 5	0.5 ug/mL
							PCB-1260 Peak 1	0.5 ug/mL
							PCB-1260 Peak 2	0.5 ug/mL
							PCB-1260 Peak 3	0.5 ug/mL
							PCB-1260 Peak 4	0.5 ug/mL
							PCB-1260 Peak 5	0.5 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.025 ug/mL
							Tetrachloro-m-xylene (Surr)	0.025 ug/mL
.GC1660WORKS_00011	03/31/15	09/29/14	HEXANE, Lot 1305300	20 mL	GCPCBICAL STD_00001	2 mL	PCB-1016 Peak 1	100 ug/mL
							PCB-1016 Peak 2	100 ug/mL
							PCB-1016 Peak 3	100 ug/mL
							PCB-1016 Peak 4	100 ug/mL
							PCB-1016 Peak 5	100 ug/mL
							PCB-1260 Peak 1	100 ug/mL
							PCB-1260 Peak 2	100 ug/mL
							PCB-1260 Peak 3	100 ug/mL
							PCB-1260 Peak 4	100 ug/mL
							PCB-1260 Peak 5	100 ug/mL
					GCPEST(SURR)S_00005	0.5 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene (Surr)	5 ug/mL
..GCPCBICAL STD_00001	04/30/19	RESTEK, Lot A092844			(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..GCPEST(SURR)S_00005	03/20/19	RESTEK, Lot a092633			(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
GCAR1660CALL5_00009	03/31/15	09/29/14	HEAXNE, Lot 1305300	400 mL	GC1660WORKS_00011	4 mL	PCB-1016 Peak 1	1 ug/mL
							PCB-1016 Peak 2	1 ug/mL
							PCB-1016 Peak 3	1 ug/mL
							PCB-1016 Peak 4	1 ug/mL
							PCB-1016 Peak 5	1 ug/mL
							PCB-1260 Peak 1	1 ug/mL
							PCB-1260 Peak 2	1 ug/mL
							PCB-1260 Peak 3	1 ug/mL
							PCB-1260 Peak 4	1 ug/mL
							PCB-1260 Peak 5	1 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.05 ug/mL
							Tetrachloro-m-xylene (Surr)	0.05 ug/mL
.GC1660WORKS_00011	03/31/15	09/29/14	HEXANE, Lot 1305300	20 mL	GCPCBICAL STD_00001	2 mL	PCB-1016 Peak 1	100 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1016 Peak 2	100 ug/mL
							PCB-1016 Peak 3	100 ug/mL
							PCB-1016 Peak 4	100 ug/mL
							PCB-1016 Peak 5	100 ug/mL
							PCB-1260 Peak 1	100 ug/mL
							PCB-1260 Peak 2	100 ug/mL
							PCB-1260 Peak 3	100 ug/mL
							PCB-1260 Peak 4	100 ug/mL
							PCB-1260 Peak 5	100 ug/mL
					GCPEST(SURR)S_00005	0.5 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene (Surr)	5 ug/mL
..GCPCBICAL STD_00001	04/30/19		RESTEK, Lot A092844		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..GCPEST(SURR)S_00005	03/20/19		RESTEK, Lot a092633		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
GCAR1660CALL5_00009	03/31/15	09/29/14	HEAXNE, Lot 1305300	400 mL	GC1660WORKS_00011	4 mL	PCB-1016	1 ug/mL
							PCB-1260	1 ug/mL
.GC1660WORKS_00011	03/31/15	09/29/14	HEXANE, Lot 1305300	20 mL	GCPCBICAL STD_00001	2 mL	PCB-1016	100 ug/mL
							PCB-1260	100 ug/mL
..GCPCBICAL STD_00001	04/30/19		RESTEK, Lot A092844		(Purchased Reagent)		PCB-1016	1000 ug/mL
							PCB-1260	1000 ug/mL
GCAR1660CALL6_00007	03/31/15	09/29/14	Hexane, Lot 1305300	200 mL	GC1660WORKS_00011	4 mL	PCB-1016 Peak 1	2 ug/mL
							PCB-1016 Peak 2	2 ug/mL
							PCB-1016 Peak 3	2 ug/mL
							PCB-1016 Peak 4	2 ug/mL
							PCB-1016 Peak 5	2 ug/mL
							PCB-1260 Peak 1	2 ug/mL
							PCB-1260 Peak 2	2 ug/mL
							PCB-1260 Peak 3	2 ug/mL
							PCB-1260 Peak 4	2 ug/mL
							PCB-1260 Peak 5	2 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.1 ug/mL
							Tetrachloro-m-xylene (Surr)	0.1 ug/mL
.GC1660WORKS_00011	03/31/15	09/29/14	HEXANE, Lot 1305300	20 mL	GCPCBICAL STD_00001	2 mL	PCB-1016 Peak 1	100 ug/mL
							PCB-1016 Peak 2	100 ug/mL
							PCB-1016 Peak 3	100 ug/mL
							PCB-1016 Peak 4	100 ug/mL
							PCB-1016 Peak 5	100 ug/mL
							PCB-1260 Peak 1	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1260 Peak 2	100 ug/mL
							PCB-1260 Peak 3	100 ug/mL
							PCB-1260 Peak 4	100 ug/mL
							PCB-1260 Peak 5	100 ug/mL
					GCPEST(SURR)S_00005	0.5 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene (Surr)	5 ug/mL
..GCPCBICAL STD_00001	04/30/19		RESTEK, Lot A092844		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..GCPEST(SURR)S_00005	03/20/19		RESTEK, Lot a092633		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
GCAR1660CALL7_00008	03/31/15	09/29/14	HEXANE, Lot 1305300	200 mL	GC1660WORKS_00011	8 mL	PCB-1016 Peak 1	4 ug/mL
							PCB-1016 Peak 2	4 ug/mL
							PCB-1016 Peak 3	4 ug/mL
							PCB-1016 Peak 4	4 ug/mL
							PCB-1016 Peak 5	4 ug/mL
							PCB-1260 Peak 1	4 ug/mL
							PCB-1260 Peak 2	4 ug/mL
							PCB-1260 Peak 3	4 ug/mL
							PCB-1260 Peak 4	4 ug/mL
							PCB-1260 Peak 5	4 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.2 ug/mL
							Tetrachloro-m-xylene (Surr)	0.2 ug/mL
.GC1660WORKS_00011	03/31/15	09/29/14	HEXANE, Lot 1305300	20 mL	GCPCBICAL STD_00001	2 mL	PCB-1016 Peak 1	100 ug/mL
							PCB-1016 Peak 2	100 ug/mL
							PCB-1016 Peak 3	100 ug/mL
							PCB-1016 Peak 4	100 ug/mL
							PCB-1016 Peak 5	100 ug/mL
							PCB-1260 Peak 1	100 ug/mL
							PCB-1260 Peak 2	100 ug/mL
							PCB-1260 Peak 3	100 ug/mL
							PCB-1260 Peak 4	100 ug/mL
							PCB-1260 Peak 5	100 ug/mL
					GCPEST(SURR)S_00005	0.5 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene (Surr)	5 ug/mL
..GCPCBICAL STD_00001	04/30/19		RESTEK, Lot A092844		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..GCPEST(SURR)S_00005	03/20/19	RESTEK, Lot a092633			(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
GCMATRIXWORKS_00011	03/11/15	07/11/14	ACETONE, Lot 1078945/JT BAKER	250 mL	GCMATRIXSPK_00001	1 mL	PCB-1016	40 ug/mL
							PCB-1260	40 ug/mL
.GCMATRIXSPK_00001	09/30/17	RESTEK, Lot A076606			(Purchased Reagent)		PCB-1016	10000 ug/mL
							PCB-1260	10000 ug/mL
MCCV1X_00069	12/18/14	11/18/14	2% Nitric Acid, Lot 1241747	500 mL	MCALSPECAREV_00005	10 mL	Arsenic	0.1 ppm
							Beryllium	0.1 ppm
							Cadmium	0.1 ppm
							Chromium	0.1 ppm
							Copper	0.1 ppm
							Lead	0.1 ppm
							Nickel	0.1 ppm
							Selenium	0.1 ppm
							Silver	0.1 ppm
							Thallium	0.1 ppm
							Zinc	0.1 ppm
					MCALSPECB_00007	10 mL	Antimony	0.1 ppm
.MCALSPECAREV_00005	05/01/15	Inorganic Ventures, Lot F2-MEB524026			(Purchased Reagent)		Arsenic	5 ppm
							Beryllium	5 ppm
							Cadmium	5 ppm
							Chromium	5 ppm
							Copper	5 ppm
							Lead	5 ppm
							Nickel	5 ppm
							Selenium	5 ppm
							Silver	5 ppm
							Thallium	5 ppm
							Zinc	5 ppm
.MCALSPECB_00007	05/01/15	Inorganic Ventures, Lot F2-MEB524027			(Purchased Reagent)		Antimony	5 ppm
MCRIX_00058	12/19/14	11/19/14	HNO3, Lot 1191081	250 mL	MMSCRI-1B_00004	1 mL	Arsenic	0.001 ppm
							Beryllium	0.001 ppm
							Cadmium	0.001 ppm
							Chromium	0.002 ppm
							Copper	0.002 ppm
							Lead	0.001 ppm
							Nickel	0.001 ppm
							Selenium	0.005 ppm
							Silver	0.001 ppm
							Thallium	0.001 ppm

REAGENT TRACEABILITY SUMMARY

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Zinc	0.005 ppm
					MMSCRI-2_00006	1 mL	Antimony	0.002 ppm
.MMSCRI-1B_00004	10/01/15	Inorganic Ventures, Lot H2-MEB549023			(Purchased Reagent)		Arsenic	0.25 ppm
							Beryllium	0.25 ppm
							Cadmium	0.25 ppm
							Chromium	0.5 ppm
							Copper	0.5 ppm
							Lead	0.25 ppm
							Nickel	0.25 ppm
							Selenium	1.25 ppm
							Silver	0.25 ppm
							Thallium	0.25 ppm
							Zinc	1.25 ppm
.MMSCRI-2_00006	10/01/15	Inorganic Ventures, Lot H2-MEB549024			(Purchased Reagent)		Antimony	0.5 ppm
MHgworkingCal_00930	11/27/14	11/26/14	2% Nitric Acid, Lot 0000072716	100 mL	MHgIntcal_00072	1 mL	Mercury	100 ppb
.MHgIntcal_00072	12/14/14	11/14/14	2% Nitric Acid, Lot 0000072716	100 mL	MCGHG1-1_00008	1 mL	Mercury	10 ppm
..MCGHG1-1_00008	02/01/15	inorganic ventures, Lot F2-HG02105			(Purchased Reagent)		Mercury	1000 ppm
MHgWorkingicv_00908	11/27/14	11/26/14	2% Nitric Acid, Lot 0000072716	100 mL	MHgIntICV_00056	1 mL	Mercury	100 ppb
.MHgIntICV_00056	12/14/14	11/14/14	2% Nitric Acid, Lot 0000072716	100 mL	MHGICV-1_00005	1 mL	Mercury	10 ppm
..MHGICV-1_00005	07/31/15	ULTRA SCIENTIFIC, Lot T00602			(Purchased Reagent)		Mercury	1000 ppm
MICSABX_00063	12/24/14	11/24/14	2% Nitric Acid, Lot J38N82	100 mL	M6020ICS-0A_00005	10 mL	Al	100 ppm
							Ca	100 ppm
							Fe	100 ppm
							K	100 ppm
							Mg	100 ppm
							Mo	2 ppm
							Na	100 ppm
							Ti	2 ppm
					M6020ICS-0B_00006	1 mL	Arsenic	0.02 ppm
							Cadmium	0.02 ppm
							Chromium	0.02 ppm
							Co	0.02 ppm
							Copper	0.02 ppm
							Mn	0.0225 ppm
							Nickel	0.02 ppm
							Silver	0.02 ppm
							Zinc	0.025 ppm
					MMSICSAB-1_00007	0.2 mL	Ba	0.02 ppm
							Beryllium	0.02 ppm
							Lead	0.02 ppm
							Sr	0.025 ppm
							Thallium	0.02 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							V	0.02 ppm
					MMSICSAB-2_00006	0.2 mL	Antimony	0.02 ppm
							B	0.05 ppm
							Selenium	0.05 ppm
							Si	0.5 ppm
							Sn	0.1 ppm
.M6020ICS-0A_00005	09/01/15	Inorganic Ventures, Lot G2-MEB476152MCA			(Purchased Reagent)		Al	1000 ppm
							Ca	1000 ppm
							Fe	1000 ppm
							K	1000 ppm
							Mg	1000 ppm
							Mo	20 ppm
							Na	1000 ppm
							Ti	20 ppm
.M6020ICS-0B_00006	09/01/15	Inorganic Ventures, Lot G2-MEB463151			(Purchased Reagent)		Arsenic	2 ppm
							Cadmium	2 ppm
							Chromium	2 ppm
							Co	2 ppm
							Copper	2 ppm
							Mn	2.25 ppm
							Nickel	2 ppm
							Silver	2 ppm
							Zinc	2.5 ppm
.MMSICSAB-1_00007	05/01/15	Inorganic Ventures, Lot F2-MEB524028			(Purchased Reagent)		Ba	10 ppm
							Beryllium	10 ppm
							Lead	10 ppm
							Sr	12.5 ppm
							Thallium	10 ppm
							V	10 ppm
.MMSICSAB-2_00006	05/01/15	Inorganic Ventures, Lot G2-MEB467043			(Purchased Reagent)		Antimony	10 ppm
							B	25 ppm
							Selenium	25 ppm
							Si	250 ppm
							Sn	50 ppm
MICSAX_00059	12/24/14	11/24/14	DI Water, Lot J38N82	100 mL	M6020ICS-0A_00005	10 mL	Al	100 ppm
							Ca	100 ppm
							Fe	100 ppm
							K	100 ppm
							Mg	100 ppm
							Mo	2 ppm
							Na	100 ppm
							Ti	2 ppm
.M6020ICS-0A_00005	09/01/15	Inorganic Ventures, Lot G2-MEB476152MCA			(Purchased Reagent)		Al	1000 ppm
							Ca	1000 ppm
							Fe	1000 ppm
							K	1000 ppm
							Mg	1000 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Mo	20 ppm
							Na	1000 ppm
							Ti	20 ppm
MICVX_00026	01/02/15	12/02/14	2% Nitric Acid, Lot 25106	250 mg/L	MICPMSICV_00018	10 mg/L	Antimony	0.08 mg/L
							Arsenic	0.08 mg/L
							Beryllium	0.08 mg/L
							Cadmium	0.08 mg/L
							Chromium	0.08 mg/L
							Copper	0.08 mg/L
							Lead	0.08 mg/L
							Nickel	0.08 mg/L
							Selenium	0.08 mg/L
							Silver	0.08 mg/L
							Thallium	0.08 mg/L
							Zinc	0.08 mg/L
.MICPMSICV_00018	11/30/15	SPEX CertiPrep, Lot 7-230WL			(Purchased Reagent)		Antimony	2 ppm
							Arsenic	2 ppm
							Beryllium	2 ppm
							Cadmium	2 ppm
							Chromium	2 ppm
							Copper	2 ppm
							Lead	2 ppm
							Nickel	2 ppm
							Selenium	2 ppm
							Silver	2 ppm
							Thallium	2 ppm
							Zinc	2 ppm
MSTD2X_00039	12/18/14	11/18/14	DI Water, Lot 1241717	250 mL	MCALSPECAREV_00005	10 mg/L	Arsenic	0.2 ppm
							Beryllium	0.2 ppm
							Cadmium	0.2 ppm
							Chromium	0.2 ppm
							Copper	0.2 ppm
							Lead	0.2 ppm
							Nickel	0.2 ppm
							Selenium	0.2 ppm
							Silver	0.2 ppm
							Thallium	0.2 ppm
							Zinc	0.2 ppm
.MCALSPECAREV_00005	05/01/15	Inorganic Ventures, Lot F2-MEB524026			(Purchased Reagent)		Arsenic	5 ppm
							Beryllium	5 ppm
							Cadmium	5 ppm
							Chromium	5 ppm
							Copper	5 ppm
							Lead	5 ppm
							Nickel	5 ppm
							Selenium	5 ppm

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Silver	5 ppm
							Thallium	5 ppm
							Zinc	5 ppm
MSTD3X_00040	12/18/14	11/18/14	2% Nitric Acid, Lot 1241747	250 mL	MCALSPECB_00007	10 mg/L	Antimony	0.2 ppm
.MCALSPECB_00007	05/01/15	Inorganic Ventures, Lot F2-MEB524027			(Purchased Reagent)		Antimony	5 ppm
MTAPITTICPMS_00018	04/01/15	INORGANIC VENTURES, Lot G2-MEB506053			(Purchased Reagent)		Al	200 ug/mL
							Arsenic	4 ug/mL
							B	100 ug/mL
							Ba	200 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Chromium	20 ug/mL
							Co	50 ug/mL
							Copper	25 ug/mL
							Fe	100 ug/mL
							Lead	2 ug/mL
							Mn	50 ug/mL
							Nickel	50 ug/mL
							Selenium	1 ug/mL
							Silver	5 ug/mL
							Sr	100 ug/mL
							Thallium	5 ug/mL
							V	50 ug/mL
							Zinc	50 ug/mL
MTAPITTMSA_00022	10/01/15	INORGANIC VENTURES, Lot H2-MEB532044			(Purchased Reagent)		Ca	5000 ug/mL
							K	5000 ug/mL
							Mg	5000 ug/mL
							Na	5000 ug/mL
MTAPITTMSC_00028	10/01/15	Inorganic Ventures, Lot H2-MEB532046			(Purchased Reagent)		Antimony	50 ug/mL
							Mo	100 ug/mL
							Si	1000 ug/mL
							SiO2	2140 ug/mL
							Sn	200 ug/mL
							Ti	100 ug/mL
OP/PESTPCBRTS_00002	12/31/16	RESTEK, Lot A0100240			(Purchased Reagent)		DCB Decachlorobiphenyl	0.2 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.2 ug/mL
							Tetrachloro-m-xylene (Surr)	0.2 ug/mL
OPLVISPKMIX1i_00032	04/28/15	10/28/14	Methanol, Lot 0000038701	100 mL	SVLVstd1_00021	20 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(as Azobenzene)	200 ug/mL
							1,3-Dichlorobenzene	200 ug/mL

REAGENT TRACEABILITY SUMMARY

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SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Hexadecane	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Isophorone	200 ug/mL
							Methyl Phenols,Total	400 ug/mL
							n-Decane	200 ug/mL
							N-Nitrosodi-n-propylamine	200 ug/mL
							N-Nitrosodimethylamine	200 ug/mL
							n-Octadecane	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
							Total Cresols	400 ug/mL
					SVLVstd2_00008	10 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Atrazine	200 ug/mL
							Benzidine	200 ug/mL
							Caprolactam	200 ug/mL
					SVLVstd7_00001	10 mL	N-Nitrosodiphenylamine	200 ug/mL
					SVLVstd8_00004	10 mL	Benzaldehyde	200 ug/mL
							Benzoic acid	200 ug/mL
							Indene	200 ug/mL
.SVLVstd1_00021	05/31/15		Restek, Lot A099449		(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(as Azobenzene)	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

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	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-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 Pittsburgh Job No.: 180-39026-1

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
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							Methyl Phenols,Total	2000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 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
							Total Cresols	2000 ug/mL
.SVLVstd2_00008	07/31/15		Restek, Lot A0100416		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
.SVLVstd7_00001	12/31/16		Restek, Lot A099909		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
.SVLVstd8_00004	04/30/15		Restek, Lot A0100635		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
OPQL8270SURi_00025	05/13/15	11/13/14	Methanol, Lot b#0000049909	500 mL	SVLVSURRSPK_00006	20 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
.SVLVSURRSPK_00006	02/28/18		Restek, Lot A093638		(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
SVTAPSTD0.4i_00007	02/21/15	07/21/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00004	5 uL	Benzo[e]pyrene	0.2 ug/mL
							2-Naphthylamine	0.2 ug/mL
							2,3,5,6-Tetrachlorophenol	0.2 ug/mL
							2,6-Dichlorophenol	0.2 ug/mL
							7,12-Dimethylbenz(a)anthracene	0.2 ug/mL
							Methyl methanesulfonate	0.2 ug/mL
							1,1'-Biphenyl	0.2 ug/mL
							1,2,4,5-Tetrachlorobenzene	0.2 ug/mL
							1,2,4-Trichlorobenzene	0.2 ug/mL
							1,2-Dichlorobenzene	0.2 ug/mL
							1,2-Diphenylhydrazine(as Azobenzene)	0.2 ug/mL
							1,3-Dichlorobenzene	0.2 ug/mL
							1,3-Dinitrobenzene	0.2 ug/mL
							1,4-Dichlorobenzene	0.2 ug/mL
							1,4-Dioxane	0.2 ug/mL
							1-Methylnaphthalene	0.2 ug/mL
							2,2'-oxybis[1-chloropropane]	0.2 ug/mL
							2,3,4,6-Tetrachlorophenol	0.2 ug/mL
							2,4,5-Trichlorophenol	0.2 ug/mL
							2,4,6-Trichlorophenol	0.2 ug/mL
							2,4-Dichlorophenol	0.2 ug/mL
							2,4-Dimethylphenol	0.2 ug/mL
							2,4-Dinitrophenol	0.4 ug/mL
							2,4-Dinitrotoluene	0.2 ug/mL
							2,6-Dinitrotoluene	0.2 ug/mL
							2-Chloronaphthalene	0.2 ug/mL
							2-Chlorophenol	0.2 ug/mL
							2-Methylnaphthalene	0.2 ug/mL
							2-Methylphenol	0.2 ug/mL
							2-Nitroaniline	0.2 ug/mL
							2-Nitrophenol	0.2 ug/mL
							3-Nitroaniline	0.2 ug/mL
							4,6-Dinitro-2-methylphenol	0.4 ug/mL
							4-Bromophenyl phenyl ether	0.2 ug/mL
							4-Chloro-3-methylphenol	0.2 ug/mL
							4-Chloroaniline	0.2 ug/mL
							4-Chlorophenyl phenyl ether	0.2 ug/mL
							4-Methylphenol	0.2 ug/mL
							4-Nitroaniline	0.2 ug/mL
							4-Nitrophenol	0.4 ug/mL
							Acenaphthene	0.2 ug/mL
							Acenaphthylene	0.2 ug/mL
							Acetophenone	0.2 ug/mL
							Aniline	0.2 ug/mL
							Anthracene	0.2 ug/mL
							Benzo[a]anthracene	0.2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[a]pyrene	0.2 ug/mL
							Benzo[b]fluoranthene	0.2 ug/mL
							Benzo[g,h,i]perylene	0.2 ug/mL
							Benzo[k]fluoranthene	0.2 ug/mL
							Benzyl alcohol	0.2 ug/mL
							Bis(2-chloroethoxy)methane	0.2 ug/mL
							Bis(2-chloroethyl)ether	0.2 ug/mL
							Bis(2-ethylhexyl) phthalate	0.2 ug/mL
							Butyl benzyl phthalate	0.2 ug/mL
							Carbazole	0.2 ug/mL
							Chrysene	0.2 ug/mL
							Di-n-butyl phthalate	0.2 ug/mL
							Di-n-octyl phthalate	0.2 ug/mL
							Dibenz(a,h)anthracene	0.2 ug/mL
							Dibenzofuran	0.2 ug/mL
							Diethyl phthalate	0.2 ug/mL
							Dimethyl phthalate	0.2 ug/mL
							Fluoranthene	0.2 ug/mL
							Fluorene	0.2 ug/mL
							Hexachlorobenzene	0.2 ug/mL
							Hexachlorobutadiene	0.2 ug/mL
							Hexachlorocyclopentadiene	0.2 ug/mL
							Hexachloroethane	0.2 ug/mL
							Hexadecane	0.2 ug/mL
							Indeno[1,2,3-cd]pyrene	0.2 ug/mL
							Isophorone	0.2 ug/mL
							n-Decane	0.2 ug/mL
							N-Nitrosodi-n-propylamine	0.2 ug/mL
							N-Nitrosodimethylamine	0.2 ug/mL
							n-Octadecane	0.2 ug/mL
							Naphthalene	0.2 ug/mL
							Nitrobenzene	0.2 ug/mL
							Pentachlorophenol	0.4 ug/mL
							Phenanthrene	0.2 ug/mL
							Phenol	0.2 ug/mL
							Pyrene	0.2 ug/mL
							Pyridine	0.2 ug/mL
							3,3'-Dichlorobenzidine	0.2 ug/mL
							Atrazine	0.2 ug/mL
							Benzidine	0.2 ug/mL
							Caprolactam	0.2 ug/mL
							N-Nitrosodiphenylamine	0.2 ug/mL
							Benzaldehyde	0.2 ug/mL
							Benzoic acid	0.2 ug/mL
							Indene	0.2 ug/mL
							2,4,6-Tribromophenol (Surr)	0.2 ug/mL
							2-Fluorobiphenyl	0.2 ug/mL
							2-Fluorophenol (Surr)	0.2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Nitrobenzene-d5 (Surr)	0.2 ug/mL
							Phenol-d5 (Surr)	0.2 ug/mL
							Terphenyl-d14 (Surr)	0.2 ug/mL
							N-Nitrosopyrrolidine	0.2 ug/mL
.SVTAPITINTRNi_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	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
..SVLVIntstd_00007	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
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre_00001	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVstd1_00026	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine(as Azobenzene)	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Methylphenol	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd2_00012	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd5(7)_00001	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd8_00003	400 uL	Benzaldehyde	40 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					SVNNITROPYROs_00015	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00001	10/03/18		Absolute, Lot 100313		(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2NAPAMINEs_00002	06/30/17		Ultra Scientific, Lot Ck-1617		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVlist12_00002	04/30/15		Restek, Lot A0102912		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
..SVLVstd1_00026	08/31/15		Restek, Lot A0101615		(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(as Azobenzene)	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-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 Pittsburgh Job No.: 180-39026-1

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-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
							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
							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-Octadecane	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

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
..SVLVstd2_00012	07/31/15		Restek, Lot A0100824		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd5(7)_00001	02/28/17		Restek, Lot A0101573		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd8_00003	05/31/15		Restek, Lot A0103145		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(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
..SVNNITROPYROs_00015	06/05/17		absolute, Lot 060514		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD10i_00078	11/17/14	11/10/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00004	125 uL	Benzo[e]pyrene	5 ug/mL
							2-Naphthylamine	5 ug/mL
							2,3,5,6-Tetrachlorophenol	5 ug/mL
							2,6-Dichlorophenol	5 ug/mL
							7,12-Dimethylbenz(a)anthracene	5 ug/mL
							Methyl methanesulfonate	5 ug/mL
							1,1'-Biphenyl	5 ug/mL
							1,2,4,5-Tetrachlorobenzene	5 ug/mL
							1,2,4-Trichlorobenzene	5 ug/mL
							1,2-Dichlorobenzene	5 ug/mL
							1,2-Diphenylhydrazine(as Azobenzene)	5 ug/mL
							1,3-Dichlorobenzene	5 ug/mL
							1,3-Dinitrobenzene	5 ug/mL
							1,4-Dichlorobenzene	5 ug/mL
							1,4-Dioxane	5 ug/mL
							1-Methylnaphthalene	5 ug/mL
							2,2'-oxybis[1-chloropropane]	5 ug/mL
							2,3,4,6-Tetrachlorophenol	5 ug/mL
							2,4,5-Trichlorophenol	5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

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	5 ug/mL
							2,4-Dichlorophenol	5 ug/mL
							2,4-Dimethylphenol	5 ug/mL
							2,4-Dinitrophenol	10 ug/mL
							2,4-Dinitrotoluene	5 ug/mL
							2,6-Dinitrotoluene	5 ug/mL
							2-Chloronaphthalene	5 ug/mL
							2-Chlorophenol	5 ug/mL
							2-Methylnaphthalene	5 ug/mL
							2-Methylphenol	5 ug/mL
							2-Nitroaniline	5 ug/mL
							2-Nitrophenol	5 ug/mL
							3-Nitroaniline	5 ug/mL
							4,6-Dinitro-2-methylphenol	10 ug/mL
							4-Bromophenyl phenyl ether	5 ug/mL
							4-Chloro-3-methylphenol	5 ug/mL
							4-Chloroaniline	5 ug/mL
							4-Chlorophenyl phenyl ether	5 ug/mL
							4-Methylphenol	5 ug/mL
							4-Nitroaniline	5 ug/mL
							4-Nitrophenol	10 ug/mL
							Acenaphthene	5 ug/mL
							Acenaphthylene	5 ug/mL
							Acetophenone	5 ug/mL
							Aniline	5 ug/mL
							Anthracene	5 ug/mL
							Benzo[a]anthracene	5 ug/mL
							Benzo[a]pyrene	5 ug/mL
							Benzo[b]fluoranthene	5 ug/mL
							Benzo[g,h,i]perylene	5 ug/mL
							Benzo[k]fluoranthene	5 ug/mL
							Benzyl alcohol	5 ug/mL
							Bis(2-chloroethoxy)methane	5 ug/mL
							Bis(2-chloroethyl)ether	5 ug/mL
							Bis(2-ethylhexyl) phthalate	5 ug/mL
							Butyl benzyl phthalate	5 ug/mL
							Carbazole	5 ug/mL
							Chrysene	5 ug/mL
							Di-n-butyl phthalate	5 ug/mL
							Di-n-octyl phthalate	5 ug/mL
							Dibenz(a,h)anthracene	5 ug/mL
							Dibenzofuran	5 ug/mL
							Diethyl phthalate	5 ug/mL
							Dimethyl phthalate	5 ug/mL
							Fluoranthene	5 ug/mL
							Fluorene	5 ug/mL
							Hexachlorobenzene	5 ug/mL
							Hexachlorobutadiene	5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorocyclopentadiene	5 ug/mL
							Hexachloroethane	5 ug/mL
							Hexadecane	5 ug/mL
							Indeno[1,2,3-cd]pyrene	5 ug/mL
							Isophorone	5 ug/mL
							n-Decane	5 ug/mL
							N-Nitrosodi-n-propylamine	5 ug/mL
							N-Nitrosodimethylamine	5 ug/mL
							n-Octadecane	5 ug/mL
							Naphthalene	5 ug/mL
							Nitrobenzene	5 ug/mL
							Pentachlorophenol	10 ug/mL
							Phenanthrene	5 ug/mL
							Phenol	5 ug/mL
							Pyrene	5 ug/mL
							Pyridine	5 ug/mL
							3,3'-Dichlorobenzidine	5 ug/mL
							Atrazine	5 ug/mL
							Benzidine	5 ug/mL
							Caprolactam	5 ug/mL
							N-Nitrosodiphenylamine	5 ug/mL
							Benzaldehyde	5 ug/mL
							Benzoic acid	5 ug/mL
							Indene	5 ug/mL
							2,4,6-Tribromophenol (Surr)	5 ug/mL
							2-Fluorobiphenyl	5 ug/mL
							2-Fluorophenol (Surr)	5 ug/mL
							Nitrobenzene-d5 (Surr)	5 ug/mL
							Phenol-d5 (Surr)	5 ug/mL
							Terphenyl-d14 (Surr)	5 ug/mL
							N-Nitrosopyrrolidine	5 ug/mL
.SVTAPITINTRNi_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	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
..SVLVIntstd_00007	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
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre_00001	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl methanesulfonate	40 ug/mL
					SVLVstd1_00026	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine(as Azobenzene)	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Methylphenol	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

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	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd2_00012	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd5(7)_00001	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd8_00003	400 uL	Benzaldehyde	40 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					SVNNITROPYROs_00015	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00001	10/03/18	Absolute, Lot 100313			(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2NAPAMINEs_00002	06/30/17	Ultra Scientific, Lot Ck-1617			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SVLVlist12_00002	04/30/15		Restek, Lot A0102912		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
..SVLVstd1_00026	08/31/15		Restek, Lot A0101615		(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(as Azobenzene)	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-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-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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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-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
..SVLVstd2_00012	07/31/15		Restek, Lot A0100824		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd5(7)_00001	02/28/17		Restek, Lot A0101573		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd8_00003	05/31/15		Restek, Lot A0103145		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(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 Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SVNNITROPYROs_00015	06/05/17	absolute, Lot 060514			(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD10i_00079	11/25/14	11/18/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00004	125 uL	Benzo[e]pyrene	5 ug/mL
							2-Naphthylamine	5 ug/mL
							2,3,5,6-Tetrachlorophenol	5 ug/mL
							2,6-Dichlorophenol	5 ug/mL
							7,12-Dimethylbenz(a)anthracene	5 ug/mL
							Methyl methanesulfonate	5 ug/mL
							1,1'-Biphenyl	5 ug/mL
							1,2,4,5-Tetrachlorobenzene	5 ug/mL
							1,2,4-Trichlorobenzene	5 ug/mL
							1,2-Dichlorobenzene	5 ug/mL
							1,2-Diphenylhydrazine(as Azobenzene)	5 ug/mL
							1,3-Dichlorobenzene	5 ug/mL
							1,3-Dinitrobenzene	5 ug/mL
							1,4-Dichlorobenzene	5 ug/mL
							1,4-Dioxane	5 ug/mL
							1-Methylnaphthalene	5 ug/mL
							2,2'-oxybis[1-chloropropane]	5 ug/mL
							2,3,4,6-Tetrachlorophenol	5 ug/mL
							2,4,5-Trichlorophenol	5 ug/mL
							2,4,6-Trichlorophenol	5 ug/mL
							2,4-Dichlorophenol	5 ug/mL
							2,4-Dimethylphenol	5 ug/mL
							2,4-Dinitrophenol	10 ug/mL
							2,4-Dinitrotoluene	5 ug/mL
							2,6-Dinitrotoluene	5 ug/mL
							2-Chloronaphthalene	5 ug/mL
							2-Chlorophenol	5 ug/mL
							2-Methylnaphthalene	5 ug/mL
							2-Methylphenol	5 ug/mL
							2-Nitroaniline	5 ug/mL
							2-Nitrophenol	5 ug/mL
							3-Nitroaniline	5 ug/mL
							4,6-Dinitro-2-methylphenol	10 ug/mL
							4-Bromophenyl phenyl ether	5 ug/mL
							4-Chloro-3-methylphenol	5 ug/mL
							4-Chloroaniline	5 ug/mL
							4-Chlorophenyl phenyl ether	5 ug/mL
							4-Methylphenol	5 ug/mL
							4-Nitroaniline	5 ug/mL
							4-Nitrophenol	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthene	5 ug/mL
							Acenaphthylene	5 ug/mL
							Acetophenone	5 ug/mL
							Aniline	5 ug/mL
							Anthracene	5 ug/mL
							Benzo[a]anthracene	5 ug/mL
							Benzo[a]pyrene	5 ug/mL
							Benzo[b]fluoranthene	5 ug/mL
							Benzo[g,h,i]perylene	5 ug/mL
							Benzo[k]fluoranthene	5 ug/mL
							Benzyl alcohol	5 ug/mL
							Bis(2-chloroethoxy)methane	5 ug/mL
							Bis(2-chloroethyl)ether	5 ug/mL
							Bis(2-ethylhexyl) phthalate	5 ug/mL
							Butyl benzyl phthalate	5 ug/mL
							Carbazole	5 ug/mL
							Chrysene	5 ug/mL
							Di-n-butyl phthalate	5 ug/mL
							Di-n-octyl phthalate	5 ug/mL
							Dibenz(a,h)anthracene	5 ug/mL
							Dibenzofuran	5 ug/mL
							Diethyl phthalate	5 ug/mL
							Dimethyl phthalate	5 ug/mL
							Fluoranthene	5 ug/mL
							Fluorene	5 ug/mL
							Hexachlorobenzene	5 ug/mL
							Hexachlorobutadiene	5 ug/mL
							Hexachlorocyclopentadiene	5 ug/mL
							Hexachloroethane	5 ug/mL
							Hexadecane	5 ug/mL
							Indeno[1,2,3-cd]pyrene	5 ug/mL
							Isophorone	5 ug/mL
							n-Decane	5 ug/mL
							N-Nitrosodi-n-propylamine	5 ug/mL
							N-Nitrosodimethylamine	5 ug/mL
							n-Octadecane	5 ug/mL
							Naphthalene	5 ug/mL
							Nitrobenzene	5 ug/mL
							Pentachlorophenol	10 ug/mL
							Phenanthrene	5 ug/mL
							Phenol	5 ug/mL
							Pyrene	5 ug/mL
							Pyridine	5 ug/mL
							3,3'-Dichlorobenzidine	5 ug/mL
							Atrazine	5 ug/mL
							Benzidine	5 ug/mL
							Caprolactam	5 ug/mL
							N-Nitrosodiphenylamine	5 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzaldehyde	5 ug/mL
							Benzoic acid	5 ug/mL
							Indene	5 ug/mL
							2,4,6-Tribromophenol (Surr)	5 ug/mL
							2-Fluorobiphenyl	5 ug/mL
							2-Fluorophenol (Surr)	5 ug/mL
							Nitrobenzene-d5 (Surr)	5 ug/mL
							Phenol-d5 (Surr)	5 ug/mL
							Terphenyl-d14 (Surr)	5 ug/mL
							N-Nitrosopyrrolidine	5 ug/mL
.SVTAPITINTRNi_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	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
..SVLVIntstd_00007	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
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre_00001	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVstd1_00026	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine(as Azobenzene)	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Methylphenol	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

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	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd2_00012	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd5(7)_00001	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd8_00003	400 uL	Benzaldehyde	40 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					SVNNITROPYROs_00015	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00001	10/03/18	Absolute, Lot 100313			(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2NAPAMINEs_00002	06/30/17	Ultra Scientific, Lot Ck-1617			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVlist12_00002	04/30/15	Restek, Lot A0102912			(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
..SVLVstd1_00026	08/31/15	Restek, Lot A0101615			(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(as Azobenzene)	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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-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
							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
							Hexadecane	1000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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-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
..SVLVstd2_00012	07/31/15		Restek, Lot A0100824		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd5(7)_00001	02/28/17		Restek, Lot A0101573		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd8_00003	05/31/15		Restek, Lot A0103145		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(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
..SVNNITROPYROs_00015	06/05/17		absolute, Lot 060514		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD10i_00080	12/03/14	11/26/14	MeCl2, Lot 1053215	1 mL	SVTAPITSTCKi_00004	125 uL	1,2,4-Trichlorobenzene	5 ug/mL
							1,2-Diphenylhydrazine(as Azobenzene)	5 ug/mL
							2,2'-oxybis[1-chloropropane]	5 ug/mL
							2,4,6-Trichlorophenol	5 ug/mL
							2,4-Dichlorophenol	5 ug/mL
							2,4-Dimethylphenol	5 ug/mL
							2,4-Dinitrophenol	10 ug/mL
							2,4-Dinitrotoluene	5 ug/mL
							2,6-Dinitrotoluene	5 ug/mL
							2-Chloronaphthalene	5 ug/mL
							2-Chlorophenol	5 ug/mL
							2-Nitrophenol	5 ug/mL
							4,6-Dinitro-2-methylphenol	10 ug/mL
							4-Bromophenyl phenyl ether	5 ug/mL
							4-Chloro-3-methylphenol	5 ug/mL
							4-Chlorophenyl phenyl ether	5 ug/mL
							4-Nitrophenol	10 ug/mL
							Acenaphthene	5 ug/mL
							Acenaphthylene	5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Anthracene	5 ug/mL
							Benzo[a]anthracene	5 ug/mL
							Benzo[a]pyrene	5 ug/mL
							Benzo[b]fluoranthene	5 ug/mL
							Benzo[g,h,i]perylene	5 ug/mL
							Benzo[k]fluoranthene	5 ug/mL
							Bis(2-chloroethoxy)methane	5 ug/mL
							Bis(2-chloroethyl)ether	5 ug/mL
							Bis(2-ethylhexyl) phthalate	5 ug/mL
							Butyl benzyl phthalate	5 ug/mL
							Chrysene	5 ug/mL
							Di-n-butyl phthalate	5 ug/mL
							Di-n-octyl phthalate	5 ug/mL
							Dibenz(a,h)anthracene	5 ug/mL
							Diethyl phthalate	5 ug/mL
							Dimethyl phthalate	5 ug/mL
							Fluoranthene	5 ug/mL
							Fluorene	5 ug/mL
							Hexachlorobenzene	5 ug/mL
							Hexachlorobutadiene	5 ug/mL
							Hexachlorocyclopentadiene	5 ug/mL
							Hexachloroethane	5 ug/mL
							Indeno[1,2,3-cd]pyrene	5 ug/mL
							Isophorone	5 ug/mL
							N-Nitrosodi-n-propylamine	5 ug/mL
							N-Nitrosodimethylamine	5 ug/mL
							Naphthalene	5 ug/mL
							Nitrobenzene	5 ug/mL
							Pentachlorophenol	10 ug/mL
							Phenanthrene	5 ug/mL
							Phenol	5 ug/mL
							Pyrene	5 ug/mL
							3,3'-Dichlorobenzidine	5 ug/mL
							Benzidine	5 ug/mL
							N-Nitrosodiphenylamine	5 ug/mL
							Benzoic acid	5 ug/mL
							2,4,6-Tribromophenol (Surr)	5 ug/mL
							2-Fluorobiphenyl	5 ug/mL
							2-Fluorophenol (Surr)	5 ug/mL
							Nitrobenzene-d5 (Surr)	5 ug/mL
							Phenol-d5 (Surr)	5 ug/mL
							Terphenyl-d14 (Surr)	5 ug/mL
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	SVLVstd1_00026	800 uL	1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine(as Azobenzene)	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Nitrophenol	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
					SVLVstd2_00012	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					SVLVstd5(7)_00001	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd8_00003	400 uL	Benzoic acid	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
..SVLVstd1_00026	08/31/15		Restek, Lot A0101615		(Purchased Reagent)		1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine(as Azobenzene)	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	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-Nitrophenol	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-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	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
							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
							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
							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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
..SVLVstd2_00012	07/31/15		Restek, Lot A0100824		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SVLVstd5(7)_00001	02/28/17		Restek, Lot A0101573		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd8_00003	05/31/15		Restek, Lot A0103145		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(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
SVTAPSTD2.0i_00005	02/21/15	07/21/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00004	25 uL	Benzo[e]pyrene	1 ug/mL
							2-Naphthylamine	1 ug/mL
							2,3,5,6-Tetrachlorophenol	1 ug/mL
							2,6-Dichlorophenol	1 ug/mL
							7,12-Dimethylbenz(a)anthracene	1 ug/mL
							Methyl methanesulfonate	1 ug/mL
							1,1'-Biphenyl	1 ug/mL
							1,2,4,5-Tetrachlorobenzene	1 ug/mL
							1,2,4-Trichlorobenzene	1 ug/mL
							1,2-Dichlorobenzene	1 ug/mL
							1,2-Diphenylhydrazine(as Azobenzene)	1 ug/mL
							1,3-Dichlorobenzene	1 ug/mL
							1,3-Dinitrobenzene	1 ug/mL
							1,4-Dichlorobenzene	1 ug/mL
							1,4-Dioxane	1 ug/mL
							1-Methylnaphthalene	1 ug/mL
							2,2'-oxybis[1-chloropropane]	1 ug/mL
							2,3,4,6-Tetrachlorophenol	1 ug/mL
							2,4,5-Trichlorophenol	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

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	1 ug/mL
							2,4-Dichlorophenol	1 ug/mL
							2,4-Dimethylphenol	1 ug/mL
							2,4-Dinitrophenol	2 ug/mL
							2,4-Dinitrotoluene	1 ug/mL
							2,6-Dinitrotoluene	1 ug/mL
							2-Chloronaphthalene	1 ug/mL
							2-Chlorophenol	1 ug/mL
							2-Methylnaphthalene	1 ug/mL
							2-Methylphenol	1 ug/mL
							2-Nitroaniline	1 ug/mL
							2-Nitrophenol	1 ug/mL
							3-Nitroaniline	1 ug/mL
							4,6-Dinitro-2-methylphenol	2 ug/mL
							4-Bromophenyl phenyl ether	1 ug/mL
							4-Chloro-3-methylphenol	1 ug/mL
							4-Chloroaniline	1 ug/mL
							4-Chlorophenyl phenyl ether	1 ug/mL
							4-Methylphenol	1 ug/mL
							4-Nitroaniline	1 ug/mL
							4-Nitrophenol	2 ug/mL
							Acenaphthene	1 ug/mL
							Acenaphthylene	1 ug/mL
							Acetophenone	1 ug/mL
							Aniline	1 ug/mL
							Anthracene	1 ug/mL
							Benzo[a]anthracene	1 ug/mL
							Benzo[a]pyrene	1 ug/mL
							Benzo[b]fluoranthene	1 ug/mL
							Benzo[g,h,i]perylene	1 ug/mL
							Benzo[k]fluoranthene	1 ug/mL
							Benzyl alcohol	1 ug/mL
							Bis(2-chloroethoxy)methane	1 ug/mL
							Bis(2-chloroethyl)ether	1 ug/mL
							Bis(2-ethylhexyl) phthalate	1 ug/mL
							Butyl benzyl phthalate	1 ug/mL
							Carbazole	1 ug/mL
							Chrysene	1 ug/mL
							Di-n-butyl phthalate	1 ug/mL
							Di-n-octyl phthalate	1 ug/mL
							Dibenz(a,h)anthracene	1 ug/mL
							Dibenzofuran	1 ug/mL
							Diethyl phthalate	1 ug/mL
							Dimethyl phthalate	1 ug/mL
							Fluoranthene	1 ug/mL
							Fluorene	1 ug/mL
							Hexachlorobenzene	1 ug/mL
							Hexachlorobutadiene	1 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorocyclopentadiene	1 ug/mL
							Hexachloroethane	1 ug/mL
							Hexadecane	1 ug/mL
							Indeno[1,2,3-cd]pyrene	1 ug/mL
							Isophorone	1 ug/mL
							n-Decane	1 ug/mL
							N-Nitrosodi-n-propylamine	1 ug/mL
							N-Nitrosodimethylamine	1 ug/mL
							n-Octadecane	1 ug/mL
							Naphthalene	1 ug/mL
							Nitrobenzene	1 ug/mL
							Pentachlorophenol	2 ug/mL
							Phenanthrene	1 ug/mL
							Phenol	1 ug/mL
							Pyrene	1 ug/mL
							Pyridine	1 ug/mL
							3,3'-Dichlorobenzidine	1 ug/mL
							Atrazine	1 ug/mL
							Benzidine	1 ug/mL
							Caprolactam	1 ug/mL
							N-Nitrosodiphenylamine	1 ug/mL
							Benzaldehyde	1 ug/mL
							Benzoic acid	1 ug/mL
							Indene	1 ug/mL
							2,4,6-Tribromophenol (Surr)	1 ug/mL
							2-Fluorobiphenyl	1 ug/mL
							2-Fluorophenol (Surr)	1 ug/mL
							Nitrobenzene-d5 (Surr)	1 ug/mL
							Phenol-d5 (Surr)	1 ug/mL
							Terphenyl-d14 (Surr)	1 ug/mL
							N-Nitrosopyrrolidine	1 ug/mL
.SVTAPITINTRNi_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	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
..SVLVIntstd_00007	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
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre_00001	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl methanesulfonate	40 ug/mL
					SVLVstd1_00026	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine(as Azobenzene)	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Methylphenol	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

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	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd2_00012	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd5(7)_00001	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd8_00003	400 uL	Benzaldehyde	40 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					SVNNITROPYROs_00015	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00001	10/03/18	Absolute, Lot 100313			(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2NAPAMINEs_00002	06/30/17	Ultra Scientific, Lot Ck-1617			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SVLVlist12_00002	04/30/15		Restek, Lot A0102912		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
..SVLVstd1_00026	08/31/15		Restek, Lot A0101615		(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(as Azobenzene)	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-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-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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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-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
..SVLVstd2_00012	07/31/15		Restek, Lot A0100824		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd5(7)_00001	02/28/17		Restek, Lot A0101573		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd8_00003	05/31/15		Restek, Lot A0103145		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(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 Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SVNNITROPYROs_00015	06/05/17	absolute, Lot 060514			(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD20i_00005	02/21/15	07/21/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00004	250 uL	Benzo[e]pyrene	10 ug/mL
							2-Naphthylamine	10 ug/mL
							2,3,5,6-Tetrachlorophenol	10 ug/mL
							2,6-Dichlorophenol	10 ug/mL
							7,12-Dimethylbenz(a)anthracene	10 ug/mL
							Methyl methanesulfonate	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(as Azobenzene)	10 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
							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-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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthene	10 ug/mL
							Acenaphthylene	10 ug/mL
							Acetophenone	10 ug/mL
							Aniline	10 ug/mL
							Anthracene	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
							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
							Hexadecane	10 ug/mL
							Indeno[1,2,3-cd]pyrene	10 ug/mL
							Isophorone	10 ug/mL
							n-Decane	10 ug/mL
							N-Nitrosodi-n-propylamine	10 ug/mL
							N-Nitrosodimethylamine	10 ug/mL
							n-Octadecane	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
							Atrazine	10 ug/mL
							Benzidine	10 ug/mL
							Caprolactam	10 ug/mL
							N-Nitrosodiphenylamine	10 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzaldehyde	10 ug/mL
							Benzoic acid	10 ug/mL
							Indene	10 ug/mL
							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
							N-Nitrosopyrrolidine	10 ug/mL
.SVTAPITINTRNi_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	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
..SVLVIntstd_00007	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
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre_00001	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVstd1_00026	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine(as Azobenzene)	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Methylphenol	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

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	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd2_00012	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd5(7)_00001	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd8_00003	400 uL	Benzaldehyde	40 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					SVNNITROPYROs_00015	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00001	10/03/18		Absolute, Lot 100313		(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2NAPAMINEs_00002	06/30/17		Ultra Scientific, Lot Ck-1617		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVlist12_00002	04/30/15		Restek, Lot A0102912		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
..SVLVstd1_00026	08/31/15		Restek, Lot A0101615		(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(as Azobenzene)	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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-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
							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
							Hexadecane	1000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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-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
..SVLVstd2_00012	07/31/15		Restek, Lot A0100824		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd5(7)_00001	02/28/17		Restek, Lot A0101573		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd8_00003	05/31/15		Restek, Lot A0103145		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(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
..SVNNITROPYROs_00015	06/05/17		absolute, Lot 060514		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD4.0i_00006	02/21/15	07/21/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00004	50 uL	Benzo[e]pyrene	2 ug/mL
							2-Naphthylamine	2 ug/mL
							2,3,5,6-Tetrachlorophenol	2 ug/mL
							2,6-Dichlorophenol	2 ug/mL
							7,12-Dimethylbenz(a)anthracene	2 ug/mL
							Methyl methanesulfonate	2 ug/mL
							1,1'-Biphenyl	2 ug/mL
							1,2,4,5-Tetrachlorobenzene	2 ug/mL
							1,2,4-Trichlorobenzene	2 ug/mL
							1,2-Dichlorobenzene	2 ug/mL
							1,2-Diphenylhydrazine(as Azobenzene)	2 ug/mL
							1,3-Dichlorobenzene	2 ug/mL
							1,3-Dinitrobenzene	2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Diethyl phthalate	2 ug/mL
							Dimethyl phthalate	2 ug/mL
							Fluoranthene	2 ug/mL
							Fluorene	2 ug/mL
							Hexachlorobenzene	2 ug/mL
							Hexachlorobutadiene	2 ug/mL
							Hexachlorocyclopentadiene	2 ug/mL
							Hexachloroethane	2 ug/mL
							Hexadecane	2 ug/mL
							Indeno[1,2,3-cd]pyrene	2 ug/mL
							Isophorone	2 ug/mL
							n-Decane	2 ug/mL
							N-Nitrosodi-n-propylamine	2 ug/mL
							N-Nitrosodimethylamine	2 ug/mL
							n-Octadecane	2 ug/mL
							Naphthalene	2 ug/mL
							Nitrobenzene	2 ug/mL
							Pentachlorophenol	4 ug/mL
							Phenanthrene	2 ug/mL
							Phenol	2 ug/mL
							Pyrene	2 ug/mL
							Pyridine	2 ug/mL
							3,3'-Dichlorobenzidine	2 ug/mL
							Atrazine	2 ug/mL
							Benzidine	2 ug/mL
							Caprolactam	2 ug/mL
							N-Nitrosodiphenylamine	2 ug/mL
							Benzaldehyde	2 ug/mL
							Benzoic acid	2 ug/mL
							Indene	2 ug/mL
							2,4,6-Tribromophenol (Surr)	2 ug/mL
							2-Fluorobiphenyl	2 ug/mL
							2-Fluorophenol (Surr)	2 ug/mL
							Nitrobenzene-d5 (Surr)	2 ug/mL
							Phenol-d5 (Surr)	2 ug/mL
							Terphenyl-d14 (Surr)	2 ug/mL
							N-Nitrosopyrrolidine	2 ug/mL
.SVTAPITINTRNi_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	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
..SVLVIntstd_00007	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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre_00001	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVstd1_00026	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine(as Azobenzene)	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Methylphenol	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd2_00012	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd5(7)_00001	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd8_00003	400 uL	Benzaldehyde	40 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					SVNNITROPYROs_00015	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00001	10/03/18	Absolute, Lot 100313			(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2NAPAMINEs_00002	06/30/17	Ultra Scientific, Lot Ck-1617			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVlist12_00002	04/30/15	Restek, Lot A0102912			(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
..SVLVstd1_00026	08/31/15	Restek, Lot A0101615			(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(as Azobenzene)	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-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-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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Aniline	1000 ug/mL
							Anthracene	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
							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-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
..SVLVstd2_00012	07/31/15		Restek, Lot A0100824		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd5(7)_00001	02/28/17		Restek, Lot A0101573		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd8_00003	05/31/15		Restek, Lot A0103145		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(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
..SVNNITROPYROs_00015	06/05/17		absolute, Lot 060514		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD40i_00005	02/21/15	07/21/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00004	500 uL	Benzo[e]pyrene	20 ug/mL
							2-Naphthylamine	20 ug/mL
							2,3,5,6-Tetrachlorophenol	20 ug/mL
							2,6-Dichlorophenol	20 ug/mL
							7,12-Dimethylbenz(a)anthracene	20 ug/mL
							Methyl methanesulfonate	20 ug/mL
							1,1'-Biphenyl	20 ug/mL
							1,2,4,5-Tetrachlorobenzene	20 ug/mL
							1,2,4-Trichlorobenzene	20 ug/mL
							1,2-Dichlorobenzene	20 ug/mL
							1,2-Diphenylhydrazine(as Azobenzene)	20 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-Nitroaniline	20 ug/mL
							4,6-Dinitro-2-methylphenol	40 ug/mL
							4-Bromophenyl phenyl ether	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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
							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
							Hexadecane	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Isophorone	20 ug/mL
							n-Decane	20 ug/mL
							N-Nitrosodi-n-propylamine	20 ug/mL
							N-Nitrosodimethylamine	20 ug/mL
							n-Octadecane	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pyridine	20 ug/mL
							3,3'-Dichlorobenzidine	20 ug/mL
							Atrazine	20 ug/mL
							Benzidine	20 ug/mL
							Caprolactam	20 ug/mL
							N-Nitrosodiphenylamine	20 ug/mL
							Benzaldehyde	20 ug/mL
							Benzoic acid	20 ug/mL
							Indene	20 ug/mL
							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
							N-Nitrosopyrrolidine	20 ug/mL
.SVTAPITINTRNi_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	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
..SVLVIntstd_00007	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
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre_00001	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVstd1_00026	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine(as Azobenzene)	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

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	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Methylphenol	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd2_00012	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd5(7)_00001	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd8_00003	400 uL	Benzaldehyde	40 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					SVNNITROPYROs_00015	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00001	10/03/18	Absolute, Lot 100313			(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2NAPAMINEs_00002	06/30/17	Ultra Scientific, Lot Ck-1617			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVlist12_00002	04/30/15	Restek, Lot A0102912			(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
..SVLVstd1_00026	08/31/15	Restek, Lot A0101615			(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(as Azobenzene)	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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-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
							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 Pittsburgh Job No.: 180-39026-1

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
							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-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
..SVLVstd2_00012	07/31/15		Restek, Lot A0100824		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd5(7)_00001	02/28/17		Restek, Lot A0101573		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd8_00003	05/31/15		Restek, Lot A0103145		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(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
..SVNNITROPYROs_00015	06/05/17		absolute, Lot 060514		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD60i_00005	02/21/15	07/21/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00004	750 uL	Benzo[e]pyrene	30 ug/mL
							2-Naphthylamine	30 ug/mL
							2,3,5,6-Tetrachlorophenol	30 ug/mL
							2,6-Dichlorophenol	30 ug/mL
							7,12-Dimethylbenz(a)anthracene	30 ug/mL
							Methyl methanesulfonate	30 ug/mL
							1,1'-Biphenyl	30 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

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	30 ug/mL
							1,2,4-Trichlorobenzene	30 ug/mL
							1,2-Dichlorobenzene	30 ug/mL
							1,2-Diphenylhydrazine(as Azobenzene)	30 ug/mL
							1,3-Dichlorobenzene	30 ug/mL
							1,3-Dinitrobenzene	30 ug/mL
							1,4-Dichlorobenzene	30 ug/mL
							1,4-Dioxane	30 ug/mL
							1-Methylnaphthalene	30 ug/mL
							2,2'-oxybis[1-chloropropane]	30 ug/mL
							2,3,4,6-Tetrachlorophenol	30 ug/mL
							2,4,5-Trichlorophenol	30 ug/mL
							2,4,6-Trichlorophenol	30 ug/mL
							2,4-Dichlorophenol	30 ug/mL
							2,4-Dimethylphenol	30 ug/mL
							2,4-Dinitrophenol	60 ug/mL
							2,4-Dinitrotoluene	30 ug/mL
							2,6-Dinitrotoluene	30 ug/mL
							2-Chloronaphthalene	30 ug/mL
							2-Chlorophenol	30 ug/mL
							2-Methylnaphthalene	30 ug/mL
							2-Methylphenol	30 ug/mL
							2-Nitroaniline	30 ug/mL
							2-Nitrophenol	30 ug/mL
							3-Nitroaniline	30 ug/mL
							4,6-Dinitro-2-methylphenol	60 ug/mL
							4-Bromophenyl phenyl ether	30 ug/mL
							4-Chloro-3-methylphenol	30 ug/mL
							4-Chloroaniline	30 ug/mL
							4-Chlorophenyl phenyl ether	30 ug/mL
							4-Methylphenol	30 ug/mL
							4-Nitroaniline	30 ug/mL
							4-Nitrophenol	60 ug/mL
							Acenaphthene	30 ug/mL
							Acenaphthylene	30 ug/mL
							Acetophenone	30 ug/mL
							Aniline	30 ug/mL
							Anthracene	30 ug/mL
							Benzo[a]anthracene	30 ug/mL
							Benzo[a]pyrene	30 ug/mL
							Benzo[b]fluoranthene	30 ug/mL
							Benzo[g,h,i]perylene	30 ug/mL
							Benzo[k]fluoranthene	30 ug/mL
							Benzyl alcohol	30 ug/mL
							Bis(2-chloroethoxy)methane	30 ug/mL
							Bis(2-chloroethyl)ether	30 ug/mL
							Bis(2-ethylhexyl) phthalate	30 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Butyl benzyl phthalate	30 ug/mL
							Carbazole	30 ug/mL
							Chrysene	30 ug/mL
							Di-n-butyl phthalate	30 ug/mL
							Di-n-octyl phthalate	30 ug/mL
							Dibenz(a,h)anthracene	30 ug/mL
							Dibenzofuran	30 ug/mL
							Diethyl phthalate	30 ug/mL
							Dimethyl phthalate	30 ug/mL
							Fluoranthene	30 ug/mL
							Fluorene	30 ug/mL
							Hexachlorobenzene	30 ug/mL
							Hexachlorobutadiene	30 ug/mL
							Hexachlorocyclopentadiene	30 ug/mL
							Hexachloroethane	30 ug/mL
							Hexadecane	30 ug/mL
							Indeno[1,2,3-cd]pyrene	30 ug/mL
							Isophorone	30 ug/mL
							n-Decane	30 ug/mL
							N-Nitrosodi-n-propylamine	30 ug/mL
							N-Nitrosodimethylamine	30 ug/mL
							n-Octadecane	30 ug/mL
							Naphthalene	30 ug/mL
							Nitrobenzene	30 ug/mL
							Pentachlorophenol	60 ug/mL
							Phenanthrene	30 ug/mL
							Phenol	30 ug/mL
							Pyrene	30 ug/mL
							Pyridine	30 ug/mL
							3,3'-Dichlorobenzidine	30 ug/mL
							Atrazine	30 ug/mL
							Benzidine	30 ug/mL
							Caprolactam	30 ug/mL
							N-Nitrosodiphenylamine	30 ug/mL
							Benzaldehyde	30 ug/mL
							Benzoic acid	30 ug/mL
							Indene	30 ug/mL
							2,4,6-Tribromophenol (Surr)	30 ug/mL
							2-Fluorobiphenyl	30 ug/mL
							2-Fluorophenol (Surr)	30 ug/mL
							Nitrobenzene-d5 (Surr)	30 ug/mL
							Phenol-d5 (Surr)	30 ug/mL
							Terphenyl-d14 (Surr)	30 ug/mL
							N-Nitrosopyrrolidine	30 ug/mL
.SVTAPITINTRNi_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00007	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
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre_00001	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVstd1_00026	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine(as Azobenzene)	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Methylphenol	40 ug/mL
							4-Nitroaniline	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd2_00012	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					SVLVstd5(7)_00001	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd8_00003	400 uL	Benzaldehyde	40 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					SVNNITROPYROs_00015	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00001	10/03/18		Absolute, Lot 100313		(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2NAPAMINEs_00002	06/30/17		Ultra Scientific, Lot Ck-1617		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVlist12_00002	04/30/15		Restek, Lot A0102912		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
..SVLVstd1_00026	08/31/15		Restek, Lot A0101615		(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(as Azobenzene)	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-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-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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

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	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
							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
							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-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
..SVLVstd2_00012	07/31/15		Restek, Lot A0100824		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd5(7)_00001	02/28/17		Restek, Lot A0101573		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd8_00003	05/31/15		Restek, Lot A0103145		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(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
..SVNNITROPYROs_00015	06/05/17		absolute, Lot 060514		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD80i_00005	02/21/15	07/21/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00004	1000 uL	Benzo[e]pyrene	40 ug/mL
							2-Naphthylamine	40 ug/mL
							2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
							1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine(as Azobenzene)	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Methylphenol	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
							3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
							2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
							N-Nitrosopyrrolidine	40 ug/mL
.SVTAPITINTRNi_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	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
..SVLVIntstd_00007	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
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre_00001	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVstd1_00026	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine(as Azobenzene)	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Methylphenol	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd2_00012	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd5(7)_00001	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd8_00003	400 uL	Benzaldehyde	40 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					SVNNITROPYROs_00015	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00001	10/03/18	Absolute, Lot 100313			(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2NAPAMINEs_00002	06/30/17	Ultra Scientific, Lot Ck-1617			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVlist12_00002	04/30/15	Restek, Lot A0102912			(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
..SVLVstd1_00026	08/31/15	Restek, Lot A0101615			(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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Diphenylhydrazine(as Azobenzene)	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-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-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
							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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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-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
..SVLVstd2_00012	07/31/15		Restek, Lot A0100824		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd5(7)_00001	02/28/17		Restek, Lot A0101573		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd8_00003	05/31/15		Restek, Lot A0103145		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(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
..SVNNITROPYROs_00015	06/05/17		absolute, Lot 060514		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
VOA8260INT_00022	11/13/14	10/13/14	Methanol, Lot 62345	10 mL	VOA8260INTRES_00092	1 mL	1,4-Dichlorobenzene-d4	25 ug/mL
							Chlorobenzene-d5	25 ug/mL
							Fluorobenzene (IS)	25 ug/mL
							TBA-d9 (IS)	500 ug/mL
.VOA8260INTRES_00092	07/31/19		Restek, Lot A0104742		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluorobenzene (IS)	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
VOA8260SURR_00017	06/27/15	06/27/14	Methanol, Lot 62345	100 mL	VOA8260SURRES_00046	1 mL	1,2-Dichloroethane-d4 (Surr)	25 ug/mL
							4-Bromofluorobenzene (Surr)	25 ug/mL
							Dibromofluoromethane (Surr)	25 ug/mL
							Toluene-d8 (Surr)	25 ug/mL
.VOA8260SURRES_00046	02/01/18	Restek, Lot A093505			(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VOA8260VOA2ND_00090	11/24/14	11/17/14	Methanol, Lot 85233	8 mL	VOA8260GAS2ND_00077	0.1 mL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOA2ND_00088	1 mL	1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,2-Dichlorobenzene	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							Acrylonitrile	250 ug/mL
							Benzene	25 ug/mL
							Bromoform	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chlorodibromomethane	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Dichlorobromomethane	25 ug/mL
							Ethylbenzene	25 ug/mL
							Methylene Chloride	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							Trichloroethene	25 ug/mL
.VOA8260GAS2ND_00077	11/30/15	Restek, Lot A099261			(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
.VOA8260VOA2ND_00088	12/07/14	11/07/14	Methanol, Lot 85233	10 mL	VOA8260MEGA2_00029	1 mL	1,1,1-Trichloroethane	200 ug/mL
							1,1,2,2-Tetrachloroethane	200 ug/mL
							1,1,2-Trichloroethane	200 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethane	200 ug/mL
							1,1-Dichloroethene	200 ug/mL
							1,2-Dichlorobenzene	200 ug/mL
							1,2-Dichloroethane	200 ug/mL
							1,2-Dichloropropane	200 ug/mL
							1,3-Dichlorobenzene	200 ug/mL
							1,4-Dichlorobenzene	200 ug/mL
							Acrylonitrile	2000 ug/mL
							Benzene	200 ug/mL
							Bromoform	200 ug/mL
							Carbon tetrachloride	200 ug/mL
							Chlorobenzene	200 ug/mL
							Chlorodibromomethane	200 ug/mL
							Chloroform	200 ug/mL
							cis-1,3-Dichloropropene	200 ug/mL
							Dichlorobromomethane	200 ug/mL
							Ethylbenzene	200 ug/mL
							Methylene Chloride	200 ug/mL
							Tetrachloroethene	200 ug/mL
							Toluene	200 ug/mL
							trans-1,2-Dichloroethene	200 ug/mL
							trans-1,3-Dichloropropene	200 ug/mL
							Trichloroethene	200 ug/mL
..VOA8260MEGA2_00029	02/28/16		Restek, Lot A093733		(Purchased Reagent)		1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,2-Dichlorobenzene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,3-Dichlorobenzene	2000 ug/mL
							1,4-Dichlorobenzene	2000 ug/mL
							Acrylonitrile	20000 ug/mL
							Benzene	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chlorodibromomethane	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Dichlorobromomethane	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	2000 ug/mL
VOA8260VOAPRI_00087	11/16/14	11/09/14	Methanol, Lot 85233	8 mL	VOA8260GAS1ST_00057	0.1 mL	Bromomethane	25 ug/mL
							Butadiene	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL
							Dichlorofluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00086	1 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
							1,1,1,2-Tetrachloroethane	25 ug/mL
							1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,1-Dichloropropene	25 ug/mL
							1,2,3-Trichlorobenzene	25 ug/mL
							1,2,3-Trichloropropane	25 ug/mL
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2,4-Trimethylbenzene	25 ug/mL
							1,2-Dibromo-3-Chloropropane	25 ug/mL
							1,2-Dichlorobenzene	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,3,5-Trimethylbenzene	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL
							1,3-Dichloropropane	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							1,4-Dioxane	500 ug/mL
							2,2-Dichloropropane	25 ug/mL
							2-Chlorotoluene	25 ug/mL
							2-Methyl-2-propanol	250 ug/mL
							3-Chloro-1-propene	25 ug/mL
							4-Chlorotoluene	25 ug/mL
							4-Isopropyltoluene	25 ug/mL
							Acrylonitrile	250 ug/mL
							Benzene	25 ug/mL
							Bromobenzene	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobromomethane	25 ug/mL
							Chlorodibromomethane	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Cyclohexane	25 ug/mL
							Dibromomethane	25 ug/mL
							Dichlorobromomethane	25 ug/mL
							Ethyl ether	25 ug/mL
							Ethyl methacrylate	25 ug/mL
							Ethylbenzene	25 ug/mL
							Ethylene Dibromide	25 ug/mL
							Hexachlorobutadiene	25 ug/mL
							Hexane	25 ug/mL
							Iodomethane	25 ug/mL
							Isobutyl alcohol	625 ug/mL
							Isopropylbenzene	25 ug/mL
							m-Xylene & p-Xylene	25 ug/mL
							Methyl acetate	125 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylcyclohexane	25 ug/mL
							Methylene Chloride	25 ug/mL
							n-Butylbenzene	25 ug/mL
							n-Heptane	25 ug/mL
							N-Propylbenzene	25 ug/mL
							Naphthalene	25 ug/mL
							o-Xylene	25 ug/mL
							sec-Butylbenzene	25 ug/mL
							Styrene	25 ug/mL
							tert-Butylbenzene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Tetrahydrofuran	50 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							trans-1,4-Dichloro-2-butene	25 ug/mL
							Trichloroethene	25 ug/mL
.VOA8260GAS1ST_00057	02/28/15		Restek, Lot A093341		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Butadiene	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Dichlorofluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
.VOA8260VOAPRI_00086	12/07/14	11/07/14	Methanol, Lot 85233	10 mL	VOA8260KET1ST_00029	0.2 mL	2-Butanone (MEK)	200 ug/mL
							2-Hexanone	200 ug/mL
							4-Methyl-2-pentanone (MIBK)	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetone	200 ug/mL
					VOA8260MEGA1_00026	1 mL	1,1,1,2-Tetrachloroethane	200 ug/mL
							1,1,1-Trichloroethane	200 ug/mL
							1,1,2,2-Tetrachloroethane	200 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ug/mL
							1,1,2-Trichloroethane	200 ug/mL
							1,1-Dichloroethane	200 ug/mL
							1,1-Dichloroethene	200 ug/mL
							1,1-Dichloropropene	200 ug/mL
							1,2,3-Trichlorobenzene	200 ug/mL
							1,2,3-Trichloropropane	200 ug/mL
							1,2,4-Trichlorobenzene	200 ug/mL
							1,2,4-Trimethylbenzene	200 ug/mL
							1,2-Dibromo-3-Chloropropane	200 ug/mL
							1,2-Dichlorobenzene	200 ug/mL
							1,2-Dichloroethane	200 ug/mL
							1,2-Dichloropropane	200 ug/mL
							1,3,5-Trimethylbenzene	200 ug/mL
							1,3-Dichlorobenzene	200 ug/mL
							1,3-Dichloropropane	200 ug/mL
							1,4-Dichlorobenzene	200 ug/mL
							1,4-Dioxane	4000 ug/mL
							2,2-Dichloropropane	200 ug/mL
							2-Chlorotoluene	200 ug/mL
							2-Methyl-2-propanol	2000 ug/mL
							3-Chloro-1-propene	200 ug/mL
							4-Chlorotoluene	200 ug/mL
							4-Isopropyltoluene	200 ug/mL
							Acrylonitrile	2000 ug/mL
							Benzene	200 ug/mL
							Bromobenzene	200 ug/mL
							Bromoform	200 ug/mL
							Carbon disulfide	200 ug/mL
							Carbon tetrachloride	200 ug/mL
							Chlorobenzene	200 ug/mL
							Chlorobromomethane	200 ug/mL
							Chlorodibromomethane	200 ug/mL
							Chloroform	200 ug/mL
							cis-1,2-Dichloroethene	200 ug/mL
							cis-1,3-Dichloropropene	200 ug/mL
							Cyclohexane	200 ug/mL
							Dibromomethane	200 ug/mL
							Dichlorobromomethane	200 ug/mL
							Ethyl ether	200 ug/mL
							Ethyl methacrylate	200 ug/mL
							Ethylbenzene	200 ug/mL
							Ethylene Dibromide	200 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorobutadiene	200 ug/mL
							Hexane	200 ug/mL
							Iodomethane	200 ug/mL
							Isobutyl alcohol	5000 ug/mL
							Isopropylbenzene	200 ug/mL
							m-Xylene & p-Xylene	200 ug/mL
							Methyl acetate	1000 ug/mL
							Methyl tert-butyl ether	200 ug/mL
							Methylcyclohexane	200 ug/mL
							Methylene Chloride	200 ug/mL
							n-Butylbenzene	200 ug/mL
							n-Heptane	200 ug/mL
							N-Propylbenzene	200 ug/mL
							Naphthalene	200 ug/mL
							o-Xylene	200 ug/mL
							sec-Butylbenzene	200 ug/mL
							Styrene	200 ug/mL
							tert-Butylbenzene	200 ug/mL
							Tetrachloroethene	200 ug/mL
							Tetrahydrofuran	400 ug/mL
							Toluene	200 ug/mL
							trans-1,2-Dichloroethene	200 ug/mL
							trans-1,3-Dichloropropene	200 ug/mL
							trans-1,4-Dichloro-2-butene	200 ug/mL
							Trichloroethene	200 ug/mL
..VOA8260KET1ST_00029	02/28/16		Restek, Lot A093365		(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
..VOA8260MEGA1_00026	02/28/16		Restek, Lot A093581		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2000 ug/mL
							1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,1-Dichloropropene	2000 ug/mL
							1,2,3-Trichlorobenzene	2000 ug/mL
							1,2,3-Trichloropropane	2000 ug/mL
							1,2,4-Trichlorobenzene	2000 ug/mL
							1,2,4-Trimethylbenzene	2000 ug/mL
							1,2-Dibromo-3-Chloropropane	2000 ug/mL
							1,2-Dichlorobenzene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,3,5-Trimethylbenzene	2000 ug/mL
							1,3-Dichlorobenzene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichloropropane	2000 ug/mL
							1,4-Dichlorobenzene	2000 ug/mL
							1,4-Dioxane	40000 ug/mL
							2,2-Dichloropropane	2000 ug/mL
							2-Chlorotoluene	2000 ug/mL
							2-Methyl-2-propanol	20000 ug/mL
							3-Chloro-1-propene	2000 ug/mL
							4-Chlorotoluene	2000 ug/mL
							4-Isopropyltoluene	2000 ug/mL
							Acrylonitrile	20000 ug/mL
							Benzene	2000 ug/mL
							Bromobenzene	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon disulfide	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chlorobromomethane	2000 ug/mL
							Chlorodibromomethane	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Cyclohexane	2000 ug/mL
							Dibromomethane	2000 ug/mL
							Dichlorobromomethane	2000 ug/mL
							Ethyl ether	2000 ug/mL
							Ethyl methacrylate	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Ethylene Dibromide	2000 ug/mL
							Hexachlorobutadiene	2000 ug/mL
							Hexane	2000 ug/mL
							Iodomethane	2000 ug/mL
							Isobutyl alcohol	50000 ug/mL
							Isopropylbenzene	2000 ug/mL
							m-Xylene & p-Xylene	2000 ug/mL
							Methyl acetate	10000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylcyclohexane	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							n-Butylbenzene	2000 ug/mL
							n-Heptane	2000 ug/mL
							N-Propylbenzene	2000 ug/mL
							Naphthalene	2000 ug/mL
							o-Xylene	2000 ug/mL
							sec-Butylbenzene	2000 ug/mL
							Styrene	2000 ug/mL
							tert-Butylbenzene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Tetrahydrofuran	4000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							trans-1,4-Dichloro-2-butene	2000 ug/mL
							Trichloroethene	2000 ug/mL
VOA8260VOAPRI_00088	11/24/14	11/17/14	Methanol, Lot 85233	8 mL	VOA8260GAS1ST_00062	0.1 mL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00086	1 mL	1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,2-Dichlorobenzene	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							Acrylonitrile	250 ug/mL
							Benzene	25 ug/mL
							Bromoform	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chlorodibromomethane	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Dichlorobromomethane	25 ug/mL
							Ethylbenzene	25 ug/mL
							Methylene Chloride	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							Trichloroethene	25 ug/mL
.VOA8260GAS1ST_00062	02/28/15		Restek, Lot A093341		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
.VOA8260VOAPRI_00086	12/07/14	11/07/14	Methanol, Lot 85233	10 mL	VOA8260MEGA1_00026	1 mL	1,1,1-Trichloroethane	200 ug/mL
							1,1,2,2-Tetrachloroethane	200 ug/mL
							1,1,2-Trichloroethane	200 ug/mL
							1,1-Dichloroethane	200 ug/mL
							1,1-Dichloroethene	200 ug/mL
							1,2-Dichlorobenzene	200 ug/mL
							1,2-Dichloroethane	200 ug/mL
							1,2-Dichloropropane	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

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
							1,4-Dichlorobenzene	200 ug/mL
							Acrylonitrile	2000 ug/mL
							Benzene	200 ug/mL
							Bromoform	200 ug/mL
							Carbon tetrachloride	200 ug/mL
							Chlorobenzene	200 ug/mL
							Chlorodibromomethane	200 ug/mL
							Chloroform	200 ug/mL
							cis-1,3-Dichloropropene	200 ug/mL
							Dichlorobromomethane	200 ug/mL
							Ethylbenzene	200 ug/mL
							Methylene Chloride	200 ug/mL
							Tetrachloroethene	200 ug/mL
							Toluene	200 ug/mL
							trans-1,2-Dichloroethene	200 ug/mL
							trans-1,3-Dichloropropene	200 ug/mL
							Trichloroethene	200 ug/mL
..VOA8260MEGA1_00026	02/28/16		Restek, Lot A093581		(Purchased Reagent)		1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,2-Dichlorobenzene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,3-Dichlorobenzene	2000 ug/mL
							1,4-Dichlorobenzene	2000 ug/mL
							Acrylonitrile	20000 ug/mL
							Benzene	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chlorodibromomethane	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Dichlorobromomethane	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							Trichloroethene	2000 ug/mL
VOAACROLEIN2N_00004	11/30/14	10/30/14	Methanol, Lot 34562	50 mL	VOAACRRES2ND_00047	0.0625 mL	Acrolein	25 ug/mL
.VOAACRRES2ND_00047	11/30/14		Restek, Lot A0104884		(Purchased Reagent)		Acrolein	20000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VOAACROPRI_00002	11/03/14	10/03/14	Methanol, Lot 34562	50 mL	VOAACRORES_00054	0.0625 mL	Acrolein	25 ug/mL
.VOAACRORES_00054	11/30/14		Restek, Lot A0104886		(Purchased Reagent)		Acrolein	20000 ug/mL
VOAACROPRI_00003	11/30/14	10/30/14	Methanol, Lot 34562	50 mL	VOAACRORES_00056	0.0625 mL	Acrolein	25 ug/mL
.VOAACRORES_00056	11/30/14		Restek, Lot A0104886		(Purchased Reagent)		Acrolein	20000 ug/mL
voaW2-cle PRi_00002	11/08/14	11/01/14	Methanol, Lot 62345	10 mL	VOACEVERES_00046	0.25 mL	2-Chloroethyl vinyl ether	50 ug/mL
.VOACEVERES_00046	02/28/16		Restek, Lot A093368		(Purchased Reagent)		2-Chloroethyl vinyl ether	2000 ug/mL
voaW2-clePriR_00007	11/21/14	11/14/14	Methanol, Lot 85233	10 mL	VOACEVERES_00053	0.25 mL	2-Chloroethyl vinyl ether	50 ug/mL
.VOACEVERES_00053	02/28/16		Restek, Lot A093368		(Purchased Reagent)		2-Chloroethyl vinyl ether	2000 ug/mL
voaWVA pri Re_00004	11/30/14	10/30/14	Methanol, Lot 62345	20 mL	VOA8260VARES_00042	0.125 mL	Vinyl acetate	25 ug/mL
.VOA8260VARES_00042	02/28/15		Restek, Lot A0105145		(Purchased Reagent)		Vinyl acetate	4000 ug/mL
voaWVOA Pri R_00001	11/08/14	11/01/14	Methanol, Lot 85233	8 mL	VOA8260GAS1ST_00070	0.1 mL	Bromomethane	25 ug/mL
							Butadiene	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL
							Dichlorofluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00083	1 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
							1,1,1,2-Tetrachloroethane	25 ug/mL
							1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,1-Dichloropropene	25 ug/mL
							1,2,3-Trichlorobenzene	25 ug/mL
							1,2,3-Trichloropropane	25 ug/mL
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2,4-Trimethylbenzene	25 ug/mL
							1,2-Dibromo-3-Chloropropane	25 ug/mL
							1,2-Dichlorobenzene	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,3,5-Trimethylbenzene	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL
							1,3-Dichloropropane	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							1,4-Dioxane	500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,2-Dichloropropane	25 ug/mL
							2-Chlorotoluene	25 ug/mL
							2-Methyl-2-propanol	250 ug/mL
							3-Chloro-1-propene	25 ug/mL
							4-Chlorotoluene	25 ug/mL
							4-Isopropyltoluene	25 ug/mL
							Acrylonitrile	250 ug/mL
							Benzene	25 ug/mL
							Bromobenzene	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chlorobromomethane	25 ug/mL
							Chlorodibromomethane	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Cyclohexane	25 ug/mL
							Dibromomethane	25 ug/mL
							Dichlorobromomethane	25 ug/mL
							Ethyl ether	25 ug/mL
							Ethyl methacrylate	25 ug/mL
							Ethylbenzene	25 ug/mL
							Ethylene Dibromide	25 ug/mL
							Hexachlorobutadiene	25 ug/mL
							Hexane	25 ug/mL
							Iodomethane	25 ug/mL
							Isobutyl alcohol	625 ug/mL
							Isopropylbenzene	25 ug/mL
							m-Xylene & p-Xylene	25 ug/mL
							Methyl acetate	125 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylcyclohexane	25 ug/mL
							Methylene Chloride	25 ug/mL
							n-Butylbenzene	25 ug/mL
							n-Heptane	25 ug/mL
							N-Propylbenzene	25 ug/mL
							Naphthalene	25 ug/mL
							o-Xylene	25 ug/mL
							sec-Butylbenzene	25 ug/mL
							Styrene	25 ug/mL
							tert-Butylbenzene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Tetrahydrofuran	50 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,4-Dichloro-2-butene	25 ug/mL
							Trichloroethene	25 ug/mL
.VOA8260GAS1ST_00070	02/28/15		Restek, Lot A093341		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Butadiene	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Dichlorofluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
.VOA8260VOAPRI_00083	11/13/14	10/13/14	Methanol, Lot 62345	10 mL	VOA8260KET1ST_00026	0.2 mL	2-Butanone (MEK)	200 ug/mL
							2-Hexanone	200 ug/mL
							4-Methyl-2-pentanone (MIBK)	200 ug/mL
							Acetone	200 ug/mL
					VOA8260MEGA1_00021	1 mL	1,1,1,2-Tetrachloroethane	200 ug/mL
							1,1,1-Trichloroethane	200 ug/mL
							1,1,2,2-Tetrachloroethane	200 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ug/mL
							1,1,2-Trichloroethane	200 ug/mL
							1,1-Dichloroethane	200 ug/mL
							1,1-Dichloroethene	200 ug/mL
							1,1-Dichloropropene	200 ug/mL
							1,2,3-Trichlorobenzene	200 ug/mL
							1,2,3-Trichloropropane	200 ug/mL
							1,2,4-Trichlorobenzene	200 ug/mL
							1,2,4-Trimethylbenzene	200 ug/mL
							1,2-Dibromo-3-Chloropropane	200 ug/mL
							1,2-Dichlorobenzene	200 ug/mL
							1,2-Dichloroethane	200 ug/mL
							1,2-Dichloropropane	200 ug/mL
							1,3,5-Trimethylbenzene	200 ug/mL
							1,3-Dichlorobenzene	200 ug/mL
							1,3-Dichloropropane	200 ug/mL
							1,4-Dichlorobenzene	200 ug/mL
							1,4-Dioxane	4000 ug/mL
							2,2-Dichloropropane	200 ug/mL
							2-Chlorotoluene	200 ug/mL
							2-Methyl-2-propanol	2000 ug/mL
							3-Chloro-1-propene	200 ug/mL
							4-Chlorotoluene	200 ug/mL
							4-Isopropyltoluene	200 ug/mL
							Acrylonitrile	2000 ug/mL
							Benzene	200 ug/mL
							Bromobenzene	200 ug/mL
							Bromoform	200 ug/mL
							Carbon disulfide	200 ug/mL
							Carbon tetrachloride	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobenzene	200 ug/mL
							Chlorobromomethane	200 ug/mL
							Chlorodibromomethane	200 ug/mL
							Chloroform	200 ug/mL
							cis-1,2-Dichloroethene	200 ug/mL
							cis-1,3-Dichloropropene	200 ug/mL
							Cyclohexane	200 ug/mL
							Dibromomethane	200 ug/mL
							Dichlorobromomethane	200 ug/mL
							Ethyl ether	200 ug/mL
							Ethyl methacrylate	200 ug/mL
							Ethylbenzene	200 ug/mL
							Ethylene Dibromide	200 ug/mL
							Hexachlorobutadiene	200 ug/mL
							Hexane	200 ug/mL
							Iodomethane	200 ug/mL
							Isobutyl alcohol	5000 ug/mL
							Isopropylbenzene	200 ug/mL
							m-Xylene & p-Xylene	200 ug/mL
							Methyl acetate	1000 ug/mL
							Methyl tert-butyl ether	200 ug/mL
							Methylcyclohexane	200 ug/mL
							Methylene Chloride	200 ug/mL
							n-Butylbenzene	200 ug/mL
							n-Heptane	200 ug/mL
							N-Propylbenzene	200 ug/mL
							Naphthalene	200 ug/mL
							o-Xylene	200 ug/mL
							sec-Butylbenzene	200 ug/mL
							Styrene	200 ug/mL
							tert-Butylbenzene	200 ug/mL
							Tetrachloroethene	200 ug/mL
							Tetrahydrofuran	400 ug/mL
							Toluene	200 ug/mL
							trans-1,2-Dichloroethene	200 ug/mL
							trans-1,3-Dichloropropene	200 ug/mL
							trans-1,4-Dichloro-2-butene	200 ug/mL
							Trichloroethene	200 ug/mL
..VOA8260KET1ST_00026	02/28/16		Restek, Lot A093365		(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
..VOA8260MEGA1_00021	02/28/16		Restek, Lot A093581		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2000 ug/mL
							1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,1-Dichloropropene	2000 ug/mL
							1,2,3-Trichlorobenzene	2000 ug/mL
							1,2,3-Trichloropropane	2000 ug/mL
							1,2,4-Trichlorobenzene	2000 ug/mL
							1,2,4-Trimethylbenzene	2000 ug/mL
							1,2-Dibromo-3-Chloropropane	2000 ug/mL
							1,2-Dichlorobenzene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,3,5-Trimethylbenzene	2000 ug/mL
							1,3-Dichlorobenzene	2000 ug/mL
							1,3-Dichloropropane	2000 ug/mL
							1,4-Dichlorobenzene	2000 ug/mL
							1,4-Dioxane	40000 ug/mL
							2,2-Dichloropropane	2000 ug/mL
							2-Chlorotoluene	2000 ug/mL
							2-Methyl-2-propanol	20000 ug/mL
							3-Chloro-1-propene	2000 ug/mL
							4-Chlorotoluene	2000 ug/mL
							4-Isopropyltoluene	2000 ug/mL
							Acrylonitrile	20000 ug/mL
							Benzene	2000 ug/mL
							Bromobenzene	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon disulfide	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chlorobromomethane	2000 ug/mL
							Chlorodibromomethane	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Cyclohexane	2000 ug/mL
							Dibromomethane	2000 ug/mL
							Dichlorobromomethane	2000 ug/mL
							Ethyl ether	2000 ug/mL
							Ethyl methacrylate	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Ethylene Dibromide	2000 ug/mL
							Hexachlorobutadiene	2000 ug/mL
							Hexane	2000 ug/mL
							Iodomethane	2000 ug/mL
							Isobutyl alcohol	50000 ug/mL
							Isopropylbenzene	2000 ug/mL
							m-Xylene & p-Xylene	2000 ug/mL
							Methyl acetate	10000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl tert-butyl ether	2000 ug/mL
							Methylcyclohexane	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							n-Butylbenzene	2000 ug/mL
							n-Heptane	2000 ug/mL
							N-Propylbenzene	2000 ug/mL
							Naphthalene	2000 ug/mL
							o-Xylene	2000 ug/mL
							sec-Butylbenzene	2000 ug/mL
							Styrene	2000 ug/mL
							tert-Butylbenzene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Tetrahydrofuran	4000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							trans-1,4-Dichloro-2-butene	2000 ug/mL
							Trichloroethene	2000 ug/mL
WCN0.1L3_00008	11/30/14	11/24/14	Sodium Hyroxide, Lot 2406877	250 mL	WCN10Pi_00459	2.5 mL	Cyanide, Total	0.1 mg/L
.WCN10Pi_00459	11/30/14	11/24/14	Sodium Hyroxide, Lot 2406877	100 mL	WCN1000P_00022	1 mL	Cyanide, Total	10 mg/L
..WCN1000P_00022	01/24/15	LabChem Inc., Lot D199-09			(Purchased Reagent)		Cyanide, Total	1000 mg/L
WCN0.2ICV_00293	11/30/14	11/24/14	Sodium Hyroxide, Lot 2406877	100 mL	WCN10Si_00464	2 mL	Cyanide, Total	0.2 mg/L
.WCN10Si_00464	11/30/14	11/24/14	Sodium Hyroxide, Lot 2406877	100 mL	WCN1000S_00015	1 mL	Cyanide, Total	10 mg/L
..WCN1000S_00015	12/31/14	Ricca Chemical Co., Lot 4406986			(Purchased Reagent)		Cyanide, Total	1000 mg/L
WCN0.5L1_00456	11/30/14	11/24/14	Sodium Hyroxide, Lot 2406877	250 mL	WCN10Pi_00459	12.5 mL	Cyanide, Total	0.5 mg/L
.WCN10Pi_00459	11/30/14	11/24/14	Sodium Hyroxide, Lot 2406877	100 mL	WCN1000P_00022	1 mL	Cyanide, Total	10 mg/L
..WCN1000P_00022	01/24/15	LabChem Inc., Lot D199-09			(Purchased Reagent)		Cyanide, Total	1000 mg/L
WCN10Pi_00459	11/30/14	11/24/14	Sodium Hyroxide, Lot 2406877	100 mL	WCN1000P_00022	1 mL	Cyanide, Total	10 mg/L
.WCN1000P_00022	01/24/15	LabChem Inc., Lot D199-09			(Purchased Reagent)		Cyanide, Total	1000 mg/L
WCN10Si_00464	11/30/14	11/24/14	Sodium Hyroxide, Lot 2406877	100 mL	WCN1000S_00015	1 mL	Cyanide, Total	10 mg/L
.WCN1000S_00015	12/31/14	Ricca Chemical Co., Lot 4406986			(Purchased Reagent)		Cyanide, Total	1000 mg/L
WHemPSP_00172	06/03/21	J.T.Baker, Lot 0000076186			(Purchased Reagent)		Acetone	0.002 mg/L
							HEM (Oil & Grease)	4000 mg/L
							HEM Polar (Oil and Grease - Polar)	4000 mg/L
							Hexadecane	2000 mg/L
							SGT HEM (Oil and Grease - Nonpolar)	2000 mg/L
							SGT-HEM	2000 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Stearic Acid	2000 mg/L
WResPSP_00028	10/31/17	ERA, Lot P233-499			(Purchased Reagent)		Total Suspended Solids	56.9 mg/L

RESTEK

Certificate of Composition

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FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

Catalog No. : 561323 **Lot No.:** A076606

Description : Custom Aroclor 1016/1260 Standard

Expiration Date[1]**:** September 2017 **Storage:** Refrigerate

Handling: This product contains PCB's

Elution Order	Compound	CAS #	Percent Purity [2]	Concentration [3] (weight/volume)	% Uncertainty [4] (95% C.L.; K=2)
1	Aroclor 1016	12674-11-2	----%	10,000.000 ug/ml	+/-0.59 %
2	Aroclor 1260	11096-82-5	----%	10,000.000 ug/ml	+/-0.59 %
Solvent:	Isooctane	540-84-1	99%		

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

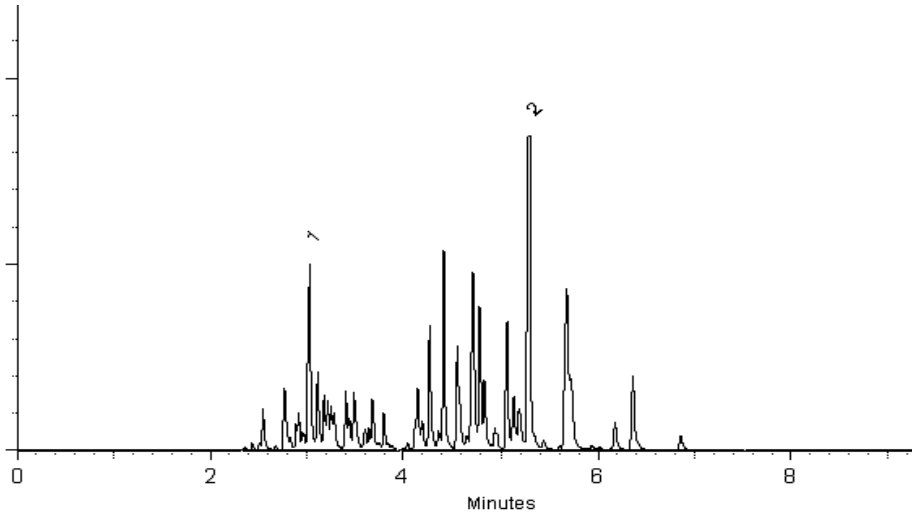
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
ECD



Diane Shaffer
Diane Shaffer - QA Analyst

Date Passed: 01-Sep-2010 **Balance:** 1128342313

APPROVED

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

1 Expiration date of the unopened ampule stored at the recommended storage condition.

2A Purity is determined by one or more of the following techniques: GC/FID, HPLC, GC/ECD, GC/MS. Value is rounded to the nearest whole number. Chemical identity is confirmed using GC/MS. See data pack or contact provider for further details.

2B Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities.

2C The following types of compounds will have a listed purity of less than 99%: Aldehyde/Ketone-DNPH compounds, Bromides, Chlorides, HCL salts, HBR salts, sulfates, hydrates, and other compounds as necessary. The listed purity is a correction factor that is equivalent to the percentage of parent compound in the molecule. This correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution. The concentration listed on the certificate is the concentration of the parent compound in the solution.

2D Purity of isomeric compounds is reported as the sum of the isomers. Value is rounded to the nearest whole number after summation.

3 Based upon gravimetric preparation with balance calibration verified using NIST traceable weights (seven mass levels) and/or class A glassware used for dilutions.

4 Uncertainties determined using data for balances and glassware from measurement systems analysis methodology, raw material purity, and, when significant, equipment tolerances or calibration results.

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

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

Catalog No. : 32008 **Lot No.:** A090290

Description : Aroclor® 1232 Standard

Aroclor 1232 1000ug/mL, Hexane, 1mL/ampul

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

Expiration Date : November 2018 **Storage:** 25°C nominal

Handling: Contains PCBs - 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	Aroclor 1232	1,000.0 µg/mL	+/- 5.8686	µg/mL	Gravimetric
	CAS # 11141-16-5		+/- 20.8758	µg/mL	Unstressed
	Purity 99%		+/- 34.3670	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

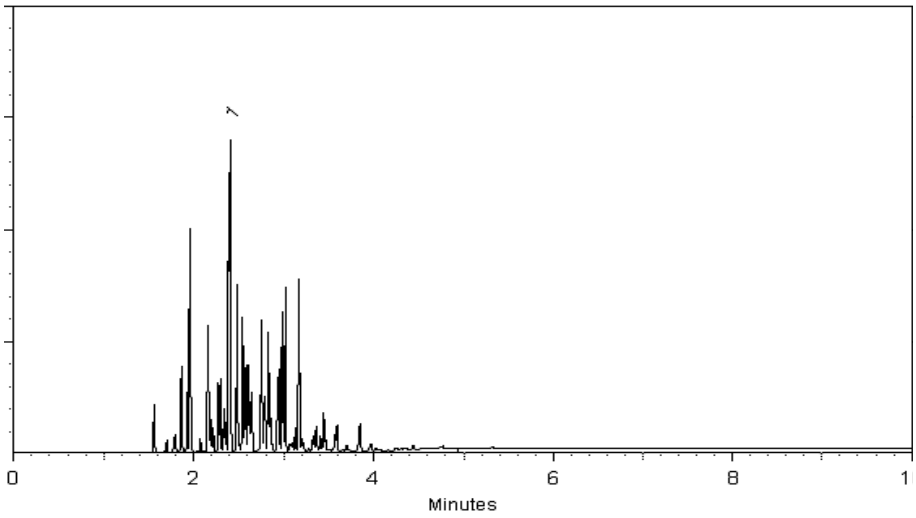
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
ECD



Jodi E. Breon - QA Analyst

Date Passed: 27-Aug-2012 **Balance:** 1128342314

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.

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Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 32009 **Lot No.:** A090182

Description : Aroclor® 1242 Standard

Aroclor® 1242 Standard 1,000 µg/mL, Hexane, 1mL/ampul

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

Expiration Date : November 30, 2018 **Storage:** 25°C nominal

Handling: This product contains PCB's

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	Aroclor 1242	1,000.0 µg/mL	+/- 5.8275 µg/mL	Gravimetric
	CAS # 53469-21-9 (Lot 01141-A)		+/- 20.8643 µg/mL	Unstressed
	Purity ----%		+/- 34.3600 µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

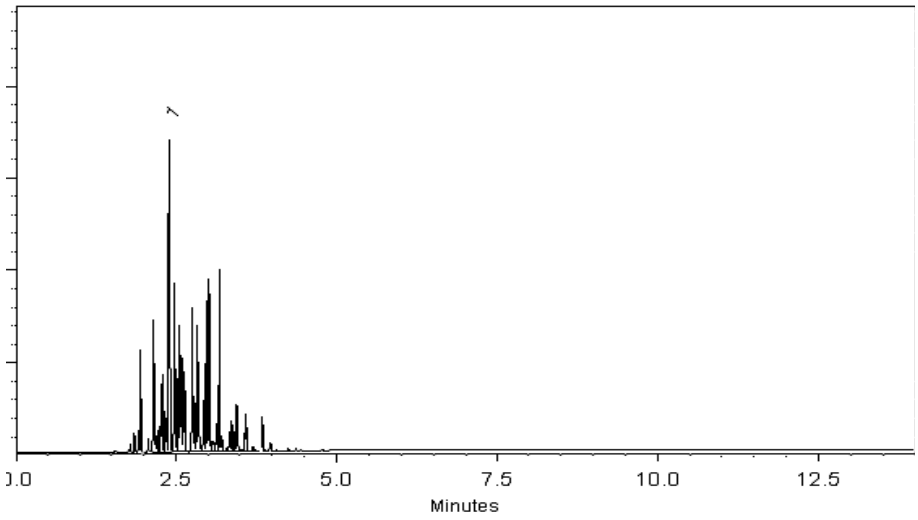
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
ECD



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.

Rebecca Sawyer

Date Mixed: 10-Aug-2012 **Balance:** 1128360905

Jennifer L. Pollino - QC Analyst

Date Passed: 15-Aug-2012

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.

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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. : 32010 **Lot No.:** A092864

Description : Aroclor® 1248 Standard

Aroclor 1248 1000µg/mL, Hexane, 1mL/ampul

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

Expiration Date : April 2019 **Storage:** 25°C nominal

Handling: This product contains PCB's

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	Aroclor 1248	1,000.0 µg/mL	+/- 5.8686	µg/mL	Gravimetric
	CAS # 12672-29-6		+/- 20.8758	µg/mL	Unstressed
	Purity ----%		+/- 34.3670	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

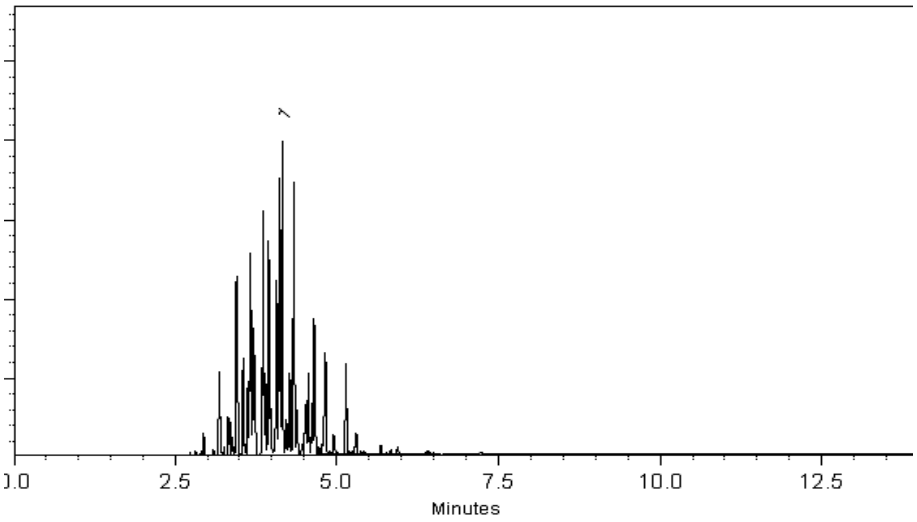
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
ECD



Diane Shaffer - QA Analyst

Date Passed: 14-Jan-2013 **Balance:** 1125113331

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.

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. : 32039 **Lot No.:** A092844

Description : Aroclor® 1016/1260 Mix

Aroclor 1016/1260 1000µg/mL, Hexane, 1mL/ampul

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

Expiration Date : April 2019 **Storage:** 25°C nominal

Handling: This product contains PCB's

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	Aroclor 1016	1,000.0 µg/mL	+/- 5.8275	µg/mL	Gravimetric
	CAS # 12674-11-2		+/- 20.8643	µg/mL	Unstressed
	Purity 99%		+/- 34.3600	µg/mL	Stressed
2	Aroclor 1260	1,000.0 µg/mL	+/- 5.8275	µg/mL	Gravimetric
	CAS # 11096-82-5		+/- 20.8643	µg/mL	Unstressed
	Purity ----%		+/- 34.3600	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

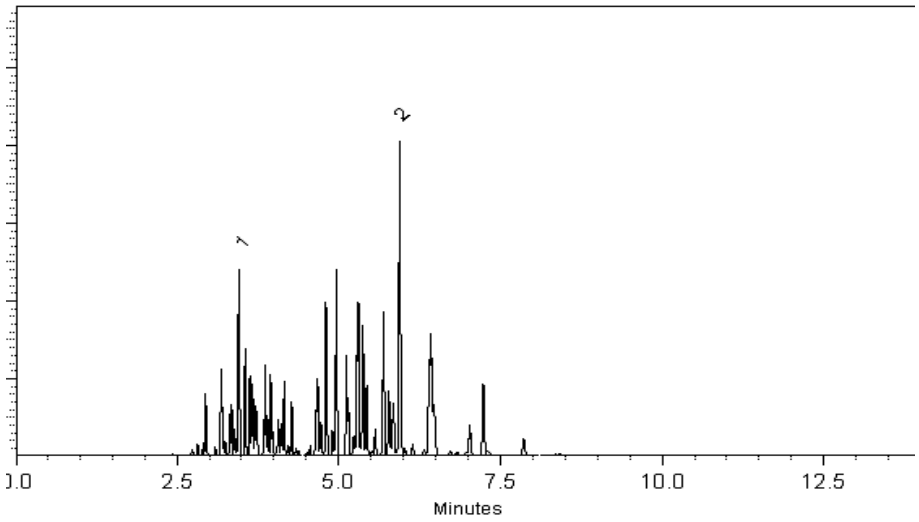
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
ECD



Diane Shaffer - QA Analyst

Date Passed: 14-Jan-2013 **Balance:** 1125113331

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.

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tel: 800.669.6799 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

CERTIFICATE OF ANALYSIS

1.0 **INORGANIC VENTURES** is an ISO Guide 34 "General Requirements for the Competence of Reference Material Producers" and ISO 9001 registered manufacturer. Our manufacturing laboratory is accredited to ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories."

ACCREDITED Testing Laboratory Certificate 863.01

ACCREDITED Reference Material Producer Certificate 863.02

2.0 **DESCRIPTION OF CRM** **Stock Solution**

Catalog No.: 6020ICS-0A

Lot Number: **G2-MEB476152MCA**

Matrix: 1.4% HNO3(v/v)

10,000 µg/mL ea:
Chloride,

2,000 µg/mL ea:
C,

1,000 µg/mL ea:
Al, Ca, Fe, K, Mg, Na, P, S,

20 µg/mL ea:
Mo, Ti

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Aluminum, Al	1,002 ± 6 µg/mL	Calcium, Ca	1,002 ± 6 µg/mL	Carbon, C	2,004 ± 13 µg/mL
Chloride, Chloride	10,020.0 ± 50.0 µg/mL	Iron, Fe	1,002 ± 7 µg/mL	Magnesium, Mg	1,002 ± 4 µg/mL
Molybdenum, Mo	20.04 ± 0.14 µg/mL	Phosphorus, P	1,002 ± 7 µg/mL	Potassium, K	1,002 ± 4 µg/mL
Sodium, Na	1,002 ± 7 µg/mL	Sulfur, S	1,002 ± 5 µg/mL	Titanium, Ti	20.04 ± 0.13 µg/mL

Certified Density: 1.034 g/mL (measured at 20 ± 1° C)

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\Sigma x_i}{n}$$

$$\text{Uncertainty } (\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$$

$(\bar{x})$ = mean

x_i = individual results

n = number of measurements

2 = the coverage factor.

$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEBILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

· "Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)
· This product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRMs are available, the term 'in-house std.' is specified.
- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a NIST SRM/RM. See section 4.2 for balance traceability.

4.1 ASSAY INFORMATION

ELEMENT	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
C	Gravimetric		See Sec. 4.2
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Chloride	Acidimetric	84L	84L
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mo	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	010728
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
S	Acidimetric	84k	84k
Ti	ICP Assay	3162a	060808

4.2 BALANCE CALIBRATION - All analytical balances are calibrated yearly by an accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

4.3 THERMOMETER CALIBRATION - All thermometers are NIST traceable through thermometers that are calibrated by an A2LA accredited calibration laboratory.

4.4 GLASSWARE CALIBRATION - An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM's.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES IN µg/mL

Custom-Grade solutions are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

s	Al		M	Dy	< 0.000100	O	Li	0.002000	M	Pr	< 0.000100	M	Te	< 0.012007
M	Sb	< 0.000600	M	Er	< 0.000100	M	Lu	< 0.000100	M	Re	< 0.000100	M	Tb	< 0.000100
O	As	< 0.020000	M	Eu	< 0.000100	s	Mg		M	Rh	< 0.000100	M	Tl	< 0.000100
O	Ba	< 0.000200	M	Gd	< 0.000100	O	Mn	0.003000	M	Rb	< 0.020012	M	Th	< 0.000100
O	Be	< 0.000090	M	Ga	< 0.001001	O	Hg	< 0.005000	M	Ru	< 0.000100	M	Tm	< 0.000100
M	Bi	< 0.005003	O	Ge	< 0.015000	s	Mo		M	Sm	< 0.000100	M	Sn	< 0.003002
O	B	< 0.005000	M	Au	< 0.001001	M	Nd	< 0.000100	O	Sc	< 0.000700	s	Ti	
O	Cd	0.003400	M	Hf	< 0.002001	O	Ni	< 0.002000	M	Se	< 0.050029	O	W	< 0.007000
s	Ca		M	Ho	< 0.000100	M	Nb	< 0.002001	n	Si		M	U	< 0.000100
M	Ce	< 0.000500	M	In	< 0.001001	n	Os		M	Ag	< 0.001001	O	V	< 0.004000
M	Cs	< 0.001001	M	Ir	< 0.000100	M	Pd	< 0.003002	s	Na		M	Yb	< 0.000100
O	Cr	< 0.010000	s	Fe		s	P		O	Sr	0.005000	M	Y	< 0.000100
M	Co	< 0.001001	M	La	< 0.000200	M	Pt	< 0.000100	s	S		M	Zn	0.016610
O	Cu	< 0.020000	M	Pb	0.002001	s	K		M	Ta	< 0.001001	M	Zr	< 0.004002

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

For the calibration of analytical instruments including but not limited to the following:
HPLC, IC, TLC, ISE, IR, NMR, UV/VIS, MS, Capillary Electrophoresis, Potentiometry, Wet Chemistry and Voltammetry
For the validation of analytical methods
For the preparation of "working reference samples"
For interference studies and the determination of correction coefficients
For detection limit and linearity studies
For additional intended uses, contact Technical Staff

This CRM was manufactured using 18 megohm doubly deionized water that has been filtered through a 0.2 micron filter.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep **Tightly** sealed when not in use. Store and use at 20 ± 4°C. **Do Not** pipette from the container. **Do Not** return portions removed from pipetting to container.

Element Specific Information - For specific information regarding any element: Contact technical staff.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0.

8.0 HAZARDOUS INFORMATION - Please refer to the enclosed Material Safety Data sheet for information regarding this CRM.

9.0 HOMOGENEITY - This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous.

Inorganic Ventures homogeneity data indicate that the end user should take a minimum sample size of 0.2mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- SAI Global File Number 010105

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration"
- Chemical Testing - Accredited A2LA Certificate Number 883.01

10.3 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"
- Reference Materials Production - Accredited A2LA Certificate Number 883.02

10.4 10CFR50 Appendix B - Nuclear Regulatory Commission
- Domestic Licensing of Production and Utilization Facilities

10.5 10CFR21 - Nuclear Regulatory Commission
- Reporting Defects and Non-Compliance

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability. Transpiration studies of chemically-stable solutions performed at the manufacturer's facility show a CRM shelf-life of twenty one months for solutions packaged in 125-mL low density polyethylene bottles. When stored under special conditions that minimize transpiration and instability, the shelf life can be extended past this limit.

11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations that solution standards be assigned a one-year expiration date.

11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: July 12, 2013

Expiration Date: EXPIRES 01 SEP 2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Zach Saunders
Product Documentation Technician

Zachary Saunders

Certificate Approved By: Allyson Guilliams
Quality Control Supervisor

Allyson Guilliams

Certifying Officer: Paul Gaines
PhD., Senior Technical Director

Paul R Gaines

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fax: 540.585.3012
info@inorganicventures.com

CERTIFICATE OF ANALYSIS

1.0 **INORGANIC VENTURES** is an ISO Guide 34 "General Requirements for the Competence of Reference Material Producers" and ISO 9001 registered manufacturer. Our manufacturing laboratory is accredited to ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories."

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0 DESCRIPTION OF CRM **Stock Solution**

Catalog No.: 6020ICS-0B

Lot Number: **G2-MEB463151**

Matrix: 3% HNO3(v/v)

2 µg/mL ea:
Ag, As, Cd, Co, Cr3, Cu, Mn, Ni, Zn

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Arsenic, As	2.000 ± 0.013 µg/mL	Cadmium, Cd	2.000 ± 0.013 µg/mL	Chromium+3, Cr3	2.000 ± 0.013 µg/mL
Cobalt, Co	2.000 ± 0.013 µg/mL	Copper, Cu	2.000 ± 0.013 µg/mL	Manganese, Mn	2.000 ± 0.013 µg/mL
Nickel, Ni	2.000 ± 0.013 µg/mL	Silver, Ag	2.000 ± 0.013 µg/mL	Zinc, Zn	2.000 ± 0.013 µg/mL

Certified Density: 1.012 g/mL (measured at 20 ± 1° C)

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\Sigma x_i}{n}$$

$$\text{Uncertainty } (\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$$

($\bar{x}$) = mean
x_i = individual results
n = number of measurements
2 = the coverage factor.
$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEBILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

· "Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)

· This product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRMs are available, the term 'in-house std.' is specified.

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a NIST SRM/RM. See section 4.2 for balance traceability.

4.1 ASSAY INFORMATION

ELEMENT	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	00630
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Ni	ICP Assay	3136	000612
Ni	EDTA	928	928
Zn	ICP Assay	3168a	080123
Zn	EDTA	928	928

4.2 BALANCE CALIBRATION - All analytical balances are calibrated yearly by an accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked dally using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

4.3 THERMOMETER CALIBRATION - All thermometers are NIST traceable through thermometers that are calibrated by an A2LA accredited calibration laboratory.

4.4 GLASSWARE CALIBRATION - An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM's.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES IN µg/mL - N/A

6.0 INTENDED USE

For the calibration of analytical instruments including but not limited to the following:
HPLC, IC, TLC, ISE, IR, NMR, UV/VIS, MS, Capillary Electrophoresis, Potentiometry, Wet Chemistry and Voltammetry
For the validation of analytical methods
For the preparation of "working reference samples"
For interference studies and the determination of correction coefficients
For detection limit and linearity studies
For additional intended uses, contact Technical Staff

This CRM was manufactured using 18 megohm doubly deionized water that has been filtered through a 0.2 micron filter.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep **Tightly** sealed when not in use. Store and use at 20 ± 4°C. **Do Not** pipette from the container. **Do Not** return portions removed from pipetting to container.

Element Specific Information - For specific information regarding any element: Contact technical staff.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0.

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION - Please refer to the enclosed Material Safety Data sheet for information regarding this CRM.

9.0 HOMOGENEITY - This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous.

Inorganic Ventures homogeneity data indicate that the end user should take a minimum sample size of 0.2mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
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10.4 10CFR50 Appendix B - Nuclear Regulatory Commission
- Domestic Licensing of Production and Utilization Facilities

10.5 10CFR21 - Nuclear Regulatory Commission
- Reporting Defects and Non-Compliance

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability. Transpiration studies of chemically-stable solutions performed at the manufacturer's facility show a CRM shelf-life of twenty one months for solutions packaged in 125-mL low density polyethylene bottles. When stored under special conditions that minimize transpiration and instability, the shelf life can be extended past this limit.

11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations that solution standards be assigned a one-year expiration date.

11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: March 25, 2013

Expiration Date: EXPIRES 01 SEP 2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Zach Saunders
Product Documentation Technician

Certificate Approved By: Allyson Guilliams
Quality Control Supervisor

Certifying Officer: Paul Gaines
PhD., Senior Technical Director

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CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
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1.0 **INORGANIC VENTURES** is an ISO Guide 34 "General Requirements for the Competence of Reference Material Producers" and ISO 9001 registered manufacturer. Our manufacturing laboratory is accredited to ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories."

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0 **DESCRIPTION OF CRM** **Custom Solution**

Catalog No.: TAPITT-CAL-SPECA-REV

Lot Number: **H2-MEB524026**

Matrix: 3% HNO3(v/v)

2,500 µg/mL ea:
Ca, K, Mg, Na,

1,250 µg/mL ea:
Fe,

25 µg/mL ea:
Al, Mn,

5 µg/mL ea:
Ag, As, Ba, Be, Cd, Co, Cr3, Cu, Ni,
Pb, Se, Sr, Tl, V, Zn

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Aluminum, Al	24.99 ± 0.18 µg/mL	Arsenic, As	4.998 ± 0.032 µg/mL	Barium, Ba	5.000 ± 0.032 µg/mL
Beryllium, Be	5.000 ± 0.028 µg/mL	Cadmium, Cd	4.998 ± 0.032 µg/mL	Calcium, Ca	2,500 ± 11 µg/mL
Chromium+3, Cr3	5.000 ± 0.028 µg/mL	Cobalt, Co	4.999 ± 0.032 µg/mL	Copper, Cu	4.999 ± 0.032 µg/mL
Iron, Fe	1,250 ± 6 µg/mL	Lead, Pb	4.998 ± 0.025 µg/mL	Magnesium, Mg	2,500 ± 16 µg/mL
Manganese, Mn	24.99 ± 0.17 µg/mL	Nickel, Ni	5.003 ± 0.028 µg/mL	Potassium, K	2,500 ± 11 µg/mL
Selenium, Se	5.002 ± 0.028 µg/mL	Silver, Ag	5.000 ± 0.036 µg/mL	Sodium, Na	2,499 ± 11 µg/mL
Strontium, Sr	5.000 ± 0.032 µg/mL	Thallium, Tl	5.000 ± 0.032 µg/mL	Vanadium, V	5.000 ± 0.032 µg/mL
Zinc, Zn	5.004 ± 0.032 µg/mL				

Certified Density: 1.051 g/mL (measured at 20 ± 1° C)

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\sum x_i}{n}$

$(\bar{x})$ = mean
x_i = individual results
n = number of measurements

Uncertainty $(\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$

2 = the coverage factor.
$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEBILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

· "Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)

· This product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRMs are available, the term 'in-house std.' is specified.

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a NIST SRM/RM. See section 4.2 for balance traceability.

4.1 ASSAY INFORMATION

ELEMENT	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	00630
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	120715
Ni	ICP Assay	3136	000612
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Tl	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	080123
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$

$(\bar{x})$ = mean

x_i = individual results

n = number of measurements

Uncertainty $(\pm) = 2 [\Sigma(s_i)^2]^{1/2}$

2 = the coverage factor.

$[\Sigma(s_i)^2]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEBILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

· "Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)

· This product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRMs are available, the term 'in-house std.' is specified.

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a NIST SRM/RM. See section 4.2 for balance traceability.

4.2 **BALANCE CALIBRATION** - All analytical balances are calibrated yearly by an accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

4.3 **THERMOMETER CALIBRATION** - All thermometers are NIST traceable through thermometers that are calibrated by an A2LA accredited calibration laboratory.

4.4 **GLASSWARE CALIBRATION** - An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM's.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES IN µg/mL - N/A

6.0 INTENDED USE

For the calibration of analytical instruments including but not limited to the following:
HPLC, IC, TLC, ISE, IR, NMR, UV/VIS, MS, Capillary Electrophoresis, Potentiometry, Wet Chemistry and Voltammetry
For the validation of analytical methods
For the preparation of "working reference samples"
For interference studies and the determination of correction coefficients
For detection limit and linearity studies
For additional intended uses, contact Technical Staff

This CRM was manufactured using 18 megohm doubly deionized water that has been filtered through a 0.2 micron filter.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep **Tightly** sealed when not in use. Store and use at 20 ± 4°C. **Do Not** pipette from the container. **Do Not** return portions removed from pipetting to container.

Element Specific Information - For specific information regarding any element: Contact technical staff.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0.

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION - Please refer to the enclosed Material Safety Data sheet for information regarding this CRM.

9.0 HOMOGENEITY - This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous.

Inorganic Ventures homogeneity data indicate that the end user should take a minimum sample size of 0.2mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 **ISO 9001 Quality Management System Registration**
- SAI Global File Number 010105

10.2 **ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration"**
- Chemical Testing - Accredited A2LA Certificate Number 883.01

10.3 **ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"**
- Reference Materials Production - Accredited A2LA Certificate Number 883.02

10.4 **10CFR50 Appendix B - Nuclear Regulatory Commission**
- Domestic Licensing of Production and Utilization Facilities

10.5 **10CFR21 - Nuclear Regulatory Commission**
- Reporting Defects and Non-Compliance

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability. Transpiration studies of chemically-stable solutions performed at the manufacturer's facility show a CRM shelf-life of twenty one months for solutions packaged in 125-mL low density polyethylene bottles. When stored under special conditions that minimize transpiration and instability, the shelf life can be extended past this limit.

11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations that solution standards be assigned a one-year expiration date.

11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: April 04, 2014

Expiration Date: EXPIRES 01 MAY 2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Brenda Francis
Product Documentation Technician

Certificate Approved By: Brian Alexander
PhD., Technical Process Director

Certifying Officer: Paul Gaines
PhD., Senior Technical Director

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CERTIFICATE OF ANALYSIS

1.0 **INORGANIC VENTURES** is an ISO Guide 34 "General Requirements for the Competence of Reference Material Producers" and ISO 9001 registered manufacturer. Our manufacturing laboratory is accredited to ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories."

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0 **DESCRIPTION OF CRM** **Custom Solution**

Catalog No.: TAPITT-CAL-SPECB

Lot Number: **H2-MEB524027**

Matrix: 3% HNO3(v/v), tr. HF

250 µg/mL ea:
Si,

5 µg/mL ea:
B, Mo, Sb, Sn, Ti

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Antimony, Sb	4.999 ± 0.044 µg/mL	Boron, B	5.000 ± 0.032 µg/mL	Molybdenum, Mo	4.999 ± 0.041 µg/mL
Silicon, Si	250.0 ± 1.6 µg/mL	Tin, Sn	4.999 ± 0.041 µg/mL	Titanium, Ti	4.999 ± 0.040 µg/mL

Certified Density: 1.017 g/mL (measured at 20 ± 1° C)

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

$$\text{Uncertainty } (\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$$

$(\bar{x})$ = mean
x_i = individual results
n = number of measurements
2 = the coverage factor.
$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 **TRACEBILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS**

· "Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)

· This product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRMs are available, the term 'in-house std.' is specified.

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a NIST SRM/RM. See section 4.2 for balance traceability.

4.1 ASSAY INFORMATION

ELEMENT	METHOD	NIST SRM#	SRM LOT#
B	Calculated		See Sec. 4.2
B	ICP Assay	3107	070514
Mo	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Sb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Si	Calculated		See Sec. 4.2
Si	ICP Assay	3150	071204
Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330
Ti	ICP Assay	3162a	060808

4.2 **BALANCE CALIBRATION** - All analytical balances are calibrated yearly by an accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

4.3 **THERMOMETER CALIBRATION** - All thermometers are NIST traceable through thermometers that are calibrated by an A2LA accredited calibration laboratory.

4.4 **GLASSWARE CALIBRATION** - An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM's.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES IN µg/mL - N/A

6.0 INTENDED USE

For the calibration of analytical instruments including but not limited to the following:
HPLC, IC, TLC, ISE, IR, NMR, UV/VIS, MS, Capillary Electrophoresis, Potentiometry, Wet Chemistry and Voltammetry
For the validation of analytical methods
For the preparation of "working reference samples"
For interference studies and the determination of correction coefficients
For detection limit and linearity studies
For additional intended uses, contact Technical Staff

This CRM was manufactured using 18 megohm doubly deionized water that has been filtered through a 0.2 micron filter.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep **Tightly** sealed when not in use. Store and use at 20 ± 4°C. **Do Not** pipette from the container. **Do Not** return portions removed from pipetting to container.

Element Specific Information - For specific information regarding any element: Contact technical staff.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0.

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION - Please refer to the enclosed Material Safety Data sheet for information regarding this CRM.

9.0 HOMOGENEITY - This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous.

Inorganic Ventures homogeneity data indicate that the end user should take a minimum sample size of 0.2mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- SAI Global File Number 010105

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration"
- Chemical Testing - Accredited A2LA Certificate Number 883.01

10.3 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"
- Reference Materials Production - Accredited A2LA Certificate Number 883.02

10.4 10CFR50 Appendix B - Nuclear Regulatory Commission
- Domestic Licensing of Production and Utilization Facilities

10.5 10CFR21 - Nuclear Regulatory Commission
- Reporting Defects and Non-Compliance

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability. Transpiration studies of chemically-stable solutions performed at the manufacturer's facility show a CRM shelf-life of twenty one months for solutions packaged in 125-mL low density polyethylene bottles. When stored under special conditions that minimize transpiration and instability, the shelf life can be extended past this limit.

11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations that solution standards be assigned a one-year expiration date.

11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: April 04, 2014

Expiration Date: EXPIRES 01 MAY 2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:	Brenda Francis Product Documentation Technician	
Certificate Approved By:	Brian Alexander PhD., Technical Process Director	
Certifying Officer:	Paul Gaines PhD., Senior Technical Director	

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CERTIFICATE OF ANALYSIS

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1.0 **INORGANIC VENTURES** is an ISO Guide 34 "General Requirements for the Competence of Reference Material Producers" and ISO 9001 registered manufacturer. Our manufacturing laboratory is accredited to ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories."

ACCREDITED Testing Laboratory Certificate 853.01 — ACCREDITED Reference Material Producer Certificate 853.02

2.0 **DESCRIPTION OF CRM** **1000 µg/mL Mercury in 5% (v/v) HNO3**

Catalog Number:	CGHG1-1, CGHG1-2, and CGHG1-5
Lot Number:	**F2-HG02105**
Starting Material:	Hg metal
Starting Material Purity (%):	99.9997
Starting Material Lot No:	1780
Matrix:	5% (v/v) HNO3

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

Certified Concentration: 1,000 ± 6 µg/mL -weighted mean-

Certified Density: 1.018 g/mL (measured at 20 ± 1°C)

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

$$\text{Uncertainty } (\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$$

$(\bar{x})$ = mean
x_i = individual results
n = number of measurements
2 = the coverage factor.
$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 **TRACEABILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS**

· "Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)

· This product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRMs are available, the term 'in-house std.' is specified.

4.1	**Assay Method #1**	**999 ± 4 µg/mL** ICP Assay NIST SRM 3133 Lot Number: 061204
	Assay Method #2	**1,001 ± 3 µg/mL** EDTA NIST SRM 928 Lot Number: 928

4.2 **BALANCE CALIBRATION** - All analytical balances are calibrated yearly by an A2LA accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

4.3 **THERMOMETER CALIBRATION** - All thermometers are NIST traceable through thermometers that are calibrated by an A2LA accredited calibration laboratory.

4.4 **GLASSWARE CALIBRATION** - An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM's.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP/MS AND ICP-OES IN µg/mL

CRM's solutions are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Al	0.000049	M	Dy	< 0.012339	O	Li	< 0.000020	M	Pr	< 0.000617	M	Te	< 0.061693
M	Sb	< 0.001028	M	Er	< 0.010282	M	Lu	< 0.000823	M	Re	< 0.002056	M	Tb	< 0.000617
M	As	< 0.020564	M	Eu	< 0.006169	O	Mg	0.000589	M	Rh	< 0.002056	O	Tl	< 0.006000
M	Ba	< 0.020564	M	Gd	< 0.002056	M	Mn	< 0.008226	M	Rb	< 0.002056	M	Th	< 0.002056
M	Be	< 0.001028	M	Ga	< 0.002056	s	Hg		M	Ru	< 0.004113	M	Tm	< 0.000823
M	Bi	< 0.000823	O	Ge	< 0.018000	M	Mo	< 0.004113	M	Sm	< 0.002056	M	Sn	< 0.010282
M	B	< 0.143950	M	Au	< 0.006169	M	Nd	< 0.004113	M	Sc	< 0.020564	M	Ti	< 0.102822
O	Cd	< 0.004600	M	Hf	< 0.004113	O	Ni	< 0.001000	M	Se	< 0.016451	M	W	< 0.020564
O	Ca	0.002160	M	Ho	< 0.001028	M	Nb	< 0.001028	O	Si	< 0.003400	M	U	< 0.004113
M	Ce	< 0.010282	M	In	< 0.020564	n	Os		M	Ag	< 0.004113	M	V	< 0.004113
M	Cs	< 0.000617	M	Ir	< 0.010282	O	Pd	< 0.003800	O	Na	0.000491	M	Yb	< 0.002056
M	Cr	< 0.010282	O	Fe	< 0.001100	O	P	< 0.002600	M	Sr	< 0.001028	M	Y	< 0.082257
M	Co	< 0.006169	M	La	< 0.001028	M	Pt	< 0.004113	O	S	< 0.025000	M	Zn	< 0.041129
M	Cu	< 0.012339	M	Pb	< 0.006169	O	K	< 0.002000	M	Ta	< 0.014395	M	Zr	< 0.010282

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

For the calibration of analytical instruments including but not limited to the following:
HPLC, IC, TLC, ISE, IR, NMR, UV/VIS, MS, Capillary Eletrophoresis, Potentiometry, Wet Chemistry and Voltammetry
For the validation of analytical methods
For the preparation of "working reference samples"
For interference studies and the determination of correction coefficients
For detection limit and linearity studies
For additional intended uses, contact Technical Staff

This CRM was manufactured using 18 megohm doubly deionized water that has been filtered through a 0.2 micron filter.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipet from container. Do not return portions removed for pipetting to container.

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59; +2; 4 ; Hg(OH)(aq) 1+

Chemical Compatibility - Stable in HNO3. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water. .

Stability - 2-100 ppb levels **not stable** in 1% HNO3 / LDPE container, ***stable*** in 10% HNO3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO3 / LDPE container.

Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO3); Oxide (Soluble in HNO3); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Type	Interferences (underlined indicates severe)
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	atom	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	ion	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	atom	Ta, Co, Th ,Rh , Fe, U
ICP-MS 202 amu	9 ppt	n/a	M+	186W16O

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0.

8.0 HAZARDOUS INFORMATION - Please refer to the enclosed Material Safety Data sheet for information regarding this CRM.

9.0 HOMOGENEITY - This solution was mixed according to an in house procedure and is guaranteed to be homogeneous. Inorganic Ventures homogeneity data indicate that the end user should take a minimum sample size of 0.2mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- QMI File Number 010105

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration"
- Chemical Testing - Accredited A2LA Certificate Number 883.01

10.3 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"
- Reference Materials Production - Accredited A2LA Certificate Number 883.02

10.4 10CFR50 Appendix B - Nuclear Regulatory Commission
- Domestic Licensing of Production and Utilization Facilities

10.5 10CFR21 - Nuclear Regulatory Commission
- Reporting Defects and Non-Compliance

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability.

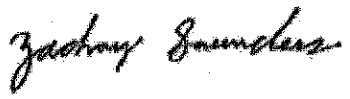
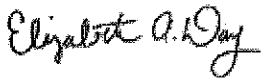
11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations that solution standards be assigned a one-year expiration date.

11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: January 03, 2013

Expiration Date: EXPIRES 01 FEB 2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:	Zach Saunders, Product Documentation Technician	
Certificate Approved By:	Elizabeth Day, Quality Assurance Specialist	
Certifying Officer:	Paul Gaines, PhD., Senior Technical Director	

Material Safety Data Sheet

ULTRA Scientific · 250 Smith Street · North Kingstown, RI, USA 02852 · 401-294-9400

Product #: ICP-080 **Last Update: 4/7/2014**

Section I Product Identification

Name: Mercury Standard

Matrix : water with dilute nitric acid

Section II Composition / Information on Ingredients

Component	CAS#	% by Wt.	LD50	OSHA PEL	ACGIH TLV	RTECS #	Codes
water	007732-18-5	97.9	>90 mL/kg oral rat	N/A	N/A	ZC0110000	
nitric acid	007697-37-2	2	N/A	5 mg/m3	5.2 mg/m3	QU5775000	G
mercury, inorganic compounds as Hg	007439-97-6	0.1	26 mg/kg oral rat	0.1 mg/m3	.025 mg/m3	OV4550000	

Codes: A-OSHA regulated carcinogen; B-IARC Group 1 carcinogen; C-IARC Group 2A carcinogen; D-IARC Group 2B carcinogen; E-NTP Group 1 carcinogen; F-NTP Group 2 carcinogen; G-SARA Title III compound; H-California Proposition 65 compound.

Section III Hazards Identification

Irritant

All chemicals should be considered hazardous - direct physical contact should be avoided.

Section IV First Aid Measures

Inhalation:	If inhaled, remove to fresh air. Give oxygen, if necessary. Contact a physician.
Skin Contact:	In case of skin contact, flush with copious amounts of water. Remove contaminated clothing. Contact a physician.
Eye Contact:	In case of eye contact, flush with copious amounts of water, lifting eyelids occasionally. Contact a physician.
Ingestion:	If ingested, contact poison center immediately for recommended procedure. Contact a physician.

Section V Fire Fighting Measures

Fire and Explosion Hazard Data for Matrix

Fire Hazard: non-combustible

Extinguishing Media: Carbon dioxide, dry chemical powder, or water spray.

Section VI Accidental Release Measures

Ventilate area of the leak or spill. Wear appropriate personal protective equipment as specified in Section VIII. A leaking bottle, vial, or ampule may be placed in a plastic bag, and normal disposal procedures followed. Take up spilled material with sand or other non-combustible absorbant material, and place in an appropriate container for later disposal. Flush spill area with water.

Section VII Handling and Storage

Store at Room Temperature (18-25°C)

Keep in a tightly closed container, and store in a corrosion proof area.

This product should only be used by persons trained in the safe handling of hazardous chemicals.

Section VIII Exposure Controls / Personal Protection

Ensure that there is adequate ventilation to prevent airborne levels from exceeding recommended exposure limits (see Section II). Use appropriate MSHA/NIOSH approved safety equipment. Wear chemical goggles, face shield, gloves, and chemical resistant clothing, such as a laboratory coat and/or a rubber apron, to prevent contact with eyes, skin, and clothing.

Section IX Physical and Chemical Properties

Physical Data for Matrix

Melting Pt.: 0°C Boiling Pt.: 100°C Density: 1

Vapor Pressure: N/A	Vapor Density: N/A	Water Solubility: soluble
Appearance: colorless liquid	Odor: none	Flash Point: none
Auto-Ignition Temperature: N/A	LEL: N/A	UEL: N/A

Section X Stability and Reactivity

Reactivity Data for Matrix

Stability: stable

Incompatibilities: organic materials, str. reducing agents, alkalies, antimony salts

Hazardous Decomposition Products: NO2, NO3

Hazardous Effects of Polymerization: none

Section XI Toxicological Information

See Section II for specific toxicological information for the ingredients of this product.

Section XII Ecological Information

No information is available.

Section XIII Disposal Considerations

Recycle, if possible. Any material which cannot be saved for recovery or recycling should be disposed of at an appropriate and approved waste disposal facility. Processing, use, and/or contamination of this product may change waste management requirements. Observe all applicable federal, state, and local environmental regulations concerning disposal.

Section XIV Transport Information

Shipment Type: Corrosive liquid, acidic, inorganic, n.o.s. (nitric acid)

UN Number: UN3264 Shipping Class: 8 Packing Group: III

Section XV Regulatory Information

EU Directives Classification

R: 34

Risk Statements: Causes burns.

S: 23-26-36-45

Safety Statements: Do not breathe gas/fumes/vapour/spray. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Section XVI Other Information

The above information is believed to be correct, but does not purport to be all-inclusive. This data should be used only as a guide in handling this material. ULTRA Scientific, Inc., shall not be held liable for any damage resulting from handling or from contact with the above product.

Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

Chemical Testing
Cert #2495.02

Catalog Number: ZCAL-60-250 **Lot No.** 7-230WL

Description: Custom Claritas Standard

Matrix: 5% HNO_3 / Tr. Tart. Acid / Tr. HF

This **CLARITAS PPT®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for inorganic spectroscopic instrumentation such as ICP-OES, DCP, AA, ICP-MS, and XRF. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

The CRM is prepared from high purity single element concentrates of individual elements using Class A laboratory ware to give precise concentrations.

Instrumental Analysis by ICP Spectrometer:

Analyte	Labeled	Uncertainty	SRM	Analyte	Labeled	Uncertainty	SRM
Ca	1000 µg/mL	±5 µg/mL	3109a*	Co	2 µg/mL	±0.01 µg/mL	3113*
K	1000 µg/mL	±5 µg/mL	3141a*	Cr	2 µg/mL	±0.01 µg/mL	3112a*
Mg	1000 µg/mL	±5 µg/mL	3131a*	Cu	2 µg/mL	±0.01 µg/mL	3114*
Na	1000 µg/mL	±5 µg/mL	3152a*	Mo	2 µg/mL	±0.01 µg/mL	3134*
Fe	500 µg/mL	±3 µg/mL	3126a*	Ni	2 µg/mL	±0.01 µg/mL	3136*
Si	100 µg/mL	±0.5 µg/mL	3150*	Pb	2 µg/mL	±0.01 µg/mL	3128*
Al	10 µg/mL	±0.05 µg/mL	3101a*	Sb	2 µg/mL	±0.01 µg/mL	3102a*
Mn	10 µg/mL	±0.05 µg/mL	3132*	Se	2 µg/mL	±0.01 µg/mL	3149*
Ag	2 µg/mL	±0.01 µg/mL	3151*	Sn	2 µg/mL	±0.01 µg/mL	3161a*
As	2 µg/mL	±0.01 µg/mL	3103a*	Sr	2 µg/mL	±0.01 µg/mL	3153a*
B	2 µg/mL	±0.01 µg/mL	3107*	Ti	2 µg/mL	±0.01 µg/mL	3162a*
Ba	2 µg/mL	±0.01 µg/mL	3104a*	Tl	2 µg/mL	±0.01 µg/mL	3158*
Be	2 µg/mL	±0.01 µg/mL	3105a*	V	2 µg/mL	±0.01 µg/mL	3165*
Cd	2 µg/mL	±0.01 µg/mL	3108*	Zn	2 µg/mL	±0.01 µg/mL	3168a*

* - indicates NIST SRM † - Indicates SPEX CertiPrep CRM (when NIST SRM is not available)

SPEX CertiPrep Reference Multi: Lot# ALL 8

Trace Metallic Impurities in the Actual Solution via ICP-MS Analysis:

Element	µg/L	Element	µg/L	Element	µg/L	Element	µg/L	Element	µg/L	Element	µg/L
Au	<0.4	Ga	<2	Ir	<0.1	Pd	<1	Sc	30	Tm	5
Bi	<1	Gd	4	La	5	Pr	5	Sm	<4	U	0.08
Ce	6	Ge	<8	Li	<4	Pt	<0.1	Ta	7	W	10
Cs	<0.08	Hf	0.7	Lu	4	Rb	30	Tb	5	Y	5
Dy	4	Hg	<0.6	Nb	5	Re	4	Te	<4	Yb	4
Er	<0.4	Ho	5	Nd	<3	Rh	<0.2	Th	4	Zr	7
Eu	<0.5	In	<0.2	P	<300	Ru	<2				

Balances are calibrated regularly with weight sets traceable to NIST#s 32856, 32867 and others. This CRM is guaranteed stable and accurate to ±0.5% of the labeled value. This includes uncertainty components due to preparation, measurement, homogeneity, short-term and long-term stability, as well as transpiration loss. This guarantee is valid for a period of one year from the date of certification only when the material is unopened and stored under ambient laboratory conditions.

Date of Certification: NOV 2014 Certifying Officer:

Report of Certification

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 quality system consistent with the following guides:

- ISO 9001: Quality management systems – Requirements – certified by UL-DQS
- ISO 17025: General requirements for the competence of testing and calibration laboratories – accredited by A2LA
- ISO Guide 34: General requirements for the competence of reference material producers – accredited by A2LA
- ISO Guide 31: Reference Materials – Contents of certificates and labels
- ISO Guide 35: Reference Materials – General & Statistical Principals for Certification
- Guide To The Expression Of Uncertainty In Measurement 1997
- EURACHEM/CITAC Guide: Quantifying Uncertainty in Analytical Measurement – Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference materials producers
- ISO/REMCO N280

Material Source:
All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For further assistance, please contact the Sales Support Department at crmsales@spexcsp.com.

Instructions for Use:
Primary usage of this CRM is in neat form or diluted serially with matrix of a purity at or greater than the purity of the original matrix solution. If dilution is required the diluent must be compatible with all certified analytes and contain stabilizers appropriate for the period of intended use. The CRM can also be used as a spike or with a spike, again with appropriate compatibility considerations. All solutions should be thoroughly mixed, by shaking, prior to use and never pipetted directly from the bottle. All surfaces that come in contact with the solution must be thoroughly cleaned and leached prior to use. Dilutions should be performed only with Class A volumetric glassware.

Method of Preparation:
Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, analytical instrumentation and personnel have been qualified prior to use. The highest purity acids applicable, 18 megohm, double deionized water, acid-leached triple-rinsed bottles (where appropriate), and Class A/calibrated volumetrics have been used in all preparations.

Homogeneity:
The homogeneity of the CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4600-HOMOGEN-1A. Since the product is highly homogeneous, any sample size taken for analysis would be within the uncertainty budget. This is consistent with the intended use of the CRM.

Statistical Estimator and Confidence Limits:
The certified value 'X' listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X = certified value, U = expanded uncertainty, x = property value
- $U = ku_c$ where $k = 2$ is the coverage factor at the 95% confidence level
- u_c is obtained by combining the individual element standard uncertainty components u_i, and $u_c = \sqrt{\sum u_i^2}$

Certification Traveler Report:
All certified values reported were derived from the Traveler Report (SPEX CertiPrep's traceability documentation) identified by the lot number of this CRM. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further assistance, please contact the Sales Support Department at crmsales@spexcsp.com.

Legal Notice:
SPEX CertiPrep reference materials are not for any cosmetic, drug or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep, Inc. of any kind whatsoever, whether based on breach of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep, Inc. be liable for any loss of profits or any incidental, special, or consequential damages.

SPEX CertiPrep®
Your Science is Our Passion.®

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CERTIFICATE OF ANALYSIS

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info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TAPITT-MSCRI-2
Lot Number:	H2-MEB549024
Matrix:	3% (v/v) HNO3 tr HF
Value / Analyte(s):	125 µg/mL ea: Si, 1.25 µg/mL ea: B, Mo, Sn, Ti, 0.5 µg/mL ea: Sb

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony	0.4998 ± 0.0038 µg/mL	Boron	1.250 ± 0.011 µg/mL	Molybdenum	1.252 ± 0.011 µg/mL
Silicon	124.9 ± 0.8 µg/mL	Tin	1.251 ± 0.009 µg/mL	Titanium	1.250 ± 0.010 µg/mL

Certified Density: 1.016 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	070514
Mo	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Sb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Si	Calculated		See Sec. 4.2
Si	ICP Assay	3150	071204
Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330
Ti	Calculated		See Sec. 4.2
Ti	ICP Assay	3162a	060808

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\sum x_i}{n}$ ($\bar{x}$) = mean
x_i = individual results
n = number of measurements

Uncertainty (±) = 2 [$\Sigma(s_i)^2$]^{½} 2 = the coverage factor.
[$\Sigma(s_i)^2$]^{½} = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

- N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

- HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 24, 2014

11.2 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.3. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

11.3 Expiration Date EXPIRES 01 2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Donna Senn
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

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CERTIFICATE OF ANALYSIS

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fax: 540.585.3012
info@inorganicventures.com

1.0 **INORGANIC VENTURES** is an ISO Guide 34 "General Requirements for the Competence of Reference Material Producers" and ISO 9001 registered manufacturer. Our manufacturing laboratory is accredited to ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories."

ACCREDITED Testing Laboratory Certificate 883.01 — ACCREDITED Reference Material Producer Certificate 883.02

2.0 **DESCRIPTION OF CRM** **Custom Solution**

Catalog No.: TAPITT-MSICSAB-1

Lot Number: **H2-MEB524028**

Matrix: 3% HNO3(v/v)

10 µg/mL ea:

Ba, Be, Pb, Sr, Tl, V

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Barium, Ba	9.99 ± 0.06 µg/mL	Beryllium, Be	10.00 ± 0.06 µg/mL	Lead, Pb	10.01 ± 0.05 µg/mL
Strontium, Sr	10.00 ± 0.06 µg/mL	Thallium, Tl	10.00 ± 0.06 µg/mL	Vanadium, V	9.99 ± 0.06 µg/mL

Certified Density: 1.022 g/mL (measured at 20 ± 1° C)

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\Sigma x_i}{n}$$

$$\text{Uncertainty } (\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$$

($\bar{x}$) = mean

x_i = individual results

n = number of measurements

2 = the coverage factor.

$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 **TRACEBILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS**

· "Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)

· This product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRMs are available, the term 'in-house std.' is specified.

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a NIST SRM/RM. See section 4.2 for balance traceability.

4.1 ASSAY INFORMATION

ELEMENT	METHOD	NIST SRM#	SRM LOT#
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	090514
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Tl	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012
V	ICP Assay	3165	992706
V	EDTA	928	928

4.2 **BALANCE CALIBRATION** - All analytical balances are calibrated yearly by an accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

4.3 **THERMOMETER CALIBRATION** - All thermometers are NIST traceable through thermometers that are calibrated by an A2LA accredited calibration laboratory.

4.4 **GLASSWARE CALIBRATION** - An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM's.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES IN µg/mL - N/A

6.0 INTENDED USE

For the calibration of analytical instruments including but not limited to the following:
HPLC, IC, TLC, ISE, IR, NMR, UV/VIS, MS, Capillary Electrophoresis, Potentiometry, Wet Chemistry and Voltammetry
For the validation of analytical methods
For the preparation of "working reference samples"
For interference studies and the determination of correction coefficients
For detection limit and linearity studies
For additional intended uses, contact Technical Staff

This CRM was manufactured using 18 megohm doubly deionized water that has been filtered through a 0.2 micron filter.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep **Tightly** sealed when not in use. Store and use at 20 ± 4ºC. **Do Not** pipette from the container. **Do Not** return portions removed from pipetting to container.

Element Specific Information - For specific information regarding any element: Contact technical staff.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0.

8.0 HAZARDOUS INFORMATION - Please refer to the enclosed Material Safety Data sheet for information regarding this CRM.

9.0 HOMOGENEITY - This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous.

Inorganic Ventures homogeneity data indicate that the end user should take a minimum sample size of 0.2mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- SAI Global File Number 010105

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration"
- Chemical Testing - Accredited A2LA Certificate Number 883.01

10.3 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"
- Reference Materials Production - Accredited A2LA Certificate Number 883.02

10.4 10CFR50 Appendix B - Nuclear Regulatory Commission
- Domestic Licensing of Production and Utilization Facilities

10.5 10CFR21 - Nuclear Regulatory Commission
- Reporting Defects and Non-Compliance

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability. Transpiration studies of chemically-stable solutions performed at the manufacturer's facility show a CRM shelf-life of twenty one months for solutions packaged in 125-mL low density polyethylene bottles. When stored under special conditions that minimize transpiration and instability, the shelf life can be extended past this limit.

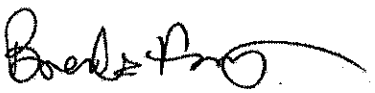
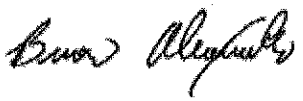
11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations that solution standards be assigned a one-year expiration date.

11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: April 04, 2014

Expiration Date: EXPIRES 01 MAY 2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:	Brenda Francis Product Documentation Technician	
Certificate Approved By:	Brian Alexander PhD., Technical Process Director	
Certifying Officer:	Paul Gaines PhD., Senior Technical Director	

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CERTIFICATE OF ANALYSIS

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1.0 **INORGANIC VENTURES** is an ISO Guide 34 "General Requirements for the Competence of Reference Material Producers" and ISO 9001 registered manufacturer. Our manufacturing laboratory is accredited to ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories."

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0 **DESCRIPTION OF CRM** **Custom Solution**

Catalog No.: TAPITT-MSICSAB-2

Lot Number: **G2-MEB467043**

Matrix: 3% HNO3(v/v), tr. HF

250 µg/mL ea:
Si,

50 µg/mL ea:
Sn,

25 µg/mL ea:
B, Se,

10 µg/mL ea:
Sb

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Antimony, Sb	10.00 ± 0.06 µg/mL	Boron, B	24.98 ± 0.17 µg/mL	Selenium, Se	25.01 ± 0.21 µg/mL
Silicon, Si	249.9 ± 1.6 µg/mL	Tin, Sn	50.04 ± 0.36 µg/mL		

Certified Density: 1.018 g/mL (measured at 20 ± 1° C)

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$

($\bar{x}$) = mean

x_i = individual results

n = number of measurements

Uncertainty $(\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$

2 = the coverage factor.

$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEBILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

· "Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)

· This product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRMs are available, the term 'in-house std.' is specified.

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a NIST SRM/RM. See section 4.2 for balance traceability.

4.1 ASSAY INFORMATION

ELEMENT	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	070514
Sb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	992106
Si	Calculated		See Sec. 4.2
Si	ICP Assay	3150	071204
Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330

4.2 BALANCE CALIBRATION - All analytical balances are calibrated yearly by an accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

4.3 THERMOMETER CALIBRATION - All thermometers are NIST traceable through thermometers that are calibrated by an A2LA accredited calibration laboratory.

4.4 GLASSWARE CALIBRATION - An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM's.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES IN µg/mL - N/A

6.0 INTENDED USE

For the calibration of analytical instruments including but not limited to the following:
HPLC, IC, TLC, ISE, IR, NMR, UV/VIS, MS, Capillary Electrophoresis, Potentiometry, Wet Chemistry and Voltammetry
For the validation of analytical methods
For the preparation of "working reference samples"
For interference studies and the determination of correction coefficients
For detection limit and linearity studies
For additional intended uses, contact Technical Staff

This CRM was manufactured using 18 megohm doubly deionized water that has been filtered through a 0.2 micron filter.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep **Tightly** sealed when not in use. Store and use at 20 ± 4°C. **Do Not** pipette from the container. **Do Not** return portions removed from pipetting to container.

Element Specific Information - For specific information regarding any element; Contact technical staff.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0.

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION - Please refer to the enclosed Material Safety Data sheet for information regarding this CRM.

9.0 HOMOGENEITY - This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Inorganic Ventures homogeneity data indicate that the end user should take a minimum sample size of 0.2mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 **ISO 9001 Quality Management System Registration**
- SAI Global File Number 010105

10.2 **ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration"**
- Chemical Testing - Accredited A2LA Certificate Number 883.01

10.3 **ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"**
- Reference Materials Production - Accredited A2LA Certificate Number 883.02

10.4 **10CFR50 Appendix B - Nuclear Regulatory Commission**
- Domestic Licensing of Production and Utilization Facilities

10.5 **10CFR21 - Nuclear Regulatory Commission**
- Reporting Defects and Non-Compliance

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability. Transpiration studies of chemically-stable solutions performed at the manufacturer's facility show a CRM shelf-life of twenty one months for solutions packaged in 125-mL low density polyethylene bottles. When stored under special conditions that minimize transpiration and instability, the shelf life can be extended past this limit.

11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations that solution standards be assigned a one-year expiration date.

11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: March 08, 2013

Expiration Date: EXPIRES 01 MAY 2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Donna Senn
Product Documentation Technician

Certificate Approved By: Brian Alexander
PhD., Technical Process Director

Certifying Officer: Paul Gaines
PhD., Senior Technical Director

INORGANIC VENTURES™
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 **INORGANIC VENTURES** is an ISO Guide 34 "General Requirements for the Competence of Reference Material Producers" and ISO 9001 registered manufacturer. Our manufacturing laboratory is accredited to ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories."

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0 **DESCRIPTION OF CRM** **Custom Solution**

Catalog No.: TAPITT-MS-ICPMS

Lot Number: **G2-MEB506053**

Matrix: 0.7% HNO3(v/v)

200 µg/mL ea:
Al, Ba,

100 µg/mL ea:
B, Fe, Sr,

50 µg/mL ea:
Co, Mn, Ni, V, Zn,

25 µg/mL ea:
Cu,

20 µg/mL ea:
Cr3,

5 µg/mL ea:
Ag, Be, Cd, Tl,

4 µg/mL ea:
As,

2 µg/mL ea:
Pb,

1 µg/mL ea:
Se

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Aluminum, Al	200.0 ± 1.3 µg/mL	Arsenic, As	4.002 ± 0.030 µg/mL	Barium, Ba	200.0 ± 1.3 µg/mL
Beryllium, Be	5.002 ± 0.029 µg/mL	Boron, B	100.0 ± 0.7 µg/mL	Cadmium, Cd	5.001 ± 0.035 µg/mL
Chromium+3, Cr3	20.01 ± 0.13 µg/mL	Cobalt, Co	50.03 ± 0.25 µg/mL	Copper, Cu	25.01 ± 0.17 µg/mL
Iron, Fe	100.0 ± 0.5 µg/mL	Lead, Pb	2.001 ± 0.010 µg/mL	Manganese, Mn	50.03 ± 0.32 µg/mL
Nickel, Ni	50.00 ± 0.33 µg/mL	Selenium, Se	1.000 ± 0.007 µg/mL	Silver, Ag	5.002 ± 0.033 µg/mL
Strontium, Sr	100.0 ± 0.6 µg/mL	Thallium, Tl	5.001 ± 0.034 µg/mL	Vanadium, V	49.99 ± 0.34 µg/mL
Zinc, Zn	50.02 ± 0.28 µg/mL				

Certified Density: 1.005 g/mL (measured at 20 ± 1° C)

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\sum x_i}{n}$

$(\bar{x})$ = mean

x_i = individual results

n = number of measurements

Uncertainty $(\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$

2 = the coverage factor.

$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEBILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

· "Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)

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- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a NIST SRM/RM. See section 4.2 for balance traceability.

4.1 ASSAY INFORMATION

ELEMENT	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
B	Calculated		See Sec. 4.2
B	ICP Assay	3107	070514
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	090514
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	000630 Co
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Ni	ICP Assay	3136	000612
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Tl	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

4.2 **BALANCE CALIBRATION** - All analytical balances are calibrated yearly by an accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

4.3 **THERMOMETER CALIBRATION** - All thermometers are NIST traceable through thermometers that are calibrated by an A2LA accredited calibration laboratory.

4.4 **GLASSWARE CALIBRATION** - An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM's.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES IN µg/mL - N/A

6.0 INTENDED USE

For the calibration of analytical instruments including but not limited to the following:
HPLC, IC, TLC, ISE, IR, NMR, UV/VIS, MS, Capillary Electrophoresis, Potentiometry, Wet Chemistry and Voltammetry
For the validation of analytical methods
For the preparation of "working reference samples"
For interference studies and the determination of correction coefficients
For detection limit and linearity studies
For additional intended uses, contact Technical Staff

This CRM was manufactured using 18 megohm doubly deionized water that has been filtered through a 0.2 micron filter.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep Tightly sealed when not in use. Store and use at 20 ± 4°C. Do Not pipette from the container. Do Not return portions removed from pipetting to container.

Element Specific Information - For specific information regarding any element: Contact technical staff.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0.

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION - Please refer to the enclosed Material Safety Data sheet for information regarding this CRM.

9.0 HOMOGENEITY - This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous.

Inorganic Ventures homogeneity data indicate that the end user should take a minimum sample size of 0.2mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- SAI Global File Number 010105

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration"
- Chemical Testing - Accredited A2LA Certificate Number 883.01

10.3 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"
- Reference Materials Production - Accredited A2LA Certificate Number 883.02

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- Domestic Licensing of Production and Utilization Facilities

10.5 10CFR21 - Nuclear Regulatory Commission
- Reporting Defects and Non-Compliance

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

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11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations that solution standards be assigned a one-year expiration date.

11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: December 04, 2013

Expiration Date: EXPIRES 01 APR 2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:	Christy Shortridge Product Documentation Technician	
Certificate Approved By:	Brian Alexander PhD., Technical Process Director	
Certifying Officer:	Paul Gaines PhD., Senior Technical Director	

MATERIAL SAFETY DATA SHEET
TAPITT-MS-ICPMS

Revision Number 4, Revision Date March 04, 2014

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product code	TAPITTMS-ICPMS
Product name	Multi-element Solution Standard in Dilute Nitric Acid
Common Name	Contains: 200 µg/mL ea: Al, Ba; 100 µg/mL ea: B, Fe, Sr; 50 µg/mL ea: Co, Mn, Ni, V, Zn; 25 µg/mL Cu; 20 µg/mL Cr3; 5 µg/mL ea: Ag, Be, Cd, Tl; 4 µg/mL As; 2 µg/mL Pb; 1 µg/mL Se
Manufacturer, importer, supplier	Inorganic Ventures 300 Technology Drive Christiansburg, VA 24073 web: www.inorganicventures.com
Emergency telephone number	800-424-9300 CHEMTREC (24 hrs)

2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% Weight	ACGIH*	OSHA*
7732-18-5	Water	~99.3	N/A	N/A
7697-37-2	Nitric Acid	~0.7	2 ppm TWA	2 ppm TWA; 5 mg/m3 TWA

* ACGIH - Occupational Exposure Limits - TWAs
* OSHA - Final PELs - Time Weighted Averages (TWAs)

3. HAZARDS IDENTIFICATION

Emergency Overview

- Vapours may be irritating to eyes, nose, throat, and lungs
- Corrosive

Eye contact	• Contact with eyes may cause irritation
Skin contact	• Substance may cause slight skin irritation
Inhalation	• May cause irritation of respiratory tract
Ingestion	• Harmful if swallowed

4. FIRST AID MEASURES

General advice	• Show this safety data sheet to the doctor in attendance
Skin contact	• Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes • Consult a physician if necessary
Eye contact	• Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes • Keep eye wide open while rinsing • If eye irritation persists, consult a specialist
Inhalation	• Move to fresh air in case of accidental inhalation of vapours • If breathing is difficult, give oxygen • Consult a physician if necessary
Ingestion	• Call a physician or Poison Control Centre immediately • If swallowed, seek medical advice immediately and show this container or label • If conscious, drink plenty of water

5. FIRE-FIGHTING MEASURES

Flash point	NA
Suitable extinguishing media	• Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

Specific hazards	• Thermal decomposition can lead to release of irritating gases and vapours
Specific methods	• Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations
Special protective equipment for firefighters	• As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear
NFPA (National Fire Protection Association)	• Health - 2 • Fire Hazard - 0 • Reactivity - 0
Under conditions giving incomplete combustion, hazardous gases produced may consist of:	• nitrogen oxides (NOx).

6 ACCIDENTAL RELEASE MEASURES

Personal precautions	• Evacuate personnel to safe areas • Keep people away from and upwind of spill/leak • Wear personal protective equipment • Ensure adequate ventilation
Environmental precautions	• Prevent further leakage or spillage if safe to do so • Prevent product from entering drains
Methods for cleaning up	• Dam up • Neutralize with lime milk or soda and flush with plenty of water • Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container • After cleaning, flush away traces with water

7 HANDLING AND STORAGE

Handling

Technical measures/Precautions	• Use only in area provided with appropriate exhaust ventilation
Safe handling advice	• Wear personal protective equipment

Storage

Technical measures/Precautions	• Keep in properly labelled containers • Store at room temperature in the original container • Keep containers tightly closed in a dry, cool and well-ventilated place
Incompatible products	• organic materials • reducing agents

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protective equipment	
Hand protection	• impervious gloves
Eye protection	• tightly fitting safety goggles
Respiratory protection	• Ensure adequate ventilation
Skin and body protection	• Chemical resistant apron • Lab coat
Hygiene measures	• When using, do not eat, drink or smoke • Regular cleaning of equipment, work area and clothing

9 PHYSICAL AND CHEMICAL PROPERTIES

General Information

Form liquid.

Appearance	clear
Colour	yellow tint.
Odour	None.

Important Health Safety and Environmental Information

pH	0 to 2
Boiling point/range	100°C
Flash point	N/A
Vapour pressure	NA.
Water solubility	miscible.

10. STABILITY AND REACTIVITY

Stability	• Stable under normal conditions • Hazardous polymerization does not occur
Materials to avoid	• organic materials • reducing agents
Hazardous decomposition products	• nitrogen oxides (NOx)

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Component Information

CAS	Chemical Name	% Weight	LD50/oral/rat =	LD50/dermal/rat =
7732-18-5	Water	~99.3	N/A	N/A
7697-37-2	Nitric Acid	~0.7	Inhalation LC50 Rat: 130 mg/kg/4H	Inhalation LC50 Rat: 130 mg/kg/4H

Product Information

Local effects	
Skin irritation	May cause skin irritation and/or dermatitis.
Eye irritation	May cause eye irritation with susceptible persons.
Inhalation	May cause irritation of respiratory tract.
Ingestion	If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.
Chronic toxicity	Avoid repeated exposure.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Component Information

CAS	Chemical Name	% Weight	EFAD*	EFFSD*	EMD - Ecotoxicity*
7732-18-5	Water	~99.3	N/A	N/A	N/A
7697-37-2	Nitric Acid	~0.7	N/A	N/A	N/A

* EFAD - Ecotoxicity - Freshwater Algae Data
* EFFSD - Ecotoxicity - Freshwater Fish Species Data
* EMD - Ecotoxicity - Microtox Data

Product Information

Do not allow material to contaminate ground water or sewage system

Other information

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products	• In accordance with local and national regulations
Contaminated packaging	• Empty containers should be taken for local recycling, recovery or waste disposal

14. TRANSPORT INFORMATION

DOT

UN-No	UN3264 / Class 8
Proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s
Packing group	III

IATA-DGR

UN-No	UN3264 / Class 8
Proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s
Packing group	III

15. REGULATORY INFORMATION

U.S. INVENTORIES:

CAS	Chemical Name	% Weight	CPCL*	NJRTK*	CERCLA/SARA*
7732-18-5	Water	~99.3	N/A	N/A	N/A
7697-37-2	Nitric Acid	~0.7	N/A	sn 1356	1000 lb final RQ; 454 kg final RQ

* CPCL - California - Proposition 65 - Carcinogens List
* NJRTK - New Jersey - Department of Health RTK List
* CERCLA/SARA - Hazardous Substances and their Reportable Quantities

:

INTERNATIONAL INVENTORIES:

CAS	Chemical Name	% Weight	WHMIS*	EINECCS - European Union*
7732-18-5	Water	~99.3	Uncontrolled product according to WHMIS classification criteria	231-791-2
7697-37-2	Nitric Acid	~0.7	C, E (including 60%, 61.3%, 63%, 67%, 67.18%, 70%, 90%); E (10%)	231-714-2

* WHMIS - Canada - WHMIS - Classifications of Substances
* EINECCS - European Union - European inventory of Existing Commercial Chemical Substances (EINECCS)

:

16. OTHER INFORMATION

The above information is believed to be accurate and represents the best information available to us. It has been compiled from the data presented in various technical publications and our experience and should only be used as a guide for handling this product. It is the user's responsibility to determine the suitability of this information for their particular purposes. We assume that only qualified individuals, trained and familiar with procedures suitable to this product will handle this material. Inorganic Ventures, Inc. assumes no responsibility and shall not be held liable for any damage resulting from misuse of this product.

1331632
1331633

CERTIFICATE OF ANALYSIS

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

tel: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 — ACCREDITED Reference Material Producer Certificate 883.02

Rec'd 9/24/14 RAR

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TAPITT-MS-A
Lot Number:	H2-MEB532044
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	5 000 µg/mL ea: Ca, K, Mg, Na

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Calcium, Ca	5 000 ± 22 µg/mL	Magnesium, Mg	5 000 ± 23 µg/mL	Potassium, K	5 000 ± 22 µg/mL
Sodium, Na	5 000 ± 22 µg/mL				

Certified Density: 1.071 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	120715

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\sum x_i}{n}$ ($\bar{x}$) = mean
x_i = individual results
n = number of measurements

Uncertainty $(\pm) = 2 [\Sigma(s_i)^2]^{1/2}$ 2 = the coverage factor.
$[\Sigma(s_i)^2]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

- N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 05, 2014

11.2 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.3. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

11.3 Expiration Date EXPIRES 1 2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Donna Senn
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

1331637 / 1331638 / 1331639

INORGANIC VENTURES™

CERTIFICATE OF ANALYSIS

300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

tel: 800 669 6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Rec'D 9/24/14

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TAPITT-MS-C
Lot Number:	H2-MEB532046
Matrix:	3% (v/v) HNO3 tr. HF
Value / Analyte(s):	1 000 µg/mL ea: Si, 200 µg/mL ea: Sn, 100 µg/mL ea: Mo, Ti, 50 µg/mL ea: Sb

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	49.98 ± 0.38 µg/mL	Molybdenum, Mo	100.0 ± 0.5 µg/mL	Silicon, Si	1 000 ± 7 µg/mL
Tin, Sn	200.0 ± 1.4 µg/mL	Titanium, Ti	100.0 ± 0.7 µg/mL		

Certified Density: 1.017 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Sb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Si	Calculated		See Sec. 4.2
Si	ICP Assay	3150	071204
Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330
Ti	ICP Assay	3162a	060808

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\sum x_i}{n}$ ($\bar{x}$) = mean
x_i = individual results
n = number of measurements

Uncertainty (±) = $2\,[\,\Sigma(s_i)^2\,]^{1/2}$ 2 = the coverage factor.
$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

- N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

- HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

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11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 05, 2014

11.2 Period of Validity

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11.3 Expiration Date EXPIRES 10/2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Donna Senn
Product Documentation Technician

Donna Senn

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Brian Alexander

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Paul R Gaines

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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. : 568719 **Lot No.:** A0100240

Description : OCP/PCB Surrogate Mix RTS

OCP/PCB Surrogate Mix RTS 0.2 µg/ml, Methanol, 100 ml/bottle

Container Size : 100 mL **Pkg Amt:** > 100 mL

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2,4,5,6-Tetrachloro-m-xylene	0.2 µg/mL	+/- 0.0025	µg/mL	Gravimetric
	CAS # 877-09-8 (Lot 0052481)		+/- 0.0066	µg/mL	Unstressed
	Purity 98%		+/- 0.0086	µg/mL	Stressed
2	Decachlorobiphenyl (BZ# 209)	0.2 µg/mL	+/- 0.0025	µg/mL	Gravimetric
	CAS # 2051-24-3 (Lot ER071509-01)		+/- 0.0067	µg/mL	Unstressed
	Purity 99%		+/- 0.0086	µg/mL	Stressed

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

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

5V Benzo pyrene primary
100313

ISO 9001 QS Registered
ISO 17025-34-35-43 Accredited
Scopes: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

Part Number: 71016
Lot Number: 100313
Description: Benzo(e)pyrene

Expiration Date: 100318
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000

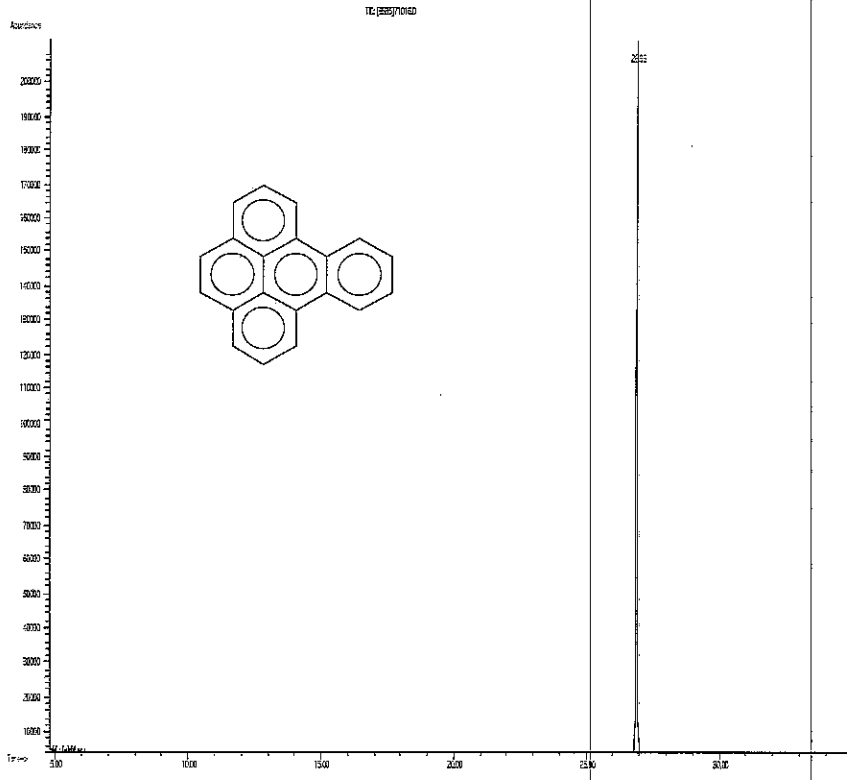
Solvent(s): Lot # 44325 Methylene chloride

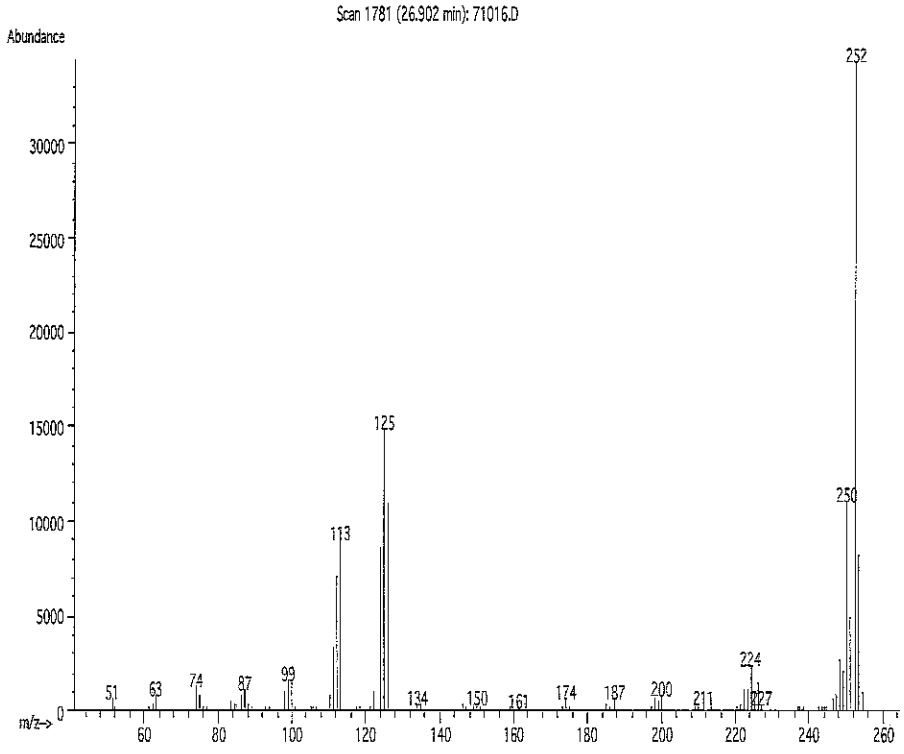
Weight(s) shown below were combined and diluted to: 100.0 5E-05 Balance Uncertainty 0.003 Flask Uncertainty

Formulated By:	Paul Barron	100313 DATE
Reviewed By:	Pedro L. Rentas	100313 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Benzo(e)pyrene	1016	012011	1000	99	0.2	0.10100	0.10125	1002.5	0.0042	00192-97-2	N/A	N/A

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B= 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.





Certificate of Analysis

2-Naphthylamine Solution

Product Number: EPA-1135 **Page:** 1 of 1

Lot Number: CK-1617 **Lot Issue Date:** 20-May-2013 **Expiration Date:** 30-Jun-2017

This certified Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
2-naphthylamine	000091-59-8	RM06488	1001 ± 5 µg/mL

Matrix: methanol (methyl alcohol)

Storage: Store at Room Temperature (15-30°C)

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

ACCREDITED
ISO 17025:2005 Accredited A2LA Cert. No. 0851-01
ISO 9001:2008 Registered TUV USA, Inc. Cert. No. 09-1009

250 Smith Street, North Kingstown, RI 02852 USA
401-294-9400 Fax: 295-2330
wwww.ultrasci.com

William J. Leary
Quality Assurance Manager

SV/Vint8d/lot A093676

RESTEK

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ilac-MRA

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Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

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

Catalog No. : 567684 **Lot No.:** A093676

Description : 8270 Internal Standard

8270 Internal Standard 2,000µg/mL, Methylene Chloride, 5mL/ampul

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

Expiration Date : February 2018 **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-Dichlorobenzene-d4		2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS #	3855-82-1			+/-	92.7158	µg/mL	Unstressed
	Purity	99%			+/-	101.3766	µg/mL	Stressed
2	Naphthalene-d8		2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS #	1146-65-2			+/-	92.7158	µg/mL	Unstressed
	Purity	99%			+/-	101.3766	µg/mL	Stressed
3	Acenaphthene-d10		2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS #	15067-26-2			+/-	92.7163	µg/mL	Unstressed
	Purity	97%			+/-	101.3771	µg/mL	Stressed
4	Phenanthrene-d10		2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS #	1517-22-2			+/-	92.7158	µg/mL	Unstressed
	Purity	99%			+/-	101.3766	µg/mL	Stressed
5	Chrysene-d12		2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS #	1719-03-5			+/-	92.7150	µg/mL	Unstressed
	Purity	98%			+/-	101.3758	µg/mL	Stressed
6	Perylene-d12		2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS #	1520-96-3			+/-	92.7158	µg/mL	Unstressed
	Purity	99%			+/-	101.3766	µg/mL	Stressed

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

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

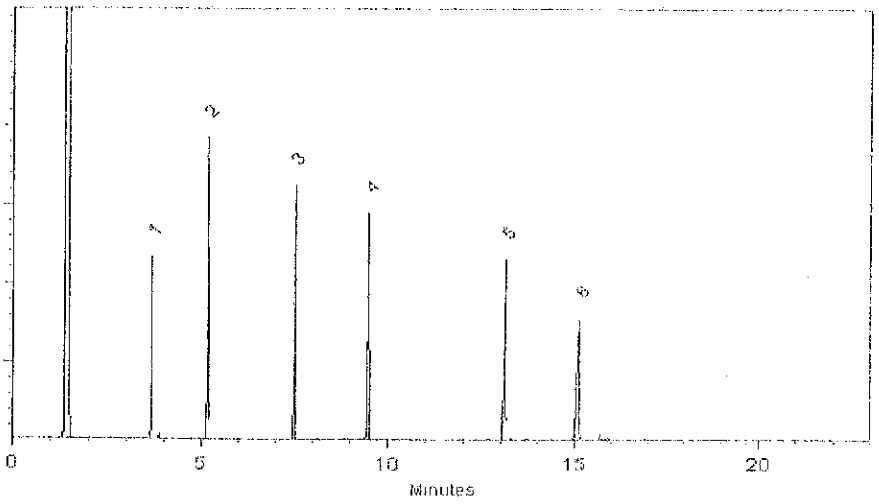
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
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



Jodi E. Breon - QA Analyst

Date Passed: 27-Feb-2013 Balance: 1128342315

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

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Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567679 **Lot No.:** A0102912

Description : 8270 List 2 / Std #2

8270 List 2 / Std #2 1,000 ug/ml, Methylene Chloride, 1 ml/ampul

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

Expiration Date : April 30, 2015 **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	Methyl methanesulfonate		1,004.0	µg/mL	+/- 5.9635	µg/mL	Gravimetric
	CAS # 66-27-3	(Lot MKBJ8702V)			+/- 31.2232	µg/mL	Unstressed
	Purity 99%				+/- 32.8038	µg/mL	Stressed
2	Ethyl methanesulfonate		1,007.0	µg/mL	+/- 5.9813	µg/mL	Gravimetric
	CAS # 62-50-0	(Lot FIN01-LVQL)			+/- 31.3165	µg/mL	Unstressed
	Purity 99%				+/- 32.9019	µg/mL	Stressed
3	Pentachloroethane		1,000.0	µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 76-01-7	(Lot 7GHYB)			+/- 31.0988	µg/mL	Unstressed
	Purity 99%				+/- 32.6732	µg/mL	Stressed
4	2,6-Dichlorophenol		1,000.0	µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 87-65-0	(Lot 03518LN)			+/- 31.0988	µg/mL	Unstressed
	Purity 99%				+/- 32.6732	µg/mL	Stressed
5	Hexachloropropene		1,000.0	µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 1888-71-7	(Lot 44391/3)			+/- 31.0988	µg/mL	Unstressed
	Purity 99%				+/- 32.6732	µg/mL	Stressed
6	Isosafrole (cis & trans)		999.6	µg/mL	+/- 5.9373	µg/mL	Gravimetric
	CAS # 120-58-1	(Lot MKBK3786V)			+/- 31.0863	µg/mL	Unstressed
	Purity 98%	83% trans; 17% cis			+/- 32.6601	µg/mL	Stressed
7	1-Chloronaphthalene		1,001.0	µg/mL	+/- 5.9456	µg/mL	Gravimetric
	CAS # 90-13-1	(Lot MYWUK)			+/- 31.1299	µg/mL	Unstressed
	Purity 99%				+/- 32.7058	µg/mL	Stressed
8	1,4-Naphthoquinone		999.0	µg/mL	+/- 5.9338	µg/mL	Gravimetric
	CAS # 130-15-4	(Lot 3232134094)			+/- 31.0677	µg/mL	Unstressed
	Purity 99%				+/- 32.6405	µg/mL	Stressed

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

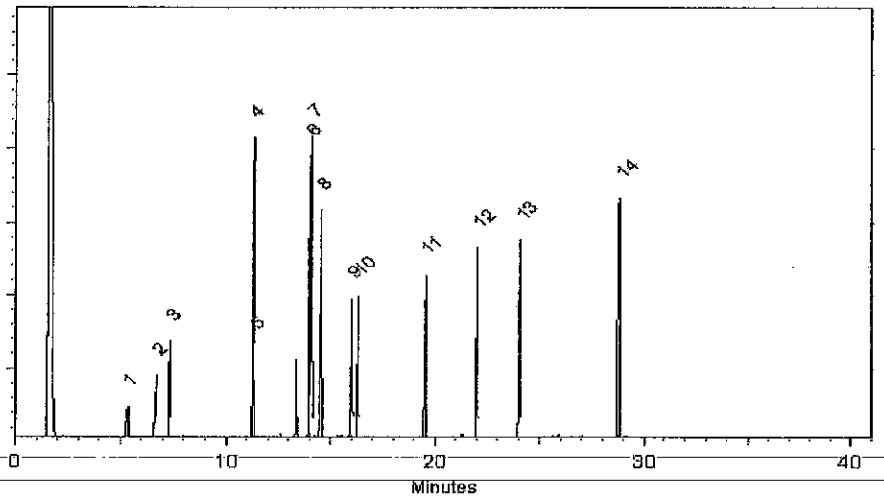
Carrier Gas:
hydrogen-constant pressure 10 psi.

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 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:** 23-Apr-2014 **Balance:** 1128360905

Jennifer L. Pollino - QC Analyst **Date Passed:** 29-Apr-2014

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

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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. : 567672.sec **Lot No.:** A099449

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

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,4-Dioxane	1,001.2 µg/mL	+/- 5.8343 µg/mL	Gravimetric
	CAS # 123-91-1.SEC (Lot 2RHVG)		+/- 6.6955 µg/mL	Unstressed
	Purity 99%		+/- 16.4425 µg/mL	Stressed
2	Pyridine	1,000.7 µg/mL	+/- 5.8314 µg/mL	Gravimetric
	CAS # 110-86-1.SEC (Lot QN8DK)		+/- 6.6922 µg/mL	Unstressed
	Purity 99%		+/- 16.4343 µg/mL	Stressed
3	N-Nitrosodimethylamine	1,001.7 µg/mL	+/- 5.8372 µg/mL	Gravimetric
	CAS # 62-75-9.SEC (Lot 31C7)		+/- 6.6989 µg/mL	Unstressed
	Purity 99%		+/- 16.4507 µg/mL	Stressed
4	Aniline	1,000.7 µg/mL	+/- 5.8314 µg/mL	Gravimetric
	CAS # 62-53-3.SEC (Lot ZCD3N)		+/- 6.6922 µg/mL	Unstressed
	Purity 99%		+/- 16.4343 µg/mL	Stressed
5	Phenol	1,000.7 µg/mL	+/- 5.8314 µg/mL	Gravimetric
	CAS # 108-95-2.SEC (Lot EDPYN)		+/- 6.6922 µg/mL	Unstressed
	Purity 99%		+/- 16.4343 µg/mL	Stressed
6	Bis(2-chloroethyl)ether	1,001.0 µg/mL	+/- 5.8333 µg/mL	Gravimetric
	CAS # 111-44-4.SEC (Lot FA010143)		+/- 6.6944 µg/mL	Unstressed
	Purity 99%		+/- 16.4397 µg/mL	Stressed
7	2-Chlorophenol	1,000.2 µg/mL	+/- 5.8285 µg/mL	Gravimetric
	CAS # 95-57-8.SEC (Lot GJ01)		+/- 6.6888 µg/mL	Unstressed
	Purity 99%		+/- 16.4261 µg/mL	Stressed
8	1,3-Dichlorobenzene	1,000.8 µg/mL	+/- 5.8324 µg/mL	Gravimetric
	CAS # 541-73-1.SEC (Lot FMDFD-KA)		+/- 6.6933 µg/mL	Unstressed
	Purity 99%		+/- 16.4370 µg/mL	Stressed

25	Bis(2-chloroethoxy)methane		1,000.0	µg/mL	+/-	5.8275	µg/mL	Gravimetric
	CAS # 111-91-1 *	(Lot 317200)			+/-	6.6877	µg/mL	Unstressed
	Purity 99%				+/-	16.4233	µg/mL	Stressed
26	2,4-Dichlorophenol		1,000.5	µg/mL	+/-	5.8304	µg/mL	Gravimetric
	CAS # 120-83-2.SEC	(Lot FHM01)			+/-	6.6911	µg/mL	Unstressed
	Purity 99%				+/-	16.4315	µg/mL	Stressed
27	1,2,4-Trichlorobenzene		1,000.3	µg/mL	+/-	5.8295	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot OGO01)			+/-	6.6899	µg/mL	Unstressed
	Purity 99%				+/-	16.4288	µg/mL	Stressed
28	Naphthalene		1,000.0	µg/mL	+/-	5.8275	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot 4KW3H-OO)			+/-	6.6877	µg/mL	Unstressed
	Purity 99%				+/-	16.4233	µg/mL	Stressed
29	4-Chloroaniline		1,001.0	µg/mL	+/-	5.8333	µg/mL	Gravimetric
	CAS # 106-47-8.SEC	(Lot 10171860)			+/-	6.6944	µg/mL	Unstressed
	Purity 99%				+/-	16.4397	µg/mL	Stressed
30	Hexachlorobutadiene		1,000.7	µg/mL	+/-	5.8317	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 2009400)			+/-	6.6925	µg/mL	Unstressed
	Purity 97%				+/-	16.4351	µg/mL	Stressed
31	2-Methylnaphthalene		1,000.7	µg/mL	+/-	5.8314	µg/mL	Gravimetric
	CAS # 91-57-6.SEC	(Lot 76023-1)			+/-	6.6922	µg/mL	Unstressed
	Purity 99%				+/-	16.4343	µg/mL	Stressed
32	4-Chloro-3-methylphenol		1,000.0	µg/mL	+/-	5.8275	µg/mL	Gravimetric
	CAS # 59-50-7.SEC	(Lot FDO02)			+/-	6.6877	µg/mL	Unstressed
	Purity 99%				+/-	16.4233	µg/mL	Stressed
33	1-Methylnaphthalene		1,000.7	µg/mL	+/-	5.8314	µg/mL	Gravimetric
	CAS # 90-12-0.SEC	(Lot UATSA)			+/-	6.6922	µg/mL	Unstressed
	Purity 99%				+/-	16.4343	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene		1,001.2	µg/mL	+/-	5.8343	µg/mL	Gravimetric
	CAS # 95-94-3.SEC	(Lot AF02)			+/-	6.6955	µg/mL	Unstressed
	Purity 99%				+/-	16.4425	µg/mL	Stressed
35	Hexachlorocyclopentadiene		1,001.5	µg/mL	+/-	5.8363	µg/mL	Gravimetric
	CAS # 77-47-4.SEC	(Lot 0012013)			+/-	6.6977	µg/mL	Unstressed
	Purity 99%				+/-	16.4480	µg/mL	Stressed
36	2,4,6-Trichlorophenol		1,003.0	µg/mL	+/-	5.8452	µg/mL	Gravimetric
	CAS # 88-06-2.SEC	(Lot UUMYM)			+/-	6.7080	µg/mL	Unstressed
	Purity 98%				+/-	16.4731	µg/mL	Stressed
37	2,4,5-Trichlorophenol		1,000.0	µg/mL	+/-	5.8275	µg/mL	Gravimetric
	CAS # 95-95-4.SEC	(Lot MKBG3862V/)			+/-	6.6877	µg/mL	Unstressed
	Purity 99%				+/-	16.4233	µg/mL	Stressed
38	2-Chloronaphthalene		1,000.7	µg/mL	+/-	5.8314	µg/mL	Gravimetric
	CAS # 91-58-7.SEC	(Lot LB89364V)			+/-	6.6922	µg/mL	Unstressed
	Purity 99%				+/-	16.4343	µg/mL	Stressed
39	Biphenyl		1,001.2	µg/mL	+/-	5.8343	µg/mL	Gravimetric
	CAS # 92-52-4.SEC	(Lot 330QE)			+/-	6.6955	µg/mL	Unstressed
	Purity 99%				+/-	16.4425	µg/mL	Stressed
40	2-Nitroaniline		1,000.3	µg/mL	+/-	5.8295	µg/mL	Gravimetric
	CAS # 88-74-4.SEC	(Lot T6E7B)			+/-	6.6899	µg/mL	Unstressed
	Purity 99%				+/-	16.4288	µg/mL	Stressed

73	Benzo(b)fluoranthene		1,000.4	µg/mL	+/- 5.8298	µg/mL	Gravimetric
	CAS # 205-99-2.SEC	(Lot 012012)			+/- 6.6903	µg/mL	Unstressed
	Purity 97%				+/- 16.4298	µg/mL	Stressed
74	Benzo(k)fluoranthene		1,000.7	µg/mL	+/- 5.8314	µg/mL	Gravimetric
	CAS # 207-08-9.SEC	(Lot 022011)			+/- 6.6922	µg/mL	Unstressed
	Purity 99%				+/- 16.4343	µg/mL	Stressed
75	Benzo(a)pyrene		1,000.2	µg/mL	+/- 5.8285	µg/mL	Gravimetric
	CAS # 50-32-8.SEC	(Lot 2IGMD)			+/- 6.6888	µg/mL	Unstressed
	Purity 99%				+/- 16.4261	µg/mL	Stressed
76	Indeno(1,2,3-cd)pyrene		1,001.3	µg/mL	+/- 5.8353	µg/mL	Gravimetric
	CAS # 193-39-5.SEC	(Lot 012011)			+/- 6.6966	µg/mL	Unstressed
	Purity 99%				+/- 16.4452	µg/mL	Stressed
77	Dibenz(a,h)anthracene		1,000.5	µg/mL	+/- 5.8304	µg/mL	Gravimetric
	CAS # 53-70-3.SEC	(Lot 0012012)			+/- 6.6911	µg/mL	Unstressed
	Purity 99%				+/- 16.4315	µg/mL	Stressed
78	Benzo(g,h,i)perylene		1,001.5	µg/mL	+/- 5.8363	µg/mL	Gravimetric
	CAS # 191-24-2 *	(Lot ER020708-08)			+/- 6.6977	µg/mL	Unstressed
	Purity 99%				+/- 16.4480	µg/mL	Stressed

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

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

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

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

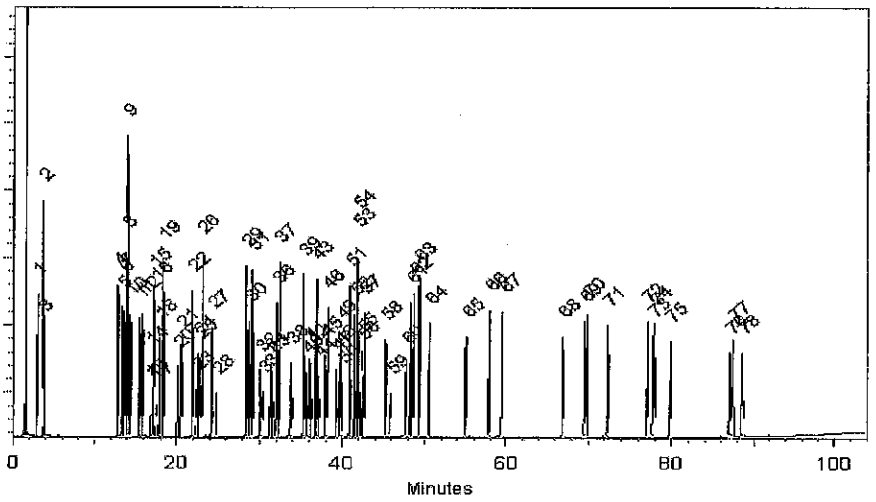
Carrier Gas:
hydrogen-constant pressure 10 psi

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



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.

Michael J Maye

Jennifer L Pollino

Jennifer L. Pollino - QC Analyst

Date Mixed: 12-Nov-2013 **Balance:** 1128353505

Date Passed: 20-Nov-2013

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

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567672 **Lot No.:** A0101615

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 31, 2015 **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%	(Lot SHBD4119V)	1,006.4 µg/mL	+/- 5.8510 µg/mL +/- 11.0182 µg/mL +/- 18.6887 µg/mL	Gravimetric Unstressed Stressed
2	Pyridine **CAS #** 110-86-1 **Purity** 99%	(Lot 02718MW)	1,001.7 µg/mL	+/- 5.8237 µg/mL +/- 10.9668 µg/mL +/- 18.6014 µg/mL	Gravimetric Unstressed Stressed
3	N-Nitrosodimethylamine **CAS #** 62-75-9 **Purity** 99%	(Lot 2179300)	1,001.4 µg/mL	+/- 5.8222 µg/mL +/- 10.9640 µg/mL +/- 18.5968 µg/mL	Gravimetric Unstressed Stressed
4	Aniline **CAS #** 62-53-3 **Purity** 99%	(Lot 68396APV)	1,009.3 µg/mL	+/- 5.8682 µg/mL +/- 11.0505 µg/mL +/- 18.7435 µg/mL	Gravimetric Unstressed Stressed
5	Phenol **CAS #** 108-95-2 **Purity** 99%	(Lot SHBC6998V)	1,009.5 µg/mL	+/- 5.8690 µg/mL +/- 11.0522 µg/mL +/- 18.7463 µg/mL	Gravimetric Unstressed Stressed
6	Bis(2-chloroethyl)ether **CAS #** 111-44-4 **Purity** 99%	(Lot 45296HKV)	1,005.2 µg/mL	+/- 5.8440 µg/mL +/- 11.0051 µg/mL +/- 18.6664 µg/mL	Gravimetric Unstressed Stressed
7	2-Chlorophenol **CAS #** 95-57-8 **Purity** 99%	(Lot MKBD3900V)	1,006.4 µg/mL	+/- 5.8510 µg/mL +/- 11.0182 µg/mL +/- 18.6887 µg/mL	Gravimetric Unstressed Stressed
8	1,3-Dichlorobenzene **CAS #** 541-73-1 **Purity** 99%	(Lot BCBC1891V)	1,009.2 µg/mL	+/- 5.8673 µg/mL +/- 11.0489 µg/mL +/- 18.7407 µg/mL	Gravimetric Unstressed Stressed

25	Bis(2-chloroethoxy)methane		1,006.3	µg/mL	+/-	5.8507	µg/mL	Gravimetric
	CAS # 111-91-1	(Lot 2238100)			+/-	11.0177	µg/mL	Unstressed
	Purity 99%				+/-	18.6878	µg/mL	Stressed
26	2,4-Dichlorophenol		1,009.7	µg/mL	+/-	5.8705	µg/mL	Gravimetric
	CAS # 120-83-2	(Lot BCBH1617V)			+/-	11.0549	µg/mL	Unstressed
	Purity 99%				+/-	18.7509	µg/mL	Stressed
27	1,2,4-Trichlorobenzene		1,000.7	µg/mL	+/-	5.8179	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot 26896BM)			+/-	10.9558	µg/mL	Unstressed
	Purity 99%				+/-	18.5829	µg/mL	Stressed
28	Naphthalene		1,001.0	µg/mL	+/-	5.8196	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBH4351V)			+/-	10.9591	µg/mL	Unstressed
	Purity 99%				+/-	18.5884	µg/mL	Stressed
29	4-Chloroaniline		999.5	µg/mL	+/-	5.8112	µg/mL	Gravimetric
	CAS # 106-47-8	(Lot 12528PH)			+/-	10.9432	µg/mL	Unstressed
	Purity 98%				+/-	18.5615	µg/mL	Stressed
30	Hexachlorobutadiene		1,001.9	µg/mL	+/-	5.8249	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot K22W009)			+/-	10.9690	µg/mL	Unstressed
	Purity 98%				+/-	18.6052	µg/mL	Stressed
31	2-Methylnaphthalene		1,006.1	µg/mL	+/-	5.8497	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot 19399MJV)			+/-	11.0158	µg/mL	Unstressed
	Purity 96%				+/-	18.6846	µg/mL	Stressed
32	4-Chloro-3-methylphenol		1,004.2	µg/mL	+/-	5.8382	µg/mL	Gravimetric
	CAS # 59-50-7	(Lot STBC0769V)			+/-	10.9941	µg/mL	Unstressed
	Purity 99%				+/-	18.6479	µg/mL	Stressed
33	1-Methylnaphthalene		1,000.6	µg/mL	+/-	5.8173	µg/mL	Gravimetric
	CAS # 90-12-0	(Lot 5250.00-10)			+/-	10.9547	µg/mL	Unstressed
	Purity 99%				+/-	18.5810	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene		1,002.1	µg/mL	+/-	5.8263	µg/mL	Gravimetric
	CAS # 95-94-3	(Lot 06024AIV)			+/-	10.9717	µg/mL	Unstressed
	Purity 99%				+/-	18.6098	µg/mL	Stressed
35	Hexachlorocyclopentadiene		1,009.5	µg/mL	+/-	5.8690	µg/mL	Gravimetric
	CAS # 77-47-4	(Lot 2220500)			+/-	11.0522	µg/mL	Unstressed
	Purity 99%				+/-	18.7463	µg/mL	Stressed
36	2,4,6-Trichlorophenol		1,003.6	µg/mL	+/-	5.8350	µg/mL	Gravimetric
	CAS # 88-06-2	(Lot MKBH7393V)			+/-	10.9881	µg/mL	Unstressed
	Purity 99%				+/-	18.6376	µg/mL	Stressed
37	2,4,5-Trichlorophenol		1,008.9	µg/mL	+/-	5.8658	µg/mL	Gravimetric
	CAS # 95-95-4	(Lot FHM01)			+/-	11.0461	µg/mL	Unstressed
	Purity 99%				+/-	18.7361	µg/mL	Stressed
38	2-Chloronaphthalene		1,004.8	µg/mL	+/-	5.8417	µg/mL	Gravimetric
	CAS # 91-58-7	(Lot FIJ01)			+/-	11.0007	µg/mL	Unstressed
	Purity 99%				+/-	18.6590	µg/mL	Stressed
39	Biphenyl		1,005.6	µg/mL	+/-	5.8464	µg/mL	Gravimetric
	CAS # 92-52-4	(Lot 1277976)			+/-	11.0095	µg/mL	Unstressed
	Purity 99%				+/-	18.6739	µg/mL	Stressed
40	2-Nitroaniline		1,007.1	µg/mL	+/-	5.8551	µg/mL	Gravimetric
	CAS # 88-74-4	(Lot MKBF9132V)			+/-	11.0259	µg/mL	Unstressed
	Purity 99%				+/-	18.7017	µg/mL	Stressed

57	Azobenzene		1,006.5	µg/mL	+/-	5.8516	µg/mL	Gravimetric
	CAS # 103-33-3	(Lot 130305JLM)			+/-	11.0193	µg/mL	Unstressed
	Purity 99%				+/-	18.6906	µg/mL	Stressed
58	4-Bromophenyl phenyl ether		1,003.7	µg/mL	+/-	5.8353	µg/mL	Gravimetric
	CAS # 101-55-3	(Lot STBB9729V)			+/-	10.9887	µg/mL	Unstressed
	Purity 99%				+/-	18.6386	µg/mL	Stressed
59	Hexachlorobenzene		1,008.0	µg/mL	+/-	5.8606	µg/mL	Gravimetric
	CAS # 118-74-1	(Lot LB93343V)			+/-	11.0363	µg/mL	Unstressed
	Purity 99%				+/-	18.7193	µg/mL	Stressed
60	Pentachlorophenol		2,006.3	µg/mL	+/-	11.6648	µg/mL	Gravimetric
	CAS # 87-86-5	(Lot 130826JLM)			+/-	21.9664	µg/mL	Unstressed
	Purity 99%				+/-	37.2586	µg/mL	Stressed
61	Phenanthrene		1,004.4	µg/mL	+/-	5.8394	µg/mL	Gravimetric
	CAS # 85-01-8	(Lot MKBJ4205V)			+/-	10.9963	µg/mL	Unstressed
	Purity 99%				+/-	18.6516	µg/mL	Stressed
62	Anthracene		1,007.3	µg/mL	+/-	5.8565	µg/mL	Gravimetric
	CAS # 120-12-7	(Lot MKBK5208V)			+/-	11.0286	µg/mL	Unstressed
	Purity 99%				+/-	18.7064	µg/mL	Stressed
63	n-Hexadecane (C16)		1,001.9	µg/mL	+/-	5.8248	µg/mL	Gravimetric
	CAS # 544-76-3	(Lot SHBC3991V)			+/-	10.9690	µg/mL	Unstressed
	Purity 99%				+/-	18.6051	µg/mL	Stressed
64	Carbazole		1,001.8	µg/mL	+/-	5.8246	µg/mL	Gravimetric
	CAS # 86-74-8	(Lot S42950-417)			+/-	10.9685	µg/mL	Unstressed
	Purity 98%				+/-	18.6043	µg/mL	Stressed
65	Di-n-butylphthalate		1,002.5	µg/mL	+/-	5.8286	µg/mL	Gravimetric
	CAS # 84-74-2	(Lot MKBG1851V)			+/-	10.9761	µg/mL	Unstressed
	Purity 99%				+/-	18.6172	µg/mL	Stressed
66	Fluoranthene		1,009.4	µg/mL	+/-	5.8685	µg/mL	Gravimetric
	CAS # 206-44-0	(Lot 00828AJ)			+/-	11.0511	µg/mL	Unstressed
	Purity 98%				+/-	18.7444	µg/mL	Stressed
67	Pyrene		1,004.0	µg/mL	+/-	5.8371	µg/mL	Gravimetric
	CAS # 129-00-0	(Lot BCBJ0984V)			+/-	10.9921	µg/mL	Unstressed
	Purity 98%				+/-	18.6443	µg/mL	Stressed
68	Benzyl butyl phthalate		1,005.4	µg/mL	+/-	5.8452	µg/mL	Gravimetric
	CAS # 85-68-7	(Lot 03027HV)			+/-	11.0073	µg/mL	Unstressed
	Purity 99%				+/-	18.6701	µg/mL	Stressed
69	Benz(a)anthracene		1,006.4	µg/mL	+/-	5.8513	µg/mL	Gravimetric
	CAS # 56-55-3	(Lot ER031412-01)			+/-	11.0188	µg/mL	Unstressed
	Purity 99%				+/-	18.6896	µg/mL	Stressed
70	Chrysene		1,003.2	µg/mL	+/-	5.8327	µg/mL	Gravimetric
	CAS # 218-01-9	(Lot PR121912-01)			+/-	10.9837	µg/mL	Unstressed
	Purity 99%				+/-	18.6302	µg/mL	Stressed
71	Bis(2-ethylhexyl)phthalate		1,000.9	µg/mL	+/-	5.8190	µg/mL	Gravimetric
	CAS # 117-81-7	(Lot MKBH9511V)			+/-	10.9580	µg/mL	Unstressed
	Purity 99%				+/-	18.5866	µg/mL	Stressed
72	Di-n-octyl phthalate		1,002.3	µg/mL	+/-	5.8272	µg/mL	Gravimetric
	CAS # 117-84-0	(Lot 1674300)			+/-	10.9733	µg/mL	Unstressed
	Purity 99%				+/-	18.6126	µg/mL	Stressed

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

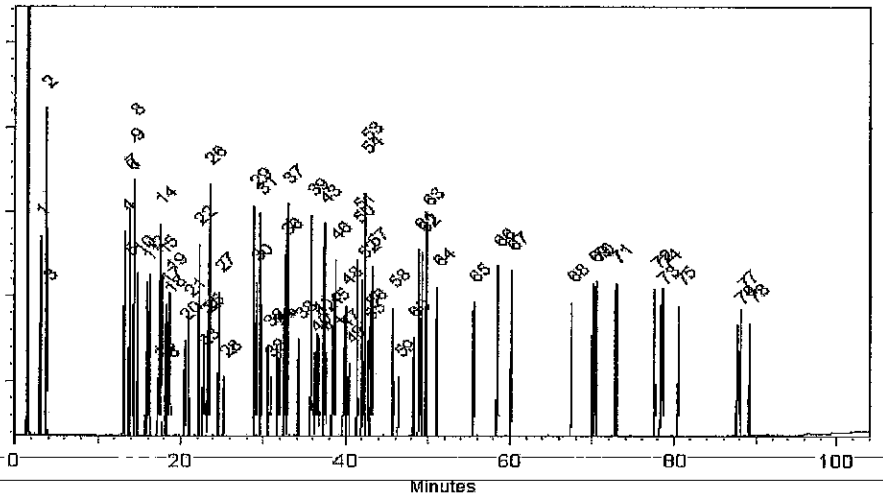
Carrier Gas:
hydrogen-constant pressure 10 psi

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.

Rebecca Hauver

Date Mixed: 26-Feb-2014 **Balance:** 1128360905

Jodi E. Breon

Jodi E. Breon - QA Analyst

Date Passed: 04-Mar-2014

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

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567673.sec **Lot No.:** A0100416

Description : 8270 List 1 / Std #2 Amines

8270 List 1 / Std #2 Amines 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

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

Handling: Contains carcinogen

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	epsilon-Caprolactam **CAS #** 105-60-2.SEC (Lot BLJTB) **Purity** 99%	2,003.0 µg/mL	+/- 11.7547 µg/mL +/- 21.9884 µg/mL +/- 37.2316 µg/mL	Gravimetric Unstressed Stressed
2	Atrazine **CAS #** 1912-24-9.SEC (Lot 1132400) **Purity** 99%	2,004.0 µg/mL	+/- 11.7606 µg/mL +/- 21.9994 µg/mL +/- 37.2502 µg/mL	Gravimetric Unstressed Stressed
3	Benzidine **CAS #** 92-87-5.SEC (Lot 1301900) **Purity** 99%	2,005.0 µg/mL	+/- 11.7665 µg/mL +/- 22.0103 µg/mL +/- 37.2688 µg/mL	Gravimetric Unstressed Stressed
4	3,3'-Dichlorobenzidine **CAS #** 91-94-1.SEC (Lot 2010900) **Purity** 99%	2,001.0 µg/mL	+/- 11.7430 µg/mL +/- 21.9664 µg/mL +/- 37.1944 µg/mL	Gravimetric Unstressed Stressed

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

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567673 **Lot No.:** A0100824

Description : 8270 List 1 / Std #2 Amines

8270 List 1 / Std #2 Amines 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

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

Handling: Contains carcinogen

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	epsilon-Caprolactam **CAS #** 105-60-2 (Lot 10000218) **Purity** 99%	2,004.8 µg/mL	+/- 11.7653 µg/mL +/- 22.0081 µg/mL +/- 37.2650 µg/mL	Gravimetric Unstressed Stressed
2	Atrazine **CAS #** 1912-24-9 (Lot TZ8ED) **Purity** 98%	2,000.4 µg/mL	+/- 11.7393 µg/mL +/- 21.9596 µg/mL +/- 37.1828 µg/mL	Gravimetric Unstressed Stressed
3	Benzidine **CAS #** 92-87-5 (Lot 140107JLM) **Purity** 99%	2,010.4 µg/mL	+/- 11.7982 µg/mL +/- 22.0696 µg/mL +/- 37.3691 µg/mL	Gravimetric Unstressed Stressed
4	3,3'-Dichlorobenzidine **CAS #** 91-94-1 (Lot 140109JLM) **Purity** 99%	2,000.0 µg/mL	+/- 11.7371 µg/mL +/- 21.9554 µg/mL +/- 37.1758 µg/mL	Gravimetric Unstressed Stressed

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

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568725 **Lot No.:** A0101573

Description : 8270 List 1/ Std #7 Diphenylamine

8270 List 1/ Std #7 Diphenylamine 1,710 µg/ml, Methylene Chloride, 5 ml/ampul

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

Expiration Date : February 28, 2017 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diphenylamine	1,706.8 µg/mL	+/- 10.0165	µg/mL	Gravimetric
	CAS # 122-39-4 (Lot 07525MF)		+/- 18.7368	µg/mL	Unstressed
	Purity 99%		+/- 31.7258	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.

Tech Tips:

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

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CERTIFIED REFERENCE MATERIAL

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Certificate #3222.01

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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. : 568725.sec **Lot No.:** A099909

Description : 8270 List 1/ Std #7 Diphenylamine

8270 List 1/ Std #7 Diphenylamine 1,710 µg/ml, Methylene Chloride, 5 ml/ampul

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diphenylamine	1,696.0 µg/mL	+/- 9.9531	µg/mL	Gravimetric
	CAS # 122-39-4.SEC (Lot 10164691)		+/- 18.6182	µg/mL	Unstressed
	Purity 99%		+/- 31.5251	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.

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

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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. : 568724 **Lot No.:** A0103145

Description : 8270 List 1/ Std #8

8270 List 1/ Std #8 2,000 µg/ml, Methylene Chloride, 5 ml/ampul

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Benzaldehyde **CAS #** 100-52-7 (Lot SHBC6366V) **Purity** 99%	2,000.0 µg/mL	+/- 11.7371 µg/mL +/- 64.1312 µg/mL +/- 74.5440 µg/mL	Gravimetric Unstressed Stressed
2	Indene **CAS #** 95-13-6 (Lot MKBH4027V) **Purity** 99%	2,012.0 µg/mL	+/- 11.8075 µg/mL +/- 64.5160 µg/mL +/- 74.9913 µg/mL	Gravimetric Unstressed Stressed
3	Benzoic acid **CAS #** 65-85-0 (Lot MKBG9391V) **Purity** 99%	2,003.0 µg/mL	+/- 11.7547 µg/mL +/- 64.2274 µg/mL +/- 74.6558 µg/mL	Gravimetric Unstressed Stressed

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

SV 8270 List 1 Std. 568724.sec
A0103007

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568724.sec **Lot No.:** A0103007

Description : 8270 List 1/ Std #8

8270 List 1/ Std #8 2,000 µg/ml, Methylene Chloride, 5 ml/ampul

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

Expiration Date : April 30, 2015 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Benzaldehyde	2,001.3 µg/mL	+/- 11.7449 µg/mL	Gravimetric
	CAS # 100-52-7.SEC (Lot E7DWH)		+/- 64.1739 µg/mL	Unstressed
	Purity 99%		+/- 74.5937 µg/mL	Stressed
2	Indene	2,002.7 µg/mL	+/- 11.7528 µg/mL	Gravimetric
	CAS # 95-13-6.SEC (Lot IG5TI)		+/- 64.2167 µg/mL	Unstressed
	Purity 99%		+/- 74.6434 µg/mL	Stressed
3	Benzoic acid	2,000.8 µg/mL	+/- 11.7417 µg/mL	Gravimetric
	CAS # 65-85-0.SEC (Lot QD3UO)		+/- 64.1564 µg/mL	Unstressed
	Purity 97%		+/- 74.5733 µg/mL	Stressed

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

708636
708635

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

5 VIALS SPIKE

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

Description : 8270 Surrogate Standard

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

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

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

Handling: Sonicate prior to use.

CERTIFIED VALUES

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

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

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

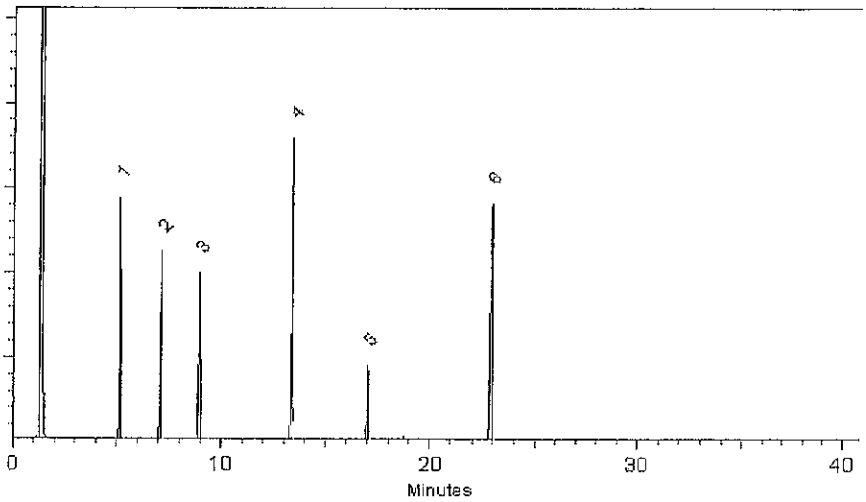
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Diane Shaffer - QAAnalyst

Date Passed: 22-Feb-2013 **Balance:** 1128342313

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

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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)

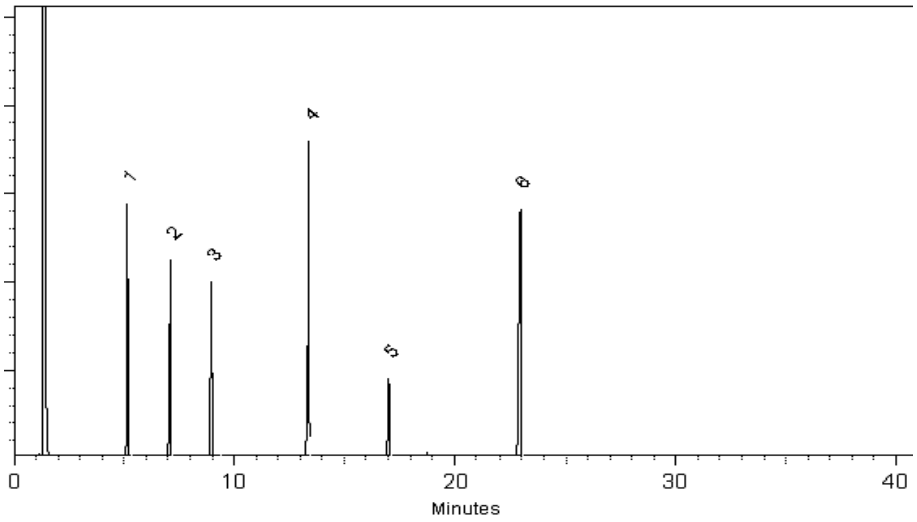
Carrier Gas:
hydrogen-constant pressure 10 psi.

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.

Absolute Standards, Inc.
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Certified Reference Material CRM

ISO 9001 QS Registered
ISO 17025-34-35-43 Accredited
Scopes: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

Part Number: 70451
Lot Number: 060514
Description: N-Nitrosopyrrolidine

Expiration Date: 060517
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 1000

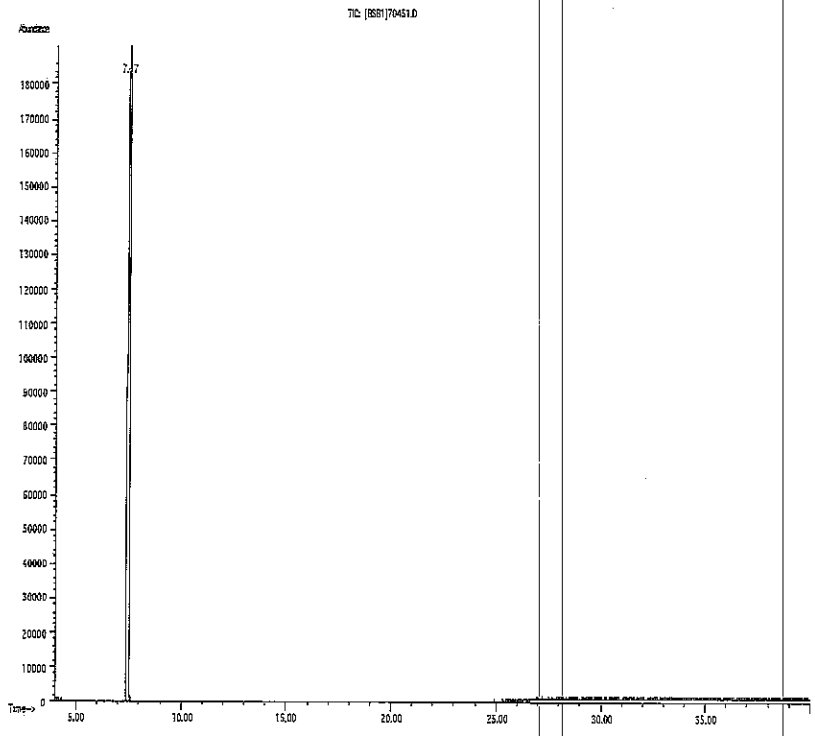
Lot #
Solvent(s): 62418 Methylene chloride

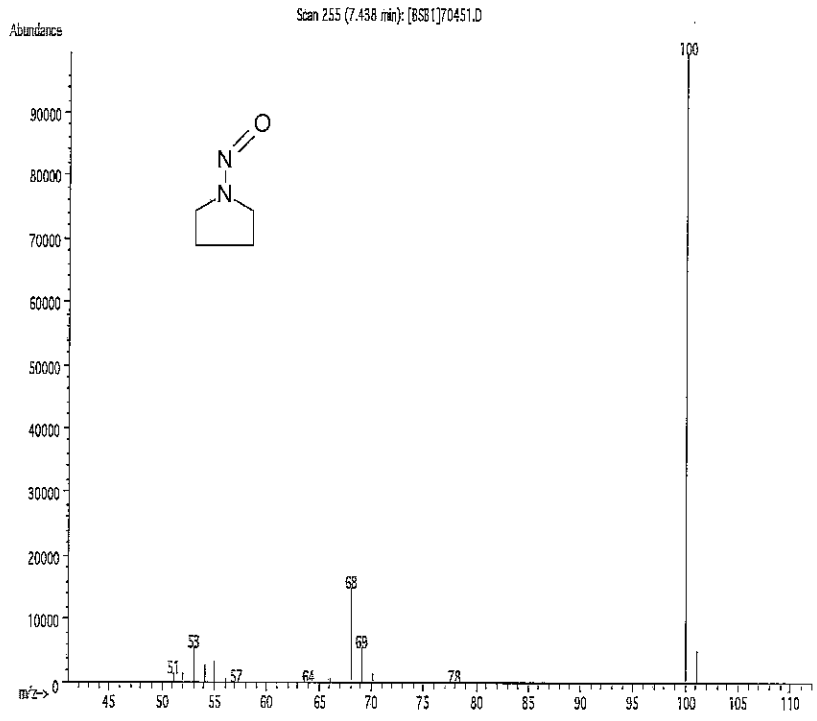
Formulated By:	Paul Barron	060514 DATE
Reviewed By:	Pedro L. Rentas	060514 DATE

Weight(s) shown below were combined and diluted to: 25.0 5E-05 Balance Uncertainty 0.001 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. N-Nitrosopyrrolidine	451	04025BM	1000	99	0.2	0.02524	0.02530	1002.2	0.00565	00930-55-2	N/A	orl-rat 900mg/kg

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.





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Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

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

Catalog No. : 567645 **Lot No.:** A093341

Description : 8260 List 1 / Std #3 Gases

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

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

Expiration Date : February 2015 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 **Purity** 99%	2,000.0 µg/mL	+/- 13.8716 +/- 25.2661 +/- 28.2336	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 **Purity** 99%	1,999.8 µg/mL	+/- 13.9993 +/- 25.3348 +/- 28.2945	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 **Purity** 99%	2,000.1 µg/mL	+/- 13.9625 +/- 25.3168 +/- 28.2792	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 **Purity** 99%	2,000.0 µg/mL	+/- 13.3773 +/- 24.9981 +/- 27.9940	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 **Purity** 99%	2,000.1 µg/mL	+/- 14.2856 +/- 25.4963 +/- 28.4399	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 **Purity** 99%	2,000.0 µg/mL	+/- 13.2200 +/- 24.9143 +/- 27.9191	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 **Purity** 99%	2,000.0 µg/mL	+/- 13.5174 +/- 25.0735 +/- 28.0614	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
8	Trichlorofluoromethane (CFC-11) **CAS #** 75-69-4 **Purity** 99%	1,999.9 µg/mL	+/- 13.1170 +/- 24.8590 +/- 27.8696	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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Catalog No. : 567645 **Lot No.:** A093341

Description : 8260 List 1 / Std #3 Gases

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

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

Expiration Date : February 2015 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 **Purity** 99%	2,000.0 µg/mL	+/- 13.8716 +/- 25.2661 +/- 28.2336	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 **Purity** 99%	1,999.8 µg/mL	+/- 13.9993 +/- 25.3348 +/- 28.2945	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 **Purity** 99%	2,000.1 µg/mL	+/- 13.9625 +/- 25.3168 +/- 28.2792	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 **Purity** 99%	2,000.0 µg/mL	+/- 13.3773 +/- 24.9981 +/- 27.9940	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 **Purity** 99%	2,000.1 µg/mL	+/- 14.2856 +/- 25.4963 +/- 28.4399	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 **Purity** 99%	2,000.0 µg/mL	+/- 13.2200 +/- 24.9143 +/- 27.9191	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 **Purity** 99%	2,000.0 µg/mL	+/- 13.5174 +/- 25.0735 +/- 28.0614	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
8	Trichlorofluoromethane (CFC-11) **CAS #** 75-69-4 **Purity** 99%	1,999.9 µg/mL	+/- 13.1170 +/- 24.8590 +/- 27.8696	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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

Catalog No. : 567645 **Lot No.:** A093341

Description : 8260 List 1 / Std #3 Gases

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

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

Expiration Date : February 2015 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 **Purity** 99%	2,000.0 µg/mL	+/- 13.8716 +/- 25.2661 +/- 28.2336	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 **Purity** 99%	1,999.8 µg/mL	+/- 13.9993 +/- 25.3348 +/- 28.2945	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 **Purity** 99%	2,000.1 µg/mL	+/- 13.9625 +/- 25.3168 +/- 28.2792	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 **Purity** 99%	2,000.0 µg/mL	+/- 13.3773 +/- 24.9981 +/- 27.9940	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 **Purity** 99%	2,000.1 µg/mL	+/- 14.2856 +/- 25.4963 +/- 28.4399	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 **Purity** 99%	2,000.0 µg/mL	+/- 13.2200 +/- 24.9143 +/- 27.9191	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 **Purity** 99%	2,000.0 µg/mL	+/- 13.5174 +/- 25.0735 +/- 28.0614	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
8	Trichlorofluoromethane (CFC-11) **CAS #** 75-69-4 **Purity** 99%	1,999.9 µg/mL	+/- 13.1170 +/- 24.8590 +/- 27.8696	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 8260 List 1 / Std #3 Gases

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

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

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

CERTIFIED VALUES

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

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Catalog No. : 567649 **Lot No.:** A0104742

Description : 8260 Internal Standard

8260 Internal Standard 250-5,000 ug/ml, P&T Methanol, 5 ml/ampul

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

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

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butyl-d9-alcohol		5,003.0	µg/mL	+/- 29.0879	µg/mL	Gravimetric
	CAS # 25725-11-5	(Lot I201P5)			+/- 106.1005	µg/mL	Unstressed
	Purity 99%				+/- 106.5713	µg/mL	Stressed
2	Fluorobenzene		250.8	µg/mL	+/- 1.4795	µg/mL	Gravimetric
	CAS # 462-06-6	(Lot 1380033)			+/- 5.3247	µg/mL	Unstressed
	Purity 99%				+/- 5.3483	µg/mL	Stressed
3	1,4-Dioxane-d8		5,009.6	µg/mL	+/- 29.1262	µg/mL	Gravimetric
	CAS # 17647-74-4	(Lot 11C-596)			+/- 106.2405	µg/mL	Unstressed
	Purity 99%				+/- 106.7119	µg/mL	Stressed
4	Chlorobenzene-d5		250.8	µg/mL	+/- 1.4795	µg/mL	Gravimetric
	CAS # 3114-55-4	(Lot PR-22736)			+/- 5.3247	µg/mL	Unstressed
	Purity 99%				+/- 5.3483	µg/mL	Stressed
5	1,4-Dichlorobenzene-d4		250.8	µg/mL	+/- 1.4795	µg/mL	Gravimetric
	CAS # 3855-82-1	(Lot PR-18488)			+/- 5.3247	µg/mL	Unstressed
	Purity 99%				+/- 5.3483	µg/mL	Stressed

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

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

Description : 8260 List 1 / Std #2 Ketones

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

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

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

CERTIFIED VALUES

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

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

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

Description : 8260 List 1 / Std #2 Ketones

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

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

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

CERTIFIED VALUES

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

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

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

Description : 8260 List 1 / Std #1 MegaMix

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

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

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

CERTIFIED VALUES

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

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

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

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

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

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

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

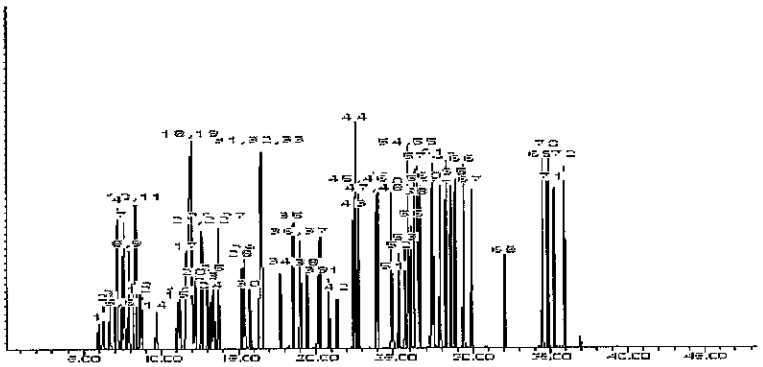
Carrier Gas:
helium-constant pressure 30 psi

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



Jennifer L. Pollino - QC Analyst

Date Passed: 01-Mar-2013 **Balance:** B251644995

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

RESTEK

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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

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

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

Description : 8260 List 1 / Std #1 MegaMix

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

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

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

CERTIFIED VALUES

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

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

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

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

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

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

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

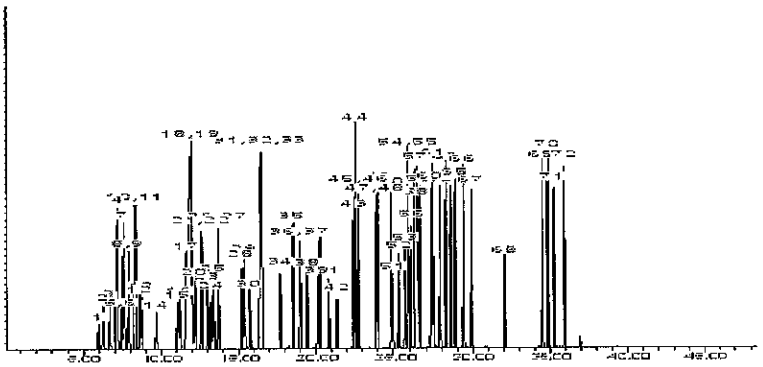
Carrier Gas:
helium-constant pressure 30 psi

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



Jennifer L. Pollino - QC Analyst

Date Passed: 01-Mar-2013 **Balance:** B251644995

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

RESTEK

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
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Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

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

Catalog No. : 567641.sec **Lot No.:** A093733

Description : 8260 List 1 / Std #1 MegaMix

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

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

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

CERTIFIED VALUES

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

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

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

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

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

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

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

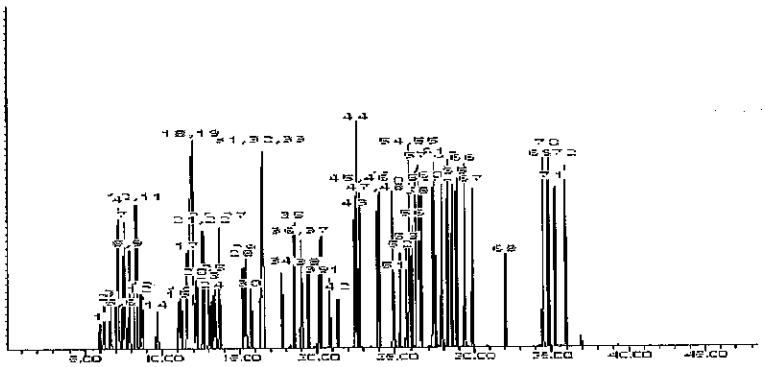
Carrier Gas:
helium-constant pressure 30 psi

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



Jennifer L. Pollino - QC Analyst

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

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

RESTEK

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Certificate 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. : 567650 **Lot No.:** A093505

Description : 8260 Surrogate Standard

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

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

Expiration Date : February 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)		
1	Dibromofluoromethane	2,500.0 µg/mL	+/- 14.5352	µg/mL	Gravimetric
	CAS # 1868-53-7		+/- 30.1344	µg/mL	Unstressed
	Purity 99%		+/- 34.0022	µg/mL	Stressed
2	1,2-Dichloroethane-d4	2,500.0 µg/mL	+/- 14.5352	µg/mL	Gravimetric
	CAS # 17060-07-0		+/- 30.1344	µg/mL	Unstressed
	Purity 99%		+/- 34.0022	µg/mL	Stressed
3	Toluene-d8	2,500.0 µg/mL	+/- 14.5352	µg/mL	Gravimetric
	CAS # 2037-26-5		+/- 30.1344	µg/mL	Unstressed
	Purity 99%		+/- 34.0022	µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)	2,500.0 µg/mL	+/- 14.5352	µg/mL	Gravimetric
	CAS # 460-00-4		+/- 30.1344	µg/mL	Unstressed
	Purity 99%		+/- 34.0022	µg/mL	Stressed

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

RESTEK® CERTIFIED REFERENCE MATERIAL

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567646 **Lot No.:** A0105145

Description : 8260 List 1 / Std #6 Vinyl Acetate

8260 List 1 / Std #6 Vinyl Acetate 4000 ug/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : February 28, 2015 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	4,010.0 µg/mL	+/- 23.5329	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot 131011JLM)		+/- 213.4273	µg/mL	Unstressed
	Purity 99%		+/- 213.6626	µg/mL	Stressed

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

Tech Tips:

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

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. : 568720 **Lot No.:** A0104886

Description : 8260 List 1/Std #5 Acrolein High

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

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

Expiration Date : November 30, 2014 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein		19,780.0	µg/mL	+/- 115.8162	µg/mL	Gravimetric
	CAS # 107-02-8	(Lot 140429JLM)			+/- 634.2090	µg/mL	Unstressed
	Purity 99%				+/- 737.1986	µg/mL	Stressed

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

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

Catalog No. : 568720 **Lot No.:** A0104886

Description : 8260 List 1/Std #5 Acrolein High

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

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

Expiration Date : November 30, 2014 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein		19,780.0	µg/mL	+/- 115.8162	µg/mL	Gravimetric
	CAS # 107-02-8	(Lot 140429JLM)			+/- 634.2090	µg/mL	Unstressed
	Purity 99%				+/- 737.1986	µg/mL	Stressed

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

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ilac-MRA

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Testing Laboratory
Certificate #3223.02

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. : 568720.sec **Lot No.:** A0104884

Description : 8260 List 1/Std #5 Acrolein High

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

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

Expiration Date : November 30, 2014 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein		19,757.0 µg/mL	+/- 115.6816	µg/mL	Gravimetric
	CAS # 107-02-8.SEC	(Lot 2881600)		+/- 633.4715	µg/mL	Unstressed
	Purity 99%			+/- 736.3413	µg/mL	Stressed

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

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

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

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

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

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

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

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

CERTIFIED VALUES

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

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

Tech Tips:

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

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

RESTEK

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

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

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

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

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

CERTIFIED VALUES

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

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

Tech Tips:

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

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

1320546
ID: WCN1000P_00022
Exp:01/24/15 Prpd:PGJ Opn:09/12/14
Cyanide 1000 ppm Primary

LabChem
performance through chemistry
Jackson's Pointe Commerce Park - Building 1000
1010 Jackson's Pointe Court, Zelienople, PA 16063
Ph: 412-826-5230 | Fax: 724-473-0647 | www.labchem.com

1320547
ID: WAvCN1000P_00015
Exp:01/24/15 Prpd:PGJ Opn:09/12/14
Available Cyanide 1000 pp

CERTIFICATE OF ANALYSIS

Description: CYANIDE STANDARD, 1000ppm (1ml = 1mg CN)

Catalog Number: LC13545
Lot Number: D199-09

Mfg Date: 07/24/2014
Expiration Date: 01/24/2015

ANALYTICAL SECTION

Test	Specification	Test Result
Appearance	clear, colorless solution	Pass Test
Concentration ppm CN	1000ppm +/- 10ppm	1001ppm
Concentration mg CN/mL	1.000mg/mL +/- 0.010 mg CN/mL	1.001 mg CN/mL
Traceable to NIST	Potassium Chloride	999b

Submitted By: Greg Albright, Chemist Supervisor

Greg Albright

An ISO9001:2008 certified company. Registration # 0306-01

09/11/2014 8:37:55 AM

Form #17.12 06/19/2012

Page 1 of 1

RICCA CHEMICAL COMPANY

1322242
ID: WCN1000S_00015
Exp:12/31/14 Prpd:PGJ Opn:09/15/14
Cyanide 1000 ppm Secondar

1322243
ID: WAvCN1000S_00016
Exp:12/31/14 Prpd:PGJ Opn:09/15/14
Available Cyanide 1000 Se

Arlington, TX 76012
Pocomoke City, MD 21851
Batesville, IN 47006
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Cyanide Standard, 1 mL = 1 mg CN, 1000 ppm CN

Lot Number: 4406986 Product Number: 2543 Expiration Date: DEC 2014 Manufacture Date:6/27/2014

This standard is prepared using accurate volumetric techniques from material that has been assayed against Silver Nitrate solution certified traceable to NIST Standard Reference Material 999. The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is the combined uncertainty based on the stability of the assayed Potassium Cyanide, and the uncertainty in the mass and volume measurements.
Use 0.16% (w/v) (0.04 N) Sodium Hydroxide or 0.225 % (w/v) (0.04 N) Potassium Hydroxide to make dilutions of this standard.
Restandardize weekly if extreme accuracy is required.

Contains:

Name	CAS#	Grade
Potassium Cyanide, KCN	151-50-8	ACS
Sodium Hydroxide, NaOH	1310-73-2	ACS
Water, Deionized, H2O	7732-18-5	ACS, ASTM D 1193 (Type I), EP, USP

Test Name	Assay Method	Specification	Result
Appearance	Clarity, Color, Odor	Clear, colorless, cyanide odor	Passed Test
Certified Concentration	Based on accurate volumetric preparation	1000 ± 5 ppm CN-	1000 ppm CN-

Specification	Reference	Method Number
Stock Standard Cyanide Solution	APHA	4500-CN- F
Stock Cyanide Solution	APHA	4500-CN- E
Stock Cyanide Solution	APHA	4500-CN- K
Stock Cyanide Solution	APHA	4500-CN- H
Cyanide Reference Solution (1000 mg/L)	EPA (SW-846)	7.3.3.2
Cyanide Calibration Stock Solution (1,000 mg/L CN-)	EPA (SW-846)	9213
Stock Cyanide Solution	EPA	335.3
Stock Cyanide Solution	EPA	335.2
Cyanide Solution Stock	ASTM	D 4282
Simple Cyanide Solution, Stock (1.0 g/L CN)	ASTM	D 4374

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Shelf Life (unopened container):

Part Number	Shelf Life
2543-4	6 months
2543-32	6 months
2543-16	6 months

Recommended Storage: 2°C - 8°C (36°F - 46°F)

LaNelle Ohlhausen
Quality Assurance

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

Version: 2

To determine manufacture site using lot number, visit http://www.riccachemical.com/Documents/lot.pdf.

Version: 2

ERA

A Waters Company

Reference Material

▪ Certificate of Analysis ▪

Product:	WatR™ Pollution Solids
Catalog Number:	499
Lot No.	P233-499
Certificate Issue Date:	September 10, 2014
Expiration Date:	October 31, 2017
Revision Number:	Original

1391435
ID WResPSP_00028
Exp: 10/31/17 Prpd SJK
ERA Solids

CERTIFICATION

Parameter	Certified Value[1]	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/L	%	mg/L	mg/L
Total Suspended Solids	56.9	1.60	45.5 - 61.5	44.9 - 64.6
Total Dissolved Solids at 180°C	212	7.51	186 - 238	167 - 257
Total Solids at 105°C	272	6.41	224 - 305	227 - 317
pH (s.u.)	9.04	NA	8.84 - 9.24	-

ANALYTICAL VERIFICATION

Parameter	Certified	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/L	mg/L	%			%
Total Suspended Solids	56.9	53.9	94.8	18	-	-
Total Dissolved Solids at 180°C	212	210	99.0	9	999b	98.9
Total Solids at 105°C	272	278	102	7	999b	102
pH (s.u.)	9.04	-	-	-	187e	100

1. The Certified Values are the actual "made-to" concentrations confirmed by ERA analytical verification. . The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The stated **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)** are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed.
Traceability Recovery (%) = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

ACCREDITED

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Certification Summary

Client: EA Engineering, Science, and Technology
Project/Site: Sparrows Point Trust Offshore Investigat

TestAmerica Job ID: 180-39026-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Pittsburgh	Arkansas DEQ	State Program	6	88-0690
TestAmerica Pittsburgh	California	State Program	9	2891
TestAmerica Pittsburgh	Connecticut	State Program	1	PH-0688
TestAmerica Pittsburgh	Florida	NELAP	4	E871008
TestAmerica Pittsburgh	Illinois	NELAP	5	002602
TestAmerica Pittsburgh	Kansas	NELAP	7	E-10350
TestAmerica Pittsburgh	Louisiana	NELAP	6	04041
TestAmerica Pittsburgh	New Hampshire	NELAP	1	203011
TestAmerica Pittsburgh	New Jersey	NELAP	2	PA005
TestAmerica Pittsburgh	New York	NELAP	2	11182
TestAmerica Pittsburgh	North Carolina (WW/SW)	State Program	4	434
TestAmerica Pittsburgh	Pennsylvania	NELAP	3	02-00416
TestAmerica Pittsburgh	South Carolina	State Program	4	89014
TestAmerica Pittsburgh	Texas	NELAP	6	T104704528
TestAmerica Pittsburgh	US Fish & Wildlife	Federal		LE94312A-1
TestAmerica Pittsburgh	USDA	Federal		P330-10-00139
TestAmerica Pittsburgh	USDA	Federal		P-Soil-01
TestAmerica Pittsburgh	Utah	NELAP	8	STLP
TestAmerica Pittsburgh	Virginia	NELAP	3	460189
TestAmerica Pittsburgh	West Virginia DEP	State Program	3	142

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 8260C

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

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
ST-018-111614	180-39026-1	94	84	101	83
ST-UNNAMED-111614	180-39026-2	84	75	90	76
ST-DUP1-111614	180-39026-3	91	77	99	81
ST-014-111614	180-39026-4	87	78	97	78
TRIP BLANK	180-39026-5	80	73	92	75
	MB 180-125940/6	82	70	91	77
	LCS 180-125940/12	101	98	98	101
ST-018-111614 MS	180-39026-1 MS	98	93	94	92
ST-018-111614 MSD	180-39026-1 MSD	98	94	91	95

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	80-120
DCA = 1,2-Dichloroethane-d4 (Surr)	62-123
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene (Surr)	75-120

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 4112112.D

Lab ID: LCS 180-125940/12 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	40.0	37.3	93	69-134	
1,1,2,2-Tetrachloroethane	40.0	39.5	99	59-136	
1,1,2-Trichloroethane	40.0	40.5	101	75-126	
1,1-Dichloroethane	40.0	40.1	100	77-122	
1,1-Dichloroethene	40.0	37.8	94	69-127	
1,2-Dichlorobenzene	40.0	38.1	95	75-125	
1,2-Dichloroethane	40.0	38.5	96	63-140	
1,2-Dichloropropane	40.0	39.0	98	75-114	
1,3-Dichlorobenzene	40.0	38.5	96	76-125	
1,4-Dichlorobenzene	40.0	37.8	94	76-123	
Benzene	40.0	41.4	103	80-120	
Bromoform	40.0	39.2	98	49-137	
Bromomethane	40.0	35.4	88	45-150	
Carbon tetrachloride	40.0	38.0	95	63-139	
Chlorobenzene	40.0	39.6	99	83-120	
Chloroform	40.0	39.6	99	77-119	
Chloromethane	40.0	37.1	93	49-133	
Chlorodibromomethane	40.0	39.5	99	64-124	
cis-1,3-Dichloropropene	40.0	38.0	95	74-123	
Dichlorobromomethane	40.0	41.7	104	71-119	
Ethylbenzene	40.0	41.1	103	79-124	
Methylene Chloride	40.0	39.4	98	75-120	
Tetrachloroethene	40.0	38.7	97	78-126	
Toluene	40.0	41.8	104	80-124	
trans-1,2-Dichloroethene	40.0	38.7	97	78-120	
trans-1,3-Dichloropropene	40.0	37.6	94	63-122	
Trichloroethene	40.0	37.4	93	80-120	
Vinyl chloride	40.0	40.9	102	57-128	
Chloroethane	40.0	40.6	102	33-150	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 4112113.D

Lab ID: 180-39026-1 MS Client ID: ST-018-111614 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	40.0	ND	35.3	88	69-134	
1,1,2,2-Tetrachloroethane	40.0	ND	35.2	88	59-136	
1,1,2-Trichloroethane	40.0	ND	35.8	89	75-126	
1,1-Dichloroethane	40.0	ND	37.9	95	77-122	
1,1-Dichloroethene	40.0	ND	37.1	93	69-127	
1,2-Dichlorobenzene	40.0	ND	36.1	90	75-125	
1,2-Dichloroethane	40.0	ND	36.4	91	63-140	
1,2-Dichloropropane	40.0	ND	36.4	91	75-114	
1,3-Dichlorobenzene	40.0	ND	36.8	92	76-125	
1,4-Dichlorobenzene	40.0	ND	36.4	91	76-123	
Benzene	40.0	ND	38.3	96	80-120	
Bromoform	40.0	ND	36.0	90	49-137	
Bromomethane	40.0	ND	32.4	81	45-150	
Carbon tetrachloride	40.0	ND	35.3	88	63-139	
Chlorobenzene	40.0	ND	36.0	90	83-120	
Chloroform	40.0	ND	37.5	94	77-119	
Chloromethane	40.0	ND	34.0	85	49-133	
Chlorodibromomethane	40.0	ND	37.6	94	64-124	
cis-1,3-Dichloropropene	40.0	ND	36.1	90	74-123	
Dichlorobromomethane	40.0	ND	39.2	98	71-119	
Ethylbenzene	40.0	ND	36.7	92	79-124	
Methylene Chloride	40.0	ND	36.5	91	75-120	
Tetrachloroethene	40.0	ND	34.0	85	78-126	
Toluene	40.0	ND	36.7	92	80-124	
trans-1,2-Dichloroethene	40.0	ND	35.9	90	78-120	
trans-1,3-Dichloropropene	40.0	ND	33.5	84	63-122	
Trichloroethene	40.0	ND	35.0	88	80-120	
Vinyl chloride	40.0	ND	34.6	86	57-128	
Chloroethane	40.0	ND	38.6	97	33-150	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 4112114.D

Lab ID: 180-39026-1 MSD Client ID: ST-018-111614 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	40.0	35.2	88	0	24	69-134	
1,1,2,2-Tetrachloroethane	40.0	36.0	90	2	20	59-136	
1,1,2-Trichloroethane	40.0	36.9	92	3	23	75-126	
1,1-Dichloroethane	40.0	37.4	93	1	22	77-122	
1,1-Dichloroethene	40.0	35.7	89	4	20	69-127	
1,2-Dichlorobenzene	40.0	37.6	94	4	20	75-125	
1,2-Dichloroethane	40.0	36.4	91	0	25	63-140	
1,2-Dichloropropane	40.0	37.2	93	2	20	75-114	
1,3-Dichlorobenzene	40.0	37.0	92	0	21	76-125	
1,4-Dichlorobenzene	40.0	36.6	91	0	20	76-123	
Benzene	40.0	38.7	97	1	20	80-120	
Bromoform	40.0	34.9	87	3	20	49-137	
Bromomethane	40.0	34.2	85	5	23	45-150	
Carbon tetrachloride	40.0	35.7	89	1	25	63-139	
Chlorobenzene	40.0	36.7	92	2	20	83-120	
Chloroform	40.0	37.0	93	1	20	77-119	
Chloromethane	40.0	34.2	86	1	20	49-133	
Chlorodibromomethane	40.0	35.6	89	5	20	64-124	
cis-1,3-Dichloropropene	40.0	37.2	93	3	20	74-123	
Dichlorobromomethane	40.0	38.7	97	1	20	71-119	
Ethylbenzene	40.0	37.5	94	2	25	79-124	
Methylene Chloride	40.0	37.3	93	2	20	75-120	
Tetrachloroethene	40.0	34.7	87	2	25	78-126	
Toluene	40.0	37.5	94	2	20	80-124	
trans-1,2-Dichloroethene	40.0	36.1	90	1	20	78-120	
trans-1,3-Dichloropropene	40.0	34.2	85	2	20	63-122	
Trichloroethene	40.0	35.3	88	1	20	80-120	
Vinyl chloride	40.0	37.6	94	8	26	57-128	
Chloroethane	40.0	35.3	88	9	24	33-150	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab File ID: 4112106.D Lab Sample ID: MB 180-125940/6

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

Instrument ID: CHHP4 Date Analyzed: 11/21/2014 12:05

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
TRIP BLANK	180-39026-5	4112107.D	11/21/2014 12:32
ST-018-111614	180-39026-1	4112108.D	11/21/2014 12:59
ST-UNNAMED-111614	180-39026-2	4112109.D	11/21/2014 13:26
ST-DUP1-111614	180-39026-3	4112110.D	11/21/2014 13:53
ST-014-111614	180-39026-4	4112111.D	11/21/2014 14:19
	LCS 180-125940/12	4112112.D	11/21/2014 14:46
ST-018-111614 MS	180-39026-1 MS	4112113.D	11/21/2014 15:13
ST-018-111614 MSD	180-39026-1 MSD	4112114.D	11/21/2014 15:40

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab File ID: 4110301.D BFB Injection Date: 11/03/2014

Instrument ID: CHHP4 BFB Injection Time: 09:04

Analysis Batch No.: 123648

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.7	
75	30.0 - 60.0 % of mass 95	42.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.2	
173	Less than 2.0 % of mass 174	0.6	(0.6)1
174	50.0 - 120.00 % of mass 95	100.6	
175	5.0 - 9.0 % of mass 174	7.0	(6.9)1
176	95.0 - 101.0 % of mass 174	96.2	(95.6)1
177	5.0 - 9.0 % of mass 176	6.4	(6.6)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 180-123648/4	4110304.D	11/03/2014	12:22
	IC 180-123648/5	4110305.D	11/03/2014	12:49
	IC 180-123648/6	4110306.D	11/03/2014	13:15
	ICIS 180-123648/7	4110307.D	11/03/2014	13:42
	IC 180-123648/9	4110309.D	11/03/2014	14:35
	IC 180-123648/10	4110310.D	11/03/2014	15:02
	IC 180-123648/12	4110312.D	11/03/2014	16:24

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab File ID: 4111301.D BFB Injection Date: 11/13/2014

Instrument ID: CHHP4 BFB Injection Time: 12:08

Analysis Batch No.: 125014

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.7	
75	30.0 - 60.0 % of mass 95	43.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.7	(0.7)1
174	50.0 - 120.00 % of mass 95	103.6	
175	5.0 - 9.0 % of mass 174	6.6	(6.4)1
176	95.0 - 101.0 % of mass 174	100.1	(96.7)1
177	5.0 - 9.0 % of mass 176	6.7	(6.7)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 180-125014/2	4111302.D	11/13/2014	12:52
	IC 180-125014/3	4111303.D	11/13/2014	13:19
	IC 180-125014/4	4111304.D	11/13/2014	13:46
	ICIS 180-125014/5	4111305.D	11/13/2014	15:08
	IC 180-125014/6	4111306.D	11/13/2014	15:34
	IC 180-125014/7	4111307.D	11/13/2014	16:01
	IC 180-125014/8	4111308.D	11/13/2014	16:27

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab File ID: 4112101.D BFB Injection Date: 11/21/2014

Instrument ID: CHHP4 BFB Injection Time: 08:52

Analysis Batch No.: 125940

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.3	
75	30.0 - 60.0 % of mass 95	45.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.4	(0.6)1
174	50.0 - 120.00 % of mass 95	77.4	
175	5.0 - 9.0 % of mass 174	5.5	(7.1)1
176	95.0 - 101.0 % of mass 174	74.3	(96.0)1
177	5.0 - 9.0 % of mass 176	5.0	(6.7)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-125940/3	4112103.D	11/21/2014	10:18
	CCV 180-125940/5	4112105.D	11/21/2014	11:28
	MB 180-125940/6	4112106.D	11/21/2014	12:05
TRIP BLANK	180-39026-5	4112107.D	11/21/2014	12:32
ST-018-111614	180-39026-1	4112108.D	11/21/2014	12:59
ST-UNNAMED-111614	180-39026-2	4112109.D	11/21/2014	13:26
ST-DUP1-111614	180-39026-3	4112110.D	11/21/2014	13:53
ST-014-111614	180-39026-4	4112111.D	11/21/2014	14:19
	LCS 180-125940/12	4112112.D	11/21/2014	14:46
ST-018-111614 MS	180-39026-1 MS	4112113.D	11/21/2014	15:13
ST-018-111614 MSD	180-39026-1 MSD	4112114.D	11/21/2014	15:40

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Sample No.: CCVIS 180-125940/3 Date Analyzed: 11/21/2014 10:18

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 4112103.D Heated Purge: (Y/N) N

Calibration ID: 19192

		TBA		FB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		207475	3.13	1287017	6.26	273792	9.45
UPPER LIMIT							
LOWER LIMIT							
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 180-125940/5		231174	3.12	1460336	6.26	297539	9.45
MB 180-125940/6		244450	3.10	1823383	6.27	352413	9.45
180-39026-5	TRIP BLANK	256468	3.10	1781281	6.26	348247	9.45
180-39026-1	ST-018-111614	259119	3.10	1574180	6.26	324311	9.45
180-39026-2	ST-UNNAMED-111614	258522	3.10	1769875	6.26	363791	9.45
180-39026-3	ST-DUP1-111614	247158	3.11	1685325	6.26	336560	9.45
180-39026-4	ST-014-111614	247163	3.10	1683903	6.26	340597	9.45
LCS 180-125940/12		206094	3.15	1083197	6.26	242992	9.45
180-39026-1 MS	ST-018-111614 MS	214133	3.14	1157627	6.26	264007	9.45
180-39026-1 MSD	ST-018-111614 MSD	217664	3.16	1208755	6.26	276312	9.45

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Sample No.: CCVIS 180-125940/3 Date Analyzed: 11/21/2014 10:18

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 4112103.D Heated Purge: (Y/N) N

Calibration ID: 19192

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		305638	11.81				
UPPER LIMIT							
LOWER LIMIT							
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 180-125940/5		280387	11.80				
MB 180-125940/6		310411	11.81				
180-39026-5	TRIP BLANK	304584	11.80				
180-39026-1	ST-018-111614	277744	11.80				
180-39026-2	ST-UNNAMED-111614	325217	11.81				
180-39026-3	ST-DUP1-111614	309037	11.80				
180-39026-4	ST-014-111614	293811	11.80				
LCS 180-125940/12		282136	11.80				
180-39026-1 MS	ST-018-111614 MS	290513	11.80				
180-39026-1 MSD	ST-018-111614 MSD	316732	11.80				

Column used to flag values outside QC limits

FORM VIII 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-018-111614 Lab Sample ID: 180-39026-1

Matrix: Water Lab File ID: 4112108.D

Analysis Method: 8260C Date Collected: 11/16/2014 18:08

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2014 12:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 125940 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.93
79-00-5	1,1,2-Trichloroethane	ND		5.0	1.2
75-34-3	1,1-Dichloroethane	ND		5.0	1.0
75-35-4	1,1-Dichloroethene	ND		5.0	1.1
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.68
107-06-2	1,2-Dichloroethane	ND		5.0	0.96
78-87-5	1,2-Dichloropropane	ND		5.0	1.3
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.51
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.53
110-75-8	2-Chloroethyl vinyl ether	ND		10	1.9
107-02-8	Acrolein	ND		100	5.7
107-13-1	Acrylonitrile	ND		50	9.0
71-43-2	Benzene	ND		5.0	0.99
75-25-2	Bromoform	ND		5.0	1.1
74-83-9	Bromomethane	ND		5.0	1.6
56-23-5	Carbon tetrachloride	ND		5.0	1.1
108-90-7	Chlorobenzene	ND		5.0	0.53
67-66-3	Chloroform	ND		5.0	1.0
74-87-3	Chloromethane	ND		5.0	1.4
124-48-1	Chlorodibromomethane	ND		5.0	0.65
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.73
75-27-4	Dichlorobromomethane	ND		5.0	0.93
100-41-4	Ethylbenzene	ND		5.0	0.62
75-09-2	Methylene Chloride	ND		5.0	1.1
127-18-4	Tetrachloroethene	ND		5.0	0.82
108-88-3	Toluene	ND		5.0	0.85
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.75
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	0.58
79-01-6	Trichloroethene	ND		5.0	0.80
75-01-4	Vinyl chloride	ND		5.0	1.3
75-00-3	Chloroethane	ND		5.0	0.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-018-111614 Lab Sample ID: 180-39026-1

Matrix: Water Lab File ID: 4112108.D

Analysis Method: 8260C Date Collected: 11/16/2014 18:08

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2014 12:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 125940 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		62-123
460-00-4	4-Bromofluorobenzene (Surr)	83		75-120
1868-53-7	Dibromofluoromethane (Surr)	94		80-120
2037-26-5	Toluene-d8 (Surr)	101		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112108.D
Lims ID: 180-39026-J-1 Lab Sample ID: 180-39026-1
Client ID: ST-018-111614
Sample Type: Client
Inject. Date: 21-Nov-2014 12:59:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-39026-J-1
Misc. Info.: 180-0004518-008
Operator ID: 034635 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Nov-2014 14:57:34 Calib Date: 13-Nov-2014 16:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111308.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK035

First Level Reviewer: journetp Date: 21-Nov-2014 13:03:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.104	3.120	-0.016	97	259119	5000.0	
* 2 Fluorobenzene (IS)	96	6.261	6.259	0.002	98	1574180	250.0	
* 3 Chlorobenzene-d5	119	9.449	9.453	-0.004	87	324311	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.803	11.801	0.002	96	277744	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.495	5.491	0.004	92	331563	234.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.890	5.887	0.003	96	267684	209.2	
$ 7 Toluene-d8 (Surr)	98	7.983	7.979	0.004	93	1528091	251.7	
$ 8 4-Bromofluorobenzene (Surr	95	10.653	10.650	0.003	88	410272	207.9	
10 Dichlorodifluoromethane	85		1.208				ND	
11 Chloromethane	50		1.318				ND	
12 Vinyl chloride	62		1.415				ND	
13 Butadiene	54		1.433				ND	
14 Bromomethane	94		1.646				ND	
15 Chloroethane	64		1.738				ND	
17 Trichlorofluoromethane	101		1.932				ND	
16 Dichlorofluoromethane	67		1.951				ND	
19 Ethyl ether	59		2.224				ND	
20 Acrolein	56		2.360				ND	
21 1,1-Dichloroethene	96		2.425				ND	
22 1,1,2-Trichloro-1,2,2-trif	101		2.474				ND	
23 Acetone	43		2.510				ND	
24 Iodomethane	142		2.565				ND	
25 Carbon disulfide	76		2.626				ND	
26 Isopropyl alcohol	45		2.712				ND	
27 Acetonitrile	40		2.822				ND	
28 3-Chloro-1-propene	76		2.833				ND	
29 Methyl acetate	43		2.857				ND	
30 Methylene Chloride	84		2.991				ND	
18 Ethanol	45		3.114				ND	
31 2-Methyl-2-propanol	59		3.228				ND	
32 Acrylonitrile	53		3.313				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
33 trans-1,2-Dichloroethene	96		3.338				ND	
34 Methyl tert-butyl ether	73		3.356				ND	
38 Vinyl acetate	43		3.733				ND	
35 Hexane	57		3.733				ND	
36 1,1-Dichloroethane	63		3.976				ND	
37 2-Chloro-1,3-butadiene	53		4.075				ND	
39 Isopropyl ether	45		4.105				ND	
40 Tert-butyl ethyl ether	59		4.641				ND	
41 2,2-Dichloropropane	77		4.804				ND	
42 cis-1,2-Dichloroethene	96		4.816				ND	
43 2-Butanone (MEK)	43		4.846				ND	
44 Propionitrile	54		4.927				ND	
45 Ethyl acetate	43		4.945				ND	
47 Methacrylonitrile	41		5.115				ND	
46 Chlorobromomethane	128		5.126				ND	
48 Tetrahydrofuran	42		5.150				ND	
49 Chloroform	83		5.296				ND	
50 1,1,1-Trichloroethane	97		5.449				ND	
51 Cyclohexane	56		5.515				ND	
53 Carbon tetrachloride	117		5.631				ND	
52 1,1-Dichloropropene	75		5.649				ND	
54 Benzene	78		5.880				ND	
59 Isobutyl alcohol	41		5.929				ND	
55 1,2-Dichloroethane	62		5.978				ND	
57 Isooctane	57		6.058				ND	
56 Tert-amyl methyl ether	73		6.101				ND	
58 n-Heptane	43		6.300				ND	
61 Trichloroethene	130		6.671				ND	
60 n-Butanol	56		6.685				ND	
62 Ethyl acrylate	55		6.843				ND	
63 Methylcyclohexane	83		6.902				ND	
64 1,2-Dichloropropane	63		6.957				ND	
65 Dibromomethane	93		7.042				ND	
67 1,4-Dioxane	88		7.061				ND	
66 Methyl methacrylate	69		7.080				ND	
68 Dichlorobromomethane	83		7.261				ND	
69 2-Nitropropane	41		7.500				ND	
70 2-Chloroethyl vinyl ether	63		7.597				ND	
74 trans-1,3-Dichloropropene	75		7.724				ND	
72 4-Methyl-2-pentanone (MIBK	43		7.894				ND	
73 Toluene	91		8.046				ND	
71 cis-1,3-Dichloropropene	75		8.326				ND	
75 Ethyl methacrylate	69		8.411				ND	
76 1,1,2-Trichloroethane	97		8.521				ND	
77 Tetrachloroethene	164		8.563				ND	
78 1,3-Dichloropropane	76		8.673				ND	
79 2-Hexanone	43		8.752				ND	
81 Chlorodibromomethane	129		8.880				ND	
80 n-Butyl acetate	43		8.893				ND	
82 Ethylene Dibromide	107		8.983				ND	
84 Chlorobenzene	112		9.482				ND	
85 1,1,1,2-Tetrachloroethane	131		9.585				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
86 Ethylbenzene	106		9.591				ND	
87 m-Xylene & p-Xylene	106		9.731				ND	
88 o-Xylene	106		10.102				ND	
89 Styrene	104		10.133				ND	
90 Bromoform	173		10.303				ND	
91 Isopropylbenzene	105		10.480				ND	
83 4-Chlorobenzotrifluoride	180		10.528				ND	
92 Cyclohexanone	55		10.554				ND	
94 Bromobenzene	156		10.772				ND	
93 1,1,2,2-Tetrachloroethane	83		10.808				ND	
96 trans-1,4-Dichloro-2-buten	53		10.845				ND	
95 1,2,3-Trichloropropane	110		10.851				ND	
97 N-Propylbenzene	120		10.899				ND	
98 2-Chlorotoluene	126		10.972				ND	
99 1,3,5-Trimethylbenzene	105		11.088				ND	
100 4-Chlorotoluene	126		11.100				ND	
101 tert-Butylbenzene	119		11.392				ND	
102 Pentachloroethane	167		11.418				ND	
103 1,2,4-Trimethylbenzene	105		11.459				ND	
104 sec-Butylbenzene	105		11.617				ND	
105 1,3-Dichlorobenzene	146		11.721				ND	
106 4-Isopropyltoluene	119		11.781				ND	
107 1,4-Dichlorobenzene	146		11.830				ND	
108 1,2,3-Trimethylbenzene	105		11.862				ND	
109 Benzyl chloride	91		11.947				ND	
111 1,2-Dichlorobenzene	146		12.171				ND	
110 n-Butylbenzene	91		12.189				ND	
112 1,2-Dibromo-3-Chloropropan	75		12.962				ND	
114 1,3,5-Trichlorobenzene	180		13.152				ND	
113 1,2,4-Trichlorobenzene	180		13.777				ND	
115 Hexachlorobutadiene	225		13.935				ND	
116 Naphthalene	128		14.032				ND	
117 1,2,3-Trichlorobenzene	180		14.251				ND	
118 2-Methylnaphthalene	142		15.177				ND	
121 2,4,5-Trichlorotoluene	159		0.000				ND	
125 2-Chlorobenzotrifluoride	180		0.000				ND	
119 1,2-dichloro-4-(trifluorom	214		0.000				ND	
123 2,5-Dichlorobenzotrifluori	214		0.000				ND	
126 2,4-Dichloro-1-(triflourom	214		0.000				ND	
124 3-Chlorobenzotrifluoride	180		0.000				ND	
128 2,3,6-Trichlorotoluene	159		0.000				ND	
120 2,4- & 2,5- & 2,6- Dichlor	125		0.000				ND	
127 2,3- & 3,4- Dichlorotoluen	125		0.000				ND	
122 3-Chlorotoluene	126		0.000				ND	
S 129 1,2-Dichloroethene, Total	96		1.000				ND	
S 130 Xylenes, Total	106		1.000				ND	
S 131 1,3-Dichloropropene, Total	1		0.000				ND	
T 133 Methyl n-amyl ketone TIC	43		0.000				ND	
T 132 Tetrahydrofuran TIC	42		6.255				ND	
T 134 Mesityl oxide TIC	83		7.915				ND	

Reagents:

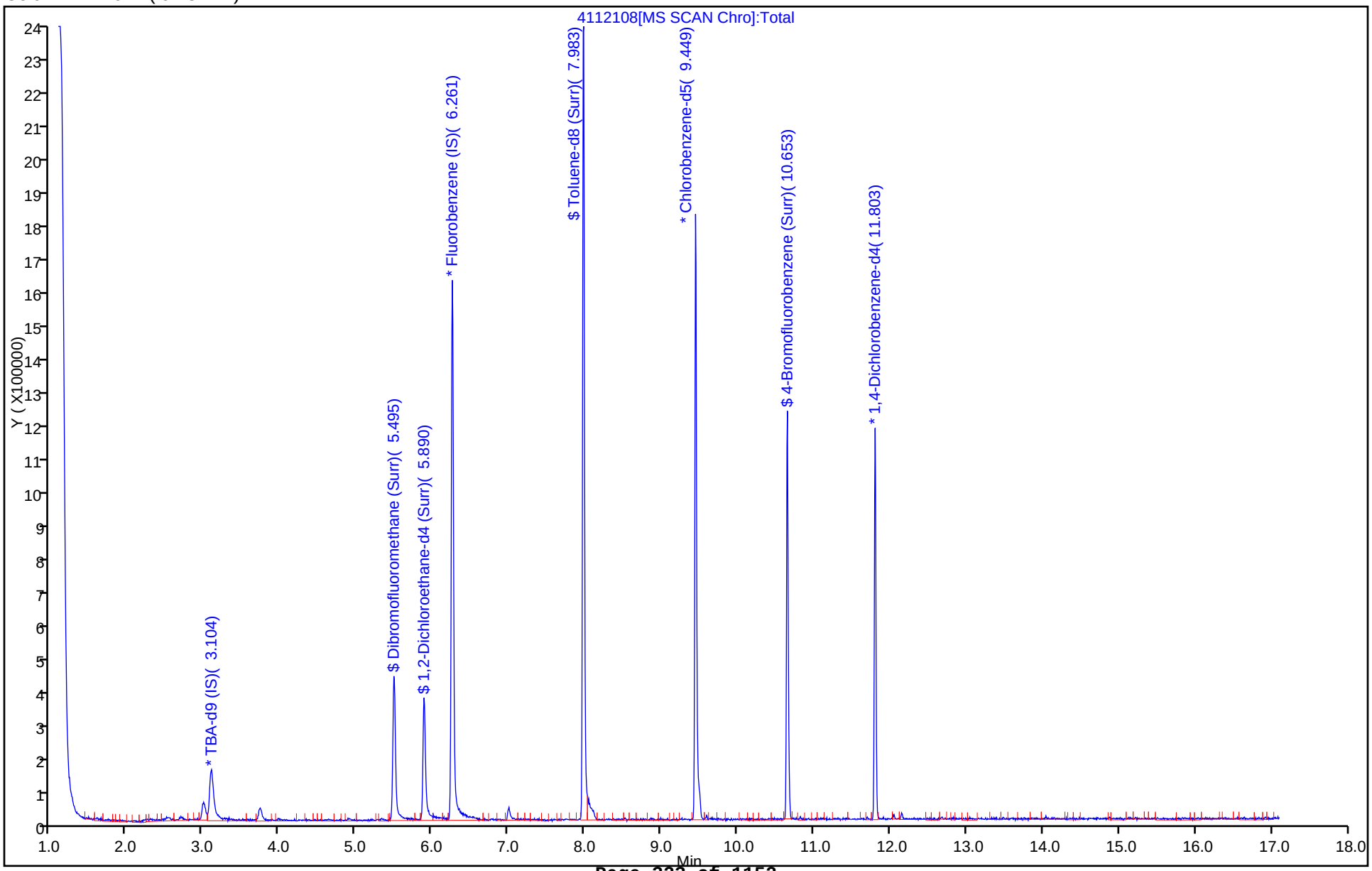
VOA8260SURR_00017	Amount Added:	10.00	Units: uL	Run Reagent
VOA8260INT_00024	Amount Added:	10.00	Units: uL	Run Reagent

Report Date: 23-Nov-2014 14:58:17 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112108.D				
Injection Date:	21-Nov-2014 12:59:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	180-39026-J-1	Lab Sample ID:	180-39026-1	Worklist Smp#:	8
Client ID:	ST-018-111614				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-UNNAMED-111614 Lab Sample ID: 180-39026-2

Matrix: Water Lab File ID: 4112109.D

Analysis Method: 8260C Date Collected: 11/16/2014 18:55

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2014 13:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 125940 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.93
79-00-5	1,1,2-Trichloroethane	ND		5.0	1.2
75-34-3	1,1-Dichloroethane	ND		5.0	1.0
75-35-4	1,1-Dichloroethene	ND		5.0	1.1
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.68
107-06-2	1,2-Dichloroethane	ND		5.0	0.96
78-87-5	1,2-Dichloropropane	ND		5.0	1.3
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.51
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.53
110-75-8	2-Chloroethyl vinyl ether	ND		10	1.9
107-02-8	Acrolein	ND		100	5.7
107-13-1	Acrylonitrile	ND		50	9.0
71-43-2	Benzene	ND		5.0	0.99
75-25-2	Bromoform	ND		5.0	1.1
74-83-9	Bromomethane	ND		5.0	1.6
56-23-5	Carbon tetrachloride	ND		5.0	1.1
108-90-7	Chlorobenzene	ND		5.0	0.53
67-66-3	Chloroform	ND		5.0	1.0
74-87-3	Chloromethane	ND		5.0	1.4
124-48-1	Chlorodibromomethane	ND		5.0	0.65
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.73
75-27-4	Dichlorobromomethane	ND		5.0	0.93
100-41-4	Ethylbenzene	ND		5.0	0.62
75-09-2	Methylene Chloride	ND		5.0	1.1
127-18-4	Tetrachloroethene	ND		5.0	0.82
108-88-3	Toluene	ND		5.0	0.85
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.75
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	0.58
79-01-6	Trichloroethene	ND		5.0	0.80
75-01-4	Vinyl chloride	ND		5.0	1.3
75-00-3	Chloroethane	ND		5.0	0.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-UNNAMED-111614 Lab Sample ID: 180-39026-2

Matrix: Water Lab File ID: 4112109.D

Analysis Method: 8260C Date Collected: 11/16/2014 18:55

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2014 13:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 125940 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	75		62-123
460-00-4	4-Bromofluorobenzene (Surr)	76		75-120
1868-53-7	Dibromofluoromethane (Surr)	84		80-120
2037-26-5	Toluene-d8 (Surr)	90		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112109.D
Lims ID: 180-39026-J-2 Lab Sample ID: 180-39026-2
Client ID: ST-UNNAMED-111614
Sample Type: Client
Inject. Date: 21-Nov-2014 13:26:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-39026-J-2
Misc. Info.: 180-0004518-009
Operator ID: 034635 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Nov-2014 14:57:34 Calib Date: 13-Nov-2014 16:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111308.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK035

First Level Reviewer: journetp Date: 23-Nov-2014 11:58:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.101	3.120	-0.019	98	258522	5000.0	
* 2 Fluorobenzene (IS)	96	6.264	6.259	0.005	98	1769875	250.0	
* 3 Chlorobenzene-d5	119	9.452	9.453	-0.001	87	363791	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.806	11.801	0.005	96	325217	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.498	5.491	0.007	93	332406	209.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.893	5.887	0.006	96	268971	187.0	
$ 7 Toluene-d8 (Surr)	98	7.980	7.979	0.001	93	1530910	224.8	
$ 8 4-Bromofluorobenzene (Surr	95	10.651	10.650	0.000	93	417902	188.8	
11 Chloromethane	50		1.318				ND	
12 Vinyl chloride	62		1.415				ND	
14 Bromomethane	94		1.646				ND	
15 Chloroethane	64		1.738				ND	
20 Acrolein	56		2.360				ND	
21 1,1-Dichloroethene	96		2.425				ND	
30 Methylene Chloride	84		2.991				ND	
32 Acrylonitrile	53		3.313				ND	
33 trans-1,2-Dichloroethene	96		3.338				ND	
36 1,1-Dichloroethane	63		3.976				ND	
49 Chloroform	83		5.296				ND	
50 1,1,1-Trichloroethane	97		5.449				ND	
53 Carbon tetrachloride	117		5.631				ND	
54 Benzene	78		5.880				ND	
55 1,2-Dichloroethane	62		5.978				ND	
61 Trichloroethene	130		6.671				ND	
64 1,2-Dichloropropane	63		6.957				ND	
68 Dichlorobromomethane	83		7.261				ND	
70 2-Chloroethyl vinyl ether	63		7.597				ND	
74 trans-1,3-Dichloropropene	75		7.724				ND	
73 Toluene	91		8.046				ND	
71 cis-1,3-Dichloropropene	75		8.326				ND	
76 1,1,2-Trichloroethane	97		8.521				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
77 Tetrachloroethene	164		8.563				ND	
81 Chlorodibromomethane	129		8.880				ND	
84 Chlorobenzene	112		9.482				ND	
86 Ethylbenzene	106		9.591				ND	
90 Bromoform	173		10.303				ND	
93 1,1,2,2-Tetrachloroethane	83		10.808				ND	
105 1,3-Dichlorobenzene	146		11.721				ND	
107 1,4-Dichlorobenzene	146		11.830				ND	
111 1,2-Dichlorobenzene	146		12.171				ND	

Reagents:

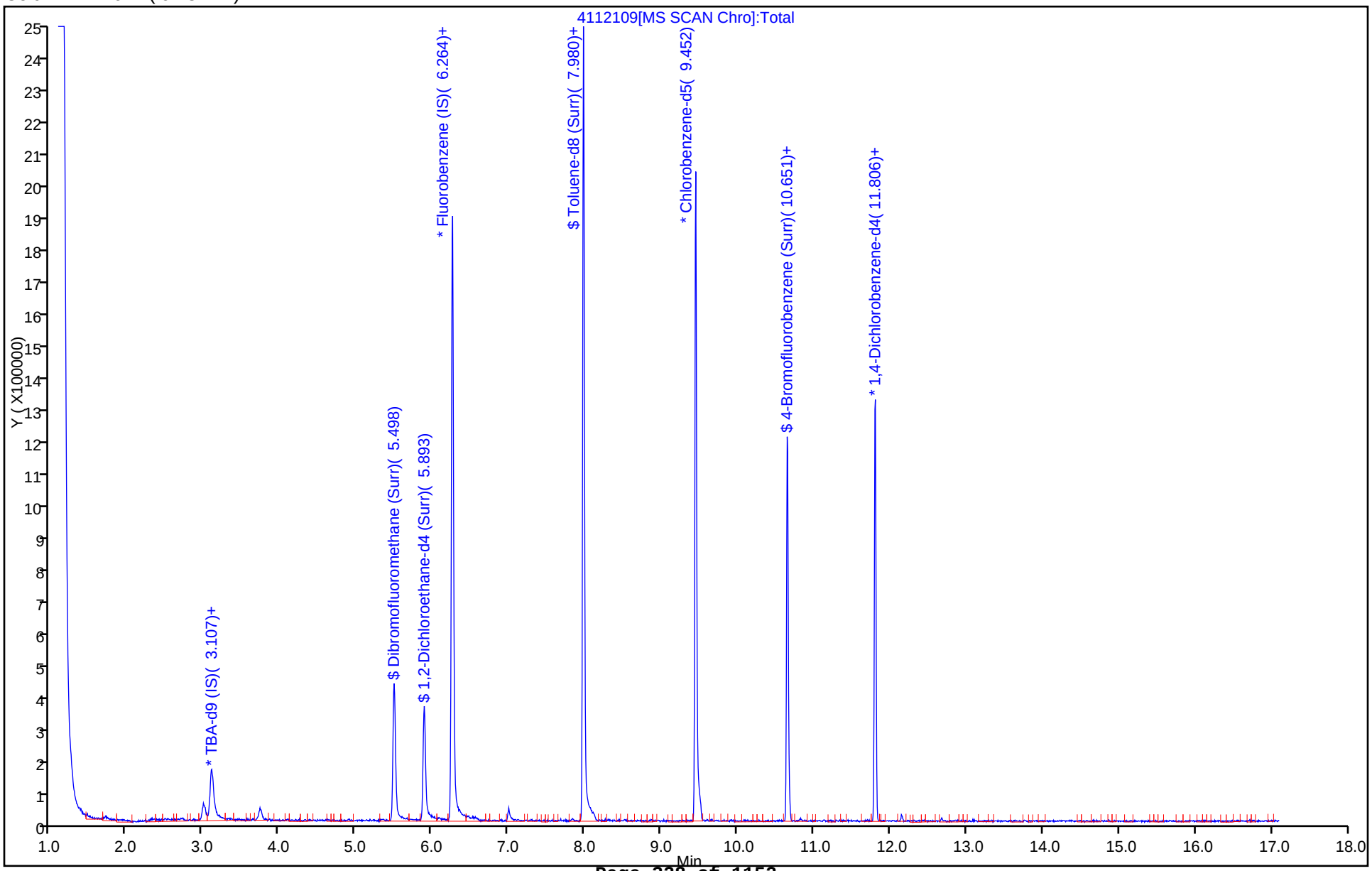
VOA8260SURR_00017	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260INT_00024	Amount Added: 10.00	Units: uL	Run Reagent

Report Date: 23-Nov-2014 14:58:16 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112109.D				
Injection Date:	21-Nov-2014 13:26:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	180-39026-J-2	Lab Sample ID:	180-39026-2	Worklist Smp#:	9
Client ID:	ST-UNNAMED-111614				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-DUP1-111614 Lab Sample ID: 180-39026-3

Matrix: Water Lab File ID: 4112110.D

Analysis Method: 8260C Date Collected: 11/16/2014 00:00

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2014 13:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 125940 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.93
79-00-5	1,1,2-Trichloroethane	ND		5.0	1.2
75-34-3	1,1-Dichloroethane	ND		5.0	1.0
75-35-4	1,1-Dichloroethene	ND		5.0	1.1
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.68
107-06-2	1,2-Dichloroethane	ND		5.0	0.96
78-87-5	1,2-Dichloropropane	ND		5.0	1.3
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.51
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.53
110-75-8	2-Chloroethyl vinyl ether	ND		10	1.9
107-02-8	Acrolein	ND		100	5.7
107-13-1	Acrylonitrile	ND		50	9.0
71-43-2	Benzene	ND		5.0	0.99
75-25-2	Bromoform	ND		5.0	1.1
74-83-9	Bromomethane	ND		5.0	1.6
56-23-5	Carbon tetrachloride	ND		5.0	1.1
108-90-7	Chlorobenzene	ND		5.0	0.53
67-66-3	Chloroform	ND		5.0	1.0
74-87-3	Chloromethane	ND		5.0	1.4
124-48-1	Chlorodibromomethane	ND		5.0	0.65
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.73
75-27-4	Dichlorobromomethane	ND		5.0	0.93
100-41-4	Ethylbenzene	ND		5.0	0.62
75-09-2	Methylene Chloride	ND		5.0	1.1
127-18-4	Tetrachloroethene	ND		5.0	0.82
108-88-3	Toluene	ND		5.0	0.85
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.75
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	0.58
79-01-6	Trichloroethene	ND		5.0	0.80
75-01-4	Vinyl chloride	ND		5.0	1.3
75-00-3	Chloroethane	ND		5.0	0.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-DUP1-111614 Lab Sample ID: 180-39026-3

Matrix: Water Lab File ID: 4112110.D

Analysis Method: 8260C Date Collected: 11/16/2014 00:00

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2014 13:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 125940 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	77		62-123
460-00-4	4-Bromofluorobenzene (Surr)	81		75-120
1868-53-7	Dibromofluoromethane (Surr)	91		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112110.D
Lims ID: 180-39026-K-3 Lab Sample ID: 180-39026-3
Client ID: ST-DUP1-111614
Sample Type: Client
Inject. Date: 21-Nov-2014 13:53:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-39026-K-3
Misc. Info.: 180-0004518-010
Operator ID: 034635 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Nov-2014 14:57:34 Calib Date: 13-Nov-2014 16:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111308.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK035

First Level Reviewer: journetp Date: 23-Nov-2014 13:36:16

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	3.107	3.120	-0.013	98	247158	5000.0	
*	2 Fluorobenzene (IS)	96	6.264	6.259	0.005	98	1685325	250.0	
*	3 Chlorobenzene-d5	119	9.452	9.453	-0.001	87	336560	250.0	
*	4 1,4-Dichlorobenzene-d4	152	11.800	11.801	-0.001	96	309037	250.0	
$	5 Dibromofluoromethane (Surr	113	5.498	5.491	0.007	94	344733	227.9	
$	6 1,2-Dichloroethane-d4 (Sur	65	5.893	5.887	0.006	96	263079	192.1	
$	7 Toluene-d8 (Surr)	98	7.980	7.979	0.001	93	1563275	248.1	
$	8 4-Bromofluorobenzene (Surr	95	10.650	10.650	0.000	88	412906	201.6	
	11 Chloromethane	50		1.318				ND	
	12 Vinyl chloride	62		1.415				ND	
	14 Bromomethane	94		1.646				ND	
	15 Chloroethane	64		1.738				ND	
	20 Acrolein	56		2.360				ND	
	21 1,1-Dichloroethene	96		2.425				ND	
	30 Methylene Chloride	84		2.991				ND	
	32 Acrylonitrile	53		3.313				ND	
	33 trans-1,2-Dichloroethene	96		3.338				ND	
	36 1,1-Dichloroethane	63		3.976				ND	
	49 Chloroform	83		5.296				ND	
	50 1,1,1-Trichloroethane	97		5.449				ND	
	53 Carbon tetrachloride	117		5.631				ND	
	54 Benzene	78		5.880				ND	
	55 1,2-Dichloroethane	62		5.978				ND	
	61 Trichloroethene	130		6.671				ND	
	64 1,2-Dichloropropane	63		6.957				ND	
	68 Dichlorobromomethane	83		7.261				ND	
	70 2-Chloroethyl vinyl ether	63		7.597				ND	
	74 trans-1,3-Dichloropropene	75		7.724				ND	
	73 Toluene	91		8.046				ND	
	71 cis-1,3-Dichloropropene	75		8.326				ND	
	76 1,1,2-Trichloroethane	97		8.521				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
77 Tetrachloroethene	164		8.563				ND	
81 Chlorodibromomethane	129		8.880				ND	
84 Chlorobenzene	112		9.482				ND	
86 Ethylbenzene	106		9.591				ND	
90 Bromoform	173		10.303				ND	
93 1,1,2,2-Tetrachloroethane	83		10.808				ND	
105 1,3-Dichlorobenzene	146		11.721				ND	
107 1,4-Dichlorobenzene	146		11.830				ND	
111 1,2-Dichlorobenzene	146		12.171				ND	

Reagents:

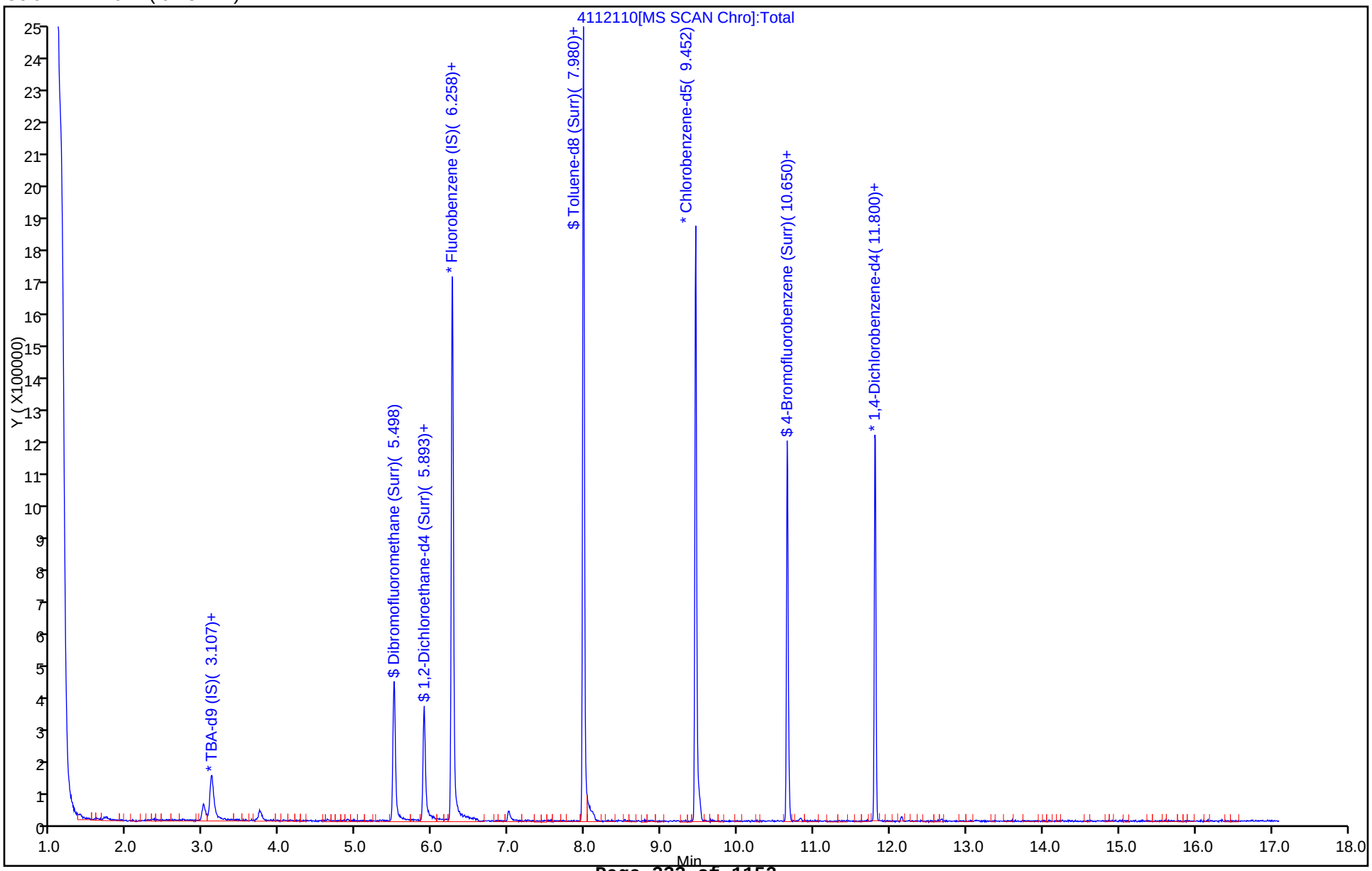
VOA8260SURR_00017	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260INT_00024	Amount Added: 10.00	Units: uL	Run Reagent

Report Date: 23-Nov-2014 14:58:15 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112110.D				
Injection Date:	21-Nov-2014 13:53:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	180-39026-K-3	Lab Sample ID:	180-39026-3	Worklist Smp#:	10
Client ID:	ST-DUP1-111614				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-014-111614 Lab Sample ID: 180-39026-4

Matrix: Water Lab File ID: 4112111.D

Analysis Method: 8260C Date Collected: 11/16/2014 19:15

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2014 14:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 125940 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.93
79-00-5	1,1,2-Trichloroethane	ND		5.0	1.2
75-34-3	1,1-Dichloroethane	ND		5.0	1.0
75-35-4	1,1-Dichloroethene	ND		5.0	1.1
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.68
107-06-2	1,2-Dichloroethane	ND		5.0	0.96
78-87-5	1,2-Dichloropropane	ND		5.0	1.3
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.51
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.53
110-75-8	2-Chloroethyl vinyl ether	ND		10	1.9
107-02-8	Acrolein	ND		100	5.7
107-13-1	Acrylonitrile	ND		50	9.0
71-43-2	Benzene	ND		5.0	0.99
75-25-2	Bromoform	ND		5.0	1.1
74-83-9	Bromomethane	ND		5.0	1.6
56-23-5	Carbon tetrachloride	ND		5.0	1.1
108-90-7	Chlorobenzene	ND		5.0	0.53
67-66-3	Chloroform	1.0	J	5.0	1.0
74-87-3	Chloromethane	ND		5.0	1.4
124-48-1	Chlorodibromomethane	ND		5.0	0.65
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.73
75-27-4	Dichlorobromomethane	ND		5.0	0.93
100-41-4	Ethylbenzene	ND		5.0	0.62
75-09-2	Methylene Chloride	ND		5.0	1.1
127-18-4	Tetrachloroethene	ND		5.0	0.82
108-88-3	Toluene	ND		5.0	0.85
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.75
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	0.58
79-01-6	Trichloroethene	ND		5.0	0.80
75-01-4	Vinyl chloride	ND		5.0	1.3
75-00-3	Chloroethane	ND		5.0	0.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-014-111614 Lab Sample ID: 180-39026-4

Matrix: Water Lab File ID: 4112111.D

Analysis Method: 8260C Date Collected: 11/16/2014 19:15

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2014 14:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 125940 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	78		62-123
460-00-4	4-Bromofluorobenzene (Surr)	78		75-120
1868-53-7	Dibromofluoromethane (Surr)	87		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112111.D
Lims ID: 180-39026-J-4 Lab Sample ID: 180-39026-4
Client ID: ST-014-111614
Sample Type: Client
Inject. Date: 21-Nov-2014 14:19:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-39026-J-4
Misc. Info.: 180-0004518-011
Operator ID: 034635 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Nov-2014 14:57:34 Calib Date: 13-Nov-2014 16:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111308.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK035

First Level Reviewer: journetp Date: 23-Nov-2014 13:37:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.103	3.120	-0.017	97	247163	5000.0	
* 2 Fluorobenzene (IS)	96	6.260	6.259	0.001	99	1683903	250.0	
* 3 Chlorobenzene-d5	119	9.454	9.453	0.001	87	340597	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.802	11.801	0.001	97	293811	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.500	5.491	0.009	94	327117	216.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.889	5.887	0.002	96	266361	194.6	
$ 7 Toluene-d8 (Surr)	98	7.982	7.979	0.003	93	1545955	242.4	
$ 8 4-Bromofluorobenzene (Surr	95	10.652	10.650	0.002	87	403976	194.9	
11 Chloromethane	50		1.318				ND	
12 Vinyl chloride	62		1.415				ND	
14 Bromomethane	94		1.646				ND	
15 Chloroethane	64		1.738				ND	
20 Acrolein	56		2.360				ND	
21 1,1-Dichloroethene	96		2.425				ND	
30 Methylene Chloride	84		2.991				ND	
32 Acrylonitrile	53		3.313				ND	
33 trans-1,2-Dichloroethene	96		3.338				ND	
36 1,1-Dichloroethane	63		3.976				ND	
49 Chloroform	83	5.305	5.296	0.009	92	17407	5.12	
50 1,1,1-Trichloroethane	97		5.449				ND	
53 Carbon tetrachloride	117		5.631				ND	
54 Benzene	78		5.880				ND	
55 1,2-Dichloroethane	62		5.978				ND	
61 Trichloroethene	130		6.671				ND	
64 1,2-Dichloropropane	63		6.957				ND	
68 Dichlorobromomethane	83	7.258	7.261	-0.003	17	2771	1.47	
70 2-Chloroethyl vinyl ether	63		7.597				ND	
74 trans-1,3-Dichloropropene	75		7.724				ND	
73 Toluene	91		8.046				ND	
71 cis-1,3-Dichloropropene	75		8.326				ND	
76 1,1,2-Trichloroethane	97		8.521				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
77 Tetrachloroethene	164		8.563				ND	
81 Chlorodibromomethane	129		8.880				ND	
84 Chlorobenzene	112		9.482				ND	
86 Ethylbenzene	106		9.591				ND	
90 Bromoform	173		10.303				ND	
93 1,1,2,2-Tetrachloroethane	83		10.808				ND	
105 1,3-Dichlorobenzene	146		11.721				ND	
107 1,4-Dichlorobenzene	146		11.830				ND	
111 1,2-Dichlorobenzene	146		12.171				ND	

Reagents:

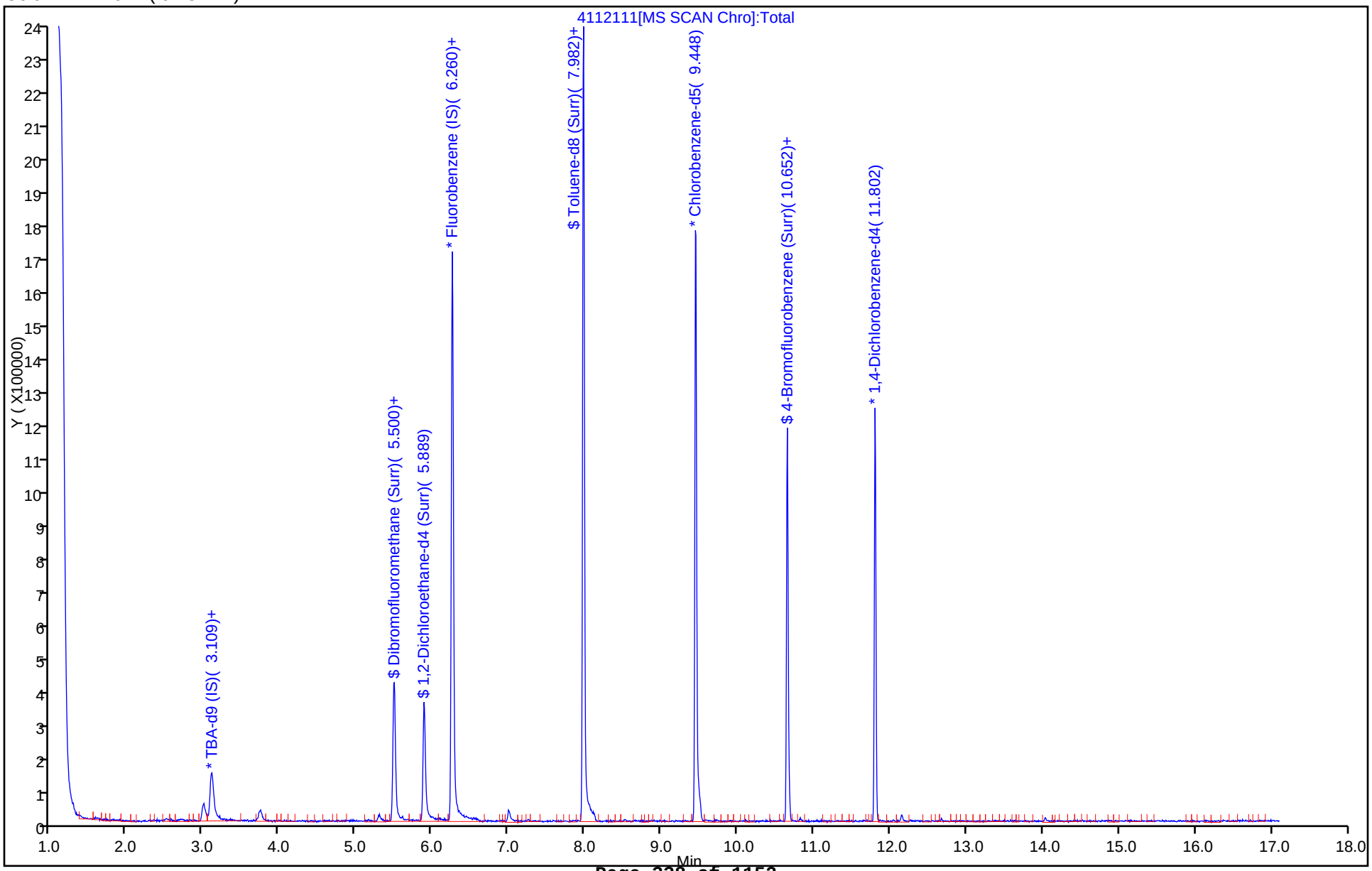
VOA8260SURR_00017	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260INT_00024	Amount Added: 10.00	Units: uL	Run Reagent

Report Date: 23-Nov-2014 14:58:14 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112111.D				
Injection Date:	21-Nov-2014 14:19:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	180-39026-J-4	Lab Sample ID:	180-39026-4	Worklist Smp#:	11
Client ID:	ST-014-111614				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



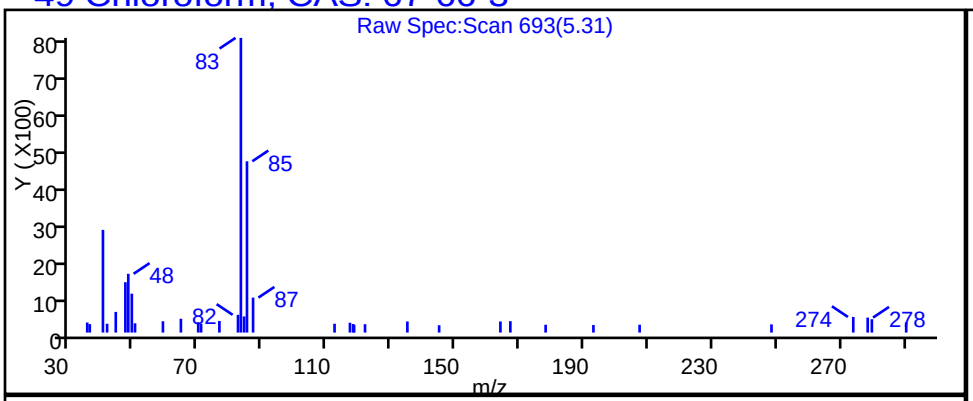
Report Date: 23-Nov-2014 14:58:14 Chrom Revision: 2.2 06-Nov-2014 14:50:32

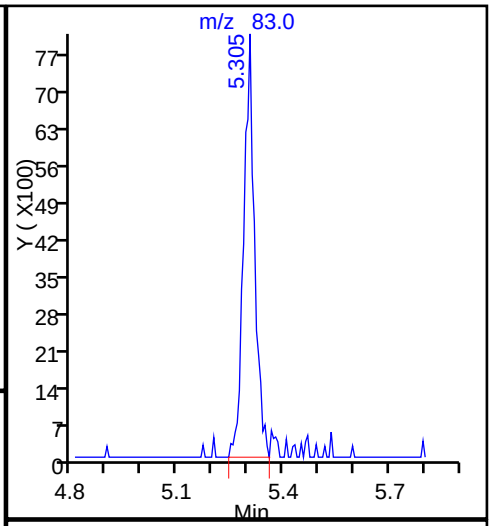
TestAmerica Pittsburgh

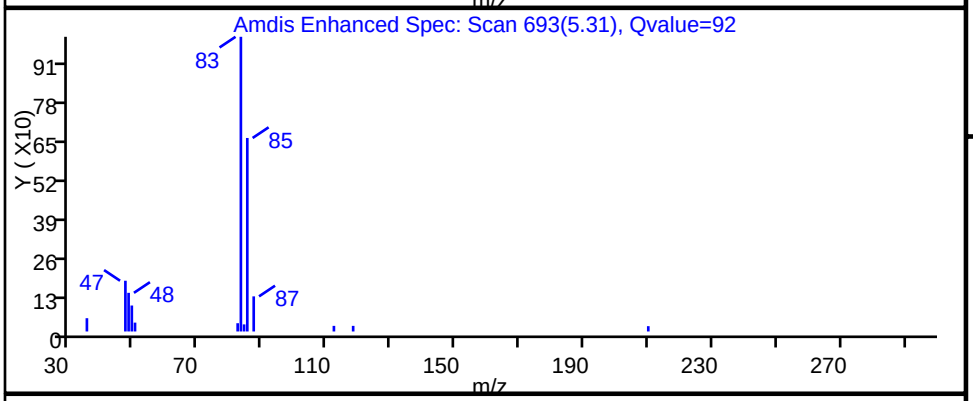
Data File: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112111.D

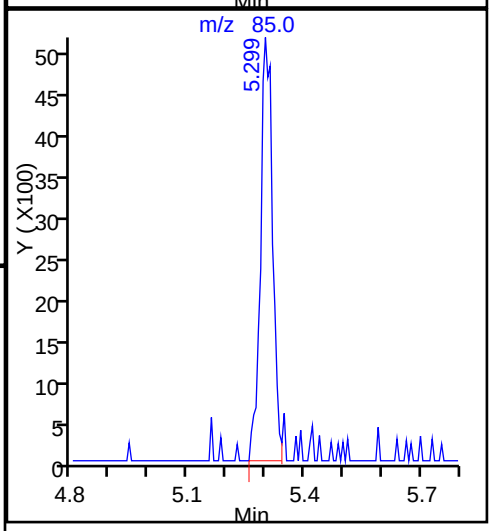
Injection Date:	21-Nov-2014 14:19:30	Instrument ID:	CHHP4		
Lims ID:	180-39026-J-4	Lab Sample ID:	180-39026-4		
Client ID:	ST-014-111614				
Operator ID:	034635	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

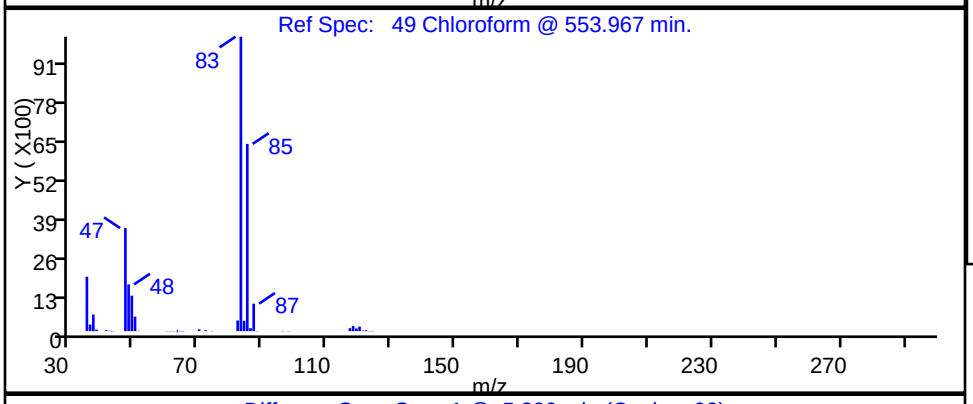
49 Chloroform, CAS: 67-66-3

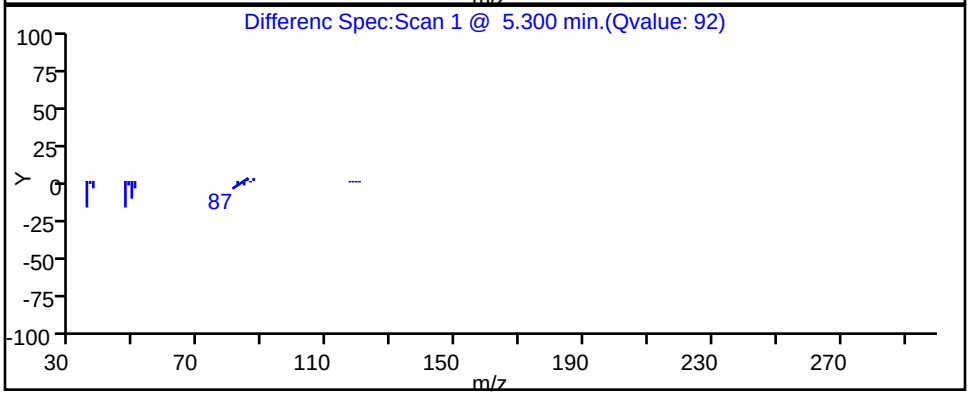












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: TRIP BLANK Lab Sample ID: 180-39026-5

Matrix: Water Lab File ID: 4112107.D

Analysis Method: 8260C Date Collected: 11/16/2014 00:00

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2014 12:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 125940 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.93
79-00-5	1,1,2-Trichloroethane	ND		5.0	1.2
75-34-3	1,1-Dichloroethane	ND		5.0	1.0
75-35-4	1,1-Dichloroethene	ND		5.0	1.1
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.68
107-06-2	1,2-Dichloroethane	ND		5.0	0.96
78-87-5	1,2-Dichloropropane	ND		5.0	1.3
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.51
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.53
110-75-8	2-Chloroethyl vinyl ether	ND		10	1.9
107-02-8	Acrolein	ND		100	5.7
107-13-1	Acrylonitrile	ND		50	9.0
71-43-2	Benzene	ND		5.0	0.99
75-25-2	Bromoform	ND		5.0	1.1
74-83-9	Bromomethane	ND		5.0	1.6
56-23-5	Carbon tetrachloride	ND		5.0	1.1
108-90-7	Chlorobenzene	ND		5.0	0.53
67-66-3	Chloroform	ND		5.0	1.0
74-87-3	Chloromethane	ND		5.0	1.4
124-48-1	Chlorodibromomethane	ND		5.0	0.65
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.73
75-27-4	Dichlorobromomethane	ND		5.0	0.93
100-41-4	Ethylbenzene	ND		5.0	0.62
75-09-2	Methylene Chloride	ND		5.0	1.1
127-18-4	Tetrachloroethene	ND		5.0	0.82
108-88-3	Toluene	ND		5.0	0.85
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.75
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	0.58
79-01-6	Trichloroethene	ND		5.0	0.80
75-01-4	Vinyl chloride	ND		5.0	1.3
75-00-3	Chloroethane	ND		5.0	0.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: TRIP BLANK Lab Sample ID: 180-39026-5

Matrix: Water Lab File ID: 4112107.D

Analysis Method: 8260C Date Collected: 11/16/2014 00:00

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2014 12:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 125940 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	73		62-123
460-00-4	4-Bromofluorobenzene (Surr)	75		75-120
1868-53-7	Dibromofluoromethane (Surr)	80		80-120
2037-26-5	Toluene-d8 (Surr)	92		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112107.D
Lims ID: 180-39026-A-5 Lab Sample ID: 180-39026-5
Client ID: TRIP BLANK
Sample Type: Client
Inject. Date: 21-Nov-2014 12:32:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-39026-A-5
Misc. Info.: 180-0004518-007
Operator ID: 034635 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Nov-2014 14:57:34 Calib Date: 13-Nov-2014 16:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111308.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK035

First Level Reviewer: journetp Date: 21-Nov-2014 13:01:30

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	3.104	3.120	-0.016	98	256468	5000.0	
*	2 Fluorobenzene (IS)	96	6.261	6.259	0.002	97	1781281	250.0	
*	3 Chlorobenzene-d5	119	9.449	9.453	-0.004	88	348247	250.0	
*	4 1,4-Dichlorobenzene-d4	152	11.803	11.801	0.002	97	304584	250.0	
$	5 Dibromofluoromethane (Surr	113	5.495	5.491	0.004	93	319201	199.6	
$	6 1,2-Dichloroethane-d4 (Sur	65	5.890	5.887	0.003	96	264375	182.6	
$	7 Toluene-d8 (Surr)	98	7.983	7.979	0.004	93	1507749	231.2	
$	8 4-Bromofluorobenzene (Surr	95	10.653	10.650	0.003	88	398995	188.3	
	11 Chloromethane	50		1.318				ND	
	12 Vinyl chloride	62		1.415				ND	
	14 Bromomethane	94		1.646				ND	
	15 Chloroethane	64		1.738				ND	
	20 Acrolein	56		2.360				ND	
	21 1,1-Dichloroethene	96		2.425				ND	
	30 Methylene Chloride	84		2.991				ND	
	32 Acrylonitrile	53		3.313				ND	
	33 trans-1,2-Dichloroethene	96		3.338				ND	
	36 1,1-Dichloroethane	63		3.976				ND	
	49 Chloroform	83		5.296				ND	
	50 1,1,1-Trichloroethane	97		5.449				ND	
	53 Carbon tetrachloride	117		5.631				ND	
	54 Benzene	78		5.880				ND	
	55 1,2-Dichloroethane	62		5.978				ND	
	61 Trichloroethene	130		6.671				ND	
	64 1,2-Dichloropropane	63		6.957				ND	
	68 Dichlorobromomethane	83		7.261				ND	
	70 2-Chloroethyl vinyl ether	63		7.597				ND	
	74 trans-1,3-Dichloropropene	75		7.724				ND	
	73 Toluene	91		8.046				ND	
	71 cis-1,3-Dichloropropene	75		8.326				ND	
	76 1,1,2-Trichloroethane	97		8.521				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
77 Tetrachloroethene	164		8.563				ND	
81 Chlorodibromomethane	129		8.880				ND	
84 Chlorobenzene	112		9.482				ND	
86 Ethylbenzene	106		9.591				ND	
90 Bromoform	173		10.303				ND	
93 1,1,2,2-Tetrachloroethane	83		10.808				ND	
105 1,3-Dichlorobenzene	146		11.721				ND	
107 1,4-Dichlorobenzene	146		11.830				ND	
111 1,2-Dichlorobenzene	146		12.171				ND	

Reagents:

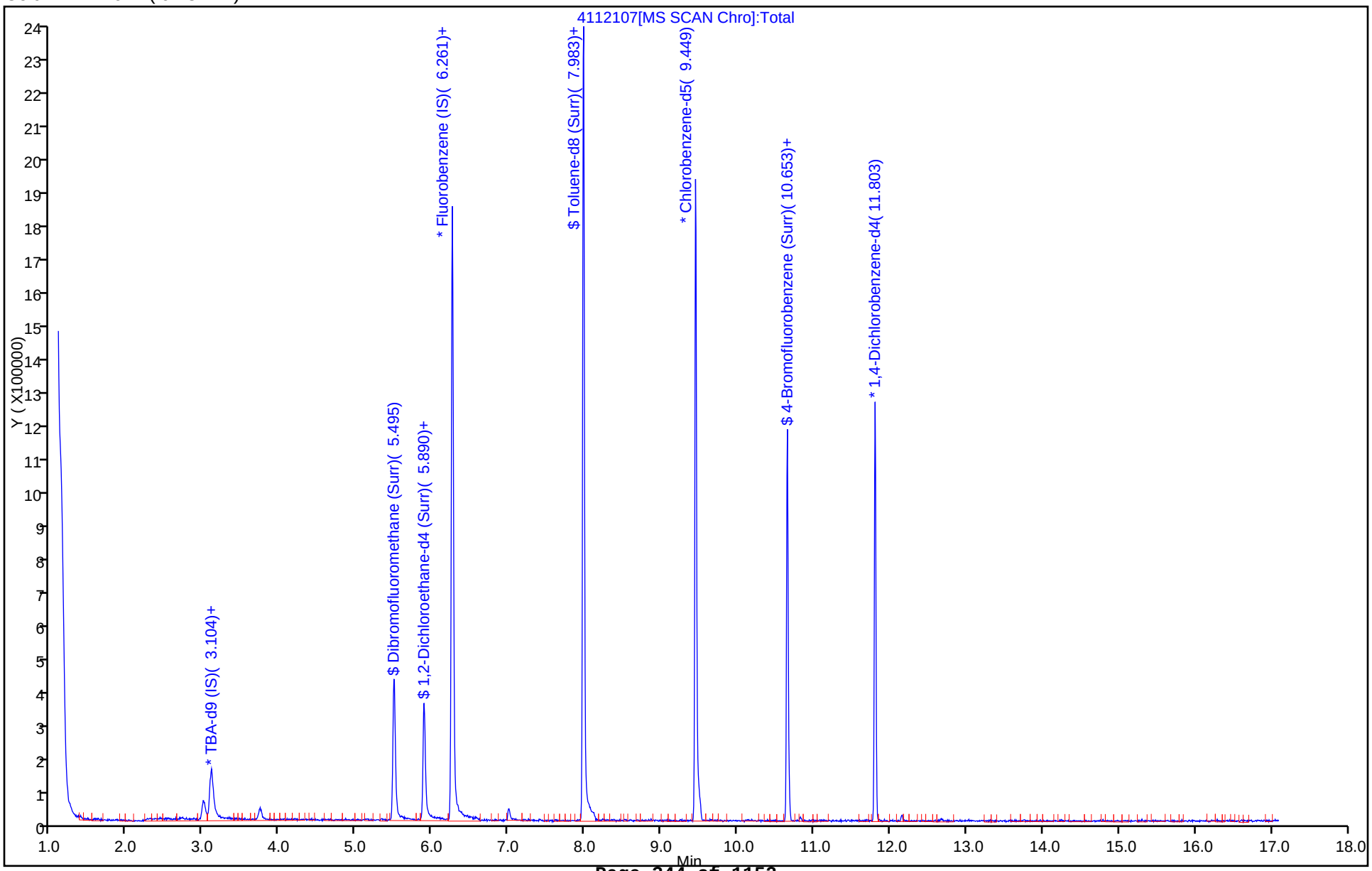
VOA8260SURR_00017	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260INT_00024	Amount Added: 10.00	Units: uL	Run Reagent

Report Date: 23-Nov-2014 14:58:18 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112107.D				
Injection Date:	21-Nov-2014 12:32:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	180-39026-A-5	Lab Sample ID:	180-39026-5	Worklist Smp#:	7
Client ID:	TRIP BLANK				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123648

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/03/2014 12:22 Calibration End Date: 11/03/2014 16:24 Calibration ID: 19030

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123648/4	4110304.D
Level 2	IC 180-123648/5	4110305.D
Level 3	IC 180-123648/6	4110306.D
Level 4	ICIS 180-123648/7	4110307.D
Level 5	IC 180-123648/12	4110312.D
Level 6	IC 180-123648/9	4110309.D
Level 7	IC 180-123648/10	4110310.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3916 0.3730	0.3342 0.3902	0.3594	0.4125	0.3744	Ave		0.3765			0.1000	6.7		20.0			
Chloromethane	0.6315 0.5016	0.5483 0.4960	0.5372	0.6040	0.5270	Ave		0.5494			0.1000	9.3		20.0			
Vinyl chloride	0.4917 0.3415	0.3981 0.3554	0.3731	0.4266	0.3434	Ave		0.3900			0.1000	14.0		20.0			
1,3-Butadiene	0.4856 0.3565	0.3770 0.3608	0.3825	0.4310	0.3522	Ave		0.3922			0.0100	13.0		20.0			
Bromomethane	0.0655 +++++	0.0533 +++++	0.0507	0.0542	0.0531	Ave		0.0553			0.0500	11.0		20.0			
Chloroethane	0.0708 0.0551	0.0604 0.0552	0.0574	0.0660	0.0755	Qua	0.8453	0.0596	-0.000004		0.0500				0.9950		0.9900
Trichlorofluoromethane	0.1601 0.2229	0.1588 0.1936	0.1779	0.2140	0.2392	Ave		0.1952			0.1000	16.0		20.0			
Dichlorofluoromethane	0.2197 0.2275	0.1992 +++++	0.2285	0.2381	0.2692	Ave		0.2304			0.0100	10.0		20.0			
Ethyl ether	0.0981 0.0965	0.1041 0.0925	0.1048	0.1053	0.1038	Ave		0.1007			0.0100	5.0		20.0			
Acrolein	0.0108 0.0132	0.0150 +++++	0.0123	0.0144	0.0102	Ave		0.0127			0.0100	15.0		20.0			
1,1-Dichloroethene	0.2214 0.2443	0.2064 0.2233	0.2352	0.2617	0.2829	Qua	-1.941	0.2787	-0.000043		0.1000				0.9990		0.9900
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2679 0.2753	0.2658 0.2862	0.2868	0.3280	0.3067	Ave		0.2881			0.1000	7.8		20.0			
Acetone	0.1871 0.0518	0.1059 0.0546	0.0768	0.0674	0.0805	Qua	4.1365	0.0465	0.0000035	*	0.0500				0.9920		0.9900
Iodomethane	0.4215 0.4526	0.4488 0.4727	0.4446	0.5011	0.4489	Ave		0.4557			0.0100	5.5		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123648

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/03/2014 12:22 Calibration End Date: 11/03/2014 16:24 Calibration ID: 19030

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	0.7866 1.0125	0.7343 1.0147	0.8459	1.0332	1.0007	Ave		0.9183			0.1000	14.0		20.0			
Allyl chloride	0.1768 0.2211	0.1728 0.2493	0.2006	0.2271	0.2121	Qua	0.1445	0.1992	0.0000398		0.0100				1.0000		0.9900
Methyl acetate	0.1735 0.1383	0.1727 0.1308	0.1580	0.1651	0.1434	Ave		0.1546			0.1000	11.0		20.0			
Methylene Chloride	0.9639 0.3241	0.5562 0.3265	0.4070	0.3979	0.3486	Qua	15.957	0.2866	0.0000216		0.1000				1.0000		0.9900
tert-Butyl alcohol	2.1242 1.3898	1.7331 1.3714	1.5128	1.4893	1.1437	Ave		1.5378			0.0100	20.0		20.0			
Acrylonitrile	0.0813 0.0613	0.0770 0.0593	0.0685	0.0735	0.0620	Qua	8.7898	0.0621	0		0.0100				0.9990		0.9900
trans-1,2-Dichloroethene	0.3550 0.3417	0.3143 0.3365	0.3275	0.3760	0.3452	Ave		0.3423			0.1000	5.8		20.0			
Methyl tert-butyl ether	0.5882 0.5061	0.5709 0.5014	0.5428	0.5835	0.5089	Ave		0.5431			0.1000	7.0		20.0			
Vinyl acetate	0.6128 0.4664	0.4936 0.4562	0.4657	0.5346	0.4840	Lin2	3.2964	0.4645			0.0100				0.9940		0.9900
Hexane	0.9554 0.6825	0.7052 0.6542	0.6846	0.7945	0.7299	Qua	4.5270	0.7167	-0.000054		0.0100				0.9990		0.9900
1,1-Dichloroethane	0.6573 0.6096	0.6080 0.6014	0.6074	0.6821	0.6249	Ave		0.6272			0.2000	4.9		20.0			
2,2-Dichloropropane	0.2388 0.2548	0.2056 0.2447	0.2208	0.2551	0.2449	Ave		0.2378			0.0100	7.7		20.0			
cis-1,2-Dichloroethene	0.3857 0.3258	0.3435 0.3253	0.3304	0.3641	0.3278	Ave		0.3432			0.1000	6.8		20.0			
2-Butanone (MEK)	0.1495 0.0765	0.1193 0.0757	0.0899	0.0832	0.0964	Qua	2.3265	0.0758	-0.000002		0.0500				0.9980		0.9900
Chlorobromomethane	0.1238 0.1163	0.1225 0.1164	0.1154	0.1249	0.1085	Ave		0.1183			0.0100	4.9		20.0			
Tetrahydrofuran	0.0654 0.0493	0.0586 0.0498	0.0534	0.0588	0.0500	Ave		0.0550			0.0100	11.0		20.0			
Chloroform	0.5884 0.4413	0.4781 0.4325	0.4614	0.4949	0.4444	Ave		0.4773			0.2000	11.0		20.0			
1,1,1-Trichloroethane	0.3567 0.3711	0.3133 0.3804	0.3371	0.3917	0.3615	Ave		0.3588			0.1000	7.4		20.0			
Cyclohexane	0.8893 0.7513	0.7786 0.7338	0.7809	0.8964	0.7795	Ave		0.8014			0.1000	8.1		20.0			
Carbon tetrachloride	0.2969 0.3426	0.2702 0.3566	0.2968	0.3491	0.3334	Ave		0.3208			0.1000	10.0		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123648

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/03/2014 12:22 Calibration End Date: 11/03/2014 16:24 Calibration ID: 19030

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloropropene	0.4646 0.4313	0.4039 0.4121	0.4176	0.4844	0.4373	Ave		0.4359			0.0100	6.7		20.0			
Benzene	1.5720 1.0847	1.3231 0.9019	1.3147	1.3998	1.2581	Ave		1.2649			0.5000	17.0		20.0			
Isobutyl alcohol	0.0059 0.0045	0.0052 0.0046	0.0051	0.0048	0.0043	Ave		0.0049		*	0.0100	11.0		20.0			
1,2-Dichloroethane	0.2904 0.2335	0.2699 0.2366	0.2414	0.2554	0.2328	Ave		0.2514			0.1000	8.7		20.0			
n-Heptane	0.8501 0.6567	0.7495 0.5746	0.7242	0.8034	0.7256	Ave		0.7263			0.0100	13.0		20.0			
Trichloroethene	0.3570 0.2868	0.2712 0.2722	0.2797	0.3190	0.2996	Ave		0.2979			0.2000	10.0		20.0			
Methylcyclohexane	0.7498 0.5821	0.6339 0.5388	0.6276	0.7088	0.6265	Ave		0.6382			0.1000	11.0		20.0			
1,2-Dichloropropane	0.4333 0.3107	0.3424 0.3001	0.3373	0.3562	0.3242	Ave		0.3435			0.1000	13.0		20.0			
Dibromomethane	0.1240 0.1087	0.1157 0.1101	0.1118	0.1140	0.1001	Ave		0.1121			0.0100	6.5		20.0			
1,4-Dioxane	0.0021 0.0015	0.0017 0.0016	0.0015	0.0017	0.0014	Qua	0.4371	0.0014	0	*	0.0100				0.9990		0.9900
Dichlorobromomethane	0.2708 0.2723	0.2532 0.2740	0.2510	0.2770	0.2689	Ave		0.2667			0.2000	3.9		20.0			
2-Chloroethyl vinyl ether	0.1118 0.1076	0.1099 0.1043	0.1007	0.1175	0.1078	Ave		0.1085			0.0100	4.9		20.0			
trans-1,3-Dichloropropene	1.8709 1.6054	1.5679 1.5174	1.6422	1.6508	1.6046	Qua	-2.292	1.6817	-0.000129		0.1000				1.0000		0.9900
4-Methyl-2-pentanone (MIBK)	0.9389 0.6750	0.8698 0.6454	0.8053	0.7381	0.7327	Ave		0.7722			0.1000	14.0		20.0			
Toluene	8.2791 4.1901	6.3911 3.2696	6.0036	5.7427	5.3905	Qua	122.09	5.0593	-0.001519		0.4000				0.9980		0.9900
cis-1,3-Dichloropropene	0.2524 0.2679	0.2401 0.2683	0.2390	0.2644	0.2533	Ave		0.2551			0.2000	4.8		20.0			
Ethyl methacrylate	1.3684 0.9977	1.2268 0.9482	1.1506	1.0840	1.0633	Qua	12.014	1.0282	-0.000072		0.0100				1.0000		0.9900
1,1,2-Trichloroethane	1.0055 0.7202	0.9210 0.6875	0.8631	0.8026	0.7509	Ave		0.8216			0.1000	14.0		20.0			
Tetrachloroethene	1.4698 0.9943	1.0610 0.9290	1.1117	1.1286	1.0536	Ave		1.1069			0.2000	16.0		20.0			
1,3-Dichloropropane	1.8637 1.2668	1.5512 1.2014	1.5262	1.4071	1.3593	Ave		1.4536			0.0100	15.0		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123648

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/03/2014 12:22 Calibration End Date: 11/03/2014 16:24 Calibration ID: 19030

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.6323 0.4345	0.5103 0.4407	0.5184	0.4624	0.5205	Qua	8.2266	0.4332	0		0.1000				0.9990		0.9900
Chlorodibromomethane	0.6813 0.6841	0.5476 0.7057	0.6457	0.6498	0.6584	Ave		0.6532			0.1000	7.8		20.0			
1,2-Dibromoethane	0.9327 0.6476	0.7660 0.6574	0.7386	0.6675	0.6493	Ave		0.7227			0.1000	14.0		20.0			
Chlorobenzene	4.6314 2.6001	3.7056 +++++	3.4980	3.2485	3.0837	Lin2	44.564	2.8774			0.5000				0.9910		0.9900
1,1,1,2-Tetrachloroethane	1.3008 0.9014	1.0783 0.8275	1.0665	1.0174	0.9948	Ave		1.0267			0.0100	15.0		20.0			
Ethylbenzene	3.0695 1.7035	2.3054 1.4109	2.2621	2.1838	2.0340	Qua	36.211	1.9715	-0.000474		0.1000				0.9990		0.9900
m-Xylene & p-Xylene	3.5800 2.2299	2.8763 1.9994	2.8001	2.6871	2.5084	Ave		2.6687			0.1000	19.0		20.0			
o-Xylene	3.5368 1.9949	2.7853 1.7043	2.6868	2.4792	2.3670	Qua	46.399	2.2440	-0.000464		0.3000				0.9990		0.9900
Styrene	5.2863 +++++	4.1428 +++++	4.0069	3.6445	3.4693	Ave		4.1100			0.3000	17.0		20.0			
Bromoform	0.2796 0.3578	0.2551 0.3989	0.2955	0.2970	0.3060	Ave		0.3128			0.1000	16.0		20.0			
Isopropylbenzene	9.2420 4.2150	7.0308 +++++	6.8078	6.1528	5.6428	Qua	67.048	6.4596	-0.003769		0.1000				0.9990		0.9900
Bromobenzene	1.4477 0.8918	1.1741 0.8538	1.0510	1.0237	0.9458	Ave		1.0554			0.0100	19.0		20.0			
1,1,2,2-Tetrachloroethane	1.1091 0.7183	0.9710 0.7195	0.9132	0.8080	0.7840	Ave		0.8604			0.3000	17.0		20.0			
trans-1,4-Dichloro-2-butene	0.1744 0.1491	0.1358 0.1666	0.1364	0.1336	0.1289	Ave		0.1464			0.0100	12.0		20.0			
1,2,3-Trichloropropane	0.2739 0.1772	0.2266 0.1822	0.2033	0.1960	0.1785	Qua	3.5867	0.1657	0.0000108		0.0100				1.0000		0.9900
N-Propylbenzene	2.3248 1.3011	1.7275 +++++	1.6675	1.5692	1.4702	Lin2	23.101	1.3741			0.0100				0.9930		0.9900
2-Chlorotoluene	1.7651 1.0236	1.3908 +++++	1.2745	1.2022	1.1161	Ave		1.2954			0.0100	20.0		20.0			
1,3,5-Trimethylbenzene	6.4607 2.8985	4.8291 2.1404	4.4244	4.1268	3.7713	Qua	103.25	3.5652	-0.001212		0.0100				0.9980		0.9900
4-Chlorotoluene	1.6663 0.9278	1.3197 0.8052	1.1813	1.1473	1.0393	Qua	20.288	1.0179	-0.000184		0.0100				1.0000		0.9900
tert-Butylbenzene	5.9542 2.7858	4.3542 2.1982	4.0137	3.7445	3.4626	Qua	87.271	3.2785	-0.000924		0.0100				0.9990		0.9900

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123648

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/03/2014 12:22 Calibration End Date: 11/03/2014 16:24 Calibration ID: 19030

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	6.1626 2.9597	4.7212 2.3074	4.3208	4.0118	3.6898	Qua	93.299	3.5129	-0.001029		0.0100				0.9990		0.9900
sec-Butylbenzene	8.9904 3.7356	6.5084 2.7414	6.0968	5.5510	5.0451	Qua	163.88	4.6067	-0.001607		0.0100				0.9970		0.9900
1,3-Dichlorobenzene	2.9221 1.6957	2.2092 1.5156	2.1169	1.9447	1.8867	Qua	30.182	1.8235	-0.000266		0.6000				1.0000		0.9900
4-Isopropyltoluene	7.0624 3.1153	5.0159 2.3553	4.7406	4.4088	4.0458	Qua	111.90	3.7834	-0.001221		0.0100				0.9980		0.9900
1,4-Dichlorobenzene	2.8266 1.6335	2.1376 1.4846	2.0163	1.8501	1.7909	Lin2	30.074	1.6217			0.5000				0.9940		0.9900
1,2-Dichlorobenzene	2.5618 1.4306	2.0231 1.2474	1.8268	1.7174	1.6239	Qua	30.597	1.5652	-0.000275		0.4000				1.0000		0.9900
n-Butylbenzene	6.3276 2.9939	4.6796 2.2458	4.4579	4.1330	3.8445	Qua	92.683	3.6676	-0.001202		0.0100				0.9990		0.9900
1,2-Dibromo-3-Chloropropane	0.0652 0.0600	0.0607 0.0668	0.0596	0.0526	0.0547	Qua	0.3221	0.0515	0.0000121		0.0500				1.0000		0.9900
1,2,4-Trichlorobenzene	0.8849 0.6920	0.7468 0.6939	0.7441	0.6990	0.6906	Ave		0.7359			0.2000	9.5		20.0			
Hexachlorobutadiene	1.1598 0.6796	0.9121 0.6473	0.8304	0.7921	0.7368	Lin2	11.988	0.6866			0.0100				0.9960		0.9900
Naphthalene	1.4545 1.0577	1.1383 1.0160	1.1397	1.0845	1.0188	Qua	5.2781	1.0639	-0.000041		0.0100				1.0000		0.9900
1,2,3-Trichlorobenzene	0.7009 0.5283	0.5389 0.5191	0.5576	0.5437	0.5162	Qua	2.4492	0.5261	-0.000007		0.0100				1.0000		0.9900
Dibromofluoromethane (Surr)	0.2095 0.2048	0.1935 0.2027	0.2124	0.2277	0.2046	Ave		0.2079				5.1		20.0			
1,2-Dichloroethane-d4 (Surr)	0.1897 0.1868	0.1988 0.1823	0.1954	0.2019	0.1798	Ave		0.1907				4.4		20.0			
Toluene-d8 (Surr)	5.0797 3.3056	4.1320 2.6848	4.7054	4.3113	3.8441	Ave		4.0090				20.0		20.0			
4-Bromofluorobenzene (Surr)	1.5877 1.2807	1.3688 1.2538	1.5156	1.4330	1.3435	Ave		1.3976				8.7		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123648

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/03/2014 12:22 Calibration End Date: 11/03/2014 16:24 Calibration ID: 19030

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123648/4	4110304.D
Level 2	IC 180-123648/5	4110305.D
Level 3	IC 180-123648/6	4110306.D
Level 4	ICIS 180-123648/7	4110307.D
Level 5	IC 180-123648/12	4110312.D
Level 6	IC 180-123648/9	4110309.D
Level 7	IC 180-123648/10	4110310.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	77008 1733176	109931 3392540	316343	544615	689688	25.0 625	50.0 1250	125	200	250
Chloromethane	FB	Ave	124171 2330249	180374 4312184	472810	797392	970825	25.0 625	50.0 1250	125	200	250
Vinyl chloride	FB	Ave	96687 1586609	130970 3089600	328377	563241	632565	25.0 625	50.0 1250	125	200	250
1,3-Butadiene	FB	Ave	95494 1656316	124022 3136694	336615	569038	648753	25.0 625	50.0 1250	125	200	250
Bromomethane	FB	Ave	12887 +++++	17523 +++++	44636	71494	97759	25.0 +++++	50.0 +++++	125	200	250
Chloroethane	FB	Qua	13928 255990	19867 479613	50534	87111	139075	25.0 625	50.0 1250	125	200	250
Trichlorofluoromethane	FB	Ave	31482 1035575	52252 1683014	156608	282519	440612	25.0 625	50.0 1250	125	200	250
Dichlorofluoromethane	FB	Ave	43211 1057158	65518 +++++	201068	314349	495933	25.0 625	50.0 +++++	125	200	250
Ethyl ether	FB	Ave	19286 448564	34251 804307	92279	139022	191154	25.0 625	50.0 1250	125	200	250
Acrolein	FB	Ave	42659 110388	61831 +++++	64925	83233	75280	500 1125	625 +++++	750	875	1000
1,1-Dichloroethene	FB	Qua	43538 1135190	67911 1941678	206982	345488	521168	25.0 625	50.0 1250	125	200	250
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	52679 1279042	87444 2487932	252456	432989	564911	25.0 625	50.0 1250	125	200	250
Acetone	FB	Qua	36783 240731	34836 474414	67552	88962	148344	25.0 625	50.0 1250	125	200	250
Iodomethane	FB	Ave	82885 2102863	147656 4109897	391294	661539	826838	25.0 625	50.0 1250	125	200	250
Carbon disulfide	FB	Ave	154686 4703940	241578 8821688	744471	1364034	1843252	25.0 625	50.0 1250	125	200	250

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123648

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/03/2014 12:22 Calibration End Date: 11/03/2014 16:24 Calibration ID: 19030

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Allyl chloride	FB	Qua	34763 1027463	56847 2167520	176559	299800	390645	25.0 625	50.0 1250	125	200	250
Methyl acetate	FB	Ave	170627 3212406	284082 5685537	695481	1090047	1320665	125 3125	250 6250	625	1000	1250
Methylene Chloride	FB	Qua	189545 1505632	182980 2838966	358205	525297	642165	25.0 625	50.0 1250	125	200	250
tert-Butyl alcohol	TBA	Ave	34778 603688	54665 1169407	122541	199618	203750	250 6250	500 12500	1250	2000	2500
Acrylonitrile	FB	Qua	159916 2847212	253271 5156002	602591	970140	1141964	250 6250	500 12500	1250	2000	2500
trans-1,2-Dichloroethene	FB	Ave	69802 1587582	103396 2925765	288205	496423	635834	25.0 625	50.0 1250	125	200	250
Methyl tert-butyl ether	FB	Ave	115666 2351395	187815 4359497	477712	770319	937481	25.0 625	50.0 1250	125	200	250
Vinyl acetate	FB	Lin2	120511 2166786	162373 3966624	409835	705725	891442	25.0 625	50.0 1250	125	200	250
Hexane	FB	Qua	187879 3170746	231987 5687369	602524	1048917	1344500	25.0 625	50.0 1250	125	200	250
1,1-Dichloroethane	FB	Ave	129255 2832176	200004 5229058	534573	900495	1151152	25.0 625	50.0 1250	125	200	250
2,2-Dichloropropane	FB	Ave	46963 1184024	67651 2127222	194359	336789	451179	25.0 625	50.0 1250	125	200	250
cis-1,2-Dichloroethene	FB	Ave	75839 1513530	113017 2828423	290755	480617	603817	25.0 625	50.0 1250	125	200	250
2-Butanone (MEK)	FB	Qua	29394 355386	39244 657940	79127	109787	177619	25.0 625	50.0 1250	125	200	250
Chlorobromomethane	FB	Ave	24335 540361	40316 1011666	101583	164896	199944	25.0 625	50.0 1250	125	200	250
Tetrahydrofuran	FB	Ave	25715 457987	38581 866670	93950	155132	184331	50.0 1250	100 2500	250	400	500
Chloroform	FB	Ave	115713 2050276	157284 3760354	406135	653358	818661	25.0 625	50.0 1250	125	200	250
1,1,1-Trichloroethane	FB	Ave	70142 1724054	103073 3307587	296710	517077	665866	25.0 625	50.0 1250	125	200	250
Cyclohexane	FB	Ave	174867 3490471	256129 6379678	687337	1183341	1435801	25.0 625	50.0 1250	125	200	250
Carbon tetrachloride	FB	Ave	58390 1591703	88906 3099947	261206	460908	614115	25.0 625	50.0 1250	125	200	250
1,1-Dichloropropene	FB	Ave	91351 2003880	132891 3582918	367552	639484	805469	25.0 625	50.0 1250	125	200	250
Benzene	FB	Ave	309117 5039564	435268 7840886	1157091	1847904	2317492	25.0 625	50.0 1250	125	200	250

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123648

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/03/2014 12:22 Calibration End Date: 11/03/2014 16:24 Calibration ID: 19030

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Isobutyl alcohol	FB	Ave	29128 519324	42376 1006186	112799	158464	199535	625 15625	1250 31250	3125	5000	6250
1,2-Dichloroethane	FB	Ave	57100 1085070	88793 2057245	212433	337212	428789	25.0 625	50.0 1250	125	200	250
n-Heptane	FB	Ave	167161 3050882	246581 4995867	637362	1060664	1336577	25.0 625	50.0 1250	125	200	250
Trichloroethene	FB	Ave	70202 1332487	89235 2366628	246174	421095	551869	25.0 625	50.0 1250	125	200	250
Methylcyclohexane	FB	Ave	147450 2704544	208546 4684311	552406	935722	1154026	25.0 625	50.0 1250	125	200	250
1,2-Dichloropropane	FB	Ave	85209 1443702	112656 2608895	296852	470284	597118	25.0 625	50.0 1250	125	200	250
Dibromomethane	FB	Ave	24387 505201	38075 957656	98410	150562	184345	25.0 625	50.0 1250	125	200	250
1,4-Dioxane	FB	Qua	8103 141379	11249 284445	27143	45936	50203	500 12500	1000 25000	2500	4000	5000
Dichlorobromomethane	FB	Ave	53243 1265293	83306 2381841	220935	365633	495371	25.0 625	50.0 1250	125	200	250
2-Chloroethyl vinyl ether	FB	Ave	43960 999550	72298 1814167	177306	310229	396960	50.0 1250	100 2500	250	400	500
trans-1,3-Dichloropropene	CBZ	Qua	80092 1715895	115869 3066001	309476	512949	667130	25.0 625	50.0 1250	125	200	250
4-Methyl-2-pentanone (MIBK)	CBZ	Ave	40191 721478	64274 1304037	151766	229333	304640	25.0 625	50.0 1250	125	200	250
Toluene	CBZ	Qua	354416 4478637	472299 6606546	1131387	1784371	2241088	25.0 625	50.0 1250	125	200	250
cis-1,3-Dichloropropene	FB	Ave	49626 1244582	78999 2332929	210351	349002	466600	25.0 625	50.0 1250	125	200	250
Ethyl methacrylate	CBZ	Qua	58581 1066379	90656 1915843	216833	336808	442080	25.0 625	50.0 1250	125	200	250
1,1,2-Trichloroethane	CBZ	Ave	43046 769743	68064 1389170	162661	249383	312197	25.0 625	50.0 1250	125	200	250
Tetrachloroethene	CBZ	Ave	62919 1062778	78409 1877219	209493	350679	438023	25.0 625	50.0 1250	125	200	250
1,3-Dichloropropane	CBZ	Ave	79781 1354026	114632 2427460	287607	437206	565116	25.0 625	50.0 1250	125	200	250
2-Hexanone	CBZ	Qua	27068 464430	37708 890566	97701	143692	216393	25.0 625	50.0 1250	125	200	250
Chlorodibromomethane	CBZ	Ave	29166 731242	40465 1425951	121676	201910	273736	25.0 625	50.0 1250	125	200	250
1,2-Dibromoethane	CBZ	Ave	39929 692151	56604 1328246	139182	207407	269950	25.0 625	50.0 1250	125	200	250

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123648

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/03/2014 12:22 Calibration End Date: 11/03/2014 16:24 Calibration ID: 19030

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chlorobenzene	CBZ	Lin2	198262 2779120	273838 +++++	659208	1009382	1282060	25.0 625	50.0 +++++	125	200	250
1,1,1,2-Tetrachloroethane	CBZ	Ave	55685 963508	79686 1672023	200974	316138	413573	25.0 625	50.0 1250	125	200	250
Ethylbenzene	CBZ	Qua	131399 1820775	170367 2850802	426297	678539	845631	25.0 625	50.0 1250	125	200	250
m-Xylene & p-Xylene	CBZ	Ave	153254 2383414	212553 4040005	527675	834919	1042884	25.0 625	50.0 1250	125	200	250
o-Xylene	CBZ	Qua	151405 2132292	205828 3443753	506325	770324	984099	25.0 625	50.0 1250	125	200	250
Styrene	CBZ	Ave	226297 +++++	306152 +++++	755106	1132409	1442360	25.0 +++++	50.0 +++++	125	200	250
Bromoform	CBZ	Ave	11971 382388	18849 806062	55692	92297	127202	25.0 625	50.0 1250	125	200	250
Isopropylbenzene	CBZ	Qua	395637 4505204	519573 +++++	1282942	1911788	2346017	25.0 625	50.0 +++++	125	200	250
Bromobenzene	DCB	Ave	69666 1127170	99350 2060126	239705	378393	471458	25.0 625	50.0 1250	125	200	250
1,1,2,2-Tetrachloroethane	CBZ	Ave	47477 767713	71759 1453855	172095	251065	325964	25.0 625	50.0 1250	125	200	250
trans-1,4-Dichloro-2-butene	DCB	Ave	8394 188479	11488 402007	31104	49372	64248	25.0 625	50.0 1250	125	200	250
1,2,3-Trichloropropane	DCB	Qua	13181 224027	19177 439678	46369	72436	88980	25.0 625	50.0 1250	125	200	250
N-Propylbenzene	DCB	Lin2	111875 1644536	146176 +++++	380320	579997	732865	25.0 625	50.0 +++++	125	200	250
2-Chlorotoluene	DCB	Ave	84943 1293841	117690 +++++	290688	444370	556330	25.0 625	50.0 +++++	125	200	250
1,3,5-Trimethylbenzene	DCB	Qua	310903 3663629	408624 5164561	1009118	1525320	1879886	25.0 625	50.0 1250	125	200	250
4-Chlorotoluene	DCB	Qua	80187 1172679	111670 1942800	269426	424064	518059	25.0 625	50.0 1250	125	200	250
tert-Butylbenzene	DCB	Qua	286531 3521083	368439 5304007	915451	1384037	1726019	25.0 625	50.0 1250	125	200	250
1,2,4-Trimethylbenzene	DCB	Qua	296561 3740947	399497 5567438	985498	1482846	1839274	25.0 625	50.0 1250	125	200	250
sec-Butylbenzene	DCB	Qua	432642 4721692	550728 6614693	1390567	2051735	2514863	25.0 625	50.0 1250	125	200	250
1,3-Dichlorobenzene	DCB	Qua	140617 2143238	186936 3657059	482823	718776	940494	25.0 625	50.0 1250	125	200	250
4-Isopropyltoluene	DCB	Qua	339862 3937573	424431 5683062	1081239	1629566	2016739	25.0 625	50.0 1250	125	200	250

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123648

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/03/2014 12:22 Calibration End Date: 11/03/2014 16:24 Calibration ID: 19030

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,4-Dichlorobenzene	DCB	Lin2	136025 2064671	180878 3582102	459873	683824	892716	25.0 625	50.0 1250	125	200	250
1,2-Dichlorobenzene	DCB	Qua	123281 1808226	171194 3009861	416666	634776	809456	25.0 625	50.0 1250	125	200	250
n-Butylbenzene	DCB	Qua	304502 3784161	395979 5418916	1016771	1527628	1916377	25.0 625	50.0 1250	125	200	250
1,2-Dibromo-3-Chloropropane	DCB	Qua	3139 75884	5136 161249	13583	19434	27287	25.0 625	50.0 1250	125	200	250
1,2,4-Trichlorobenzene	DCB	Ave	42584 874689	63194 1674198	169713	258363	344249	25.0 625	50.0 1250	125	200	250
Hexachlorobutadiene	DCB	Lin2	55812 859016	77177 1561854	189406	292767	367257	25.0 625	50.0 1250	125	200	250
Naphthalene	DCB	Qua	69995 1336874	96317 2451542	259950	400841	507856	25.0 625	50.0 1250	125	200	250
1,2,3-Trichlorobenzene	DCB	Qua	33729 667810	45602 1252459	127175	200974	257321	25.0 625	50.0 1250	125	200	250
Dibromofluoromethane (Surr)	FB	Ave	41194 951487	63642 1762628	186929	300577	376917	25.0 625	50.0 1250	125	200	250
1,2-Dichloroethane-d4 (Surr)	FB	Ave	37301 868109	65396 1584927	171974	266578	331198	25.0 625	50.0 1250	125	200	250
Toluene-d8 (Surr)	CBZ	Ave	217455 3533198	305351 5424801	886737	1339596	1598196	25.0 625	50.0 1250	125	200	250
4-Bromofluorobenzene (Surr)	CBZ	Ave	67968 1368902	101150 2533468	285621	445255	558566	25.0 625	50.0 1250	125	200	250

Curve Type Legend:

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

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110304.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Nov-2014 12:22:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0004149-004
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub33

Method: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Nov-2014 16:25:13 Calib Date: 03-Nov-2014 16:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110312.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: journetp Date: 03-Nov-2014 12:19:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.195	3.168	0.027	98	327451	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.255	6.258	-0.003	98	1966404	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.449	9.452	-0.003	87	428086	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.803	11.806	-0.003	95	481225	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.494	5.492	0.002	93	41194	25.0	25.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.890	5.887	0.003	37	37301	25.0	24.9	
$ 7 Toluene-d8 (Surr)	98	7.983	7.980	0.003	92	217455	25.0	31.7	
$ 8 4-Bromofluorobenzene (Surr	95	10.653	10.650	0.003	88	67968	25.0	28.4	
10 Dichlorodifluoromethane	85	1.212	1.209	0.003	88	77008	25.0	26.0	
11 Chloromethane	50	1.303	1.318	-0.015	99	124171	25.0	28.7	
12 Vinyl chloride	62	1.406	1.416	-0.010	98	96687	25.0	31.5	
13 Butadiene	54	1.431	1.434	-0.003	92	95494	25.0	31.0	
14 Bromomethane	94	1.650	1.659	-0.009	84	12887	25.0	29.6	
15 Chloroethane	64	1.735	1.744	-0.009	61	13928	25.0	15.6	
17 Trichlorofluoromethane	101	1.917	1.921	-0.004	95	31482	25.0	20.5	
16 Dichlorofluoromethane	67	1.948	1.957	-0.009	96	43211	25.0	23.8	
19 Ethyl ether	59	2.240	2.225	0.015	94	19286	25.0	24.3	
20 Acrolein	56	2.367	2.365	0.002	85	42659	500.0	428.1	M
21 1,1-Dichloroethene	96	2.410	2.419	-0.009	95	43538	25.0	26.9	
22 1,1,2-Trichloro-1,2,2-trif	101	2.471	2.486	-0.015	93	52679	25.0	23.2	
23 Acetone	43	2.526	2.529	-0.003	96	36783	25.0	11.6	M
24 Iodomethane	142	2.556	2.559	-0.003	95	82885	25.0	23.1	
25 Carbon disulfide	76	2.611	2.620	-0.009	100	154686	25.0	21.4	
28 3-Chloro-1-propene	76	2.824	2.833	-0.009	94	34763	25.0	21.4	
29 Methyl acetate	43	2.872	2.870	0.002	99	170627	125.0	140.4	
30 Methylene Chloride	84	2.988	2.991	-0.003	99	189545	25.0	28.3	
31 2-Methyl-2-propanol	59	3.286	3.265	0.021	95	34778	250.0	345.3	
32 Acrylonitrile	53	3.323	3.326	-0.003	98	159916	250.0	186.0	
33 trans-1,2-Dichloroethene	96	3.335	3.332	0.003	90	69802	25.0	25.9	
34 Methyl tert-butyl ether	73	3.371	3.368	0.003	96	115666	25.0	27.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 Vinyl acetate	43	3.712	3.727	-0.015	94	120511	25.0	25.9	
35 Hexane	57	3.730	3.727	0.003	82	187879	25.0	27.1	
36 1,1-Dichloroethane	63	3.974	3.971	0.003	95	129255	25.0	26.2	
41 2,2-Dichloropropane	77	4.807	4.804	0.003	56	46963	25.0	25.1	
42 cis-1,2-Dichloroethene	96	4.807	4.816	-0.009	82	75839	25.0	28.1	
43 2-Butanone (MEK)	43	4.874	4.859	0.015	88	29394	25.0	18.6	
46 Chlorobromomethane	128	5.129	5.127	0.002	89	24335	25.0	26.2	
48 Tetrahydrofuran	42	5.166	5.157	0.009	82	25715	50.0	59.4	
49 Chloroform	83	5.300	5.303	-0.003	93	115713	25.0	30.8	
50 1,1,1-Trichloroethane	97	5.440	5.449	-0.009	97	70142	25.0	24.9	
51 Cyclohexane	56	5.513	5.516	-0.003	92	174867	25.0	27.7	
53 Carbon tetrachloride	117	5.628	5.625	0.003	97	58390	25.0	23.1	
52 1,1-Dichloropropene	75	5.646	5.650	-0.004	94	91351	25.0	26.6	
54 Benzene	78	5.878	5.881	-0.003	98	309117	25.0	31.1	
59 Isobutyl alcohol	41	5.951	5.942	0.009	96	29128	625.0	752.7	
55 1,2-Dichloroethane	62	5.987	5.984	0.003	94	57100	25.0	28.9	
58 n-Heptane	43	6.291	6.295	-0.004	91	167161	25.0	29.3	
61 Trichloroethene	130	6.669	6.666	0.002	97	70202	25.0	30.0	
63 Methylcyclohexane	83	6.900	6.903	-0.003	95	147450	25.0	29.4	
64 1,2-Dichloropropane	63	6.961	6.958	0.002	96	85209	25.0	31.5	
65 Dibromomethane	93	7.046	7.043	0.003	92	24387	25.0	27.7	
67 1,4-Dioxane	88	7.070	7.067	0.003	37	8103	500.0	435.0	M
68 Dichlorobromomethane	83	7.259	7.262	-0.003	95	53243	25.0	25.4	
70 2-Chloroethyl vinyl ether	63	7.599	7.596	0.003	91	43960	50.0	51.5	
74 trans-1,3-Dichloropropene	75	7.727	7.724	0.003	93	80092	25.0	29.2	
72 4-Methyl-2-pentanone (MIBK	43	7.903	7.901	0.002	96	40191	25.0	30.4	
73 Toluene	91	8.049	8.047	0.002	96	354416	25.0	16.9	
71 cis-1,3-Dichloropropene	75	8.329	8.327	0.003	92	49626	25.0	24.7	
75 Ethyl methacrylate	69	8.408	8.412	-0.004	92	58581	25.0	21.6	
76 1,1,2-Trichloroethane	97	8.518	8.521	-0.003	89	43046	25.0	30.6	
77 Tetrachloroethene	164	8.560	8.564	-0.004	96	62919	25.0	33.2	
78 1,3-Dichloropropane	76	8.670	8.673	-0.003	94	79781	25.0	32.1	
79 2-Hexanone	43	8.755	8.752	0.003	96	27068	25.0	17.5	
81 Chlorodibromomethane	129	8.883	8.880	0.003	93	29166	25.0	26.1	
82 Ethylene Dibromide	107	8.986	8.984	0.002	95	39929	25.0	32.3	
84 Chlorobenzene	112	9.479	9.482	-0.003	95	198262	25.0	24.8	
85 1,1,1,2-Tetrachloroethane	131	9.582	9.586	-0.004	94	55685	25.0	31.7	
86 Ethylbenzene	106	9.595	9.592	0.003	98	131399	25.0	20.7	
87 m-Xylene & p-Xylene	106	9.728	9.732	-0.004	100	153254	25.0	33.5	
88 o-Xylene	106	10.106	10.109	-0.003	98	151405	25.0	18.8	
89 Styrene	104	10.130	10.133	-0.003	95	226297	25.0	32.2	
90 Bromoform	173	10.300	10.304	-0.004	97	11971	25.0	22.3	
91 Isopropylbenzene	105	10.483	10.480	0.003	96	395637	25.0	25.8	
94 Bromobenzene	156	10.775	10.772	0.003	95	69666	25.0	34.3	
93 1,1,2,2-Tetrachloroethane	83	10.805	10.809	-0.004	94	47477	25.0	32.2	
96 trans-1,4-Dichloro-2-buten	53	10.848	10.845	0.003	67	8394	25.0	29.8	
95 1,2,3-Trichloropropane	110	10.854	10.851	0.003	89	13181	25.0	19.7	
97 N-Propylbenzene	120	10.897	10.900	-0.003	99	111875	25.0	25.5	
98 2-Chlorotoluene	126	10.970	10.973	-0.003	96	84943	25.0	34.1	
99 1,3,5-Trimethylbenzene	105	11.091	11.088	0.003	95	310903	25.0	16.4	
100 4-Chlorotoluene	126	11.097	11.101	-0.004	98	80187	25.0	21.1	
101 tert-Butylbenzene	119	11.395	11.393	0.002	94	286531	25.0	18.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
103 1,2,4-Trimethylbenzene	105	11.456	11.459	-0.003	97	296561	25.0	17.4	
104 sec-Butylbenzene	105	11.620	11.618	0.002	94	432642	25.0	13.3	
105 1,3-Dichlorobenzene	146	11.718	11.721	-0.003	99	140617	25.0	23.6	
106 4-Isopropyltoluene	119	11.785	11.782	0.003	97	339862	25.0	17.2	
107 1,4-Dichlorobenzene	146	11.827	11.831	-0.004	96	136025	25.0	25.0	
111 1,2-Dichlorobenzene	146	12.174	12.171	0.003	97	123281	25.0	21.5	
110 n-Butylbenzene	91	12.186	12.190	-0.004	98	304502	25.0	18.0	
112 1,2-Dibromo-3-Chloropropan	75	12.965	12.968	-0.003	68	3139	25.0	25.3	
113 1,2,4-Trichlorobenzene	180	13.780	13.777	0.003	92	42584	25.0	30.1	
115 Hexachlorobutadiene	225	13.932	13.929	0.003	96	55812	25.0	24.8	
116 Naphthalene	128	14.036	14.033	0.003	96	69995	25.0	29.3	
117 1,2,3-Trichlorobenzene	180	14.249	14.252	-0.004	95	33729	25.0	28.7	
S 129 1,2-Dichloroethene, Total	96				0		50.0	54.0	
S 130 Xylenes, Total	106				0		50.0	52.3	
S 131 1,3-Dichloropropene, Total	1				0		50.0	54.0	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00022	Amount Added:	10.00	Units: uL
VOA8260SURR_00017	Amount Added:	1.00	Units: uL
voaWVOA Pri R_00001	Amount Added:	1.00	Units: uL
VOAACROPRI_00002	Amount Added:	20.00	Units: uL
voaWVA pri Re_00004	Amount Added:	1.00	Units: uL
voaW2-cle PRi_00002	Amount Added:	1.00	Units: uL

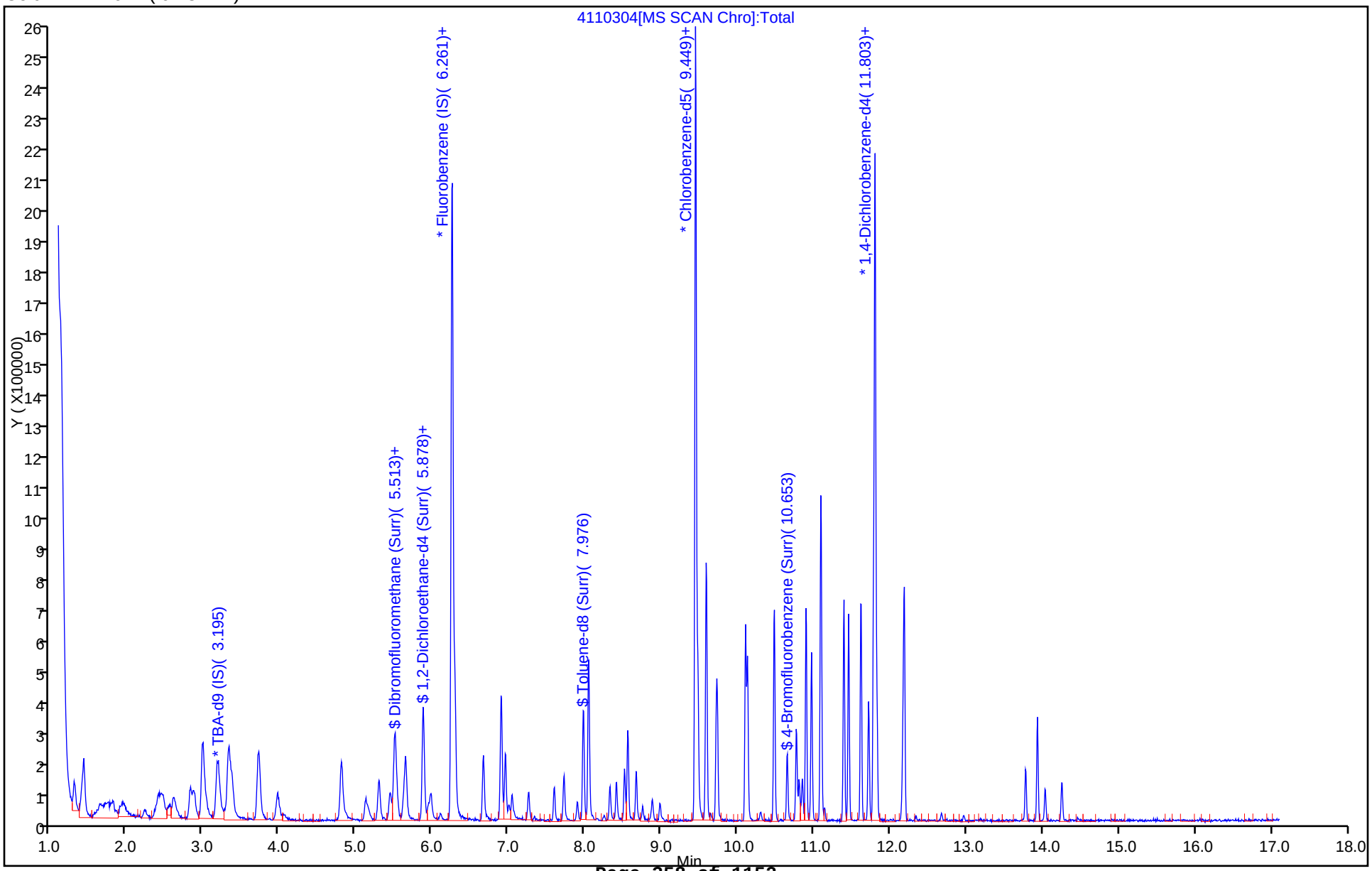
Report Date: 03-Nov-2014 16:25:13 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110304.D

Injection Date:	03-Nov-2014 12:22:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	IC			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

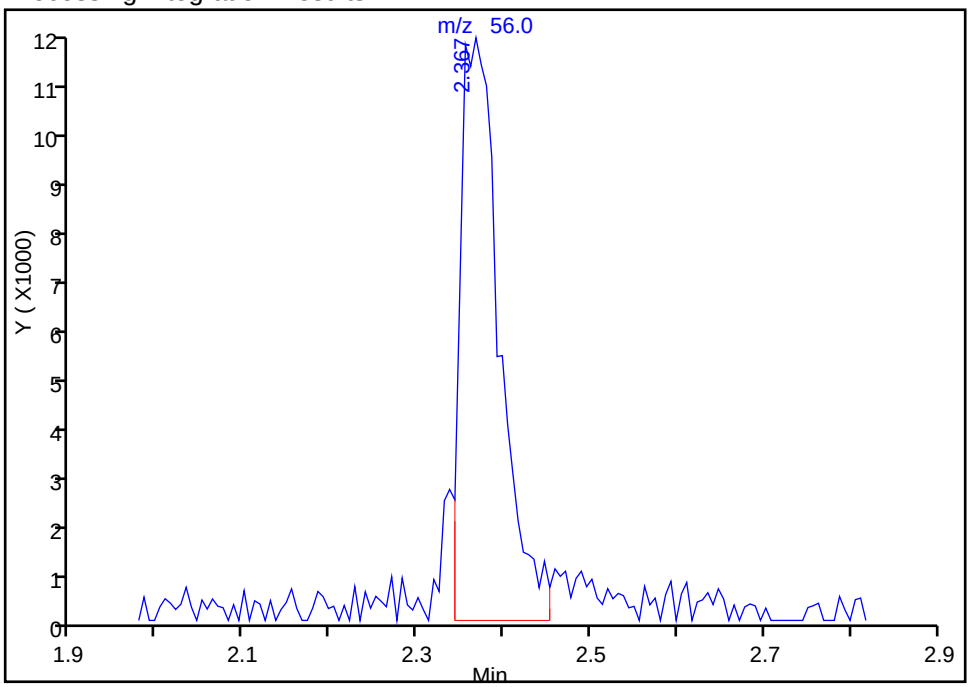
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110304.D				
Injection Date:	03-Nov-2014 12:22:30	Instrument ID:	CHHP4		
Lims ID:	IC				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

20 Acrolein, CAS: 107-02-8

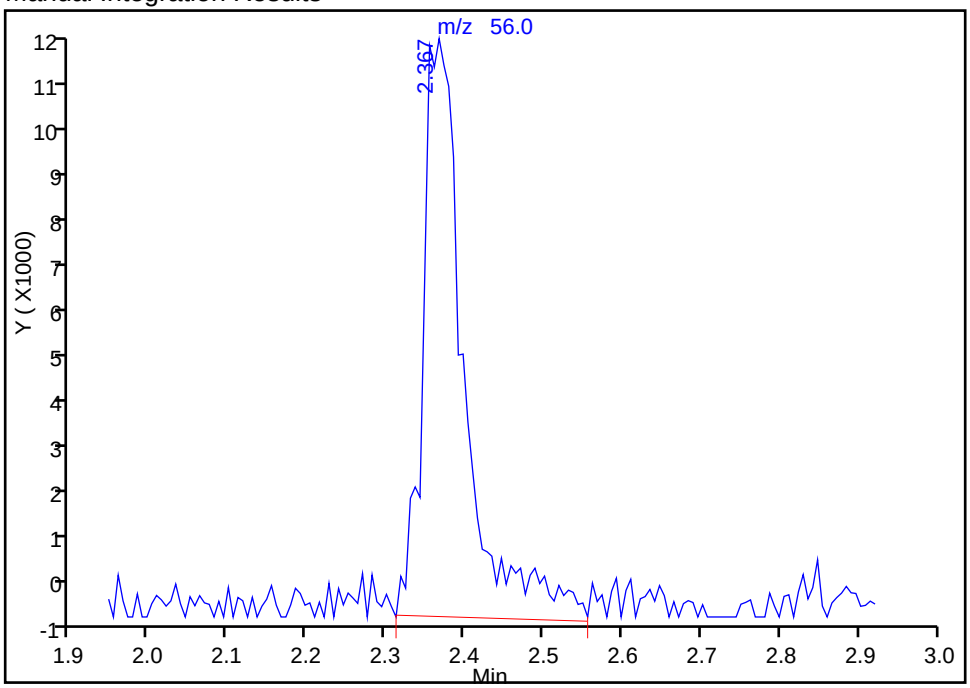
Processing Integration Results

RT: 2.37
Response: 36334
Amount: 500.0000



Manual Integration Results

RT: 2.37
Response: 42659
Amount: 428.1414



Reviewer: journetp, 03-Nov-2014 12:19:08
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

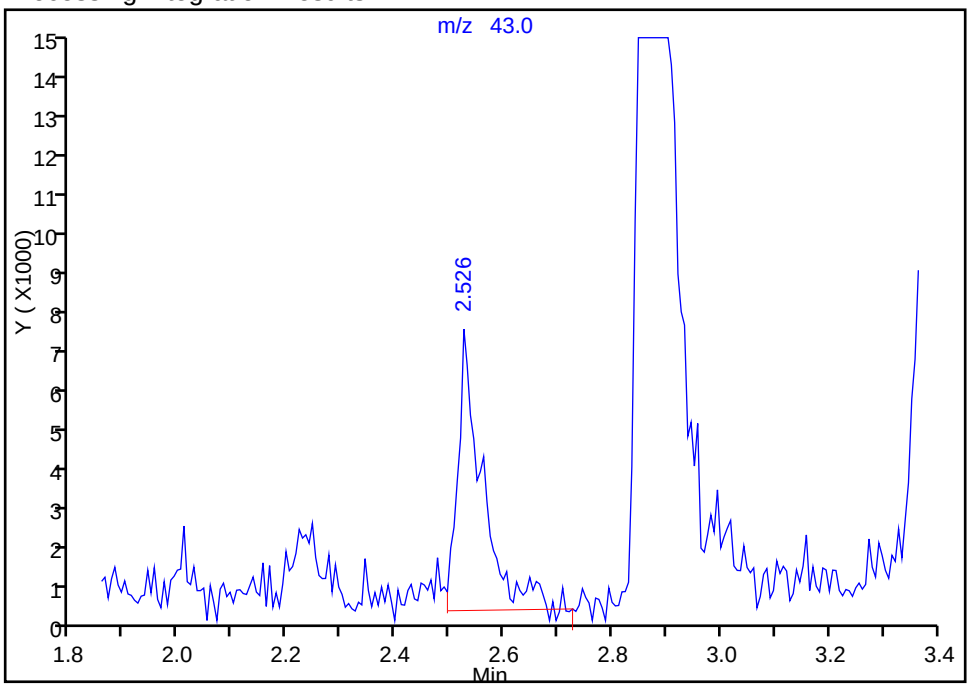
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110304.D				
Injection Date:	03-Nov-2014 12:22:30	Instrument ID:	CHHP4		
Lims ID:	IC				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

23 Acetone, CAS: 67-64-1

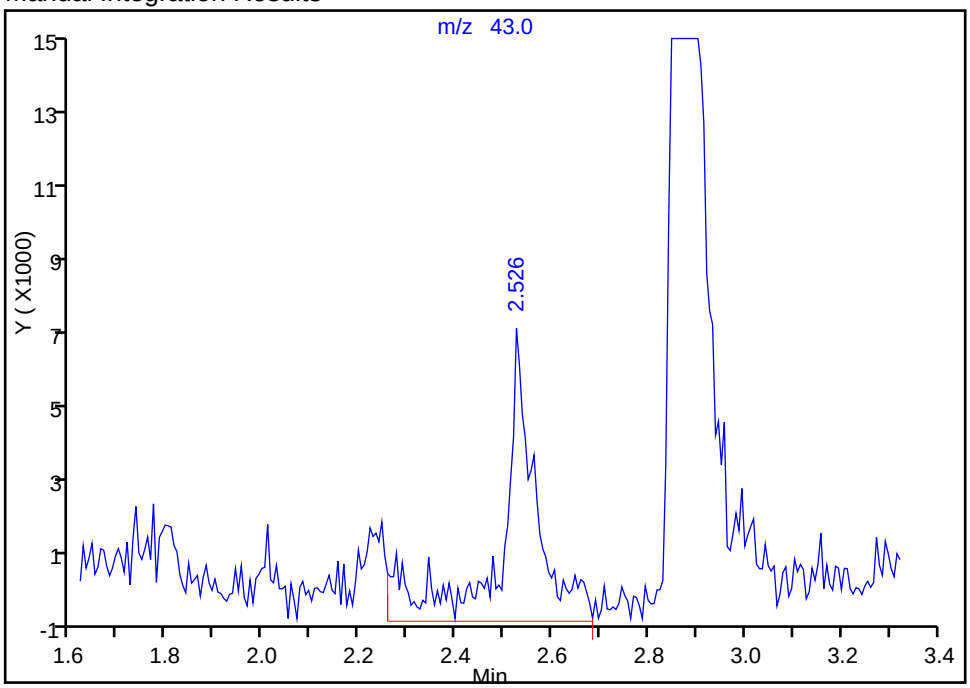
Processing Integration Results

RT: 2.53
Response: 21760
Amount: -4.911854



Manual Integration Results

RT: 2.53
Response: 36783
Amount: 11.591898



Reviewer: journetp, 03-Nov-2014 15:52:58
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

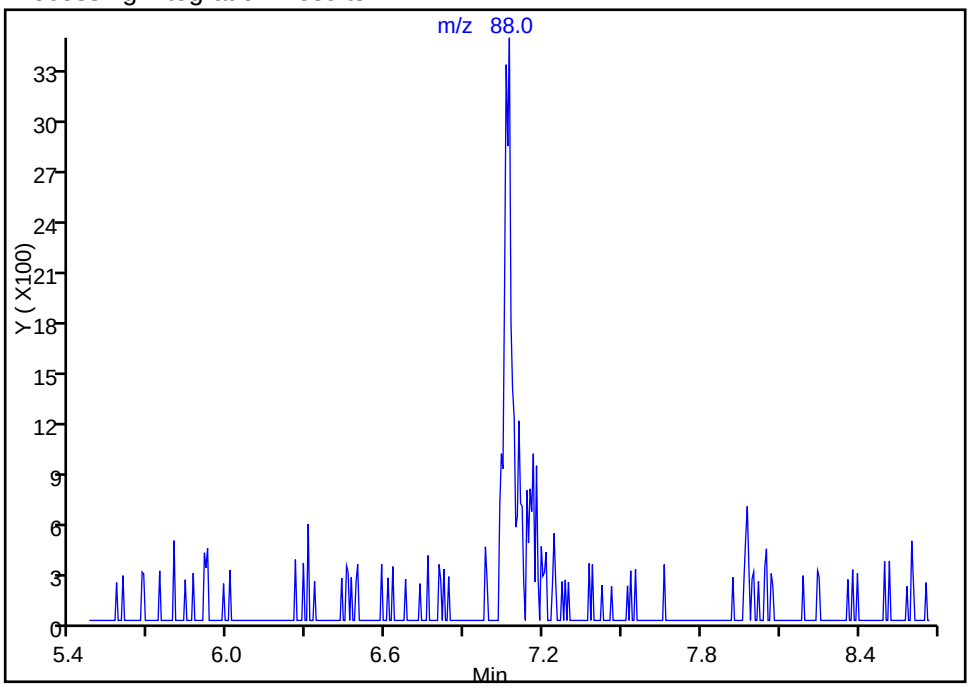
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110304.D
Injection Date: 03-Nov-2014 12:22:30 Instrument ID: CHHP4
Lims ID: IC
Client ID:
Operator ID: 034635 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP4 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

67 1,4-Dioxane, CAS: 123-91-1

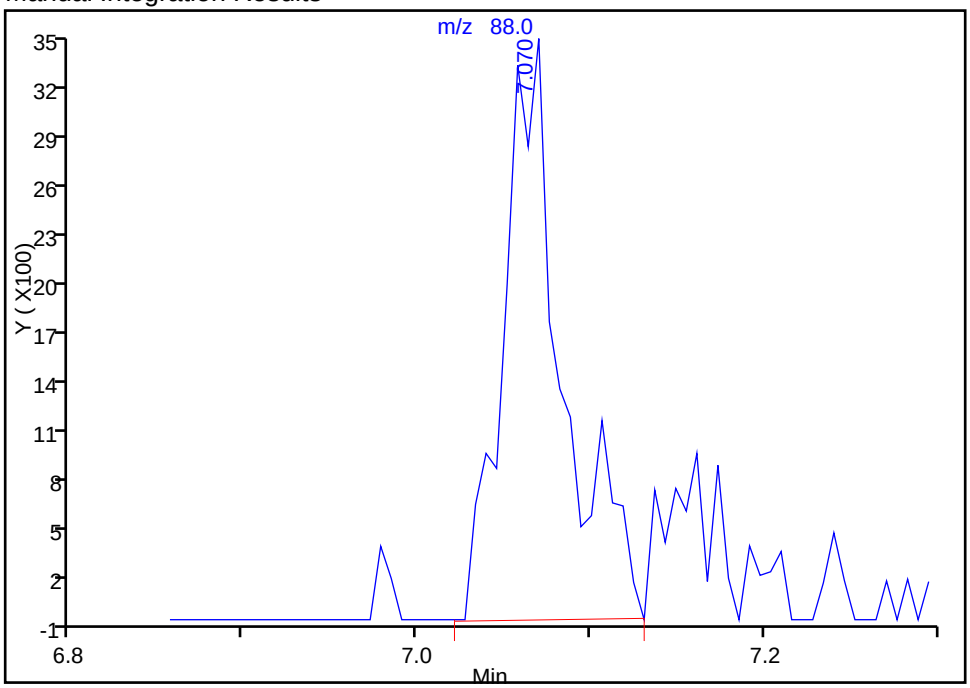
Not Detected
Expected RT: 7.07

Processing Integration Results



Manual Integration Results

RT: 7.07
Response: 8103
Amount: 434.9932



Reviewer: journetp, 03-Nov-2014 12:19:08
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110305.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 03-Nov-2014 12:49:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0004149-005
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub33

Method: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Nov-2014 16:25:14 Calib Date: 03-Nov-2014 16:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110312.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: journetp Date: 03-Nov-2014 12:19:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.168	3.168	0.000	96	315410	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.259	6.258	0.001	98	1644900	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.453	9.452	0.001	86	369496	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.801	11.806	-0.005	96	423089	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.498	5.492	0.006	93	63642	50.0	46.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.894	5.887	0.007	39	65396	50.0	52.1	
$ 7 Toluene-d8 (Surr)	98	7.980	7.980	0.000	93	305351	50.0	51.5	
$ 8 4-Bromofluorobenzene (Surr	95	10.651	10.650	0.001	89	101150	50.0	49.0	
10 Dichlorodifluoromethane	85	1.203	1.209	-0.006	98	109931	50.0	44.4	
11 Chloromethane	50	1.307	1.318	-0.011	99	180374	50.0	49.9	
12 Vinyl chloride	62	1.410	1.416	-0.006	98	130970	50.0	51.0	
13 Butadiene	54	1.435	1.434	0.001	96	124022	50.0	48.1	
14 Bromomethane	94	1.648	1.659	-0.011	93	17523	50.0	48.1	
15 Chloroethane	64	1.733	1.744	-0.011	91	19867	50.0	36.6	
17 Trichlorofluoromethane	101	1.909	1.921	-0.012	94	52252	50.0	40.7	
16 Dichlorofluoromethane	67	1.946	1.957	-0.011	98	65518	50.0	43.2	
19 Ethyl ether	59	2.225	2.225	0.000	92	34251	50.0	51.7	
20 Acrolein	56	2.359	2.365	-0.006	99	61831	625.0	741.8	M
21 1,1-Dichloroethene	96	2.402	2.419	-0.017	95	67911	50.0	44.3	
22 1,1,2-Trichloro-1,2,2-trif	101	2.481	2.486	-0.005	94	87444	50.0	46.1	
23 Acetone	43	2.536	2.529	0.007	80	34836	50.0	24.8	
24 Iodomethane	142	2.548	2.559	-0.011	95	147656	50.0	49.2	
25 Carbon disulfide	76	2.615	2.620	-0.005	99	241578	50.0	40.0	
28 3-Chloro-1-propene	76	2.828	2.833	-0.005	94	56847	50.0	42.3	M
29 Methyl acetate	43	2.870	2.870	0.000	99	284082	250.0	279.4	
30 Methylene Chloride	84	2.986	2.991	-0.005	98	182980	50.0	41.2	
31 2-Methyl-2-propanol	59	3.272	3.265	0.007	94	54665	500.0	563.5	
32 Acrylonitrile	53	3.314	3.326	-0.012	100	253271	500.0	479.4	
33 trans-1,2-Dichloroethene	96	3.339	3.332	0.007	94	103396	50.0	45.9	
34 Methyl tert-butyl ether	73	3.375	3.368	0.007	96	187815	50.0	52.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 Vinyl acetate	43	3.722	3.727	-0.005	68	162373	50.0	46.0	
35 Hexane	57	3.728	3.727	0.001	93	231987	50.0	43.0	
36 1,1-Dichloroethane	63	3.984	3.971	0.013	96	200004	50.0	48.5	
41 2,2-Dichloropropane	77	4.793	4.804	-0.011	77	67651	50.0	43.2	
42 cis-1,2-Dichloroethene	96	4.811	4.816	-0.005	84	113017	50.0	50.0	
43 2-Butanone (MEK)	43	4.860	4.859	0.001	99	39244	50.0	48.1	
46 Chlorobromomethane	128	5.121	5.127	-0.006	90	40316	50.0	51.8	
48 Tetrahydrofuran	42	5.158	5.157	0.001	95	38581	100.0	106.5	
49 Chloroform	83	5.298	5.303	-0.005	93	157284	50.0	50.1	
50 1,1,1-Trichloroethane	97	5.444	5.449	-0.005	97	103073	50.0	43.7	
51 Cyclohexane	56	5.511	5.516	-0.005	92	256129	50.0	48.6	
53 Carbon tetrachloride	117	5.620	5.625	-0.005	96	88906	50.0	42.1	
52 1,1-Dichloropropene	75	5.650	5.650	0.000	95	132891	50.0	46.3	
54 Benzene	78	5.876	5.881	-0.005	97	435268	50.0	52.3	
59 Isobutyl alcohol	41	5.942	5.942	0.000	95	42376	1250.0	1309.1	
55 1,2-Dichloroethane	62	5.985	5.984	0.001	94	88793	50.0	53.7	
58 n-Heptane	43	6.295	6.295	0.000	93	246581	50.0	51.6	
61 Trichloroethene	130	6.666	6.666	0.000	97	89235	50.0	45.5	
63 Methylcyclohexane	83	6.904	6.903	0.001	95	208546	50.0	49.7	
64 1,2-Dichloropropane	63	6.952	6.958	-0.006	98	112656	50.0	49.9	
65 Dibromomethane	93	7.050	7.043	0.007	97	38075	50.0	51.6	
67 1,4-Dioxane	88	7.068	7.067	0.001	66	11249	1000.0	929.9	
68 Dichlorobromomethane	83	7.263	7.262	0.001	97	83306	50.0	47.5	
70 2-Chloroethyl vinyl ether	63	7.597	7.596	0.001	90	72298	100.0	101.3	
74 trans-1,3-Dichloropropene	75	7.725	7.724	0.001	98	115869	50.0	48.2	
72 4-Methyl-2-pentanone (MIBK	43	7.901	7.901	0.000	95	64274	50.0	56.3	
73 Toluene	91	8.047	8.047	0.000	98	472299	50.0	39.5	
71 cis-1,3-Dichloropropene	75	8.327	8.327	0.001	93	78999	50.0	47.1	
75 Ethyl methacrylate	69	8.412	8.412	0.000	93	90656	50.0	48.1	
76 1,1,2-Trichloroethane	97	8.516	8.521	-0.005	89	68064	50.0	56.1	
77 Tetrachloroethene	164	8.564	8.564	0.000	98	78409	50.0	47.9	
78 1,3-Dichloropropane	76	8.674	8.673	0.001	96	114632	50.0	53.4	
79 2-Hexanone	43	8.753	8.752	0.001	93	37708	50.0	39.9	
81 Chlorodibromomethane	129	8.881	8.880	0.001	91	40465	50.0	41.9	
82 Ethylene Dibromide	107	8.984	8.984	0.000	97	56604	50.0	53.0	
84 Chlorobenzene	112	9.477	9.482	-0.005	94	273838	50.0	48.9	
85 1,1,1,2-Tetrachloroethane	131	9.586	9.586	0.000	95	79686	50.0	52.5	
86 Ethylbenzene	106	9.593	9.592	0.001	98	170367	50.0	40.5	
87 m-Xylene & p-Xylene	106	9.732	9.732	0.000	100	212553	50.0	53.9	
88 o-Xylene	106	10.104	10.109	-0.005	97	205828	50.0	41.7	
89 Styrene	104	10.128	10.133	-0.005	96	306152	50.0	50.4	
90 Bromoform	173	10.304	10.304	0.000	95	18849	50.0	40.8	
91 Isopropylbenzene	105	10.481	10.480	0.001	95	519573	50.0	45.2	
94 Bromobenzene	156	10.773	10.772	0.001	95	99350	50.0	55.6	
93 1,1,2,2-Tetrachloroethane	83	10.809	10.809	0.000	93	71759	50.0	56.4	
96 trans-1,4-Dichloro-2-buten	53	10.846	10.845	0.001	66	11488	50.0	46.4	
95 1,2,3-Trichloropropane	110	10.852	10.851	0.001	89	19177	50.0	46.6	
97 N-Propylbenzene	120	10.901	10.900	0.000	99	146176	50.0	46.0	
98 2-Chlorotoluene	126	10.974	10.973	0.001	97	117690	50.0	53.7	
99 1,3,5-Trimethylbenzene	105	11.089	11.088	0.001	95	408624	50.0	39.3	
100 4-Chlorotoluene	126	11.095	11.101	-0.006	98	111670	50.0	45.3	
101 tert-Butylbenzene	119	11.393	11.393	0.000	94	368439	50.0	40.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
103 1,2,4-Trimethylbenzene	105	11.454	11.459	-0.005	97	399497	50.0	41.1	
104 sec-Butylbenzene	105	11.618	11.618	0.000	94	550728	50.0	35.5	
105 1,3-Dichlorobenzene	146	11.722	11.721	0.001	99	186936	50.0	44.3	
106 4-Isopropyltoluene	119	11.783	11.782	0.001	97	424431	50.0	37.2	
107 1,4-Dichlorobenzene	146	11.825	11.831	-0.006	96	180878	50.0	47.4	
111 1,2-Dichlorobenzene	146	12.172	12.171	0.001	97	171194	50.0	45.4	
110 n-Butylbenzene	91	12.184	12.190	-0.006	98	395979	50.0	39.0	
112 1,2-Dibromo-3-Chloropropan	75	12.963	12.968	-0.005	79	5136	50.0	52.0	
113 1,2,4-Trichlorobenzene	180	13.778	13.777	0.001	93	63194	50.0	50.7	
115 Hexachlorobutadiene	225	13.930	13.929	0.001	93	77177	50.0	49.0	
116 Naphthalene	128	14.033	14.033	0.000	96	96317	50.0	48.6	
117 1,2,3-Trichlorobenzene	180	14.253	14.252	0.000	93	45602	50.0	46.6	
S 129 1,2-Dichloroethene, Total	96				0		100.0	96.0	
S 130 Xylenes, Total	106				0		100.0	95.6	
S 131 1,3-Dichloropropene, Total	1				0		100.0	95.2	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00022	Amount Added:	10.00	Units: uL
VOA8260SURR_00017	Amount Added:	2.00	Units: uL
voaWVOA Pri R_00001	Amount Added:	2.00	Units: uL
VOAACROPRI_00002	Amount Added:	25.00	Units: uL
voaWVA pri Re_00004	Amount Added:	2.00	Units: uL
voaW2-cle PRi_00002	Amount Added:	2.00	Units: uL

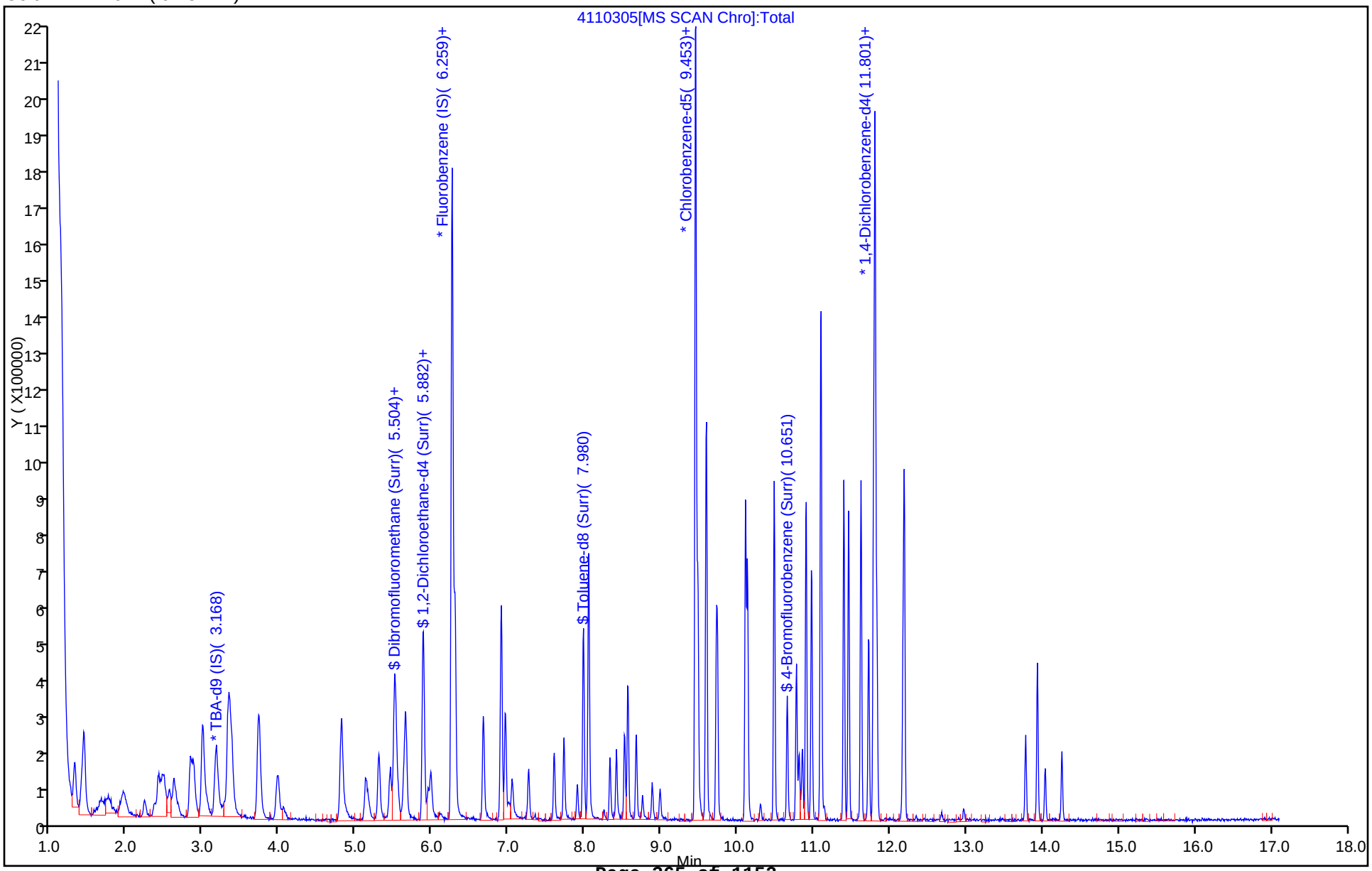
Report Date: 03-Nov-2014 16:25:15 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110305.D

Injection Date:	03-Nov-2014 12:49:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	IC			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

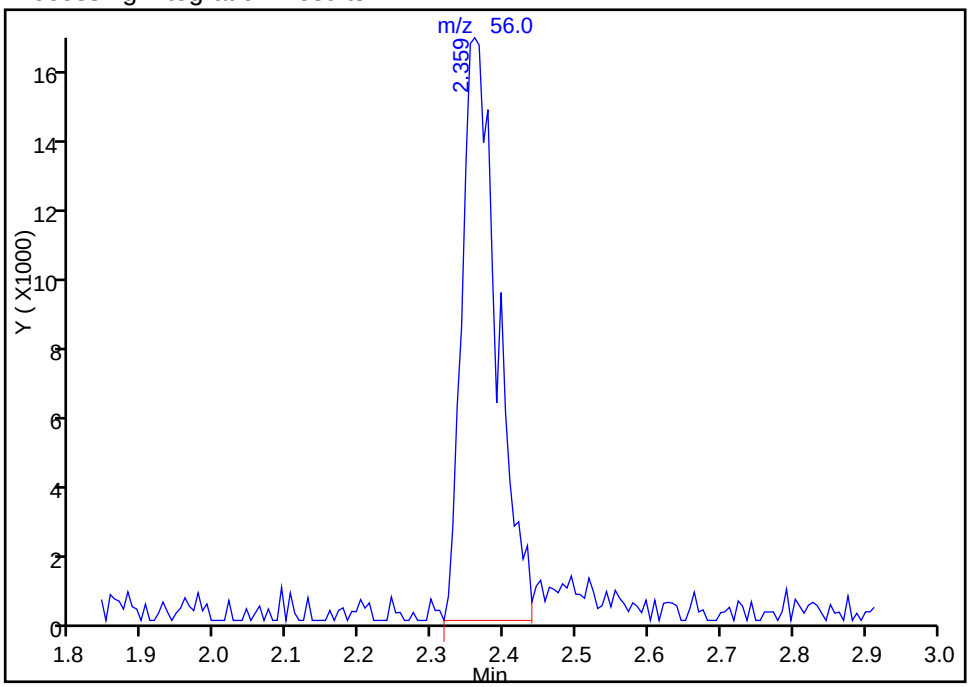
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110305.D
Injection Date: 03-Nov-2014 12:49:30 Instrument ID: CHHP4
Lims ID: IC
Client ID:
Operator ID: 034635 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP4 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

20 Acrolein, CAS: 107-02-8

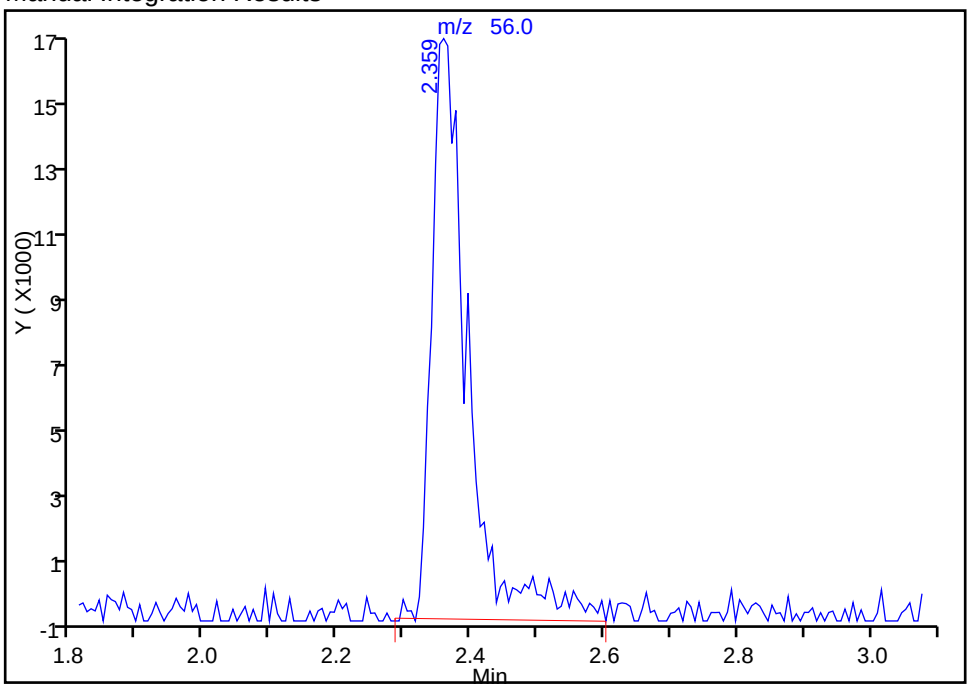
Processing Integration Results

RT: 2.36
Response: 55401
Amount: 695.3284



Manual Integration Results

RT: 2.36
Response: 61831
Amount: 741.8499



Reviewer: journetp, 03-Nov-2014 15:54:08
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

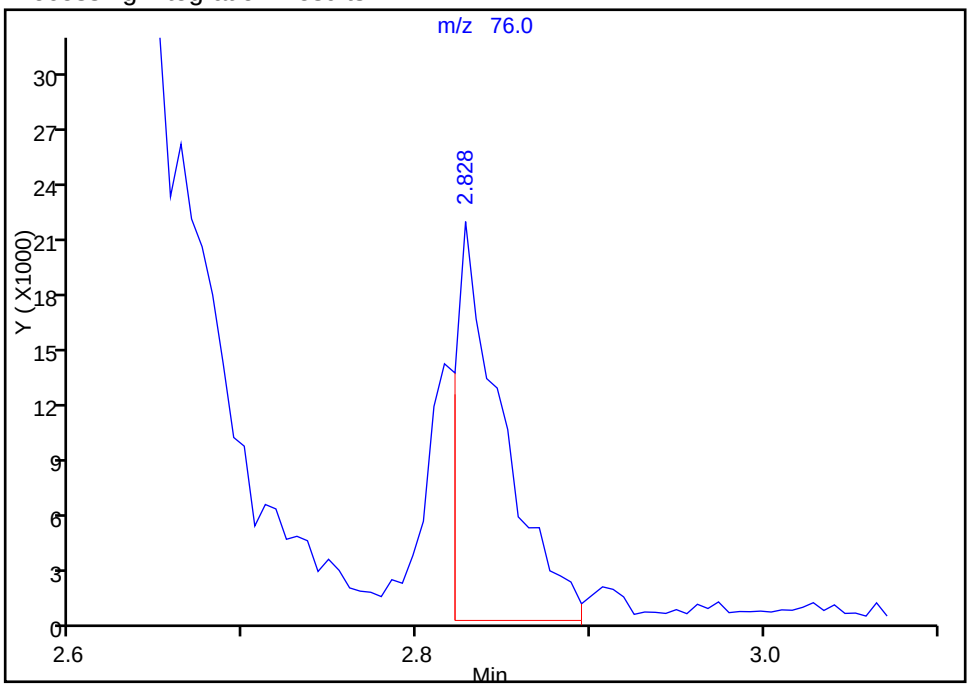
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110305.D
Injection Date: 03-Nov-2014 12:49:30 Instrument ID: CHHP4
Lims ID: IC
Client ID:
Operator ID: 034635 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP4 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

28 3-Chloro-1-propene, CAS: 107-05-1

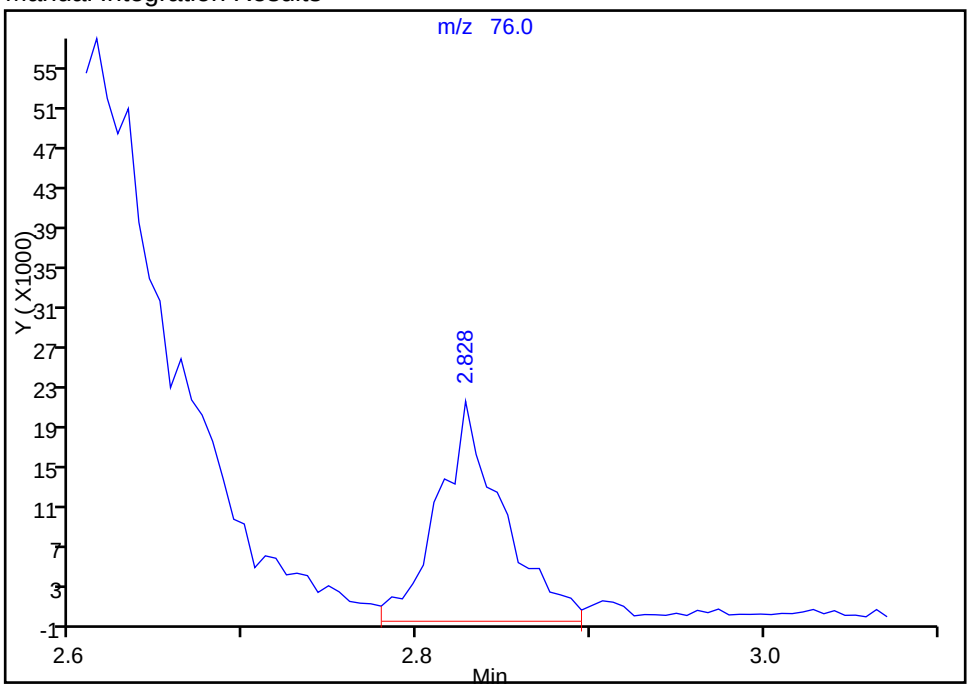
Processing Integration Results

RT: 2.83
Response: 40731
Amount: 41.188353



Manual Integration Results

RT: 2.83
Response: 56847
Amount: 42.298901



Reviewer: journetp, 03-Nov-2014 12:19:41
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110306.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Nov-2014 13:15:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0004149-006
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub33

Method: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Nov-2014 16:25:15 Calib Date: 03-Nov-2014 16:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110312.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: journetp Date: 03-Nov-2014 14:13:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.162	3.168	-0.006	98	324008	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.258	6.258	0.000	98	1760261	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.452	9.452	0.000	86	376902	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.800	11.806	-0.006	97	456162	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.498	5.492	0.006	94	186929	125.0	127.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.887	5.887	0.000	95	171974	125.0	128.1	
$ 7 Toluene-d8 (Surr)	98	7.980	7.980	0.000	93	886737	125.0	146.7	
$ 8 4-Bromofluorobenzene (Surr	95	10.651	10.650	0.000	87	285621	125.0	135.6	
10 Dichlorodifluoromethane	85	1.203	1.209	-0.006	100	316343	125.0	119.3	
11 Chloromethane	50	1.312	1.318	-0.006	99	472810	125.0	122.2	
12 Vinyl chloride	62	1.410	1.416	-0.006	98	328377	125.0	119.6	
13 Butadiene	54	1.434	1.434	0.000	95	336615	125.0	121.9	
14 Bromomethane	94	1.653	1.659	-0.006	93	44636	125.0	114.5	
15 Chloroethane	64	1.738	1.744	-0.006	97	50534	125.0	107.1	
17 Trichlorofluoromethane	101	1.915	1.921	-0.006	93	156608	125.0	113.9	
16 Dichlorofluoromethane	67	1.957	1.957	0.000	99	201068	125.0	124.0	M
19 Ethyl ether	59	2.231	2.225	0.006	97	92279	125.0	130.1	
20 Acrolein	56	2.365	2.365	0.000	97	64925	750.0	727.9	
21 1,1-Dichloroethene	96	2.407	2.419	-0.012	94	206982	125.0	114.5	
22 1,1,2-Trichloro-1,2,2-trif	101	2.480	2.486	-0.006	94	252456	125.0	124.5	
23 Acetone	43	2.529	2.529	0.000	98	67552	125.0	116.3	
24 Iodomethane	142	2.559	2.559	0.000	95	391294	125.0	121.9	
25 Carbon disulfide	76	2.614	2.620	-0.006	99	744471	125.0	115.1	
28 3-Chloro-1-propene	76	2.833	2.833	0.000	94	176559	125.0	122.2	
29 Methyl acetate	43	2.870	2.870	0.000	99	695481	625.0	639.1	
30 Methylene Chloride	84	2.991	2.991	0.000	99	358205	125.0	120.7	
31 2-Methyl-2-propanol	59	3.271	3.265	0.006	97	122541	1250.0	1229.7	
32 Acrylonitrile	53	3.320	3.326	-0.006	99	602591	1250.0	1243.6	
33 trans-1,2-Dichloroethene	96	3.332	3.332	0.000	98	288205	125.0	119.6	
34 Methyl tert-butyl ether	73	3.369	3.368	0.001	97	477712	125.0	124.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 Vinyl acetate	43	3.728	3.727	0.001	68	409835	125.0	118.2	
35 Hexane	57	3.728	3.727	0.001	93	602524	125.0	114.1	
36 1,1-Dichloroethane	63	3.977	3.971	0.006	96	534573	125.0	121.0	
41 2,2-Dichloropropane	77	4.804	4.804	0.000	81	194359	125.0	116.1	
42 cis-1,2-Dichloroethene	96	4.810	4.816	-0.006	82	290755	125.0	120.3	
43 2-Butanone (MEK)	43	4.859	4.859	0.000	99	79127	125.0	117.9	
46 Chlorobromomethane	128	5.127	5.127	0.000	92	101583	125.0	122.0	
48 Tetrahydrofuran	42	5.157	5.157	0.000	93	93950	250.0	242.4	
49 Chloroform	83	5.297	5.303	-0.006	94	406135	125.0	120.8	
50 1,1,1-Trichloroethane	97	5.443	5.449	-0.006	99	296710	125.0	117.4	
51 Cyclohexane	56	5.516	5.516	0.000	92	687337	125.0	121.8	
53 Carbon tetrachloride	117	5.626	5.625	0.001	98	261206	125.0	115.6	
52 1,1-Dichloropropene	75	5.650	5.650	0.000	94	367552	125.0	119.8	
54 Benzene	78	5.881	5.881	0.000	98	1157091	125.0	129.9	
59 Isobutyl alcohol	41	5.942	5.942	0.000	97	112799	3125.0	3256.3	
55 1,2-Dichloroethane	62	5.978	5.984	-0.006	95	212433	125.0	120.0	
58 n-Heptane	43	6.295	6.295	0.000	95	637362	125.0	124.6	
61 Trichloroethene	130	6.666	6.666	0.000	98	246174	125.0	117.4	
63 Methylcyclohexane	83	6.903	6.903	0.000	94	552406	125.0	122.9	
64 1,2-Dichloropropane	63	6.958	6.958	0.000	99	296852	125.0	122.7	
65 Dibromomethane	93	7.043	7.043	0.000	97	98410	125.0	124.7	
67 1,4-Dioxane	88	7.055	7.067	-0.012	96	27143	2500.0	2468.7	
68 Dichlorobromomethane	83	7.262	7.262	0.000	97	220935	125.0	117.6	
70 2-Chloroethyl vinyl ether	63	7.597	7.596	0.001	91	177306	250.0	232.1	
74 trans-1,3-Dichloropropene	75	7.724	7.724	0.000	95	309476	125.0	124.6	
72 4-Methyl-2-pentanone (MIBK	43	7.901	7.901	0.000	97	151766	125.0	130.4	
73 Toluene	91	8.047	8.047	0.000	99	1131387	125.0	129.2	
71 cis-1,3-Dichloropropene	75	8.327	8.327	0.001	94	210351	125.0	117.1	
75 Ethyl methacrylate	69	8.412	8.412	0.000	93	216833	125.0	129.4	
76 1,1,2-Trichloroethane	97	8.521	8.521	0.000	89	162661	125.0	131.3	
77 Tetrachloroethene	164	8.564	8.564	0.000	96	209493	125.0	125.5	
78 1,3-Dichloropropane	76	8.673	8.673	0.000	94	287607	125.0	131.2	
79 2-Hexanone	43	8.752	8.752	0.000	97	97701	125.0	130.6	
81 Chlorodibromomethane	129	8.886	8.880	0.006	91	121676	125.0	123.6	
82 Ethylene Dibromide	107	8.984	8.984	0.000	96	139182	125.0	127.7	
84 Chlorobenzene	112	9.482	9.482	0.000	93	659208	125.0	136.5	
85 1,1,1,2-Tetrachloroethane	131	9.586	9.586	0.000	96	200974	125.0	129.8	
86 Ethylbenzene	106	9.592	9.592	0.000	98	426297	125.0	129.1	
87 m-Xylene & p-Xylene	106	9.732	9.732	0.000	98	527675	125.0	131.2	
88 o-Xylene	106	10.103	10.109	-0.006	97	506325	125.0	132.6	
89 Styrene	104	10.133	10.133	0.000	96	755106	125.0	121.9	
90 Bromoform	173	10.304	10.304	0.000	97	55692	125.0	118.1	
91 Isopropylbenzene	105	10.480	10.480	0.000	96	1282942	125.0	131.4	
94 Bromobenzene	156	10.772	10.772	0.000	94	239705	125.0	124.5	
93 1,1,2,2-Tetrachloroethane	83	10.803	10.809	-0.006	93	172095	125.0	132.7	
96 trans-1,4-Dichloro-2-buten	53	10.845	10.845	0.000	68	31104	125.0	116.4	
95 1,2,3-Trichloropropane	110	10.851	10.851	0.000	88	46369	125.0	130.6	
97 N-Propylbenzene	120	10.900	10.900	0.000	98	380320	125.0	134.9	
98 2-Chlorotoluene	126	10.973	10.973	0.000	97	290688	125.0	123.0	
99 1,3,5-Trimethylbenzene	105	11.089	11.088	0.001	96	1009118	125.0	132.1	
100 4-Chlorotoluene	126	11.101	11.101	0.000	98	269426	125.0	128.1	
101 tert-Butylbenzene	119	11.393	11.393	0.000	94	915451	125.0	131.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
103 1,2,4-Trimethylbenzene	105	11.454	11.459	-0.005	97	985498	125.0	132.3	
104 sec-Butylbenzene	105	11.618	11.618	0.000	94	1390567	125.0	136.3	
105 1,3-Dichlorobenzene	146	11.721	11.721	0.000	98	482823	125.0	131.1	
106 4-Isopropyltoluene	119	11.782	11.782	0.000	96	1081239	125.0	132.7	
107 1,4-Dichlorobenzene	146	11.825	11.831	-0.006	96	459873	125.0	136.9	
111 1,2-Dichlorobenzene	146	12.171	12.171	0.000	98	416666	125.0	129.3	
110 n-Butylbenzene	91	12.184	12.190	-0.006	97	1016771	125.0	132.4	
112 1,2-Dibromo-3-Chloropropan	75	12.968	12.968	0.000	79	13583	125.0	134.1	
113 1,2,4-Trichlorobenzene	180	13.777	13.777	0.000	94	169713	125.0	126.4	
115 Hexachlorobutadiene	225	13.936	13.929	0.007	96	189406	125.0	133.7	
116 Naphthalene	128	14.033	14.033	0.000	97	259950	125.0	129.6	
117 1,2,3-Trichlorobenzene	180	14.252	14.252	0.000	95	127175	125.0	128.0	
S 129 1,2-Dichloroethene, Total	96				0		250.0	239.9	
S 130 Xylenes, Total	106				0		250.0	263.8	
S 131 1,3-Dichloropropene, Total	1				0		250.0	241.8	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00022	Amount Added:	10.00	Units: uL
VOA8260SURR_00017	Amount Added:	5.00	Units: uL
voaWVOA Pri R_00001	Amount Added:	5.00	Units: uL
VOAACROPRI_00002	Amount Added:	30.00	Units: uL
voaWVA pri Re_00004	Amount Added:	5.00	Units: uL
voaW2-cle PRi_00002	Amount Added:	5.00	Units: uL

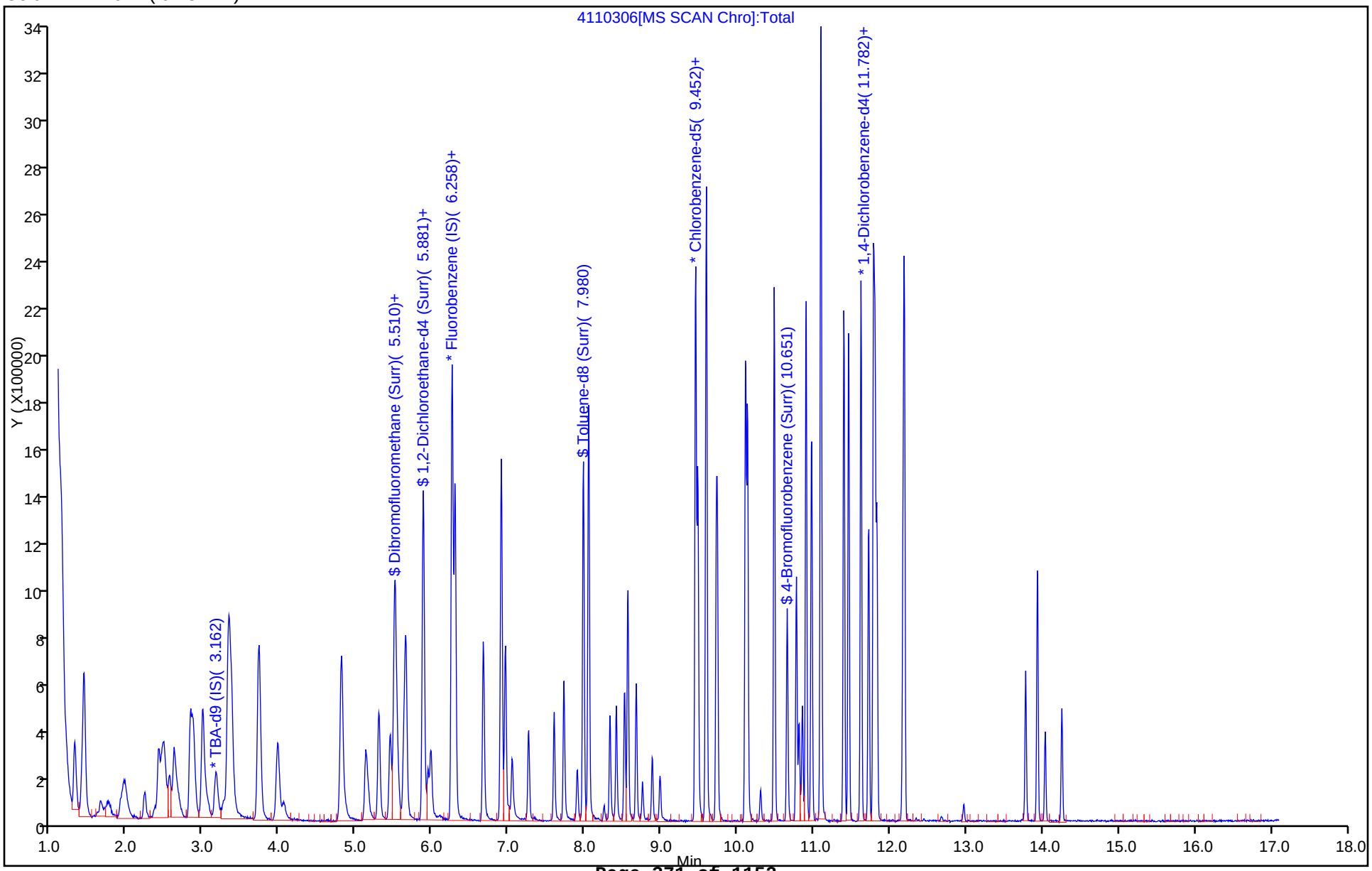
Report Date: 03-Nov-2014 16:25:16 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110306.D

Injection Date:	03-Nov-2014 13:15:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	ic			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

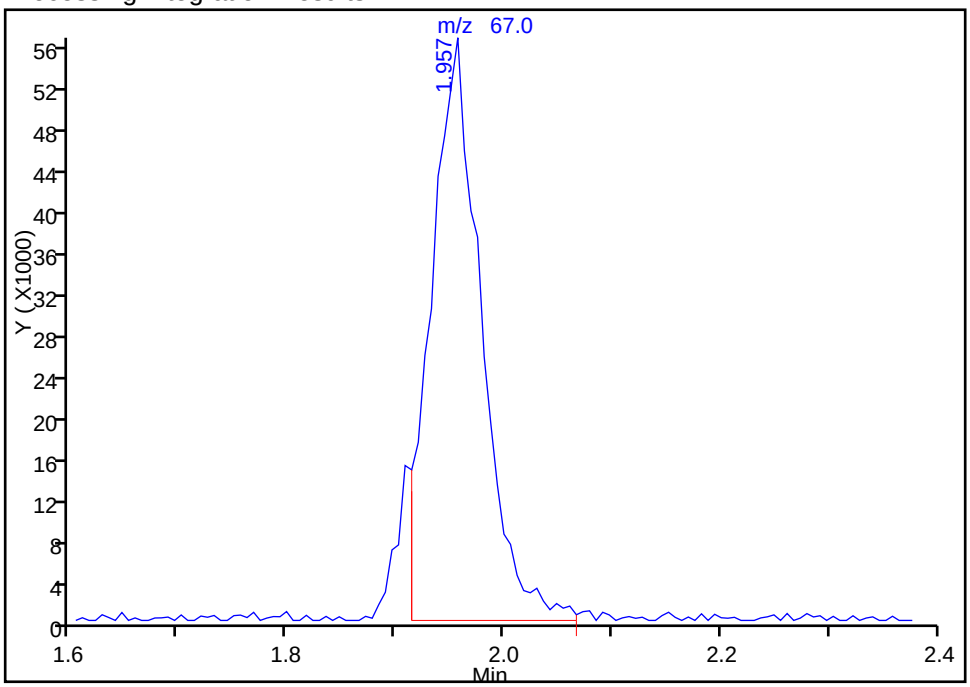
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110306.D
Injection Date: 03-Nov-2014 13:15:30 Instrument ID: CHHP4
Lims ID: ic
Client ID:
Operator ID: 034635 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP4 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

16 Dichlorofluoromethane, CAS: 75-43-4

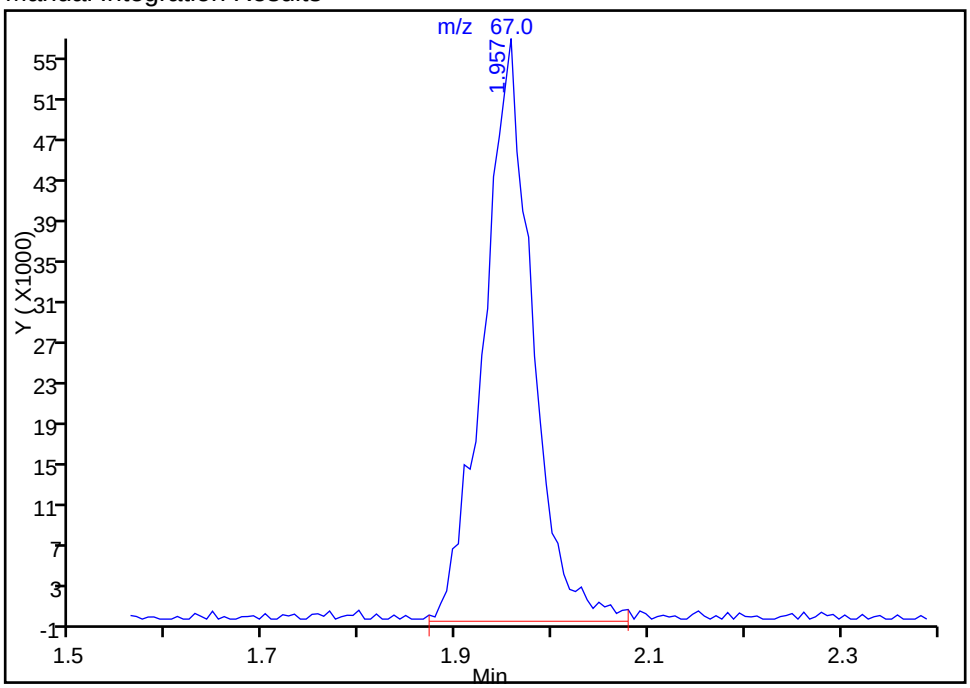
Processing Integration Results

RT: 1.96
Response: 185206
Amount: 116.9280



Manual Integration Results

RT: 1.96
Response: 201068
Amount: 123.9577



Reviewer: journetp, 03-Nov-2014 14:13:30
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110307.D
Lims ID: icis
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 03-Nov-2014 13:42:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS
Misc. Info.: 180-0004149-007
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub33

Method: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Nov-2014 16:25:17 Calib Date: 03-Nov-2014 16:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110312.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: journetp Date: 03-Nov-2014 14:12:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.168	3.168	0.000	96	335088	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.258	6.258	0.000	98	1650203	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.452	9.452	0.000	86	388399	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.806	11.806	0.000	95	462021	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.492	5.492	0.000	94	300577	200.0	219.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.887	5.887	0.000	96	266578	200.0	211.8	
$ 7 Toluene-d8 (Surr)	98	7.980	7.980	0.000	93	1339596	200.0	215.1	
$ 8 4-Bromofluorobenzene (Surr	95	10.650	10.650	0.000	89	445255	200.0	205.1	
10 Dichlorodifluoromethane	85	1.209	1.209	0.000	99	544615	200.0	219.2	
11 Chloromethane	50	1.318	1.318	0.000	99	797392	200.0	219.9	
12 Vinyl chloride	62	1.416	1.416	0.000	98	563241	200.0	218.8	
13 Butadiene	54	1.440	1.434	0.006	98	569038	200.0	219.8	
14 Bromomethane	94	1.659	1.659	0.000	93	71494	200.0	195.7	
15 Chloroethane	64	1.744	1.744	0.000	97	87111	200.0	210.5	
17 Trichlorofluoromethane	101	1.921	1.921	0.000	98	282519	200.0	219.2	
16 Dichlorofluoromethane	67	1.957	1.957	0.000	98	314349	200.0	206.7	
19 Ethyl ether	59	2.225	2.225	0.000	96	139022	200.0	209.1	
20 Acrolein	56	2.365	2.365	0.000	99	83233	875.0	995.4	
21 1,1-Dichloroethene	96	2.419	2.419	0.000	96	345488	200.0	201.1	
22 1,1,2-Trichloro-1,2,2-trif	101	2.486	2.486	0.000	95	432989	200.0	227.7	
23 Acetone	43	2.529	2.529	0.000	98	88962	200.0	197.8	
24 Iodomethane	142	2.559	2.559	0.000	96	661539	200.0	219.9	
25 Carbon disulfide	76	2.620	2.620	0.000	99	1364034	200.0	225.0	
28 3-Chloro-1-propene	76	2.833	2.833	0.000	94	299800	200.0	217.8	
29 Methyl acetate	43	2.870	2.870	0.000	98	1090047	1000.0	1068.5	
30 Methylene Chloride	84	2.991	2.991	0.000	99	525297	200.0	218.4	
31 2-Methyl-2-propanol	59	3.265	3.265	0.000	94	199618	2000.0	1937.0	
32 Acrylonitrile	53	3.326	3.326	0.000	100	970140	2000.0	2248.2	
33 trans-1,2-Dichloroethene	96	3.332	3.332	0.000	97	496423	200.0	219.7	
34 Methyl tert-butyl ether	73	3.368	3.368	0.000	97	770319	200.0	214.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 Vinyl acetate	43	3.727	3.727	0.000	69	705725	200.0	223.1	
35 Hexane	57	3.727	3.727	0.000	93	1048917	200.0	219.0	
36 1,1-Dichloroethane	63	3.971	3.971	0.000	96	900495	200.0	217.5	
41 2,2-Dichloropropane	77	4.804	4.804	0.000	89	336789	200.0	214.5	
42 cis-1,2-Dichloroethene	96	4.816	4.816	0.000	82	480617	200.0	212.1	
43 2-Butanone (MEK)	43	4.859	4.859	0.000	100	109787	200.0	189.6	
46 Chlorobromomethane	128	5.127	5.127	0.000	91	164896	200.0	211.2	
48 Tetrahydrofuran	42	5.157	5.157	0.000	97	155132	400.0	427.0	
49 Chloroform	83	5.303	5.303	0.000	93	653358	200.0	207.4	
50 1,1,1-Trichloroethane	97	5.449	5.449	0.000	99	517077	200.0	218.3	
51 Cyclohexane	56	5.516	5.516	0.000	92	1183341	200.0	223.7	
53 Carbon tetrachloride	117	5.625	5.625	0.000	99	460908	200.0	217.7	
52 1,1-Dichloropropene	75	5.650	5.650	0.000	94	639484	200.0	222.3	
54 Benzene	78	5.881	5.881	0.000	98	1847904	200.0	221.3	
59 Isobutyl alcohol	41	5.942	5.942	0.000	93	158464	5000.0	4879.6	
55 1,2-Dichloroethane	62	5.984	5.984	0.000	94	337212	200.0	203.2	
58 n-Heptane	43	6.295	6.295	0.000	95	1060664	200.0	221.2	
61 Trichloroethene	130	6.666	6.666	0.000	98	421095	200.0	214.1	
63 Methylcyclohexane	83	6.903	6.903	0.000	94	935722	200.0	222.1	
64 1,2-Dichloropropane	63	6.958	6.958	0.000	98	470284	200.0	207.4	
65 Dibromomethane	93	7.043	7.043	0.000	94	150562	200.0	203.5	
67 1,4-Dioxane	88	7.067	7.067	0.000	95	45936	4000.0	4635.6	
68 Dichlorobromomethane	83	7.262	7.262	0.000	97	365633	200.0	207.7	
70 2-Chloroethyl vinyl ether	63	7.596	7.596	0.000	91	310229	400.0	433.1	
74 trans-1,3-Dichloropropene	75	7.724	7.724	0.000	95	512949	200.0	200.8	
72 4-Methyl-2-pentanone (MIBK	43	7.901	7.901	0.000	97	229333	200.0	191.2	
73 Toluene	91	8.047	8.047	0.000	98	1784371	200.0	217.0	
71 cis-1,3-Dichloropropene	75	8.327	8.327	0.000	93	349002	200.0	207.3	
75 Ethyl methacrylate	69	8.412	8.412	0.000	94	336808	200.0	202.0	
76 1,1,2-Trichloroethane	97	8.521	8.521	0.000	89	249383	200.0	195.4	
77 Tetrachloroethene	164	8.564	8.564	0.000	97	350679	200.0	203.9	
78 1,3-Dichloropropane	76	8.673	8.673	0.000	95	437206	200.0	193.6	
79 2-Hexanone	43	8.752	8.752	0.000	96	143692	200.0	194.5	
81 Chlorodibromomethane	129	8.880	8.880	0.000	92	201910	200.0	199.0	
82 Ethylene Dibromide	107	8.984	8.984	0.000	93	207407	200.0	184.7	
84 Chlorobenzene	112	9.482	9.482	0.000	92	1009382	200.0	210.3	
85 1,1,1,2-Tetrachloroethane	131	9.586	9.586	0.000	97	316138	200.0	198.2	
86 Ethylbenzene	106	9.592	9.592	0.000	98	678539	200.0	214.2	
87 m-Xylene & p-Xylene	106	9.732	9.732	0.000	99	834919	200.0	201.4	
88 o-Xylene	106	10.109	10.109	0.000	96	770324	200.0	209.3	
89 Styrene	104	10.133	10.133	0.000	95	1132409	200.0	177.3	
90 Bromoform	173	10.304	10.304	0.000	96	92297	200.0	189.9	
91 Isopropylbenzene	105	10.480	10.480	0.000	96	1911788	200.0	204.5	
94 Bromobenzene	156	10.772	10.772	0.000	95	378393	200.0	194.0	
93 1,1,2,2-Tetrachloroethane	83	10.809	10.809	0.000	93	251065	200.0	187.8	
96 trans-1,4-Dichloro-2-buten	53	10.845	10.845	0.000	71	49372	200.0	182.5	
95 1,2,3-Trichloropropane	110	10.851	10.851	0.000	89	72436	200.0	212.0	
97 N-Propylbenzene	120	10.900	10.900	0.000	98	579997	200.0	211.6	
98 2-Chlorotoluene	126	10.973	10.973	0.000	96	444370	200.0	185.6	
99 1,3,5-Trimethylbenzene	105	11.088	11.088	0.000	96	1525320	200.0	218.8	
100 4-Chlorotoluene	126	11.101	11.101	0.000	98	424064	200.0	213.8	
101 tert-Butylbenzene	119	11.393	11.393	0.000	94	1384037	200.0	214.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
103 1,2,4-Trimethylbenzene	105	11.459	11.459	0.000	97	1482846	200.0	215.4	
104 sec-Butylbenzene	105	11.618	11.618	0.000	95	2051735	200.0	222.7	
105 1,3-Dichlorobenzene	146	11.721	11.721	0.000	98	718776	200.0	202.7	
106 4-Isopropyltoluene	119	11.782	11.782	0.000	96	1629566	200.0	219.0	
107 1,4-Dichlorobenzene	146	11.831	11.831	0.000	95	683824	200.0	209.6	
111 1,2-Dichlorobenzene	146	12.171	12.171	0.000	98	634776	200.0	207.4	
110 n-Butylbenzene	91	12.190	12.190	0.000	97	1527628	200.0	215.3	
112 1,2-Dibromo-3-Chloropropan	75	12.968	12.968	0.000	80	19434	200.0	189.5	
113 1,2,4-Trichlorobenzene	180	13.777	13.777	0.000	94	258363	200.0	190.0	
115 Hexachlorobutadiene	225	13.929	13.929	0.000	96	292767	200.0	213.3	
116 Naphthalene	128	14.033	14.033	0.000	98	400841	200.0	200.5	
117 1,2,3-Trichlorobenzene	180	14.252	14.252	0.000	95	200974	200.0	202.6	
S 129 1,2-Dichloroethene, Total	96				0		400.0	431.8	
S 130 Xylenes, Total	106				0		400.0	410.7	
S 131 1,3-Dichloropropene, Total	1				0		400.0	408.1	

Reagents:

VOA8260INT_00022	Amount Added:	10.00	Units: uL
VOA8260SURR_00017	Amount Added:	8.00	Units: uL
voaWVOA Pri R_00001	Amount Added:	8.00	Units: uL
VOAACROPRI_00002	Amount Added:	35.00	Units: uL
voaWVA pri Re_00004	Amount Added:	8.00	Units: uL
voaW2-cle PRi_00002	Amount Added:	8.00	Units: uL

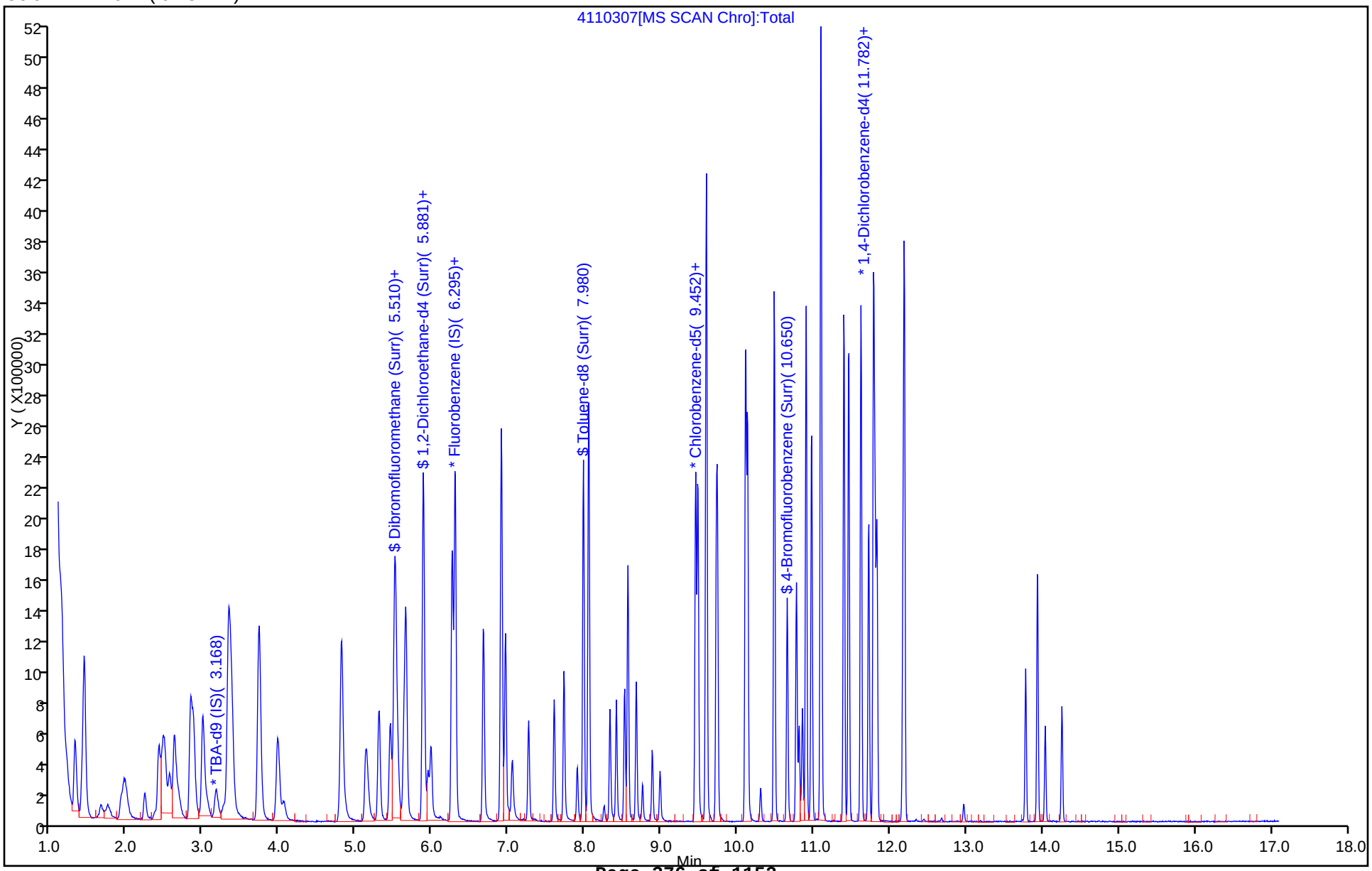
Report Date: 03-Nov-2014 16:25:18 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110307.D

Injection Date:	03-Nov-2014 13:42:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	icis			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110309.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Nov-2014 14:35:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0004149-009
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub33

Method: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Nov-2014 16:25:22 Calib Date: 03-Nov-2014 16:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110312.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: journetp Date: 03-Nov-2014 14:11:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.168	3.168	0.000	99	347497	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.258	6.258	0.000	98	1858435	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.452	9.452	0.000	87	427541	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.806	11.806	0.000	95	505583	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.498	5.492	0.006	94	951487	625.0	615.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.887	5.887	0.000	96	868109	625.0	612.4	
$ 7 Toluene-d8 (Surr)	98	7.980	7.980	0.000	93	3533198	625.0	515.3	
$ 8 4-Bromofluorobenzene (Surr	95	10.650	10.650	0.000	88	1368902	625.0	572.7	
10 Dichlorodifluoromethane	85	1.209	1.209	0.000	99	1733176	625.0	619.3	
11 Chloromethane	50	1.318	1.318	0.000	98	2330249	625.0	570.6	
12 Vinyl chloride	62	1.422	1.416	0.006	98	1586609	625.0	547.3	
13 Butadiene	54	1.434	1.434	0.000	96	1656316	625.0	568.1	
14 Bromomethane	94	1.653	1.659	-0.006	92	233482	625.0	567.5	
15 Chloroethane	64	1.738	1.744	-0.006	97	255990	625.0	588.9	
17 Trichlorofluoromethane	101	1.927	1.921	0.006	95	1035575	625.0	713.6	
16 Dichlorofluoromethane	67	1.957	1.957	0.000	97	1057158	625.0	617.3	
19 Ethyl ether	59	2.231	2.225	0.006	98	448564	625.0	599.0	
20 Acrolein	56	2.365	2.365	0.000	98	110388	1125.0	1172.3	
21 1,1-Dichloroethene	96	2.419	2.419	0.000	97	1135190	625.0	613.5	
22 1,1,2-Trichloro-1,2,2-trif	101	2.474	2.486	-0.012	94	1279042	625.0	597.2	
23 Acetone	43	2.523	2.529	-0.006	99	240731	625.0	581.4	
24 Iodomethane	142	2.559	2.559	0.000	96	2102863	625.0	620.7	
25 Carbon disulfide	76	2.620	2.620	0.000	99	4703940	625.0	689.1	
28 3-Chloro-1-propene	76	2.833	2.833	0.000	94	1027463	625.0	617.2	
29 Methyl acetate	43	2.870	2.870	0.000	98	3212406	3125.0	2796.0	
30 Methylene Chloride	84	2.991	2.991	0.000	99	1505632	625.0	621.8	
31 2-Methyl-2-propanol	59	3.265	3.265	0.000	95	603688	6250.0	5648.6	
32 Acrylonitrile	53	3.326	3.326	0.000	100	2847212	6250.0	6201.9	
33 trans-1,2-Dichloroethene	96	3.332	3.332	0.000	98	1587582	625.0	623.9	
34 Methyl tert-butyl ether	73	3.374	3.368	0.006	97	2351395	625.0	582.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 Vinyl acetate	43	3.727	3.727	0.000	67	2166786	625.0	620.4	
35 Hexane	57	3.727	3.727	0.000	94	3170746	625.0	617.3	
36 1,1-Dichloroethane	63	3.977	3.971	0.006	96	2832176	625.0	607.4	
41 2,2-Dichloropropane	77	4.804	4.804	0.000	90	1184024	625.0	669.7	
42 cis-1,2-Dichloroethene	96	4.816	4.816	0.000	83	1513530	625.0	593.2	
43 2-Butanone (MEK)	43	4.859	4.859	0.000	99	355386	625.0	608.5	
46 Chlorobromomethane	128	5.126	5.127	-0.001	91	540361	625.0	614.7	
48 Tetrahydrofuran	42	5.157	5.157	0.000	95	457987	1250.0	1119.2	
49 Chloroform	83	5.297	5.303	-0.006	93	2050276	625.0	577.8	
50 1,1,1-Trichloroethane	97	5.449	5.449	0.000	98	1724054	625.0	646.3	
51 Cyclohexane	56	5.516	5.516	0.000	94	3490471	625.0	585.9	
53 Carbon tetrachloride	117	5.631	5.625	0.006	98	1591703	625.0	667.4	
52 1,1-Dichloropropene	75	5.656	5.650	0.006	93	2003880	625.0	618.4	
54 Benzene	78	5.881	5.881	0.000	98	5039564	625.0	536.0	
59 Isobutyl alcohol	41	5.942	5.942	0.000	96	519324	15625	14200	
55 1,2-Dichloroethane	62	5.984	5.984	0.000	93	1085070	625.0	580.5	
58 n-Heptane	43	6.301	6.295	0.006	94	3050882	625.0	565.1	
61 Trichloroethene	130	6.672	6.666	0.006	97	1332487	625.0	601.6	
63 Methylcyclohexane	83	6.903	6.903	0.000	94	2704544	625.0	570.0	
64 1,2-Dichloropropane	63	6.958	6.958	0.000	98	1443702	625.0	565.4	
65 Dibromomethane	93	7.043	7.043	0.000	97	505201	625.0	606.3	
67 1,4-Dioxane	88	7.061	7.067	-0.006	98	141379	12500	12485	
68 Dichlorobromomethane	83	7.262	7.262	0.000	96	1265293	625.0	638.1	
70 2-Chloroethyl vinyl ether	63	7.596	7.596	0.000	92	999550	1250.0	1239.2	
74 trans-1,3-Dichloropropene	75	7.724	7.724	0.000	95	1715895	625.0	628.4	
72 4-Methyl-2-pentanone (MIBK	43	7.901	7.901	0.000	96	721478	625.0	546.4	
73 Toluene	91	8.053	8.047	0.006	94	4478637	625.0	602.4	
71 cis-1,3-Dichloropropene	75	8.326	8.327	0.000	93	1244582	625.0	656.4	
75 Ethyl methacrylate	69	8.412	8.412	0.000	93	1066379	625.0	621.9	
76 1,1,2-Trichloroethane	97	8.521	8.521	0.000	90	769743	625.0	547.9	
77 Tetrachloroethene	164	8.564	8.564	0.000	97	1062778	625.0	561.5	
78 1,3-Dichloropropane	76	8.673	8.673	0.000	96	1354026	625.0	544.7	
79 2-Hexanone	43	8.752	8.752	0.000	96	464430	625.0	608.0	
81 Chlorodibromomethane	129	8.880	8.880	0.000	91	731242	625.0	654.6	
82 Ethylene Dibromide	107	8.983	8.984	-0.001	99	692151	625.0	560.0	
84 Chlorobenzene	112	9.482	9.482	0.000	87	2779120	625.0	549.3	
85 1,1,1,2-Tetrachloroethane	131	9.586	9.586	0.000	96	963508	625.0	548.8	
86 Ethylbenzene	106	9.598	9.592	0.006	94	1820775	625.0	611.6	
87 m-Xylene & p-Xylene	106	9.732	9.732	0.000	95	2383414	625.0	522.2	
88 o-Xylene	106	10.109	10.109	0.000	93	2132292	625.0	612.5	
89 Styrene	104	10.133	10.133	0.000	92	3109520	625.0	442.4	
90 Bromoform	173	10.304	10.304	0.000	98	382388	625.0	714.7	
91 Isopropylbenzene	105	10.480	10.480	0.000	96	4505204	625.0	626.3	
94 Bromobenzene	156	10.772	10.772	0.000	95	1127170	625.0	528.1	
93 1,1,2,2-Tetrachloroethane	83	10.808	10.809	-0.001	93	767713	625.0	521.7	
96 trans-1,4-Dichloro-2-buten	53	10.845	10.845	0.000	78	188479	625.0	636.6	
95 1,2,3-Trichloropropane	110	10.857	10.851	0.006	86	224027	625.0	621.6	
97 N-Propylbenzene	120	10.900	10.900	0.000	93	1644536	625.0	575.0	
98 2-Chlorotoluene	126	10.973	10.973	0.000	96	1293841	625.0	493.9	
99 1,3,5-Trimethylbenzene	105	11.088	11.088	0.000	97	3663629	625.0	602.6	
100 4-Chlorotoluene	126	11.100	11.101	-0.001	97	1172679	625.0	618.9	
101 tert-Butylbenzene	119	11.399	11.393	0.006	93	3521083	625.0	609.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
103 1,2,4-Trimethylbenzene	105	11.459	11.459	0.000	96	3740947	625.0	608.4	
104 sec-Butylbenzene	105	11.618	11.618	0.000	95	4721692	625.0	594.6	
105 1,3-Dichlorobenzene	146	11.721	11.721	0.000	96	2143238	625.0	621.0	
106 4-Isopropyltoluene	119	11.782	11.782	0.000	91	3937573	625.0	602.0	
107 1,4-Dichlorobenzene	146	11.830	11.831	-0.001	90	2064671	625.0	611.0	
111 1,2-Dichlorobenzene	146	12.171	12.171	0.000	95	1808226	625.0	618.9	
110 n-Butylbenzene	91	12.189	12.190	-0.001	93	3784161	625.0	604.8	
112 1,2-Dibromo-3-Chloropropan	75	12.962	12.968	-0.006	86	75884	625.0	629.4	
113 1,2,4-Trichlorobenzene	180	13.777	13.777	0.000	95	874689	625.0	587.7	
115 Hexachlorobutadiene	225	13.935	13.929	0.006	97	859016	625.0	601.2	
116 Naphthalene	128	14.033	14.033	0.000	97	1336874	625.0	631.7	
117 1,2,3-Trichlorobenzene	180	14.252	14.252	0.000	94	667810	625.0	628.3	
S 129 1,2-Dichloroethene, Total	96				0		1250.0	1217.1	
S 130 Xylenes, Total	106				0		1250.0	1134.8	
S 131 1,3-Dichloropropene, Total	1				0		1250.0	1284.8	

Reagents:

VOA8260INT_00022	Amount Added:	10.00	Units: uL
VOA8260SURR_00017	Amount Added:	25.00	Units: uL
voaWVOA Pri R_00001	Amount Added:	25.00	Units: uL
VOAACROPRI_00002	Amount Added:	45.00	Units: uL
voaWVA pri Re_00004	Amount Added:	25.00	Units: uL
voaW2-cle PRi_00002	Amount Added:	25.00	Units: uL

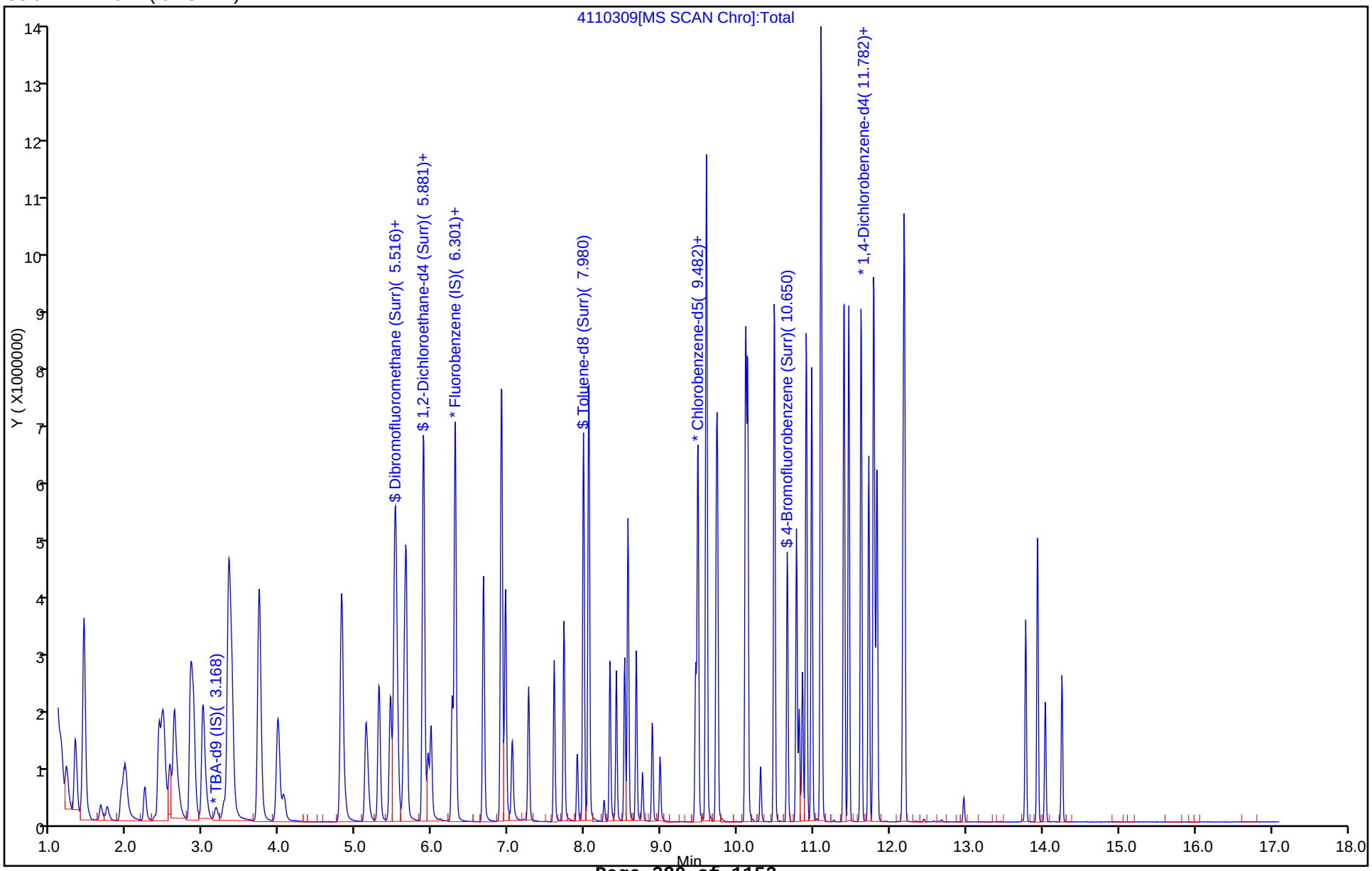
Report Date: 03-Nov-2014 16:25:22 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110309.D

Injection Date:	03-Nov-2014 14:35:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	ic			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110310.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 03-Nov-2014 15:02:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0004149-0110
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub33

Method: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Nov-2014 16:25:24 Calib Date: 03-Nov-2014 16:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110312.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: journetp Date: 03-Nov-2014 14:24:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.192	3.168	0.024	100	341079	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.258	6.258	0.000	97	1738826	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.452	9.452	0.000	87	404119	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.807	11.806	0.001	92	482582	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.498	5.492	0.006	94	1762628	1250.0	1219.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.893	5.887	0.006	95	1584927	1250.0	1195.1	
$ 7 Toluene-d8 (Surr)	98	7.980	7.980	0.000	92	5424801	1250.0	837.1	
$ 8 4-Bromofluorobenzene (Surr	95	10.651	10.650	0.001	90	2533468	1250.0	1121.4	
10 Dichlorodifluoromethane	85	1.209	1.209	0.000	99	3392540	1250.0	1295.6	
11 Chloromethane	50	1.325	1.318	0.007	98	4312184	1250.0	1128.6	
12 Vinyl chloride	62	1.428	1.416	0.012	97	3089600	1250.0	1139.1	
13 Butadiene	54	1.440	1.434	0.006	95	3136694	1250.0	1149.8	
14 Bromomethane	94	1.653	1.659	-0.006	93	464053	1250.0	1205.4	
15 Chloroethane	64	1.745	1.744	0.000	97	479613	1250.0	1257.2	
17 Trichlorofluoromethane	101	1.909	1.921	-0.012	86	1683014	1250.0	1239.5	
16 Dichlorofluoromethane	67	1.957	1.957	0.000	99	1667239	1250.0	1040.5	
19 Ethyl ether	59	2.231	2.225	0.006	97	804307	1250.0	1147.9	
20 Acrolein	56	2.365	2.365	0.000	99	98947	1250.0	1123.0	
21 1,1-Dichloroethene	96	2.408	2.419	-0.011	96	1941678	1250.0	1252.6	
22 1,1,2-Trichloro-1,2,2-trif	101	2.487	2.486	0.001	94	2487932	1250.0	1241.6	
23 Acetone	43	2.535	2.529	0.006	100	474414	1250.0	1257.2	
24 Iodomethane	142	2.554	2.559	-0.005	98	4109897	1250.0	1296.6	
25 Carbon disulfide	76	2.608	2.620	-0.012	100	8821688	1250.0	1381.2	
28 3-Chloro-1-propene	76	2.827	2.833	-0.006	95	2167520	1250.0	1251.2	
29 Methyl acetate	43	2.876	2.870	0.006	97	5685537	6250.0	5288.9	
30 Methylene Chloride	84	2.992	2.991	0.001	97	2838966	1250.0	1250.6	
31 2-Methyl-2-propanol	59	3.296	3.265	0.031	97	1169407	12500	11148	
32 Acrylonitrile	53	3.332	3.326	0.006	97	5156002	12500	12511	
33 trans-1,2-Dichloroethene	96	3.326	3.332	-0.006	97	2925765	1250.0	1228.9	
34 Methyl tert-butyl ether	73	3.375	3.368	0.007	97	4359497	1250.0	1154.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 Vinyl acetate	43	3.722	3.727	-0.005	68	3966624	1250.0	1220.7	
35 Hexane	57	3.722	3.727	-0.005	94	5687369	1250.0	1251.6	
36 1,1-Dichloroethane	63	3.971	3.971	0.000	95	5229058	1250.0	1198.6	
41 2,2-Dichloropropane	77	4.798	4.804	-0.006	93	2127222	1250.0	1285.9	
42 cis-1,2-Dichloroethene	96	4.817	4.816	0.001	81	2828423	1250.0	1184.8	
43 2-Butanone (MEK)	43	4.859	4.859	0.000	100	657940	1250.0	1253.0	
46 Chlorobromomethane	128	5.127	5.127	0.000	92	1011666	1250.0	1229.9	
48 Tetrahydrofuran	42	5.157	5.157	0.000	93	866670	2500.0	2263.7	
49 Chloroform	83	5.297	5.303	-0.006	94	3760354	1250.0	1132.7	
50 1,1,1-Trichloroethane	97	5.449	5.449	0.000	97	3307587	1250.0	1325.3	
51 Cyclohexane	56	5.516	5.516	0.000	95	6379678	1250.0	1144.6	
53 Carbon tetrachloride	117	5.632	5.625	0.007	97	3099947	1250.0	1389.3	
52 1,1-Dichloropropene	75	5.656	5.650	0.006	91	3582918	1250.0	1181.8	
54 Benzene	78	5.881	5.881	0.000	92	7840886	1250.0	891.2	
59 Isobutyl alcohol	41	5.954	5.942	0.012	95	1006186	31250	29404	
55 1,2-Dichloroethane	62	5.985	5.984	0.001	92	2057245	1250.0	1176.4	
58 n-Heptane	43	6.301	6.295	0.006	89	4995867	1250.0	989.0	
61 Trichloroethene	130	6.666	6.666	0.000	96	2366628	1250.0	1142.1	
63 Methylcyclohexane	83	6.909	6.903	0.006	93	4684311	1250.0	1055.2	
64 1,2-Dichloropropane	63	6.958	6.958	0.000	96	2608895	1250.0	1092.1	
65 Dibromomethane	93	7.043	7.043	0.000	98	957656	1250.0	1228.4	
67 1,4-Dioxane	88	7.061	7.067	-0.006	98	284445	25000	25005	
68 Dichlorobromomethane	83	7.262	7.262	0.000	94	2381841	1250.0	1283.8	
70 2-Chloroethyl vinyl ether	63	7.597	7.596	0.001	91	1814167	2500.0	2403.9	
74 trans-1,3-Dichloropropene	75	7.725	7.724	0.001	96	3066001	1250.0	1249.3	
72 4-Methyl-2-pentanone (MIBK	43	7.901	7.901	0.000	96	1304037	1250.0	1044.7	
73 Toluene	91	8.053	8.047	0.006	88	6606546	1250.0	1261.0	
71 cis-1,3-Dichloropropene	75	8.327	8.327	0.001	90	2332929	1250.0	1315.1	
75 Ethyl methacrylate	69	8.412	8.412	0.000	93	1915843	1250.0	1250.7	
76 1,1,2-Trichloroethane	97	8.521	8.521	0.000	91	1389170	1250.0	1046.0	
77 Tetrachloroethene	164	8.564	8.564	0.000	93	1877219	1250.0	1049.2	
78 1,3-Dichloropropane	76	8.674	8.673	0.001	96	2427460	1250.0	1033.1	
79 2-Hexanone	43	8.753	8.752	0.001	96	890566	1250.0	1253.1	
81 Chlorodibromomethane	129	8.887	8.880	0.006	91	1425951	1250.0	1350.4	
82 Ethylene Dibromide	107	8.984	8.984	0.000	98	1328246	1250.0	1137.0	
84 Chlorobenzene	112	9.483	9.482	0.001	81	4484487	1250.0	948.7	
85 1,1,1,2-Tetrachloroethane	131	9.586	9.586	0.000	94	1672023	1250.0	1007.5	
86 Ethylbenzene	106	9.598	9.592	0.006	89	2850802	1250.0	1254.6	
87 m-Xylene & p-Xylene	106	9.732	9.732	0.000	88	4040005	1250.0	936.5	
88 o-Xylene	106	10.109	10.109	0.000	89	3443753	1250.0	1253.7	
89 Styrene	104	10.134	10.133	0.001	84	4814865	1250.0	724.7	
90 Bromoform	173	10.304	10.304	0.000	98	806062	1250.0	1593.9	
91 Isopropylbenzene	105	10.486	10.480	0.006	90	6406312	1250.0	NQ	
94 Bromobenzene	156	10.772	10.772	0.000	95	2060126	1250.0	1011.2	
93 1,1,2,2-Tetrachloroethane	83	10.809	10.809	0.000	93	1453855	1250.0	1045.3	
96 trans-1,4-Dichloro-2-buten	53	10.845	10.845	0.000	81	402007	1250.0	1422.6	
95 1,2,3-Trichloropropane	110	10.858	10.851	0.007	87	439678	1250.0	1250.7	
97 N-Propylbenzene	120	10.906	10.900	0.006	86	2731707	1250.0	1013.1	
98 2-Chlorotoluene	126	10.973	10.973	0.000	91	2285124	1250.0	913.8	
99 1,3,5-Trimethylbenzene	105	11.095	11.088	0.007	93	5164561	1250.0	1267.6	
100 4-Chlorotoluene	126	11.107	11.101	0.006	93	1942800	1250.0	1251.8	
101 tert-Butylbenzene	119	11.399	11.393	0.006	90	5304007	1250.0	1256.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
103 1,2,4-Trimethylbenzene	105	11.460	11.459	0.001	90	5567438	1250.0	1257.8	
104 sec-Butylbenzene	105	11.624	11.618	0.006	93	6614693	1250.0	1278.8	
105 1,3-Dichlorobenzene	146	11.721	11.721	0.000	91	3657059	1250.0	1251.0	
106 4-Isopropyltoluene	119	11.788	11.782	0.006	87	5683062	1250.0	1264.3	
107 1,4-Dichlorobenzene	146	11.831	11.831	0.000	86	3582102	1250.0	1125.8	
111 1,2-Dichlorobenzene	146	12.172	12.171	0.001	91	3009861	1250.0	1251.7	
110 n-Butylbenzene	91	12.190	12.190	0.000	87	5418916	1250.0	1263.2	
112 1,2-Dibromo-3-Chloropropan	75	12.962	12.968	-0.006	86	161249	1250.0	1249.4	
113 1,2,4-Trichlorobenzene	180	13.778	13.777	0.001	95	1674198	1250.0	1178.6	
115 Hexachlorobutadiene	225	13.936	13.929	0.007	98	1561854	1250.0	1161.0	
116 Naphthalene	128	14.033	14.033	0.000	98	2451542	1250.0	1248.7	
117 1,2,3-Trichlorobenzene	180	14.252	14.252	0.000	94	1252459	1250.0	1249.4	
S 129 1,2-Dichloroethene, Total	96				0		2500.0	2413.7	
S 130 Xylenes, Total	106				0		2500.0	2190.2	
S 131 1,3-Dichloropropene, Total	1				0		2500.0	2564.4	

QC Flag Legend

Processing Flags

NQ - Not Quantifiable

Reagents:

VOA8260INT_00022	Amount Added:	10.00	Units: uL
VOA8260SURR_00017	Amount Added:	50.00	Units: uL
voaWVOA Pri R_00001	Amount Added:	50.00	Units: uL
VOAACROPRI_00002	Amount Added:	50.00	Units: uL
voaWVA pri Re_00004	Amount Added:	50.00	Units: uL
voaW2-cle PRi_00002	Amount Added:	50.00	Units: uL

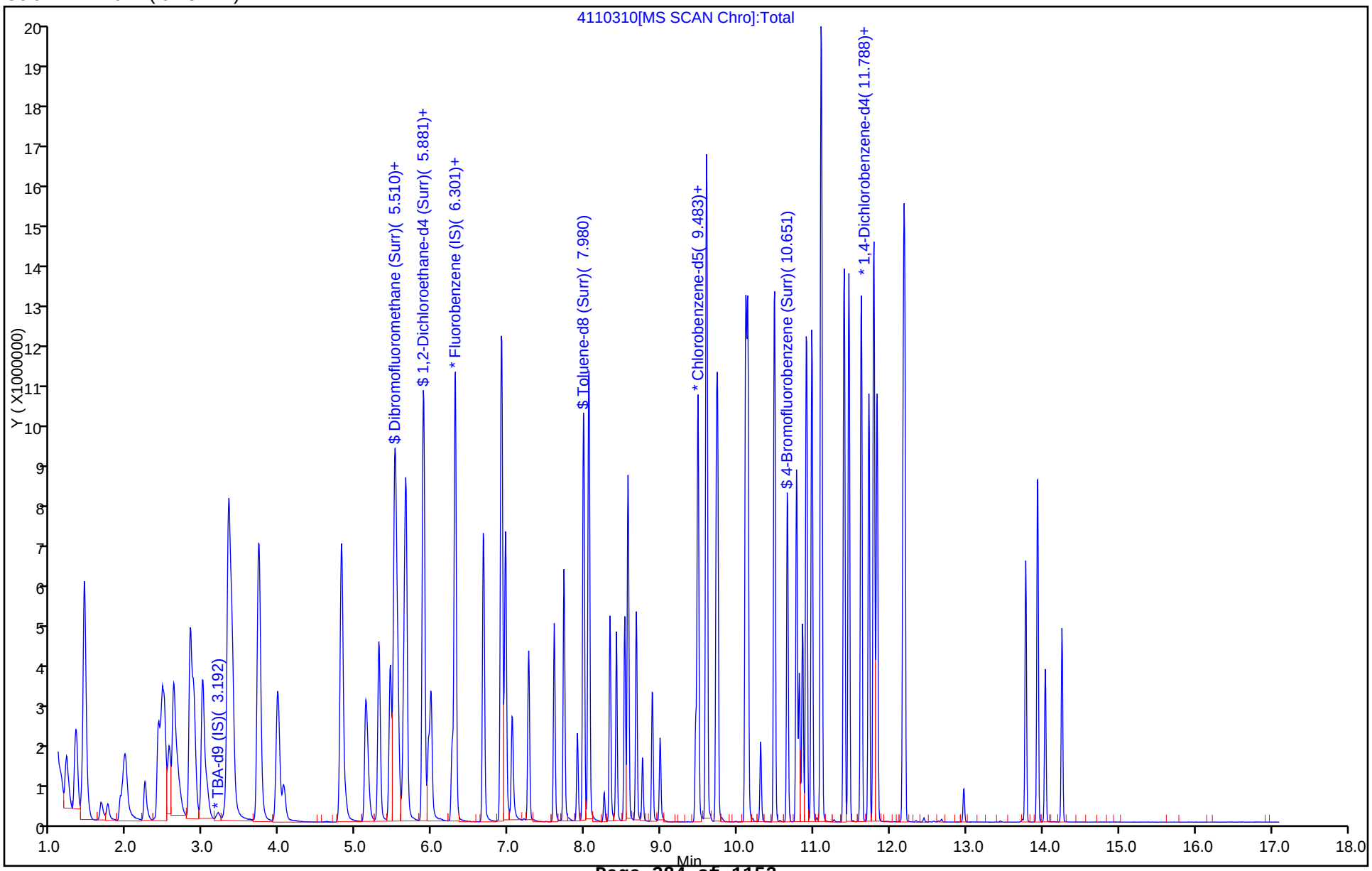
Report Date: 03-Nov-2014 16:25:24 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110310.D

Injection Date:	03-Nov-2014 15:02:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	ic			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110312.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 03-Nov-2014 16:24:30 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0004149-012
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub33

Method: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Nov-2014 16:25:21 Calib Date: 03-Nov-2014 16:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110312.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: journetp Date: 03-Nov-2014 15:49:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.137	3.168	-0.031	97	356286	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.258	6.258	0.000	98	1842006	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.452	9.452	0.000	86	415751	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.806	11.806	0.000	95	498474	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.498	5.492	0.006	96	376917	250.0	246.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.887	5.887	0.000	96	331198	250.0	235.7	
$ 7 Toluene-d8 (Surr)	98	7.980	7.980	0.000	93	1598196	250.0	239.7	
$ 8 4-Bromofluorobenzene (Surr	95	10.651	10.650	0.001	88	558566	250.0	240.3	
10 Dichlorodifluoromethane	85	1.209	1.209	0.000	100	689688	250.0	248.6	
11 Chloromethane	50	1.312	1.318	-0.006	99	970825	250.0	239.8	
12 Vinyl chloride	62	1.422	1.416	0.006	98	632565	250.0	220.1	
13 Butadiene	54	1.434	1.434	0.000	97	648753	250.0	224.5	
14 Bromomethane	94	1.653	1.659	-0.006	92	97759	250.0	239.7	
15 Chloroethane	64	1.750	1.744	0.006	96	139075	250.0	309.6	
17 Trichlorofluoromethane	101	1.933	1.921	0.012	97	440612	250.0	306.3	
16 Dichlorofluoromethane	67	1.957	1.957	0.000	99	495933	250.0	292.2	
19 Ethyl ether	59	2.225	2.225	0.000	97	191154	250.0	257.5	
20 Acrolein	56	2.371	2.365	0.006	95	75280	1000.0	806.6	M
21 1,1-Dichloroethene	96	2.420	2.419	0.001	96	521168	250.0	272.3	
22 1,1,2-Trichloro-1,2,2-trif	101	2.480	2.486	-0.006	95	564911	250.0	266.1	
23 Acetone	43	2.523	2.529	-0.006	100	148344	250.0	335.2	
24 Iodomethane	142	2.566	2.559	0.007	96	826838	250.0	246.2	
25 Carbon disulfide	76	2.626	2.620	0.006	99	1843252	250.0	272.4	
28 3-Chloro-1-propene	76	2.833	2.833	0.000	95	390645	250.0	252.7	
29 Methyl acetate	43	2.864	2.870	-0.006	99	1320665	1250.0	1159.7	
30 Methylene Chloride	84	2.998	2.991	0.007	99	642165	250.0	243.9	
31 2-Methyl-2-propanol	59	3.253	3.265	-0.012	96	203750	2500.0	1859.4	
32 Acrylonitrile	53	3.320	3.326	-0.006	100	1141964	2500.0	2380.1	
33 trans-1,2-Dichloroethene	96	3.338	3.332	0.006	98	635834	250.0	252.1	
34 Methyl tert-butyl ether	73	3.363	3.368	-0.005	96	937481	250.0	234.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 Vinyl acetate	43	3.734	3.727	0.007	91	891442	250.0	253.4	
35 Hexane	57	3.734	3.727	0.007	93	1344500	250.0	253.1	
36 1,1-Dichloroethane	63	3.977	3.971	0.006	96	1151152	250.0	249.1	
41 2,2-Dichloropropane	77	4.804	4.804	0.000	86	451179	250.0	257.5	
42 cis-1,2-Dichloroethene	96	4.816	4.816	0.000	83	603817	250.0	238.8	
43 2-Butanone (MEK)	43	4.859	4.859	0.000	98	177619	250.0	289.3	
46 Chlorobromomethane	128	5.133	5.127	0.006	91	199944	250.0	229.5	
48 Tetrahydrofuran	42	5.151	5.157	-0.006	94	184331	500.0	454.5	
49 Chloroform	83	5.297	5.303	-0.006	94	818661	250.0	232.8	
50 1,1,1-Trichloroethane	97	5.449	5.449	0.000	99	665866	250.0	251.9	
51 Cyclohexane	56	5.516	5.516	0.000	93	1435801	250.0	243.2	
53 Carbon tetrachloride	117	5.632	5.625	0.007	96	614115	250.0	259.8	
52 1,1-Dichloropropene	75	5.656	5.650	0.006	94	805469	250.0	250.8	
54 Benzene	78	5.881	5.881	0.000	98	2317492	250.0	248.7	
59 Isobutyl alcohol	41	5.936	5.942	-0.006	96	199535	6250.0	5504.5	
55 1,2-Dichloroethane	62	5.985	5.984	0.000	94	428789	250.0	231.5	
58 n-Heptane	43	6.301	6.295	0.006	94	1336577	250.0	249.8	
61 Trichloroethene	130	6.666	6.666	0.000	98	551869	250.0	251.4	
63 Methylcyclohexane	83	6.903	6.903	0.000	94	1154026	250.0	245.4	
64 1,2-Dichloropropane	63	6.958	6.958	0.000	98	597118	250.0	236.0	
65 Dibromomethane	93	7.043	7.043	0.000	94	184345	250.0	223.2	
67 1,4-Dioxane	88	7.061	7.067	-0.006	96	50203	5000.0	4535.5	
68 Dichlorobromomethane	83	7.262	7.262	0.000	97	495371	250.0	252.1	
70 2-Chloroethyl vinyl ether	63	7.597	7.596	0.001	91	396960	500.0	496.5	
74 trans-1,3-Dichloropropene	75	7.724	7.724	0.000	96	667130	250.0	244.5	
72 4-Methyl-2-pentanone (MIBK	43	7.901	7.901	0.000	97	304640	250.0	237.2	
73 Toluene	91	8.053	8.047	0.006	98	2241088	250.0	263.0	
71 cis-1,3-Dichloropropene	75	8.327	8.327	0.001	94	466600	250.0	248.3	
75 Ethyl methacrylate	69	8.412	8.412	0.000	92	442080	250.0	251.3	
76 1,1,2-Trichloroethane	97	8.521	8.521	0.000	89	312197	250.0	228.5	
77 Tetrachloroethene	164	8.564	8.564	0.000	96	438023	250.0	238.0	
78 1,3-Dichloropropane	76	8.673	8.673	0.000	94	565116	250.0	233.8	
79 2-Hexanone	43	8.752	8.752	0.000	97	216393	250.0	281.4	
81 Chlorodibromomethane	129	8.886	8.880	0.006	91	273736	250.0	252.0	
82 Ethylene Dibromide	107	8.984	8.984	0.000	97	269950	250.0	224.6	
84 Chlorobenzene	112	9.483	9.482	0.000	92	1282060	250.0	252.4	
85 1,1,1,2-Tetrachloroethane	131	9.586	9.586	0.000	97	413573	250.0	242.2	
86 Ethylbenzene	106	9.592	9.592	0.000	98	845631	250.0	255.2	
87 m-Xylene & p-Xylene	106	9.732	9.732	0.000	98	1042884	250.0	235.0	
88 o-Xylene	106	10.109	10.109	0.000	96	984099	250.0	256.6	
89 Styrene	104	10.133	10.133	0.000	95	1442360	250.0	211.0	
90 Bromoform	173	10.304	10.304	0.000	98	127202	250.0	244.5	
91 Isopropylbenzene	105	10.480	10.480	0.000	96	2346017	250.0	242.2	
94 Bromobenzene	156	10.772	10.772	0.000	94	471458	250.0	224.0	
93 1,1,2,2-Tetrachloroethane	83	10.809	10.809	0.000	92	325964	250.0	227.8	
96 trans-1,4-Dichloro-2-buten	53	10.845	10.845	0.000	70	64248	250.0	220.1	
95 1,2,3-Trichloropropane	110	10.851	10.851	0.000	87	88980	250.0	243.8	
97 N-Propylbenzene	120	10.900	10.900	0.000	97	732865	250.0	250.7	
98 2-Chlorotoluene	126	10.973	10.973	0.000	96	556330	250.0	215.4	
99 1,3,5-Trimethylbenzene	105	11.089	11.088	0.001	97	1879886	250.0	258.1	
100 4-Chlorotoluene	126	11.101	11.101	0.000	99	518059	250.0	246.3	
101 tert-Butylbenzene	119	11.393	11.393	0.000	94	1726019	250.0	255.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
103 1,2,4-Trimethylbenzene	105	11.460	11.459	0.001	97	1839274	250.0	255.1	
104 sec-Butylbenzene	105	11.618	11.618	0.000	95	2514863	250.0	262.2	
105 1,3-Dichlorobenzene	146	11.721	11.721	0.000	98	940494	250.0	251.3	
106 4-Isopropyltoluene	119	11.782	11.782	0.000	95	2016739	250.0	259.5	
107 1,4-Dichlorobenzene	146	11.831	11.831	0.000	95	892716	250.0	257.5	
111 1,2-Dichlorobenzene	146	12.171	12.171	0.000	98	809456	250.0	250.9	
110 n-Butylbenzene	91	12.190	12.190	0.000	97	1916377	250.0	258.7	
112 1,2-Dibromo-3-Chloropropan	75	12.962	12.968	-0.006	83	27287	250.0	245.4	
113 1,2,4-Trichlorobenzene	180	13.777	13.777	0.000	95	344249	250.0	234.6	
115 Hexachlorobutadiene	225	13.936	13.929	0.007	97	367257	250.0	250.8	
116 Naphthalene	128	14.033	14.033	0.000	97	507856	250.0	236.6	
117 1,2,3-Trichlorobenzene	180	14.252	14.252	0.000	94	257321	250.0	241.4	
S 129 1,2-Dichloroethene, Total	96				0		500.0	490.9	
S 130 Xylenes, Total	106				0		500.0	491.6	
S 131 1,3-Dichloropropene, Total	1				0		500.0	492.8	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

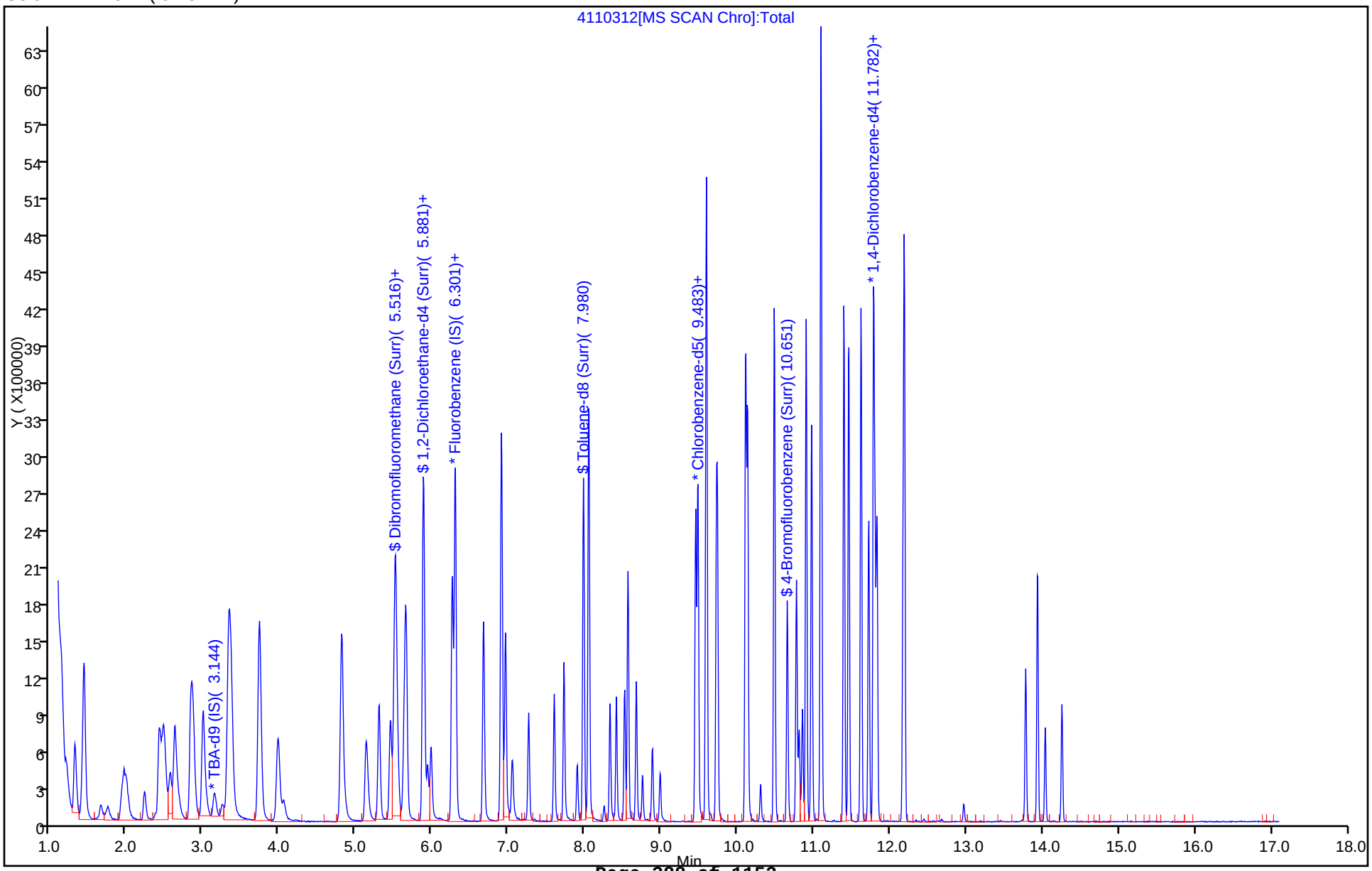
VOA8260INT_00022	Amount Added:	10.00	Units: uL
VOA8260SURR_00017	Amount Added:	10.00	Units: uL
voaWVOA Pri R_00001	Amount Added:	10.00	Units: uL
VOAACROPRI_00002	Amount Added:	40.00	Units: uL
voaWVA pri Re_00004	Amount Added:	10.00	Units: uL
voaW2-cle PRi_00002	Amount Added:	10.00	Units: uL

Report Date: 03-Nov-2014 16:25:21 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110312.D				
Injection Date:	03-Nov-2014 16:24:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	IC			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

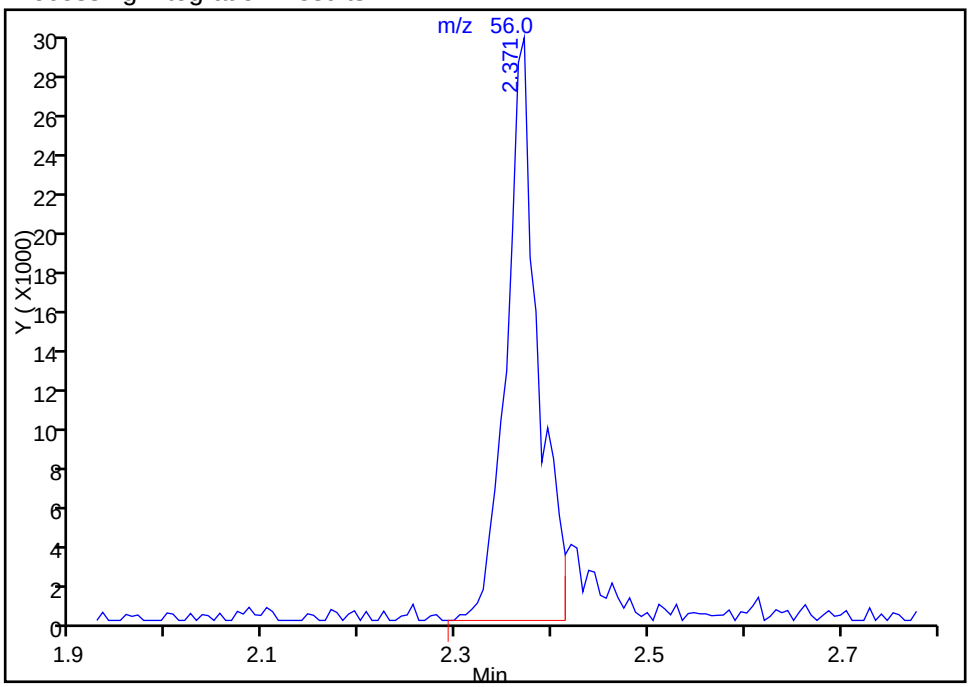
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110312.D
Injection Date: 03-Nov-2014 16:24:30 Instrument ID: CHHP4
Lims ID: IC
Client ID:
Operator ID: 034635 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP4 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

20 Acrolein, CAS: 107-02-8

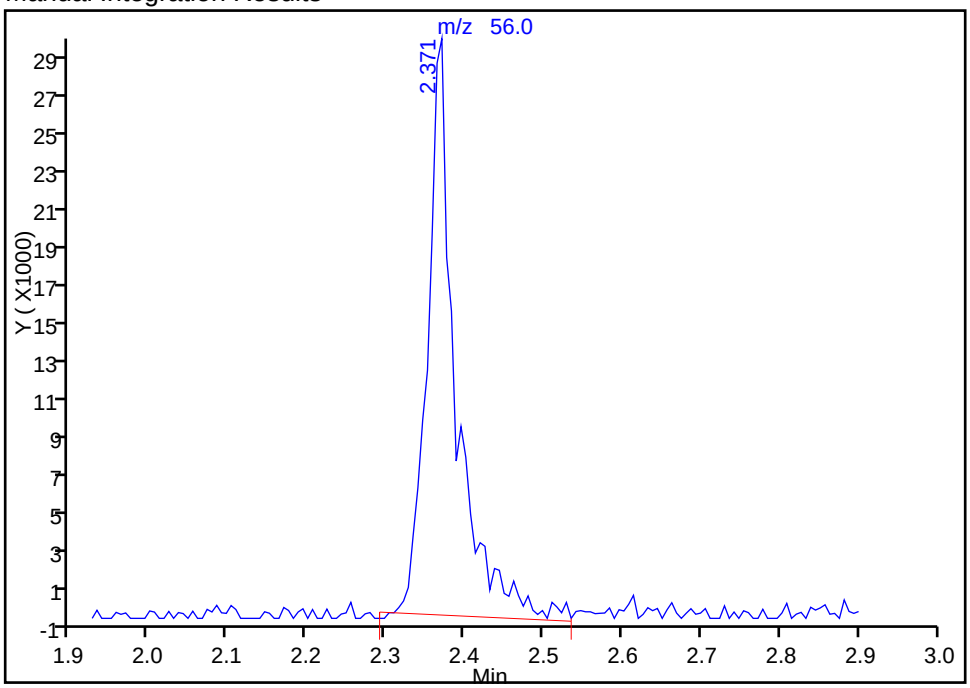
Processing Integration Results

RT: 2.37
Response: 67504
Amount: 742.8691



Manual Integration Results

RT: 2.37
Response: 75280
Amount: 806.5622



Reviewer: journetp, 03-Nov-2014 15:55:47
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 125014

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/13/2014 12:52 Calibration End Date: 11/13/2014 16:27 Calibration ID: 19192

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-125014/2	4111302.D
Level 2	IC 180-125014/3	4111303.D
Level 3	IC 180-125014/4	4111304.D
Level 4	ICIS 180-125014/5	4111305.D
Level 5	IC 180-125014/6	4111306.D
Level 6	IC 180-125014/7	4111307.D
Level 7	IC 180-125014/8	4111308.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.5035 0.4038	0.4180 0.3904	0.4277	0.3860	0.4418	Ave		0.4245			0.1000	9.5		20.0			
Chloromethane	0.7716 0.5307	0.6210 0.5077	0.6736	0.5361	0.6321	Ave		0.6104			0.1000	15.0		20.0			
Vinyl chloride	0.6347 0.3601	0.5485 +++++	0.5648	0.3788	0.4147	Qua	9.4068	0.3943	-0.000080		0.1000				0.9900		0.9900
1,3-Butadiene	0.6145 0.3671	0.5373 0.3561	0.5748	0.3761	0.4347	Qua	12.311	0.3613	-0.000013		0.0100				0.9970		0.9900
Bromomethane	0.0894 0.0581	0.0707 +++++	0.0652	0.0554	0.0665	Ave		0.0676			0.0500	18.0		20.0			
Chloroethane	0.0928 0.0666	0.0745 0.0618	0.0724	0.0645	0.0847	Qua	0.4180	0.0731	-0.000009		0.0500				0.9970		0.9900
Trichlorofluoromethane	0.2979 0.2683	0.2450 0.2369	0.2839	0.2563	0.3093	Qua	-1.820	0.3060	-0.000054		0.1000				0.9990		0.9900
Dichlorofluoromethane	0.3986 0.2736	0.2898 +++++	0.3321	0.2769	0.3304	Ave		0.3169			0.0100	15.0		20.0			
Ethyl ether	0.2282 +++++	0.1555 +++++	+++++	0.2212	+++++	Ave		0.2016			0.0100	20.0		20.0			
Acrolein	0.0147 0.0131	0.0136 +++++	0.0165	0.0140	0.0121	Ave		0.0140			0.0100	11.0		20.0			
1,1-Dichloroethene	0.3888 0.3328	0.3380 0.3080	0.3842	0.3452	0.3514	Qua	0.8897	0.3564	-0.000039		0.1000				1.0000		0.9900
1,1,2-Trichloro-1,2,2-trifluoroethane	0.4709 0.3723	0.3990 0.3563	0.4163	0.3717	0.3927	Ave		0.3970			0.1000	9.6		20.0			
Acetone	0.1632 0.0953	0.1062 0.0911	0.1231	0.0889	0.0817	Qua	1.1386	0.0905	0		0.0500				0.9970		0.9900
Iodomethane	0.6039 0.4999	0.4972 0.4810	0.5477	0.4699	0.5418	Ave		0.5202			0.0100	9.0		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 125014

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/13/2014 12:52 Calibration End Date: 11/13/2014 16:27 Calibration ID: 19192

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	1.0850 1.1612	0.9739 1.0849	1.1395	1.0628	1.2823	Ave		1.1128			0.1000	8.6		20.0			
Allyl chloride	0.2449 0.2603	0.2101 0.2619	0.2494	0.2460	0.2699	Qua	-1.554	0.2644	-0.000001		0.0100				1.0000		0.9900
Methyl acetate	0.1918 0.1526	0.1579 0.1368	0.2043	0.1618	0.1643	Ave		0.1671			0.1000	14.0		20.0			
Methylene Chloride	0.9984 0.3649	0.5398 0.3428	0.4981	0.4221	0.4314	Qua	14.565	0.3607	-0.000024		0.1000				0.9990		0.9900
tert-Butyl alcohol	2.0019 1.5157	1.5975 1.4387	1.4871	1.5174	1.3620	Ave		1.5600			0.0100	13.0		20.0			
Acrylonitrile	0.0879 0.0697	0.0683 0.0630	0.0888	0.0731	0.0740	Qua	3.7074	0.0757	-0.000001		0.0100				0.9990		0.9900
trans-1,2-Dichloroethene	0.4234 0.3684	0.3668 0.3450	0.4074	0.3393	0.3986	Ave		0.3784			0.1000	8.5		20.0			
Methyl tert-butyl ether	0.6798 0.5671	0.5419 0.5335	0.6603	0.5876	0.6195	Ave		0.5985			0.1000	9.5		20.0			
Vinyl acetate	0.8134 0.4994	0.6169 0.4616	0.6203	0.5173	0.5985	Qua	7.9700	0.5323	-0.000062		0.0100				0.9990		0.9900
Hexane	1.2150 0.7455	0.9159 0.6774	0.9376	0.7820	0.8959	Qua	11.553	0.8067	-0.000112		0.0100				0.9990		0.9900
1,1-Dichloroethane	0.7182 0.6727	0.6680 0.6304	0.7253	0.6469	0.7503	Ave		0.6874			0.2000	6.5		20.0			
2,2-Dichloropropane	0.2585 0.2802	0.2617 0.2695	0.2788	0.2495	0.3153	Ave		0.2733			0.0100	7.9		20.0			
cis-1,2-Dichloroethene	0.4152 0.3622	0.3664 0.3346	0.3835	0.3532	0.3982	Ave		0.3733			0.1000	7.4		20.0			
2-Butanone (MEK)	0.1528 0.1106	0.0839 0.1039	0.1411	0.1055	0.0964	Qua	0.0627	0.1118	-0.000006		0.0500				0.9970		0.9900
Chlorobromomethane	0.1238 0.1253	0.1291 0.1231	0.1366	0.1156	0.1276	Ave		0.1259			0.0100	5.1		20.0			
Tetrahydrofuran	0.0779 0.0540	0.0526 0.0546	0.0616	0.0571	0.0571	Ave		0.0593			0.0100	15.0		20.0			
Chloroform	0.5535 0.4867	0.4890 0.4580	0.5380	0.4741	0.5314	Ave		0.5044			0.2000	7.2		20.0			
1,1,1-Trichloroethane	0.4325 0.4152	0.3759 0.4000	0.4242	0.3744	0.4444	Ave		0.4095			0.1000	6.6		20.0			
Cyclohexane	1.0549 0.8741	0.9345 0.7638	1.0074	0.8658	0.9994	Ave		0.9286			0.1000	11.0		20.0			
Carbon tetrachloride	0.3405 0.3783	0.3274 0.3677	0.3558	0.3349	0.4030	Ave		0.3582			0.1000	7.5		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 125014

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/13/2014 12:52 Calibration End Date: 11/13/2014 16:27 Calibration ID: 19192

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloropropene	0.4980 0.4415	0.4560 0.4061	0.4747	0.4322	0.5032	Ave		0.4588			0.0100	7.7		20.0			
Benzene	1.5973 1.2107	1.4636 0.9809	1.5795	1.3682	1.5073	Ave		1.3868			0.5000	16.0		20.0			
Isobutyl alcohol	0.0060 0.0050	0.0037 0.0050	0.0054	0.0047	0.0050	Ave		0.0049		*	0.0100	14.0		20.0			
1,2-Dichloroethane	0.2971 0.2522	0.2478 0.2486	0.2882	0.2470	0.2651	Ave		0.2637			0.1000	7.9		20.0			
n-Heptane	0.9370 0.7119	0.8392 0.6065	0.9213	0.7753	0.8962	Ave		0.8125			0.0100	15.0		20.0			
Trichloroethene	0.3523 0.3045	0.3135 0.2879	0.3455	0.2954	0.3495	Ave		0.3212			0.2000	8.5		20.0			
Methylcyclohexane	0.8179 0.6556	0.7460 0.5615	0.8064	0.6787	0.7866	Ave		0.7218			0.1000	13.0		20.0			
1,2-Dichloropropane	0.4236 0.3477	0.3435 0.3245	0.4010	0.3481	0.3861	Ave		0.3678			0.1000	9.8		20.0			
Dibromomethane	0.1204 0.1160	0.1088 0.1153	0.1333	0.1141	0.1222	Ave		0.1186			0.0100	6.6		20.0			
1,4-Dioxane	0.0027 0.0017	0.0018 0.0018	0.0023	0.0018	0.0018	Qua	0.7964	0.0016	0	*	0.0100				0.9990		0.9900
Dichlorobromomethane	0.2622 0.3002	0.2297 0.2977	0.2829	0.2735	0.3095	Ave		0.2794			0.2000	9.8		20.0			
trans-1,3-Dichloropropene	1.5969 1.7245	1.4679 1.6682	1.7929	1.7050	1.8899	Qua	-6.885	1.8338	-0.000129		0.1000				1.0000		0.9900
4-Methyl-2-pentanone (MIBK)	0.9354 0.7441	0.6210 0.7166	0.8637	0.7760	0.7883	Ave		0.7779			0.1000	13.0		20.0			
Toluene	7.9699 4.7593	6.7234 3.7228	6.8555	6.1105	6.5174	Qua	109.84	5.8892	-0.001816		0.4000				0.9970		0.9900
cis-1,3-Dichloropropene	0.2090 +++++	0.1995 +++++	0.2666	0.2359	0.2682	Ave		0.2359			0.2000	13.0		20.0			
Ethyl methacrylate	1.0952 1.1086	1.0013 1.0482	1.2587	1.1458	1.1943	Qua	-0.277	1.1891	-0.000113		0.0100				1.0000		0.9900
1,1,2-Trichloroethane	0.9443 0.7816	0.7740 0.7535	0.9419	0.8360	0.8982	Ave		0.8471			0.1000	9.6		20.0			
Tetrachloroethene	1.4597 1.0717	1.2260 1.0038	1.2895	1.1662	1.2705	Ave		1.2125			0.2000	12.0		20.0			
1,3-Dichloropropane	1.7572 1.4257	1.4540 1.3471	1.6607	1.5413	1.5884	Ave		1.5392			0.0100	9.3		20.0			
2-Hexanone	0.7316 0.6708	0.5223 0.6399	0.7502	0.5613	0.5705	Qua	-5.905	0.6708	-0.000019		0.1000				0.9980		0.9900

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 125014

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/13/2014 12:52 Calibration End Date: 11/13/2014 16:27 Calibration ID: 19192

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorodibromomethane	0.6321 0.7518	0.5019 0.7838	0.6627	0.6809	0.7575	Ave		0.6815			0.1000	14.0		20.0			
1,2-Dibromoethane	0.7985 0.7196	0.6947 0.7195	0.8645	0.7062	0.7627	Ave		0.7523			0.1000	8.1		20.0			
Chlorobenzene	4.2582 +++++	3.6154 +++++	3.8143	3.3861	3.6261	Lin2	18.064	3.4619			0.5000				0.9950		0.9900
1,1,1,2-Tetrachloroethane	1.1401 0.9882	1.0233 0.8952	1.1292	1.0639	1.1335	Ave		1.0533			0.0100	8.7		20.0			
Ethylbenzene	2.6484 1.8893	2.4865 1.5046	2.5483	2.2217	2.4466	Ave		2.2493			0.1000	18.0		20.0			
m-Xylene & p-Xylene	3.3212 2.5036	2.8648 2.1591	3.0486	2.7488	3.0485	Ave		2.8135			0.1000	14.0		20.0			
o-Xylene	3.1109 2.2288	2.8018 1.8303	2.9429	2.5631	2.7764	Ave		2.6077			0.3000	17.0		20.0			
Styrene	4.8039 3.3347	4.1192 +++++	4.5200	3.8183	4.1601	Qua	2.6759	4.4610	-0.001807		0.3000				0.9980		0.9900
Bromoform	0.2560 0.3889	0.2035 +++++	0.2683	0.2955	0.3501	Qua	-4.549	0.3117	0.0001361		0.1000				0.9980		0.9900
Isopropylbenzene	8.5049 4.8732	7.3851 +++++	7.5227	6.4869	6.8038	Qua	12.900	7.7039	-0.004559		0.1000				0.9980		0.9900
Bromobenzene	1.3653 1.0223	1.1213 0.9422	1.1705	1.1014	1.1479	Ave		1.1244			0.0100	12.0		20.0			
1,1,2,2-Tetrachloroethane	0.9440 0.8099	0.7703 0.7838	0.9448	0.8480	0.8820	Ave		0.8547			0.3000	8.4		20.0			
trans-1,4-Dichloro-2-butene	0.1115 0.1489	0.1023 0.1713	0.1154	0.1344	0.1380	Ave		0.1317			0.0100	18.0		20.0			
1,2,3-Trichloropropane	0.2310 0.1954	0.1802 0.1915	0.2369	0.2071	0.1978	Qua	1.3657	0.1980	-0.000006		0.0100				1.0000		0.9900
N-Propylbenzene	2.0771 1.4636	1.8493 1.2151	1.8500	1.7068	1.8363	Qua	17.049	1.7344	-0.000429		0.0100				0.9990		0.9900
2-Chlorotoluene	1.6484 1.1472	1.3525 +++++	1.3979	1.2928	1.3722	Ave		1.3685			0.0100	12.0		20.0			
1,3,5-Trimethylbenzene	5.8558 3.3171	5.1012 2.4268	4.9776	4.6199	4.6955	Qua	91.474	4.2791	-0.001551		0.0100				0.9960		0.9900
4-Chlorotoluene	1.4845 1.0176	1.2865 0.8465	1.2858	1.2012	1.2866	Ave		1.2012			0.0100	17.0		20.0			
tert-Butylbenzene	5.2675 3.1888	4.6650 2.4772	4.6094	4.1770	4.2848	Qua	76.057	3.9417	-0.001228		0.0100				0.9980		0.9900
1,2,4-Trimethylbenzene	5.6775 3.4866	5.0699 2.6282	4.9956	4.4910	4.6265	Qua	71.823	4.3733	-0.001449		0.0100				0.9980		0.9900

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 125014

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/13/2014 12:52 Calibration End Date: 11/13/2014 16:27 Calibration ID: 19192

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
sec-Butylbenzene	8.1829 4.4111	7.2681 3.1774	7.0133	6.1383	6.3642	Qua	144.44	5.6955	-0.002121		0.0100				0.9950		0.9900
1,3-Dichlorobenzene	2.6724 1.9208	2.2091 1.6681	2.3724	2.1291	2.2400	Qua	16.856	2.1776	-0.000420		0.6000				1.0000		0.9900
4-Isopropyltoluene	6.3488 3.6592	5.5351 2.7101	5.5324	4.8981	5.0355	Qua	95.257	4.6474	-0.001620		0.0100				0.9970		0.9900
1,4-Dichlorobenzene	2.4664 1.8568	2.1145 1.6002	2.1582	1.9586	2.1033	Ave		2.0369			0.5000	13.0		20.0			
1,2-Dichlorobenzene	2.2702 1.6116	1.9012 1.3627	2.0445	1.8472	1.8850	Qua	15.724	1.8614	-0.000410		0.4000				1.0000		0.9900
n-Butylbenzene	5.9203 3.4447	5.2250 2.5393	5.1368	4.4797	4.6803	Qua	82.444	4.3659	-0.001522		0.0100				0.9980		0.9900
1,2-Dibromo-3-Chloropropane	0.0484 0.0641	0.0456 0.0725	0.0513	0.0556	0.0526	Qua	-0.604	0.0553	0.0000142		0.0500				1.0000		0.9900
1,2,4-Trichlorobenzene	0.6398 0.7397	0.6472 0.7264	0.7349	0.7151	0.7365	Ave		0.7056			0.2000	6.1		20.0			
Hexachlorobutadiene	1.1447 0.7523	0.9777 0.6907	0.9699	0.8481	0.8862	Ave		0.8957			0.0100	17.0		20.0			
Naphthalene	1.1039 1.1220	0.8759 1.0785	1.1025	1.1617	1.1205	Qua	-7.767	1.1848	-0.000080		0.0100				1.0000		0.9900
1,2,3-Trichlorobenzene	0.5068 0.5508	0.4610 0.5391	0.5303	0.5473	0.5590	Qua	-3.645	0.5724	-0.000024		0.0100				1.0000		0.9900
Dibromofluoromethane (Surr)	0.2062 0.2223	0.2269 0.2150	0.2482	0.2170	0.2352	Ave		0.2244				6.2		20.0			
1,2-Dichloroethane-d4 (Surr)	0.2037 0.1948	0.1958 0.1966	0.2296	0.1900	0.2117	Ave		0.2032				6.7		20.0			
Toluene-d8 (Surr)	4.7243 3.7308	5.0298 +++++	5.2250	4.5925	4.7813	Ave		4.6806				11.0		20.0			
4-Bromofluorobenzene (Surr)	1.6330 1.4286	1.5616 1.3448	1.6940	1.4211	1.5669	Ave		1.5214				8.3		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 125014

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/13/2014 12:52 Calibration End Date: 11/13/2014 16:27 Calibration ID: 19192

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-125014/2	4111302.D
Level 2	IC 180-125014/3	4111303.D
Level 3	IC 180-125014/4	4111304.D
Level 4	ICIS 180-125014/5	4111305.D
Level 5	IC 180-125014/6	4111306.D
Level 6	IC 180-125014/7	4111307.D
Level 7	IC 180-125014/8	4111308.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	63874 1425242	120065 2818625	235231	430526	605388	25.0 625	50.0 1250	125	200	250
Chloromethane	FB	Ave	97886 1873417	178386 3665874	370479	597863	866054	25.0 625	50.0 1250	125	200	250
Vinyl chloride	FB	Qua	80526 1271000	157552 +++++	310633	422441	568203	25.0 625	50.0 +++++	125	200	250
1,3-Butadiene	FB	Qua	77966 1295697	154360 2571403	316103	419379	595592	25.0 625	50.0 1250	125	200	250
Bromomethane	FB	Ave	11337 205249	20323 +++++	35855	61825	91051	25.0 625	50.0 +++++	125	200	250
Chloroethane	FB	Qua	11779 234915	21411 446169	39819	71968	116110	25.0 625	50.0 1250	125	200	250
Trichlorofluoromethane	FB	Qua	37795 947224	70371 1710503	156143	285877	423831	25.0 625	50.0 1250	125	200	250
Dichlorofluoromethane	FB	Ave	50576 965759	83243 +++++	182636	308768	452738	25.0 625	50.0 +++++	125	200	250
Ethyl ether	FB	Ave	28956 +++++	44657 +++++	+++++	246670	+++++	25.0 +++++	50.0 +++++	+++++	200	+++++
Acrolein	FB	Ave	37283 83263	48762 +++++	54592	68341	66210	500 1125	625 +++++	750	875	1000
1,1-Dichloroethene	FB	Qua	49329 1174902	97092 2223500	211321	385007	481490	25.0 625	50.0 1250	125	200	250
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	59742 1314043	114617 2572296	228925	414576	538039	25.0 625	50.0 1250	125	200	250
Acetone	FB	Qua	20708 336404	30508 657755	67701	99148	112000	25.0 625	50.0 1250	125	200	250
Iodomethane	FB	Ave	76612 1764732	142838 3472713	301243	524029	742312	25.0 625	50.0 1250	125	200	250
Carbon disulfide	FB	Ave	137652 4098766	279780 7832773	626697	1185295	1757018	25.0 625	50.0 1250	125	200	250

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 125014

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/13/2014 12:52 Calibration End Date: 11/13/2014 16:27 Calibration ID: 19192

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Allyl chloride	FB	Qua	31071 918988	60364 1891076	137169	274361	369820	25.0 625	50.0 1250	125	200	250
Methyl acetate	FB	Ave	121688 2692420	226796 4937443	561777	902441	1125960	125 3125	250 6250	625	1000	1250
Methylene Chloride	FB	Qua	126671 1288194	155059 2474759	273927	470723	591130	25.0 625	50.0 1250	125	200	250
tert-Butyl alcohol	TBA	Ave	23933 524068	39188 1025484	94002	163559	174439	250 6250	500 12500	1250	2000	2500
Acrylonitrile	FB	Qua	111463 2460435	196179 4547444	488483	815508	1013701	250 6250	500 12500	1250	2000	2500
trans-1,2-Dichloroethene	FB	Ave	53718 1300362	105363 2490725	224082	378403	546100	25.0 625	50.0 1250	125	200	250
Methyl tert-butyl ether	FB	Ave	86249 2001815	155658 3852087	363148	655303	848875	25.0 625	50.0 1250	125	200	250
Vinyl acetate	FB	Qua	103189 1762970	177209 3332955	341130	576934	820004	25.0 625	50.0 1250	125	200	250
Hexane	FB	Qua	154143 2631619	263122 4890957	515626	872076	1227577	25.0 625	50.0 1250	125	200	250
1,1-Dichloroethane	FB	Ave	91112 2374633	191886 4551726	398889	721385	1028001	25.0 625	50.0 1250	125	200	250
2,2-Dichloropropane	FB	Ave	32791 989114	75166 1945572	153330	278239	431975	25.0 625	50.0 1250	125	200	250
cis-1,2-Dichloroethene	FB	Ave	52672 1278532	105250 2415854	210905	393893	545586	25.0 625	50.0 1250	125	200	250
2-Butanone (MEK)	FB	Qua	19380 390511	24091 749894	77621	117665	132056	25.0 625	50.0 1250	125	200	250
Chlorobromomethane	FB	Ave	15711 442240	37083 888624	75139	128973	174899	25.0 625	50.0 1250	125	200	250
Tetrahydrofuran	FB	Ave	19757 381480	30243 788836	67776	127412	156557	50.0 1250	100 2500	250	400	500
Chloroform	FB	Ave	70219 1717983	140487 3306749	295869	528754	728154	25.0 625	50.0 1250	125	200	250
1,1,1-Trichloroethane	FB	Ave	54873 1465686	107988 2888252	233290	417577	608954	25.0 625	50.0 1250	125	200	250
Cyclohexane	FB	Ave	133833 3085324	268443 5514912	554025	965563	1369397	25.0 625	50.0 1250	125	200	250
Carbon tetrachloride	FB	Ave	43196 1335309	94044 2655134	195677	373487	552200	25.0 625	50.0 1250	125	200	250
1,1-Dichloropropene	FB	Ave	63179 1558568	130993 2932114	261068	482035	689546	25.0 625	50.0 1250	125	200	250
Benzene	FB	Ave	202642 4273723	420453 7082329	868674	1525828	2065323	25.0 625	50.0 1250	125	200	250

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 125014

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/13/2014 12:52 Calibration End Date: 11/13/2014 16:27 Calibration ID: 19192

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Isobutyl alcohol	FB	Ave	18991 437048	26269 898756	74501	129645	170998	625 15625	1250 31250	3125	5000	6250
1,2-Dichloroethane	FB	Ave	37688 890231	71185 1794671	158525	275407	363270	25.0 625	50.0 1250	125	200	250
n-Heptane	FB	Ave	118876 2512809	241086 4379109	506708	864667	1227976	25.0 625	50.0 1250	125	200	250
Trichloroethene	FB	Ave	44694 1074892	90062 2078691	189987	329482	478839	25.0 625	50.0 1250	125	200	250
Methylcyclohexane	FB	Ave	103766 2314111	214289 4054262	443486	756847	1077786	25.0 625	50.0 1250	125	200	250
1,2-Dichloropropane	FB	Ave	53740 1227431	98682 2342875	220514	388248	528984	25.0 625	50.0 1250	125	200	250
Dibromomethane	FB	Ave	15269 409624	31269 832691	73288	127290	167424	25.0 625	50.0 1250	125	200	250
1,4-Dioxane	FB	Qua	6831 121487	10472 264670	25078	39607	49371	500 12500	1000 25000	2500	4000	5000
Dichlorobromomethane	FB	Ave	33262 1059548	65991 2149442	155574	305043	424089	25.0 625	50.0 1250	125	200	250
trans-1,3-Dichloropropene	CBZ	Qua	43310 1409996	91860 2701972	222565	413617	578704	25.0 625	50.0 1250	125	200	250
4-Methyl-2-pentanone (MIBK)	CBZ	Ave	25370 608401	38866 1160728	107215	188260	241399	25.0 625	50.0 1250	125	200	250
Toluene	CBZ	Qua	216158 3891300	420757 6029590	851037	1482388	1995717	25.0 625	50.0 1250	125	200	250
cis-1,3-Dichloropropene	FB	Ave	26514 +++++	57320 +++++	146609	263119	367540	25.0 +++++	50.0 +++++	125	200	250
Ethyl methacrylate	CBZ	Qua	29704 906418	62662 1697790	156255	277970	365707	25.0 625	50.0 1250	125	200	250
1,1,2-Trichloroethane	CBZ	Ave	25611 639056	48438 1220396	116927	202813	275035	25.0 625	50.0 1250	125	200	250
Tetrachloroethene	CBZ	Ave	39590 876254	76723 1625840	160080	282910	389051	25.0 625	50.0 1250	125	200	250
1,3-Dichloropropane	CBZ	Ave	47659 1165717	90991 2181877	206159	373912	486381	25.0 625	50.0 1250	125	200	250
2-Hexanone	CBZ	Qua	19843 548500	32687 1036391	93131	136168	174692	25.0 625	50.0 1250	125	200	250
Chlorodibromomethane	CBZ	Ave	17144 614666	31412 1269498	82271	165195	231956	25.0 625	50.0 1250	125	200	250
1,2-Dibromoethane	CBZ	Ave	21656 588394	43478 1165315	107323	171314	233562	25.0 625	50.0 1250	125	200	250
Chlorobenzene	CBZ	Lin2	115491 +++++	226255 +++++	473508	821464	1110362	25.0 +++++	50.0 +++++	125	200	250

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 125014

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/13/2014 12:52 Calibration End Date: 11/13/2014 16:27 Calibration ID: 19192

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,1,1,2-Tetrachloroethane	CBZ	Ave	30922 807938	64040 1449971	140181	258091	347096	25.0 625	50.0 1250	125	200	250
Ethylbenzene	CBZ	Ave	71829 1544718	155610 2436878	316342	538964	749199	25.0 625	50.0 1250	125	200	250
m-Xylene & p-Xylene	CBZ	Ave	90078 2046967	179282 3496984	378450	666858	933500	25.0 625	50.0 1250	125	200	250
o-Xylene	CBZ	Ave	84372 1822348	175337 2964517	365328	621808	850175	25.0 625	50.0 1250	125	200	250
Styrene	CBZ	Qua	130290 2726504	257784 +++++	561106	926312	1273900	25.0 625	50.0 +++++	125	200	250
Bromoform	CBZ	Qua	6943 317998	12736 +++++	33304	71684	107214	25.0 625	50.0 +++++	125	200	250
Isopropylbenzene	CBZ	Qua	230669 3984405	462171 +++++	933855	1573703	2083413	25.0 625	50.0 +++++	125	200	250
Bromobenzene	DCB	Ave	41064 973122	79969 1791912	171668	293419	400010	25.0 625	50.0 1250	125	200	250
1,1,2,2-Tetrachloroethane	CBZ	Ave	25602 662210	48204 1269483	117289	205728	270082	25.0 625	50.0 1250	125	200	250
trans-1,4-Dichloro-2-butene	DCB	Ave	3353 141779	7295 325791	16924	35792	48106	25.0 625	50.0 1250	125	200	250
1,2,3-Trichloropropane	DCB	Qua	6947 185957	12848 364227	34752	55169	68915	25.0 625	50.0 1250	125	200	250
N-Propylbenzene	DCB	Qua	62475 1393134	131885 2310781	271339	454703	639921	25.0 625	50.0 1250	125	200	250
2-Chlorotoluene	DCB	Ave	49581 1092021	96455 +++++	205028	344419	478168	25.0 625	50.0 +++++	125	200	250
1,3,5-Trimethylbenzene	DCB	Qua	176129 3157394	363797 4615267	730050	1230769	1636253	25.0 625	50.0 1250	125	200	250
4-Chlorotoluene	DCB	Ave	44649 968646	91750 1609777	188586	320017	448346	25.0 625	50.0 1250	125	200	250
tert-Butylbenzene	DCB	Qua	158433 3035317	332689 4711107	676042	1112785	1493133	25.0 625	50.0 1250	125	200	250
1,2,4-Trimethylbenzene	DCB	Qua	170765 3318781	361566 4998205	732691	1196451	1612232	25.0 625	50.0 1250	125	200	250
sec-Butylbenzene	DCB	Qua	246123 4198749	518333 6042610	1028626	1635305	2217769	25.0 625	50.0 1250	125	200	250
1,3-Dichlorobenzene	DCB	Qua	80378 1828357	157541 3172333	347957	567208	780582	25.0 625	50.0 1250	125	200	250
4-Isopropyltoluene	DCB	Qua	190958 3483029	394741 5154059	811425	1304885	1754745	25.0 625	50.0 1250	125	200	250
1,4-Dichlorobenzene	DCB	Ave	74183 1767424	150799 3043269	316531	521793	732940	25.0 625	50.0 1250	125	200	250

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 125014

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/13/2014 12:52 Calibration End Date: 11/13/2014 16:27 Calibration ID: 19192

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,2-Dichlorobenzene	DCB	Qua	68281 1534020	135584 2591506	299869	492120	656861	25.0 625	50.0 1250	125	200	250
n-Butylbenzene	DCB	Qua	178069 3278863	372626 4829229	753399	1193426	1630975	25.0 625	50.0 1250	125	200	250
1,2-Dibromo-3-Chloropropane	DCB	Qua	1456 60977	3255 137878	7517	14825	18329	25.0 625	50.0 1250	125	200	250
1,2,4-Trichlorobenzene	DCB	Ave	19245 704052	46156 1381410	107790	190499	256636	25.0 625	50.0 1250	125	200	250
Hexachlorobutadiene	DCB	Ave	34431 716089	69727 1313471	142255	225931	308820	25.0 625	50.0 1250	125	200	250
Naphthalene	DCB	Qua	33203 1068002	62465 2051017	161708	309493	390467	25.0 625	50.0 1250	125	200	250
1,2,3-Trichlorobenzene	DCB	Qua	15243 524291	32879 1025305	77784	145813	194809	25.0 625	50.0 1250	125	200	250
Dibromofluoromethane (Surr)	FB	Ave	26165 784706	65172 1552470	136499	241970	322322	25.0 625	50.0 1250	125	200	250
1,2-Dichloroethane-d4 (Surr)	FB	Ave	25846 687750	56242 1419269	126287	211879	290098	25.0 625	50.0 1250	125	200	250
Toluene-d8 (Surr)	CBZ	Ave	128132 3050366	314773 +++++	648624	1114127	1464096	25.0 625	50.0 +++++	125	200	250
4-Bromofluorobenzene (Surr)	CBZ	Ave	44291 1168062	97728 2178079	210287	344751	479801	25.0 625	50.0 1250	125	200	250

Curve Type Legend:

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

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111302.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 13-Nov-2014 12:52:30 ALS Bottle#: 5 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0004379-002
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub5

Method: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 14-Nov-2014 08:03:52 Calib Date: 13-Nov-2014 16:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111308.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK047

First Level Reviewer: journetp Date: 13-Nov-2014 12:35:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.176	3.144	0.032	99	239106	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.260	6.258	0.002	98	1268690	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.454	9.452	0.002	86	271218	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.802	11.807	-0.005	95	300776	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.493	5.492	0.001	92	26165	25.0	23.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.883	5.887	-0.004	37	25846	25.0	25.1	
$ 7 Toluene-d8 (Surr)	98	7.982	7.980	0.002	92	128132	25.0	25.2	
$ 8 4-Bromofluorobenzene (Surr	95	10.652	10.651	0.001	89	44291	25.0	26.8	
10 Dichlorodifluoromethane	85	1.192	1.209	-0.017	98	63874	25.0	29.7	
11 Chloromethane	50	1.308	1.313	-0.005	99	97886	25.0	31.6	
12 Vinyl chloride	62	1.399	1.416	-0.017	97	80526	25.0	16.4	
13 Butadiene	54	1.430	1.434	-0.004	96	77966	25.0	8.45	
14 Bromomethane	94	1.655	1.653	0.002	1	11337	25.0	33.1	M
15 Chloroethane	64	1.728	1.745	-0.017	57	11779	25.0	26.1	
17 Trichlorofluoromethane	101	1.910	1.927	-0.017	93	37795	25.0	30.4	
16 Dichlorofluoromethane	67	1.941	1.951	-0.010	96	50576	25.0	31.4	M
19 Ethyl ether	59	2.233	2.225	0.008	97	28956	25.0	28.3	
20 Acrolein	56	2.360	2.359	0.001	97	37283	500.0	524.7	
21 1,1-Dichloroethene	96	2.409	2.414	-0.005	97	49329	25.0	24.8	
22 1,1,2-Trichloro-1,2,2-trif	101	2.464	2.487	-0.023	94	59742	25.0	29.7	
23 Acetone	43	2.537	2.517	0.020	43	20708	25.0	32.5	
24 Iodomethane	142	2.549	2.560	-0.011	96	76612	25.0	29.0	
25 Carbon disulfide	76	2.616	2.621	-0.005	99	137652	25.0	24.4	
28 3-Chloro-1-propene	76	2.835	2.833	0.002	95	31071	25.0	29.0	
29 Methyl acetate	43	2.872	2.864	0.008	100	121688	125.0	143.5	
30 Methylene Chloride	84	2.987	2.992	-0.005	98	126671	25.0	28.9	
31 2-Methyl-2-propanol	59	3.279	3.259	0.020	71	23933	250.0	320.8	
32 Acrylonitrile	53	3.328	3.320	0.008	99	111463	250.0	241.9	
33 trans-1,2-Dichloroethene	96	3.322	3.332	-0.010	90	53718	25.0	28.0	
34 Methyl tert-butyl ether	73	3.364	3.363	0.001	97	86249	25.0	28.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 Vinyl acetate	43	3.723	3.728	-0.005	65	103189	25.0	23.3	
35 Hexane	57	3.729	3.728	0.001	91	154143	25.0	23.4	
36 1,1-Dichloroethane	63	3.973	3.971	0.002	96	91112	25.0	26.1	
41 2,2-Dichloropropane	77	4.800	4.805	-0.004	60	32791	25.0	23.6	
42 cis-1,2-Dichloroethene	96	4.812	4.817	-0.005	82	52672	25.0	27.8	
43 2-Butanone (MEK)	43	4.867	4.865	0.002	85	19380	25.0	33.7	
46 Chlorobromomethane	128	5.116	5.127	-0.011	92	15711	25.0	24.6	
48 Tetrahydrofuran	42	5.171	5.151	0.020	80	19757	50.0	65.7	
49 Chloroform	83	5.293	5.297	-0.004	94	70219	25.0	27.4	
50 1,1,1-Trichloroethane	97	5.445	5.449	-0.004	97	54873	25.0	26.4	
51 Cyclohexane	56	5.506	5.516	-0.010	90	133833	25.0	28.4	
53 Carbon tetrachloride	117	5.627	5.626	0.001	97	43196	25.0	23.8	
52 1,1-Dichloropropene	75	5.652	5.656	-0.004	95	63179	25.0	27.1	
54 Benzene	78	5.883	5.881	0.002	98	202642	25.0	28.8	
59 Isobutyl alcohol	41	5.944	5.936	0.008	90	18991	625.0	756.3	
55 1,2-Dichloroethane	62	5.974	5.979	-0.005	93	37688	25.0	28.2	
58 n-Heptane	43	6.296	6.295	0.001	94	118876	25.0	28.8	
61 Trichloroethene	130	6.668	6.672	-0.004	94	44694	25.0	27.4	
63 Methylcyclohexane	83	6.905	6.903	0.002	94	103766	25.0	28.3	
64 1,2-Dichloropropane	63	6.954	6.958	-0.004	97	53740	25.0	28.8	
65 Dibromomethane	93	7.039	7.043	-0.004	92	15269	25.0	25.4	
67 1,4-Dioxane	88	7.063	7.068	-0.005	54	6831	500.0	351.1	
68 Dichlorobromomethane	83	7.258	7.262	-0.004	96	33262	25.0	23.5	
74 trans-1,3-Dichloropropene	75	7.726	7.725	0.001	93	43310	25.0	25.6	
72 4-Methyl-2-pentanone (MIBK	43	7.896	7.895	0.001	95	25370	25.0	30.1	
73 Toluene	91	8.049	8.047	0.002	98	216158	25.0	15.3	
71 cis-1,3-Dichloropropene	75	8.328	8.327	0.001	94	26514	25.0	22.2	
75 Ethyl methacrylate	69	8.414	8.412	0.002	91	29704	25.0	23.3	
76 1,1,2-Trichloroethane	97	8.517	8.522	-0.005	89	25611	25.0	27.9	
77 Tetrachloroethene	164	8.566	8.564	0.002	95	39590	25.0	30.1	
78 1,3-Dichloropropane	76	8.669	8.674	-0.005	91	47659	25.0	28.5	
79 2-Hexanone	43	8.760	8.753	0.007	96	19843	25.0	36.1	
81 Chlorodibromomethane	129	8.882	8.880	0.002	89	17144	25.0	23.2	
82 Ethylene Dibromide	107	8.985	8.984	0.001	92	21656	25.0	26.5	
84 Chlorobenzene	112	9.478	9.483	-0.005	96	115491	25.0	25.5	
85 1,1,1,2-Tetrachloroethane	131	9.588	9.586	0.002	91	30922	25.0	27.1	
86 Ethylbenzene	106	9.588	9.592	-0.004	98	71829	25.0	29.4	
87 m-Xylene & p-Xylene	106	9.728	9.732	-0.004	100	90078	25.0	29.5	
88 o-Xylene	106	10.105	10.103	0.002	95	84372	25.0	29.8	
89 Styrene	104	10.135	10.134	0.001	95	130290	25.0	26.6	
90 Bromoform	173	10.299	10.304	-0.005	94	6943	25.0	34.6	
91 Isopropylbenzene	105	10.482	10.480	0.002	95	230669	25.0	26.3	
94 Bromobenzene	156	10.774	10.772	0.002	95	41064	25.0	30.4	
93 1,1,2,2-Tetrachloroethane	83	10.804	10.809	-0.005	95	25602	25.0	27.6	
96 trans-1,4-Dichloro-2-buten	53	10.847	10.845	0.002	66	3353	25.0	21.2	
95 1,2,3-Trichloropropane	110	10.853	10.851	0.002	86	6947	25.0	22.3	
97 N-Propylbenzene	120	10.902	10.900	0.002	99	62475	25.0	20.2	
98 2-Chlorotoluene	126	10.969	10.973	-0.004	97	49581	25.0	30.1	
99 1,3,5-Trimethylbenzene	105	11.090	11.089	0.001	94	176129	25.0	12.9	
100 4-Chlorotoluene	126	11.096	11.101	-0.005	97	44649	25.0	30.9	
101 tert-Butylbenzene	119	11.394	11.393	0.001	94	158433	25.0	14.2	
103 1,2,4-Trimethylbenzene	105	11.455	11.460	-0.005	97	170765	25.0	16.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
104 sec-Butylbenzene	105	11.620	11.618	0.002	94	246123	25.0	10.6	
105 1,3-Dichlorobenzene	146	11.723	11.721	0.002	98	80378	25.0	23.0	
106 4-Isopropyltoluene	119	11.784	11.782	0.002	97	190958	25.0	13.7	
107 1,4-Dichlorobenzene	146	11.826	11.831	-0.005	95	74183	25.0	30.3	
111 1,2-Dichlorobenzene	146	12.173	12.172	0.001	97	68281	25.0	22.2	
110 n-Butylbenzene	91	12.185	12.184	0.001	98	178069	25.0	15.1	
112 1,2-Dibromo-3-Chloropropan	75	12.970	12.962	0.008	73	1456	25.0	32.6	
113 1,2,4-Trichlorobenzene	180	13.779	13.778	0.001	91	19245	25.0	22.7	
115 Hexachlorobutadiene	225	13.931	13.936	-0.005	93	34431	25.0	32.0	
116 Naphthalene	128	14.041	14.033	0.008	96	33203	25.0	29.9	
117 1,2,3-Trichlorobenzene	180	14.254	14.252	0.002	95	15243	25.0	28.5	
S 130 Xylenes, Total	106				0		50.0	59.3	
S 129 1,2-Dichloroethene, Total	96				0		50.0	55.8	
S 131 1,3-Dichloropropene, Total	1				0		50.0	47.7	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00017	Amount Added:	1.00	Units: uL
VOA8260INT_00022	Amount Added:	10.00	Units: uL
VOAACROPRI_00003	Amount Added:	20.00	Units: uL
VOA8260VOAPRI_00087	Amount Added:	1.00	Units: uL
voaWVA pri Re_00004	Amount Added:	1.00	Units: uL

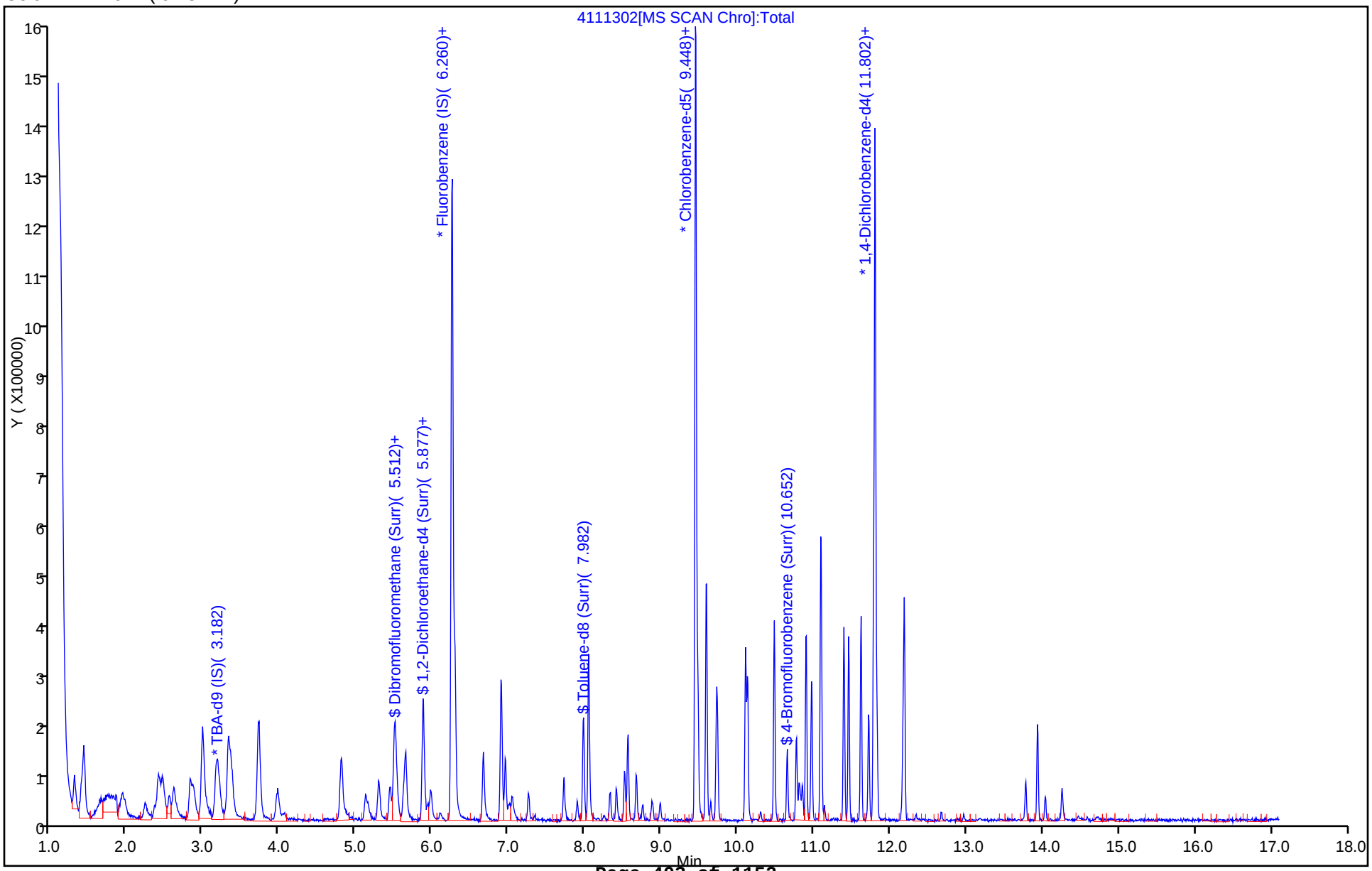
Report Date: 14-Nov-2014 08:03:53 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111302.D

Injection Date:	13-Nov-2014 12:52:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	IC			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

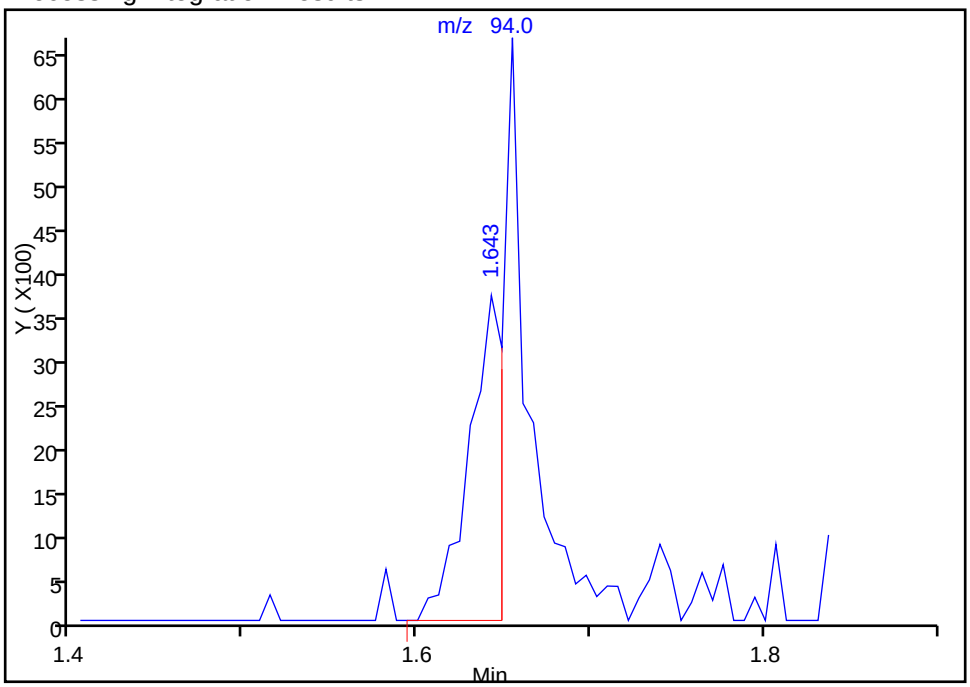
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111302.D				
Injection Date:	13-Nov-2014 12:52:30	Instrument ID:	CHHP4		
Lims ID:	IC				
Client ID:					
Operator ID:	034635	ALS Bottle#:	5	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

14 Bromomethane, CAS: 74-83-9

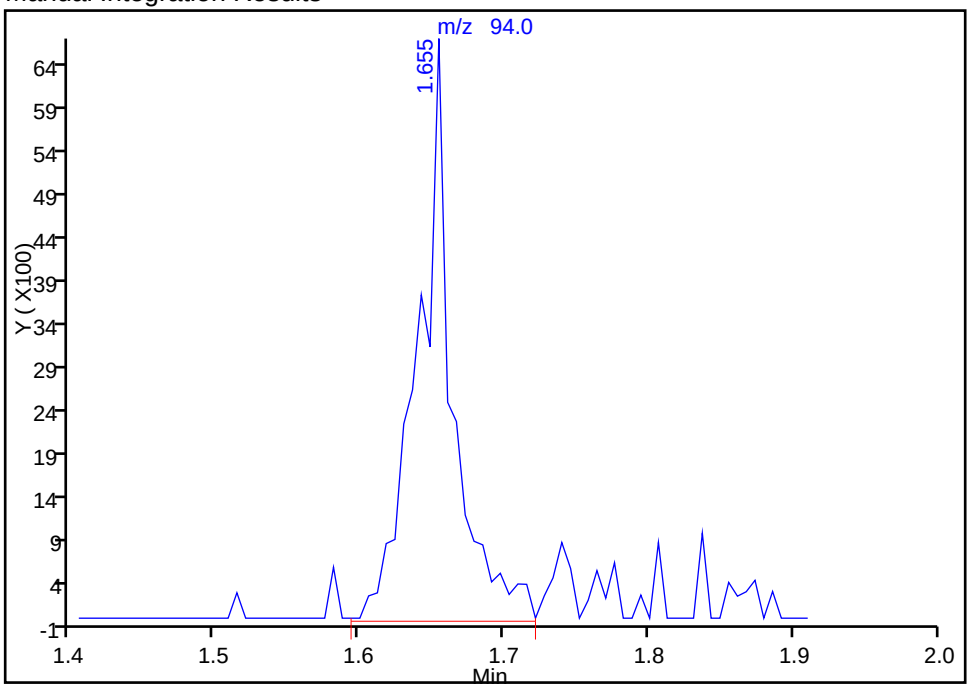
Processing Integration Results

RT: 1.64
Response: 5107
Amount: 25.000000



Manual Integration Results

RT: 1.65
Response: 11337
Amount: 33.068885



Reviewer: journetp, 13-Nov-2014 12:35:15
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

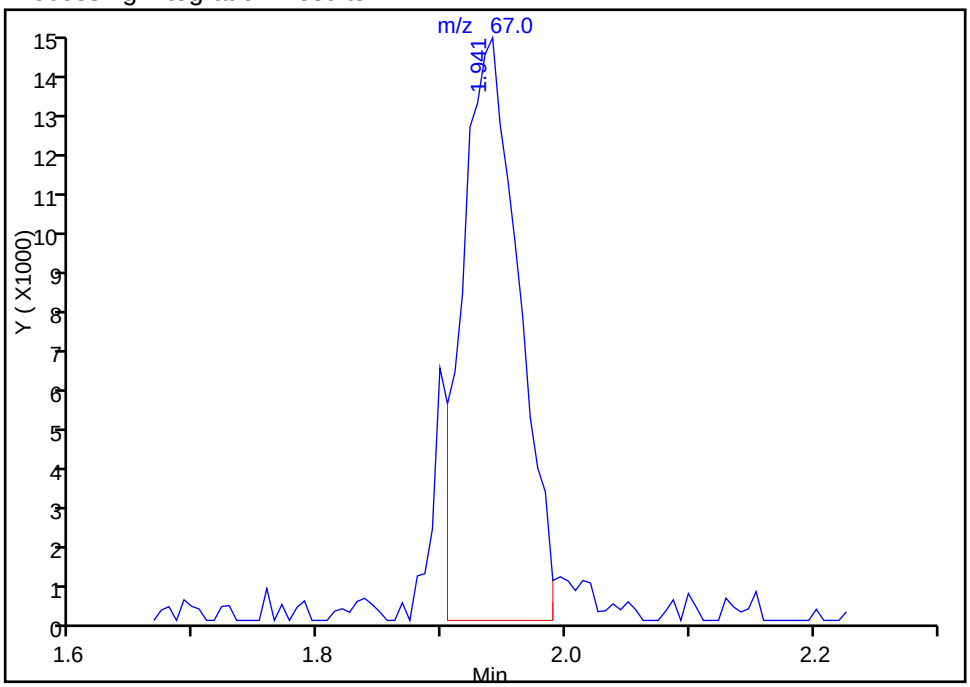
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111302.D
Injection Date: 13-Nov-2014 12:52:30 Instrument ID: CHHP4
Lims ID: IC
Client ID:
Operator ID: 034635 ALS Bottle#: 5 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP4 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

16 Dichlorofluoromethane, CAS: 75-43-4

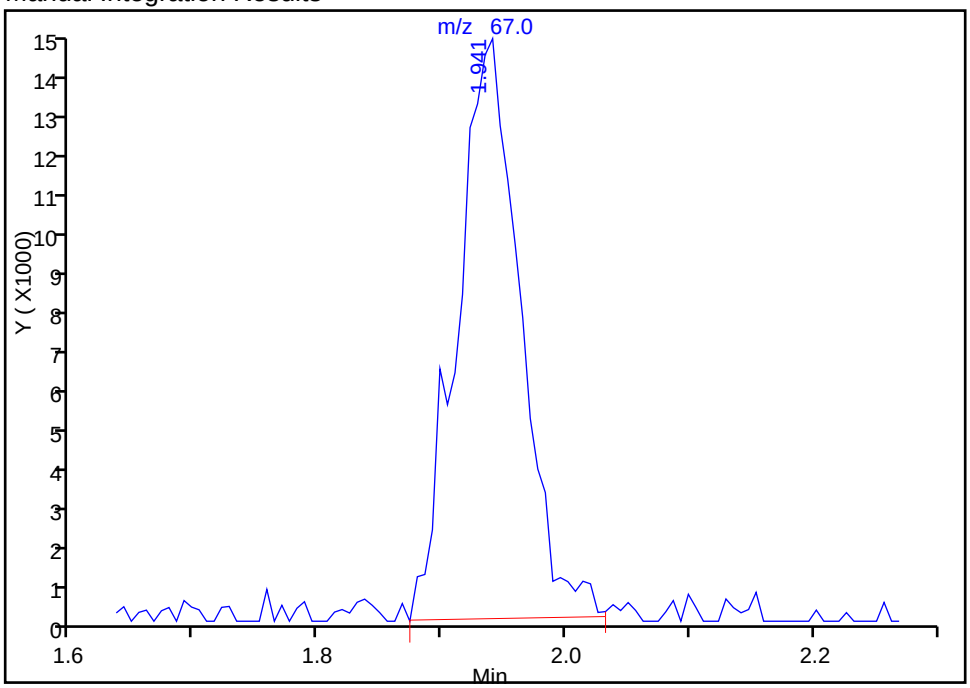
Processing Integration Results

RT: 1.94
Response: 45520
Amount: 0



Manual Integration Results

RT: 1.94
Response: 50576
Amount: 31.449184



Reviewer: journetp, 13-Nov-2014 12:35:15
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111303.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 13-Nov-2014 13:19:30 ALS Bottle#: 6 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0004379-003
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub5

Method: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 14-Nov-2014 08:03:54 Calib Date: 13-Nov-2014 16:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111308.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK047

First Level Reviewer: journetp Date: 13-Nov-2014 13:02:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.193	3.144	0.049	98	245309	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.259	6.258	0.001	98	1436338	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.453	9.452	0.001	86	312906	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.801	11.807	-0.006	96	356579	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.498	5.492	0.006	93	65172	50.0	50.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.894	5.887	0.007	96	56242	50.0	48.2	
$ 7 Toluene-d8 (Surr)	98	7.980	7.980	0.000	92	314773	50.0	53.7	
$ 8 4-Bromofluorobenzene (Surr	95	10.651	10.651	0.000	89	97728	50.0	51.3	
10 Dichlorodifluoromethane	85	1.197	1.209	-0.012	98	120065	50.0	49.2	
11 Chloromethane	50	1.313	1.313	0.000	99	178386	50.0	50.9	
12 Vinyl chloride	62	1.404	1.416	-0.012	97	157552	50.0	46.1	
13 Butadiene	54	1.435	1.434	0.001	93	154360	50.0	40.3	
14 Bromomethane	94	1.654	1.653	0.001	91	20323	50.0	52.4	
15 Chloroethane	64	1.739	1.745	-0.006	92	21411	50.0	45.5	
17 Trichlorofluoromethane	101	1.933	1.927	0.006	92	70371	50.0	46.3	
16 Dichlorofluoromethane	67	1.940	1.951	-0.011	99	83243	50.0	45.7	
19 Ethyl ether	59	2.244	2.225	0.019	90	44657	50.0	38.6	
20 Acrolein	56	2.359	2.359	0.000	100	48762	625.0	606.2	
21 1,1-Dichloroethene	96	2.414	2.414	0.000	96	97092	50.0	45.1	
22 1,1,2-Trichloro-1,2,2-trif	101	2.463	2.487	-0.024	94	114617	50.0	50.2	
23 Acetone	43	2.536	2.517	0.019	49	30508	50.0	46.1	
24 Iodomethane	142	2.560	2.560	0.000	97	142838	50.0	47.8	
25 Carbon disulfide	76	2.621	2.621	0.000	99	279780	50.0	43.8	
28 3-Chloro-1-propene	76	2.822	2.833	-0.011	93	60364	50.0	45.6	
29 Methyl acetate	43	2.870	2.864	0.006	99	226796	250.0	236.3	
30 Methylene Chloride	84	2.992	2.992	0.000	98	155059	50.0	34.5	
31 2-Methyl-2-propanol	59	3.296	3.259	0.037	76	39188	500.0	512.0	
32 Acrylonitrile	53	3.320	3.320	0.000	96	196179	500.0	404.3	
33 trans-1,2-Dichloroethene	96	3.333	3.332	0.001	96	105363	50.0	48.5	
34 Methyl tert-butyl ether	73	3.375	3.363	0.012	97	155658	50.0	45.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 Vinyl acetate	43	3.722	3.728	-0.006	66	177209	50.0	43.2	
35 Hexane	57	3.722	3.728	-0.006	92	263122	50.0	42.7	
36 1,1-Dichloroethane	63	3.971	3.971	0.000	95	191886	50.0	48.6	
41 2,2-Dichloropropane	77	4.805	4.805	0.001	66	75166	50.0	47.9	
42 cis-1,2-Dichloroethene	96	4.817	4.817	0.000	83	105250	50.0	49.1	
43 2-Butanone (MEK)	43	4.872	4.865	0.007	98	24091	50.0	37.0	
46 Chlorobromomethane	128	5.127	5.127	0.000	90	37083	50.0	51.3	
48 Tetrahydrofuran	42	5.158	5.151	0.007	96	30243	100.0	88.8	
49 Chloroform	83	5.298	5.297	0.001	95	140487	50.0	48.5	
50 1,1,1-Trichloroethane	97	5.444	5.449	-0.005	98	107988	50.0	45.9	
51 Cyclohexane	56	5.511	5.516	-0.005	92	268443	50.0	50.3	
53 Carbon tetrachloride	117	5.626	5.626	0.000	93	94044	50.0	45.7	
52 1,1-Dichloropropene	75	5.650	5.656	-0.006	95	130993	50.0	49.7	
54 Benzene	78	5.876	5.881	-0.005	98	420453	50.0	52.8	
59 Isobutyl alcohol	41	5.949	5.936	0.013	96	26269	1250.0	924.0	
55 1,2-Dichloroethane	62	5.979	5.979	0.000	94	71185	50.0	47.0	
58 n-Heptane	43	6.295	6.295	0.000	93	241086	50.0	51.6	
61 Trichloroethene	130	6.672	6.672	0.000	95	90062	50.0	48.8	
63 Methylcyclohexane	83	6.904	6.903	0.001	94	214289	50.0	51.7	
64 1,2-Dichloropropane	63	6.958	6.958	0.000	99	98682	50.0	46.7	
65 Dibromomethane	93	7.044	7.043	0.001	97	31269	50.0	45.9	
67 1,4-Dioxane	88	7.068	7.068	0.000	36	10472	1000.0	654.4	
68 Dichlorobromomethane	83	7.263	7.262	0.001	97	65991	50.0	41.1	
74 trans-1,3-Dichloropropene	75	7.725	7.725	0.000	95	91860	50.0	43.9	
72 4-Methyl-2-pentanone (MIBK	43	7.901	7.895	0.006	96	38866	50.0	39.9	
73 Toluene	91	8.047	8.047	0.000	97	420757	50.0	38.9	
71 cis-1,3-Dichloropropene	75	8.327	8.327	0.000	94	57320	50.0	42.3	
75 Ethyl methacrylate	69	8.412	8.412	0.000	91	62662	50.0	42.5	
76 1,1,2-Trichloroethane	97	8.516	8.522	-0.006	89	48438	50.0	45.7	
77 Tetrachloroethene	164	8.564	8.564	0.000	98	76723	50.0	50.6	
78 1,3-Dichloropropane	76	8.674	8.674	0.000	95	90991	50.0	47.2	
79 2-Hexanone	43	8.753	8.753	0.000	98	32687	50.0	47.8	
81 Chlorodibromomethane	129	8.881	8.880	0.001	93	31412	50.0	36.8	
82 Ethylene Dibromide	107	8.990	8.984	0.006	94	43478	50.0	46.2	
84 Chlorobenzene	112	9.477	9.483	-0.006	93	226255	50.0	47.0	
85 1,1,1,2-Tetrachloroethane	131	9.586	9.586	0.000	94	64040	50.0	48.6	
86 Ethylbenzene	106	9.593	9.592	0.001	98	155610	50.0	55.3	
87 m-Xylene & p-Xylene	106	9.732	9.732	0.000	99	179282	50.0	50.9	
88 o-Xylene	106	10.110	10.103	0.007	95	175337	50.0	53.7	
89 Styrene	104	10.134	10.134	0.000	96	257784	50.0	46.4	
90 Bromoform	173	10.298	10.304	-0.006	95	12736	50.0	46.3	
91 Isopropylbenzene	105	10.481	10.480	0.001	96	462171	50.0	47.6	
94 Bromobenzene	156	10.773	10.772	0.001	94	79969	50.0	49.9	
93 1,1,2,2-Tetrachloroethane	83	10.809	10.809	0.000	94	48204	50.0	45.1	
96 trans-1,4-Dichloro-2-buten	53	10.846	10.845	0.001	67	7295	50.0	38.8	
95 1,2,3-Trichloropropane	110	10.852	10.851	0.001	89	12848	50.0	38.6	
97 N-Propylbenzene	120	10.900	10.900	0.000	99	131885	50.0	44.0	
98 2-Chlorotoluene	126	10.973	10.973	0.000	97	96455	50.0	49.4	
99 1,3,5-Trimethylbenzene	105	11.089	11.089	0.000	95	363797	50.0	38.8	
100 4-Chlorotoluene	126	11.095	11.101	-0.006	98	91750	50.0	53.5	
101 tert-Butylbenzene	119	11.393	11.393	0.000	94	332689	50.0	40.4	
103 1,2,4-Trimethylbenzene	105	11.454	11.460	-0.006	97	361566	50.0	42.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
104 sec-Butylbenzene	105	11.618	11.618	0.000	94	518333	50.0	39.0	
105 1,3-Dichlorobenzene	146	11.716	11.721	-0.005	98	157541	50.0	43.3	
106 4-Isopropyltoluene	119	11.783	11.782	0.001	97	394741	50.0	39.6	
107 1,4-Dichlorobenzene	146	11.825	11.831	-0.006	97	150799	50.0	51.9	
111 1,2-Dichlorobenzene	146	12.172	12.172	0.000	97	135584	50.0	43.0	
110 n-Butylbenzene	91	12.184	12.184	0.000	98	372626	50.0	41.6	
112 1,2-Dibromo-3-Chloropropan	75	12.963	12.962	0.001	69	3255	50.0	51.6	
113 1,2,4-Trichlorobenzene	180	13.778	13.778	0.000	94	46156	50.0	45.9	
115 Hexachlorobutadiene	225	13.930	13.936	-0.006	95	69727	50.0	54.6	
116 Naphthalene	128	14.033	14.033	0.000	97	62465	50.0	43.6	
117 1,2,3-Trichlorobenzene	180	14.252	14.252	0.000	93	32879	50.0	46.7	
S 130 Xylenes, Total	106				0		100.0	104.6	
S 129 1,2-Dichloroethene, Total	96				0		100.0	97.5	
S 131 1,3-Dichloropropene, Total	1				0		100.0	86.2	

Reagents:

VOA8260SURR_00017	Amount Added:	2.00	Units: uL
VOA8260INT_00022	Amount Added:	10.00	Units: uL
VOAACROPRI_00003	Amount Added:	25.00	Units: uL
VOA8260VOAPRI_00087	Amount Added:	2.00	Units: uL
voaWVA pri Re_00004	Amount Added:	2.00	Units: uL

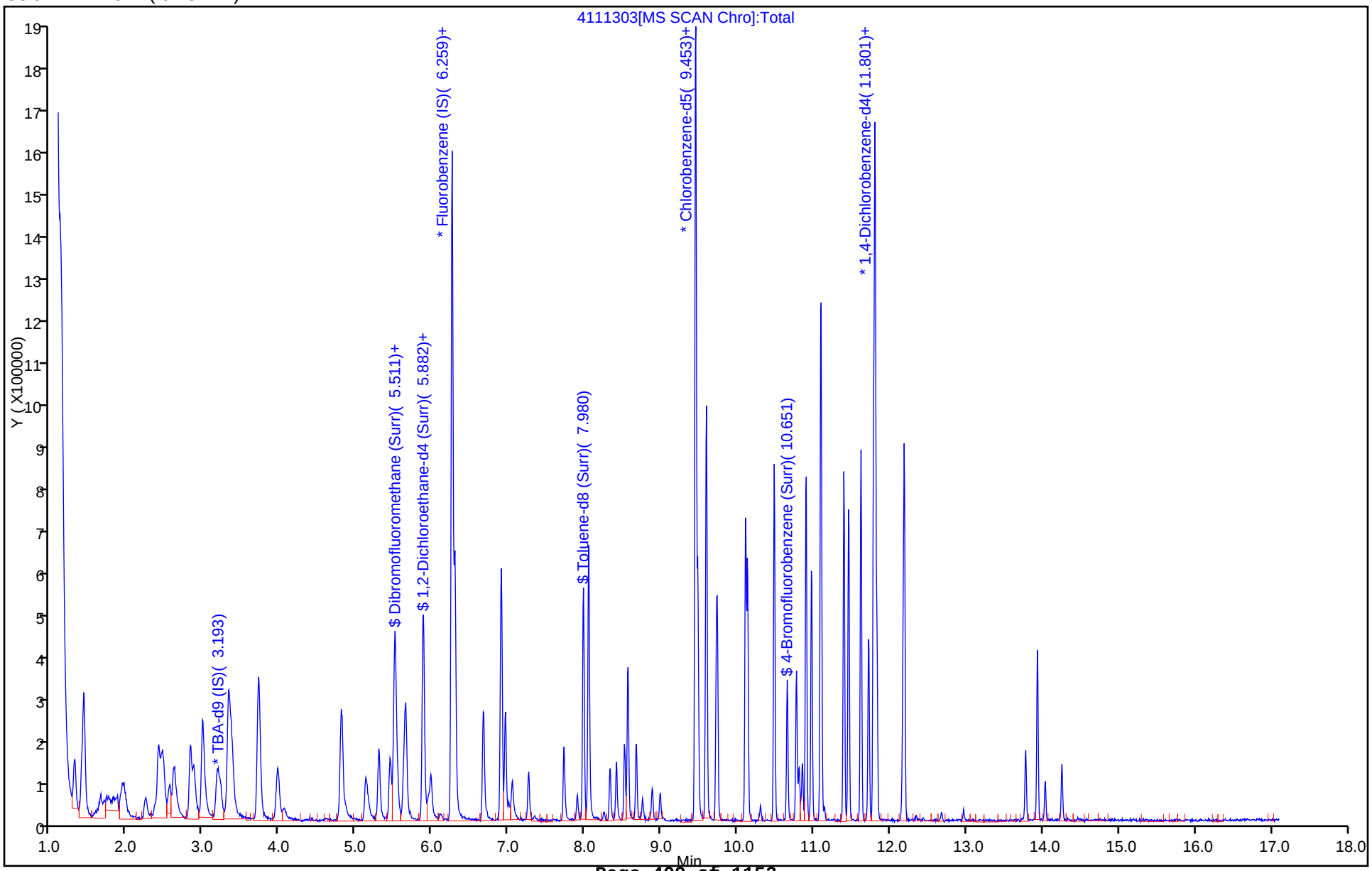
Report Date: 14-Nov-2014 08:03:54 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111303.D

Injection Date:	13-Nov-2014 13:19:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	IC			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Report Date: 14-Nov-2014 08:03:55 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111304.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 13-Nov-2014 13:46:30 ALS Bottle#: 7 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0004379-004
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub5

Method: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 14-Nov-2014 08:03:55 Calib Date: 13-Nov-2014 16:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111308.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK047

First Level Reviewer: journetp Date: 13-Nov-2014 13:35:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.186	3.144	0.042	98	252850	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.258	6.258	0.000	99	1099938	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.452	9.452	0.000	86	248278	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.800	11.807	-0.007	95	293335	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.492	5.492	0.000	94	136499	125.0	138.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.893	5.887	0.006	97	126287	125.0	141.3	
$ 7 Toluene-d8 (Surr)	98	7.980	7.980	0.000	93	648624	125.0	139.5	
$ 8 4-Bromofluorobenzene (Surr	95	10.650	10.651	-0.001	89	210287	125.0	139.2	
10 Dichlorodifluoromethane	85	1.203	1.209	-0.006	99	235231	125.0	126.0	
11 Chloromethane	50	1.306	1.313	-0.007	99	370479	125.0	138.0	
12 Vinyl chloride	62	1.416	1.416	0.000	98	310633	125.0	160.4	
13 Butadiene	54	1.434	1.434	0.000	92	316103	125.0	165.7	
14 Bromomethane	94	1.653	1.653	0.000	91	35855	125.0	120.6	
15 Chloroethane	64	1.738	1.745	-0.007	99	39819	125.0	119.9	
17 Trichlorofluoromethane	101	1.908	1.927	-0.019	96	156143	125.0	124.7	
16 Dichlorofluoromethane	67	1.939	1.951	-0.012	98	182636	125.0	131.0	
19 Ethyl ether	59	2.249	2.225	0.024	96	97628	125.0	110.1	
20 Acrolein	56	2.371	2.359	0.012	99	54592	750.0	886.2	
21 1,1-Dichloroethene	96	2.413	2.414	-0.001	97	211321	125.0	134.2	
22 1,1,2-Trichloro-1,2,2-trif	101	2.468	2.487	-0.019	93	228925	125.0	131.1	
23 Acetone	43	2.529	2.517	0.012	82	67701	125.0	157.4	
24 Iodomethane	142	2.553	2.560	-0.007	98	301243	125.0	131.6	
25 Carbon disulfide	76	2.614	2.621	-0.007	99	626697	125.0	128.0	
28 3-Chloro-1-propene	76	2.827	2.833	-0.006	94	137169	125.0	123.8	
29 Methyl acetate	43	2.870	2.864	0.006	99	561777	625.0	764.2	
30 Methylene Chloride	84	2.985	2.992	-0.007	99	273927	125.0	133.4	
31 2-Methyl-2-propanol	59	3.302	3.259	0.043	91	94002	1250.0	1191.6	
32 Acrylonitrile	53	3.320	3.320	0.000	100	488483	1250.0	1446.3	
33 trans-1,2-Dichloroethene	96	3.332	3.332	0.000	95	224082	125.0	134.6	
34 Methyl tert-butyl ether	73	3.368	3.363	0.005	97	363148	125.0	137.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 Vinyl acetate	43	3.721	3.728	-0.007	68	341130	125.0	132.7	
35 Hexane	57	3.721	3.728	-0.007	92	515626	125.0	133.4	
36 1,1-Dichloroethane	63	3.965	3.971	-0.006	96	398889	125.0	131.9	
41 2,2-Dichloropropane	77	4.798	4.805	-0.006	86	153330	125.0	127.5	
42 cis-1,2-Dichloroethene	96	4.810	4.817	-0.007	83	210905	125.0	128.4	
43 2-Butanone (MEK)	43	4.865	4.865	0.000	100	77621	125.0	158.7	
46 Chlorobromomethane	128	5.127	5.127	0.000	89	75139	125.0	135.7	
48 Tetrahydrofuran	42	5.163	5.151	0.012	94	67776	250.0	259.8	
49 Chloroform	83	5.297	5.297	0.000	94	295869	125.0	133.3	
50 1,1,1-Trichloroethane	97	5.443	5.449	-0.006	98	233290	125.0	129.5	
51 Cyclohexane	56	5.510	5.516	-0.006	93	554025	125.0	135.6	
53 Carbon tetrachloride	117	5.625	5.626	-0.001	94	195677	125.0	124.2	
52 1,1-Dichloropropene	75	5.650	5.656	-0.006	96	261068	125.0	129.3	
54 Benzene	78	5.881	5.881	0.000	97	868674	125.0	142.4	
59 Isobutyl alcohol	41	5.954	5.936	0.018	97	74501	3125.0	3422.0	
55 1,2-Dichloroethane	62	5.978	5.979	-0.001	93	158525	125.0	136.6	
58 n-Heptane	43	6.295	6.295	0.000	95	506708	125.0	141.7	
61 Trichloroethene	130	6.666	6.672	-0.006	99	189987	125.0	134.4	
63 Methylcyclohexane	83	6.903	6.903	0.000	94	443486	125.0	139.6	
64 1,2-Dichloropropane	63	6.958	6.958	0.000	98	220514	125.0	136.3	
65 Dibromomethane	93	7.043	7.043	0.000	97	73288	125.0	140.5	
67 1,4-Dioxane	88	7.061	7.068	-0.007	95	25078	2500.0	3081.4	
68 Dichlorobromomethane	83	7.262	7.262	0.000	96	155574	125.0	126.6	
74 trans-1,3-Dichloropropene	75	7.724	7.725	-0.001	94	222565	125.0	127.1	
72 4-Methyl-2-pentanone (MIBK	43	7.901	7.895	0.006	97	107215	125.0	138.8	
73 Toluene	91	8.047	8.047	0.000	99	851037	125.0	132.3	
71 cis-1,3-Dichloropropene	75	8.326	8.327	-0.001	95	146609	125.0	141.3	
75 Ethyl methacrylate	69	8.412	8.412	0.000	94	156255	125.0	134.3	
76 1,1,2-Trichloroethane	97	8.521	8.522	-0.001	88	116927	125.0	139.0	
77 Tetrachloroethene	164	8.564	8.564	0.000	97	160080	125.0	132.9	
78 1,3-Dichloropropane	76	8.673	8.674	-0.001	95	206159	125.0	134.9	
79 2-Hexanone	43	8.752	8.753	-0.001	96	93131	125.0	149.2	
81 Chlorodibromomethane	129	8.886	8.880	0.006	91	82271	125.0	121.6	
82 Ethylene Dibromide	107	8.983	8.984	-0.001	94	107323	125.0	143.7	
84 Chlorobenzene	112	9.482	9.483	-0.001	93	473508	125.0	132.5	
85 1,1,1,2-Tetrachloroethane	131	9.586	9.586	0.000	97	140181	125.0	134.0	
86 Ethylbenzene	106	9.592	9.592	0.000	98	316342	125.0	141.6	
87 m-Xylene & p-Xylene	106	9.732	9.732	0.000	99	378450	125.0	135.4	
88 o-Xylene	106	10.103	10.103	0.000	97	365328	125.0	141.1	
89 Styrene	104	10.133	10.134	-0.001	97	561106	125.0	133.2	
90 Bromoform	173	10.304	10.304	0.000	97	33304	125.0	116.3	
91 Isopropylbenzene	105	10.480	10.480	0.000	96	933855	125.0	130.5	
94 Bromobenzene	156	10.772	10.772	0.000	94	171668	125.0	130.1	
93 1,1,2,2-Tetrachloroethane	83	10.809	10.809	-0.001	93	117289	125.0	138.2	
96 trans-1,4-Dichloro-2-buten	53	10.845	10.845	0.000	67	16924	125.0	109.5	
95 1,2,3-Trichloropropane	110	10.851	10.851	0.000	88	34752	125.0	143.3	
97 N-Propylbenzene	120	10.900	10.900	0.000	98	271339	125.0	127.5	
98 2-Chlorotoluene	126	10.973	10.973	0.000	97	205028	125.0	127.7	
99 1,3,5-Trimethylbenzene	105	11.088	11.089	-0.001	96	730050	125.0	130.2	
100 4-Chlorotoluene	126	11.101	11.101	0.000	99	188586	125.0	133.8	
101 tert-Butylbenzene	119	11.393	11.393	0.000	94	676042	125.0	132.3	
103 1,2,4-Trimethylbenzene	105	11.453	11.460	-0.007	97	732691	125.0	132.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
104 sec-Butylbenzene	105	11.618	11.618	0.000	94	1028626	125.0	135.4	
105 1,3-Dichlorobenzene	146	11.721	11.721	0.000	98	347957	125.0	131.8	
106 4-Isopropyltoluene	119	11.782	11.782	0.000	97	811425	125.0	134.6	
107 1,4-Dichlorobenzene	146	11.824	11.831	-0.007	96	316531	125.0	132.4	
111 1,2-Dichlorobenzene	146	12.171	12.172	-0.001	98	299869	125.0	132.7	
110 n-Butylbenzene	91	12.183	12.184	-0.001	98	753399	125.0	134.5	
112 1,2-Dibromo-3-Chloropropan	75	12.968	12.962	0.006	84	7517	125.0	123.0	
113 1,2,4-Trichlorobenzene	180	13.777	13.778	-0.001	93	107790	125.0	130.2	
115 Hexachlorobutadiene	225	13.935	13.936	-0.001	94	142255	125.0	135.4	
116 Naphthalene	128	14.033	14.033	0.000	97	161708	125.0	123.9	
117 1,2,3-Trichlorobenzene	180	14.252	14.252	0.000	95	77784	125.0	122.8	
S 130 Xylenes, Total	106				0		250.0	276.5	
S 129 1,2-Dichloroethene, Total	96				0		250.0	263.0	
S 131 1,3-Dichloropropene, Total	1				0		250.0	268.4	

Reagents:

VOA8260SURR_00017	Amount Added:	5.00	Units: uL
VOA8260INT_00022	Amount Added:	10.00	Units: uL
VOAACROPRI_00003	Amount Added:	30.00	Units: uL
VOA8260VOAPRI_00087	Amount Added:	5.00	Units: uL
voaWVA pri Re_00004	Amount Added:	5.00	Units: uL

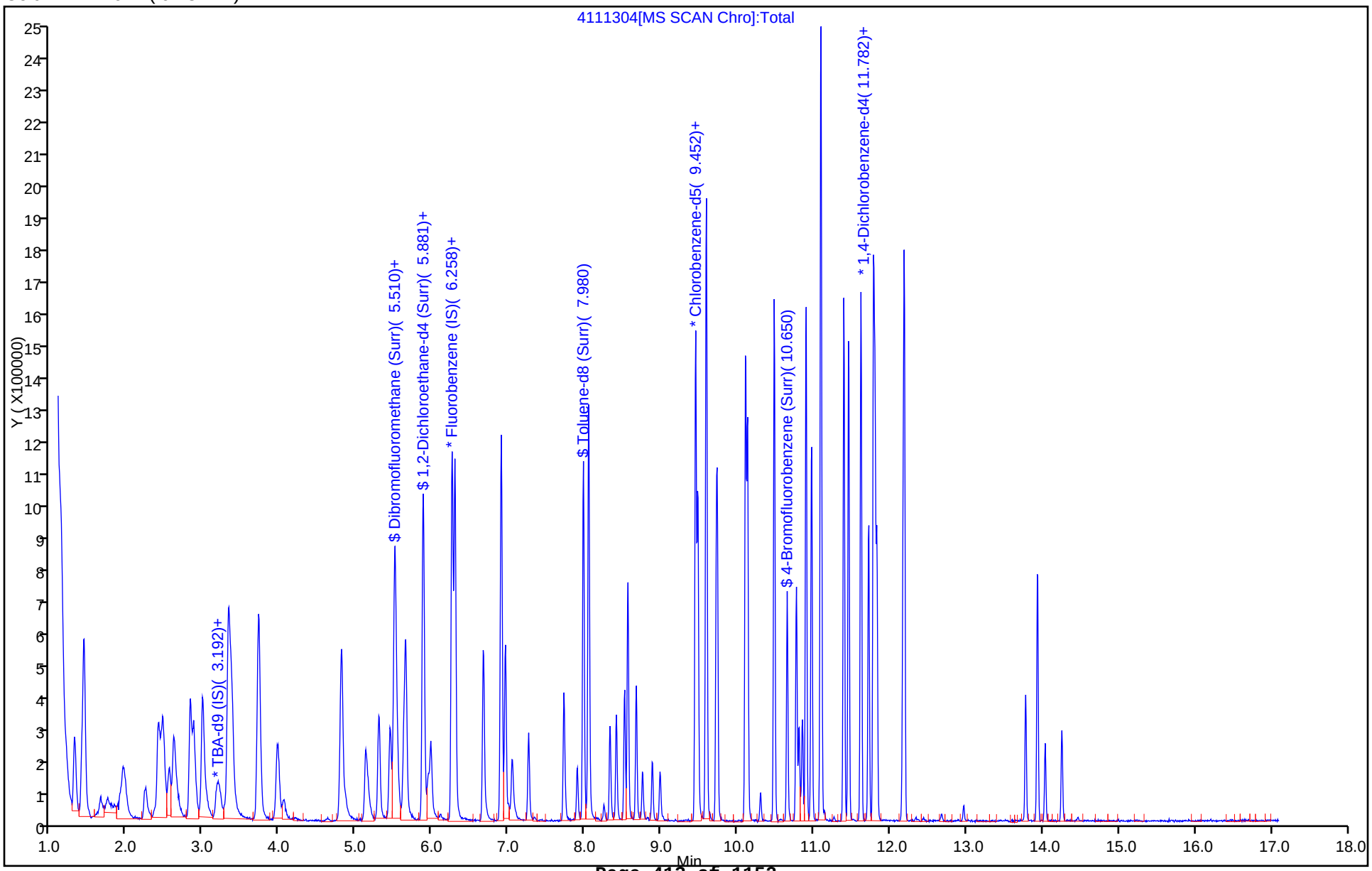
Report Date: 14-Nov-2014 08:03:55 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111304.D

Injection Date:	13-Nov-2014 13:46:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	IC			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111305.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 13-Nov-2014 15:08:30 ALS Bottle#: 8 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS
Misc. Info.: 180-0004379-005
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub5

Method: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 14-Nov-2014 08:03:56 Calib Date: 13-Nov-2014 16:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111308.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK047

First Level Reviewer: journetp Date: 13-Nov-2014 14:30:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.144	3.144	0.000	99	269470	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.258	6.258	0.000	98	1394024	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.452	9.452	0.000	86	303245	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.807	11.807	0.000	92	333010	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.492	5.492	0.000	93	241970	200.0	193.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.887	5.887	0.000	93	211879	200.0	187.0	
$ 7 Toluene-d8 (Surr)	98	7.980	7.980	0.000	93	1114127	200.0	196.2	
$ 8 4-Bromofluorobenzene (Surr	95	10.651	10.651	0.000	90	344751	200.0	186.8	
10 Dichlorodifluoromethane	85	1.209	1.209	0.000	100	430526	200.0	181.9	
11 Chloromethane	50	1.313	1.313	0.000	99	597863	200.0	175.7	
12 Vinyl chloride	62	1.416	1.416	0.000	98	422441	200.0	174.4	
13 Butadiene	54	1.440	1.434	0.006	97	419379	200.0	175.1	
14 Bromomethane	94	1.653	1.653	0.000	91	61825	200.0	164.1	
15 Chloroethane	64	1.745	1.745	0.000	94	71968	200.0	174.7	
17 Trichlorofluoromethane	101	1.927	1.927	0.000	85	285877	200.0	179.1	
16 Dichlorofluoromethane	67	1.951	1.951	0.000	98	308768	200.0	174.7	
19 Ethyl ether	59	2.225	2.225	0.000	95	246670	200.0	219.4	M
20 Acrolein	56	2.359	2.359	0.000	98	68341	875.0	875.3	
21 1,1-Dichloroethene	96	2.414	2.414	0.000	97	385007	200.0	195.4	
22 1,1,2-Trichloro-1,2,2-trif	101	2.487	2.487	0.000	94	414576	200.0	187.3	
23 Acetone	43	2.517	2.517	0.000	100	99148	200.0	183.8	
24 Iodomethane	142	2.560	2.560	0.000	96	524029	200.0	180.7	
25 Carbon disulfide	76	2.621	2.621	0.000	99	1185295	200.0	191.0	
28 3-Chloro-1-propene	76	2.833	2.833	0.000	95	274361	200.0	192.1	
29 Methyl acetate	43	2.864	2.864	0.000	98	902441	1000.0	968.7	
30 Methylene Chloride	84	2.992	2.992	0.000	99	470723	200.0	196.2	
31 2-Methyl-2-propanol	59	3.259	3.259	0.000	94	163559	2000.0	1945.4	
32 Acrylonitrile	53	3.320	3.320	0.000	100	815508	2000.0	1934.3	
33 trans-1,2-Dichloroethene	96	3.332	3.332	0.000	97	378403	200.0	179.3	
34 Methyl tert-butyl ether	73	3.363	3.363	0.000	97	655303	200.0	196.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 Vinyl acetate	43	3.728	3.728	0.000	68	576934	200.0	183.3	
35 Hexane	57	3.728	3.728	0.000	92	872076	200.0	184.2	
36 1,1-Dichloroethane	63	3.971	3.971	0.000	96	721385	200.0	188.2	
41 2,2-Dichloropropane	77	4.805	4.805	0.000	85	278239	200.0	182.6	
42 cis-1,2-Dichloroethene	96	4.817	4.817	0.000	82	393893	200.0	189.2	
43 2-Butanone (MEK)	43	4.865	4.865	0.000	100	117665	200.0	190.2	
46 Chlorobromomethane	128	5.127	5.127	0.000	91	128973	200.0	183.7	
48 Tetrahydrofuran	42	5.151	5.151	0.000	94	127412	400.0	385.4	
49 Chloroform	83	5.297	5.297	0.000	93	528754	200.0	188.0	
50 1,1,1-Trichloroethane	97	5.449	5.449	0.000	98	417577	200.0	182.9	
51 Cyclohexane	56	5.516	5.516	0.000	91	965563	200.0	186.5	
53 Carbon tetrachloride	117	5.626	5.626	0.000	96	373487	200.0	187.0	
52 1,1-Dichloropropene	75	5.656	5.656	0.000	96	482035	200.0	188.4	
54 Benzene	78	5.881	5.881	0.000	98	1525828	200.0	197.3	
59 Isobutyl alcohol	41	5.936	5.936	0.000	96	129645	5000.0	4698.7	
55 1,2-Dichloroethane	62	5.979	5.979	0.000	93	275407	200.0	187.3	
58 n-Heptane	43	6.295	6.295	0.000	94	864667	200.0	190.9	
61 Trichloroethene	130	6.672	6.672	0.000	97	329482	200.0	183.9	
63 Methylcyclohexane	83	6.903	6.903	0.000	94	756847	200.0	188.0	
64 1,2-Dichloropropane	63	6.958	6.958	0.000	99	388248	200.0	189.3	
65 Dibromomethane	93	7.043	7.043	0.000	97	127290	200.0	192.5	
67 1,4-Dioxane	88	7.068	7.068	0.000	94	39607	4000.0	3942.9	
68 Dichlorobromomethane	83	7.262	7.262	0.000	97	305043	200.0	195.8	
74 trans-1,3-Dichloropropene	75	7.725	7.725	0.000	95	413617	200.0	192.3	
72 4-Methyl-2-pentanone (MIBK	43	7.895	7.895	0.000	96	188260	200.0	199.5	
73 Toluene	91	8.047	8.047	0.000	99	1482388	200.0	201.4	
71 cis-1,3-Dichloropropene	75	8.327	8.327	0.000	94	263119	200.0	200.1	
75 Ethyl methacrylate	69	8.412	8.412	0.000	91	277970	200.0	196.6	
76 1,1,2-Trichloroethane	97	8.522	8.522	0.000	89	202813	200.0	197.4	
77 Tetrachloroethene	164	8.564	8.564	0.000	98	282910	200.0	192.4	
78 1,3-Dichloropropane	76	8.674	8.674	0.000	94	373912	200.0	200.3	
79 2-Hexanone	43	8.753	8.753	0.000	97	136168	200.0	177.1	
81 Chlorodibromomethane	129	8.880	8.880	0.000	92	165195	200.0	199.8	
82 Ethylene Dibromide	107	8.984	8.984	0.000	99	171314	200.0	187.7	
84 Chlorobenzene	112	9.483	9.483	0.000	93	821464	200.0	190.4	
85 1,1,1,2-Tetrachloroethane	131	9.586	9.586	0.000	96	258091	200.0	202.0	
86 Ethylbenzene	106	9.592	9.592	0.000	98	538964	200.0	197.5	
87 m-Xylene & p-Xylene	106	9.732	9.732	0.000	99	666858	200.0	195.4	
88 o-Xylene	106	10.103	10.103	0.000	97	621808	200.0	196.6	
89 Styrene	104	10.134	10.134	0.000	95	926312	200.0	184.4	
90 Bromoform	173	10.304	10.304	0.000	98	71684	200.0	188.6	
91 Isopropylbenzene	105	10.480	10.480	0.000	96	1573703	200.0	187.5	
94 Bromobenzene	156	10.772	10.772	0.000	94	293419	200.0	195.9	
93 1,1,2,2-Tetrachloroethane	83	10.809	10.809	0.000	93	205728	200.0	198.4	
96 trans-1,4-Dichloro-2-buten	53	10.845	10.845	0.000	70	35792	200.0	204.0	
95 1,2,3-Trichloropropane	110	10.851	10.851	0.000	87	55169	200.0	203.6	
97 N-Propylbenzene	120	10.900	10.900	0.000	98	454703	200.0	196.5	
98 2-Chlorotoluene	126	10.973	10.973	0.000	96	344419	200.0	188.9	
99 1,3,5-Trimethylbenzene	105	11.089	11.089	0.000	95	1230769	200.0	210.6	
100 4-Chlorotoluene	126	11.101	11.101	0.000	98	320017	200.0	200.0	
101 tert-Butylbenzene	119	11.393	11.393	0.000	95	1112785	200.0	205.8	
103 1,2,4-Trimethylbenzene	105	11.460	11.460	0.000	98	1196451	200.0	202.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
104 sec-Butylbenzene	105	11.618	11.618	0.000	94	1635305	200.0	206.0	
105 1,3-Dichlorobenzene	146	11.721	11.721	0.000	98	567208	200.0	195.1	
106 4-Isopropyltoluene	119	11.782	11.782	0.000	96	1304885	200.0	204.9	
107 1,4-Dichlorobenzene	146	11.831	11.831	0.000	96	521793	200.0	192.3	
111 1,2-Dichlorobenzene	146	12.172	12.172	0.000	98	492120	200.0	198.7	
110 n-Butylbenzene	91	12.184	12.184	0.000	97	1193426	200.0	200.3	
112 1,2-Dibromo-3-Chloropropan	75	12.962	12.962	0.000	80	14825	200.0	201.9	
113 1,2,4-Trichlorobenzene	180	13.778	13.778	0.000	95	190499	200.0	202.7	
115 Hexachlorobutadiene	225	13.936	13.936	0.000	97	225931	200.0	189.4	
116 Naphthalene	128	14.033	14.033	0.000	97	309493	200.0	205.5	
117 1,2,3-Trichlorobenzene	180	14.252	14.252	0.000	96	145813	200.0	199.3	
S 130 Xylenes, Total	106				0		400.0	392.0	
S 129 1,2-Dichloroethene, Total	96				0		400.0	368.6	
S 131 1,3-Dichloropropene, Total	1				0		400.0	392.4	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00017	Amount Added:	8.00	Units: uL
VOA8260INT_00022	Amount Added:	10.00	Units: uL
VOAACROPRI_00003	Amount Added:	35.00	Units: uL
VOA8260VOAPRI_00087	Amount Added:	8.00	Units: uL
voaWVA pri Re_00004	Amount Added:	8.00	Units: uL

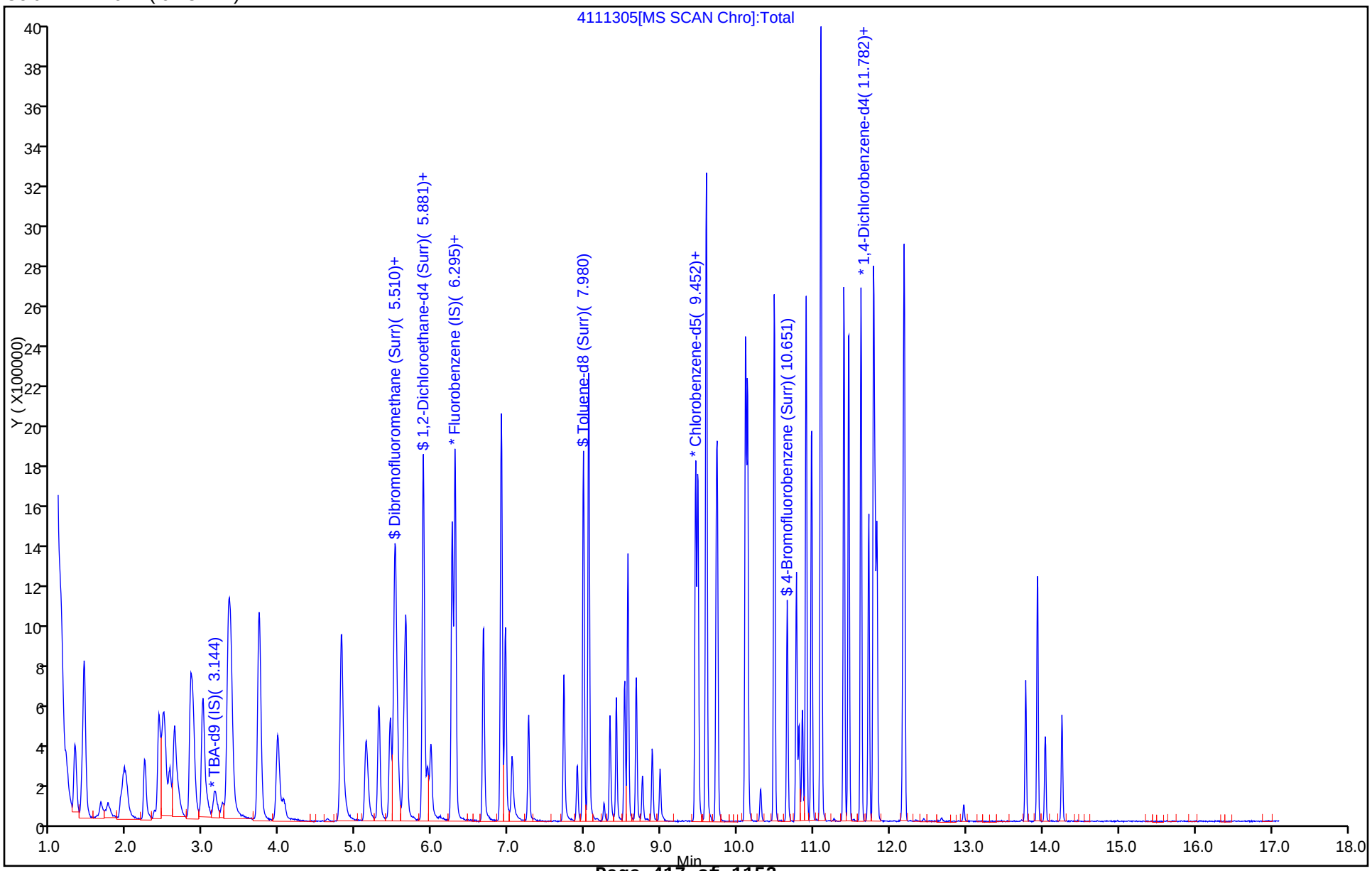
Report Date: 14-Nov-2014 08:03:56 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111305.D

Injection Date:	13-Nov-2014 15:08:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	ICIS			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

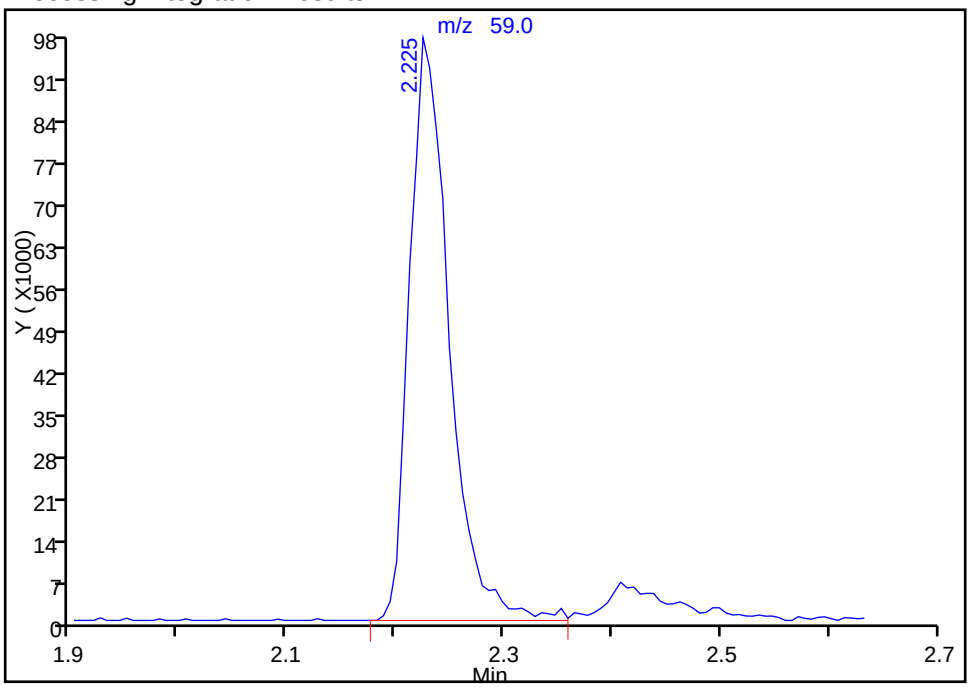
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111305.D
Injection Date: 13-Nov-2014 15:08:30 Instrument ID: CHHP4
Lims ID: ICIS
Client ID:
Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP4 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

19 Ethyl ether, CAS: 60-29-7

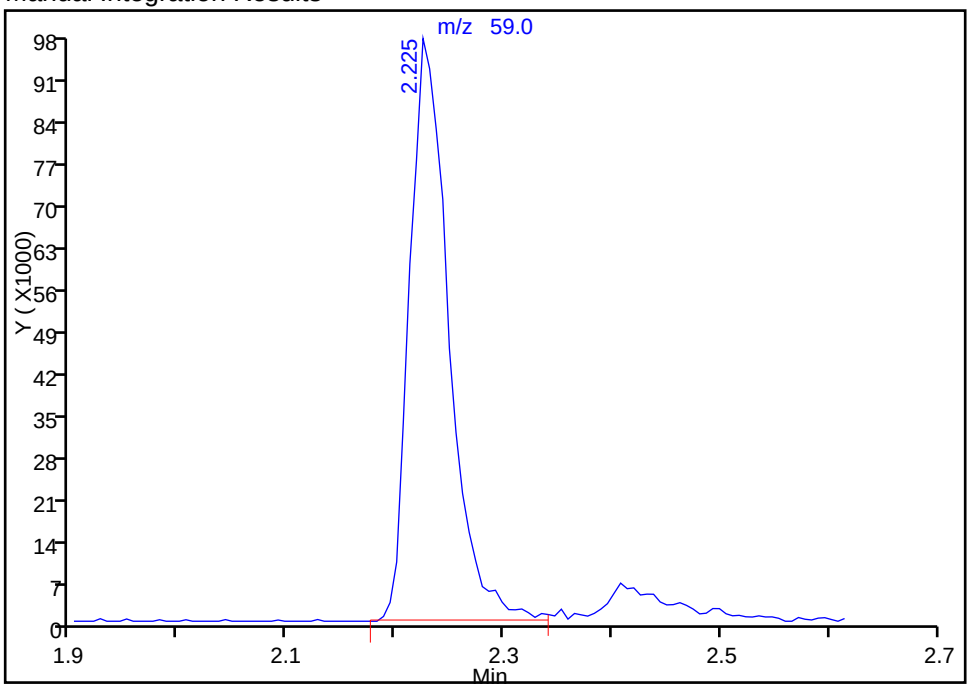
Processing Integration Results

RT: 2.23
Response: 249928
Amount: 330.5479



Manual Integration Results

RT: 2.23
Response: 246670
Amount: 219.4026



Reviewer: journetp, 13-Nov-2014 15:51:28
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111306.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 13-Nov-2014 15:34:30 ALS Bottle#: 9 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0004379-006
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub5

Method: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 14-Nov-2014 08:03:57 Calib Date: 13-Nov-2014 16:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111308.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK047

First Level Reviewer: journetp Date: 13-Nov-2014 15:27:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.143	3.144	-0.001	99	256156	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.258	6.258	0.000	98	1370202	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.452	9.452	0.000	87	306215	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.806	11.807	-0.001	95	348475	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.498	5.492	0.006	94	322322	250.0	262.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.887	5.887	0.000	96	290098	250.0	260.5	
$ 7 Toluene-d8 (Surr)	98	7.980	7.980	0.000	93	1464096	250.0	255.4	
$ 8 4-Bromofluorobenzene (Surr	95	10.650	10.651	-0.001	89	479801	250.0	257.5	
10 Dichlorodifluoromethane	85	1.203	1.209	-0.006	99	605388	250.0	260.2	
11 Chloromethane	50	1.318	1.313	0.005	99	866054	250.0	258.9	
12 Vinyl chloride	62	1.422	1.416	0.006	99	568203	250.0	251.9	
13 Butadiene	54	1.434	1.434	0.000	96	595592	250.0	269.2	
14 Bromomethane	94	1.653	1.653	0.000	92	91051	250.0	245.9	
15 Chloroethane	64	1.744	1.745	-0.001	97	116110	250.0	295.2	
17 Trichlorofluoromethane	101	1.933	1.927	0.006	77	423831	250.0	271.7	
16 Dichlorofluoromethane	67	1.957	1.951	0.006	98	452738	250.0	260.7	
19 Ethyl ether	59	2.225	2.225	0.000	96	163204	250.0	147.7	M
20 Acrolein	56	2.352	2.359	-0.007	96	66210	1000.0	862.8	
21 1,1-Dichloroethene	96	2.419	2.414	0.005	96	481490	250.0	250.9	
22 1,1,2-Trichloro-1,2,2-trif	101	2.480	2.487	-0.007	95	538039	250.0	247.3	
23 Acetone	43	2.517	2.517	0.000	99	112000	250.0	213.2	
24 Iodomethane	142	2.565	2.560	0.005	96	742312	250.0	260.4	
25 Carbon disulfide	76	2.626	2.621	0.005	99	1757018	250.0	288.1	
28 3-Chloro-1-propene	76	2.833	2.833	0.000	94	369820	250.0	261.3	
29 Methyl acetate	43	2.863	2.864	-0.001	98	1125960	1250.0	1229.6	
30 Methylene Chloride	84	2.991	2.992	-0.001	99	591130	250.0	263.2	
31 2-Methyl-2-propanol	59	3.253	3.259	-0.006	95	174439	2500.0	2182.6	
32 Acrylonitrile	53	3.320	3.320	0.000	100	1013701	2500.0	2478.6	
33 trans-1,2-Dichloroethene	96	3.338	3.332	0.006	97	546100	250.0	263.3	
34 Methyl tert-butyl ether	73	3.362	3.363	-0.001	97	848875	250.0	258.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 Vinyl acetate	43	3.727	3.728	-0.001	67	820004	250.0	274.9	
35 Hexane	57	3.733	3.728	0.005	92	1227577	250.0	273.7	
36 1,1-Dichloroethane	63	3.977	3.971	0.006	95	1028001	250.0	272.9	
41 2,2-Dichloropropane	77	4.804	4.805	0.000	88	431975	250.0	288.3	
42 cis-1,2-Dichloroethene	96	4.810	4.817	-0.007	83	545586	250.0	266.6	
43 2-Butanone (MEK)	43	4.853	4.865	-0.012	100	132056	250.0	217.6	
46 Chlorobromomethane	128	5.133	5.127	0.006	90	174899	250.0	253.5	
48 Tetrahydrofuran	42	5.151	5.151	0.000	94	156557	500.0	481.8	
49 Chloroform	83	5.303	5.297	0.006	94	728154	250.0	263.4	
50 1,1,1-Trichloroethane	97	5.449	5.449	0.000	98	608954	250.0	271.3	
51 Cyclohexane	56	5.516	5.516	0.000	92	1369397	250.0	269.1	
53 Carbon tetrachloride	117	5.631	5.626	0.005	95	552200	250.0	281.3	
52 1,1-Dichloropropene	75	5.656	5.656	0.000	95	689546	250.0	274.2	
54 Benzene	78	5.881	5.881	0.000	98	2065323	250.0	271.7	
59 Isobutyl alcohol	41	5.936	5.936	0.000	96	170998	6250.0	6305.2	
55 1,2-Dichloroethane	62	5.978	5.979	-0.001	94	363270	250.0	251.3	
58 n-Heptane	43	6.301	6.295	0.006	94	1227976	250.0	275.8	
61 Trichloroethene	130	6.672	6.672	0.000	98	478839	250.0	272.0	
63 Methylcyclohexane	83	6.903	6.903	0.000	94	1077786	250.0	272.4	
64 1,2-Dichloropropane	63	6.958	6.958	0.000	99	528984	250.0	262.4	
65 Dibromomethane	93	7.043	7.043	0.000	96	167424	250.0	257.6	
67 1,4-Dioxane	88	7.061	7.068	-0.007	98	49371	5000.0	5099.1	
68 Dichlorobromomethane	83	7.262	7.262	0.000	96	424089	250.0	277.0	
74 trans-1,3-Dichloropropene	75	7.724	7.725	-0.001	94	578704	250.0	266.4	
72 4-Methyl-2-pentanone (MIBK	43	7.894	7.895	-0.001	97	241399	250.0	253.4	
73 Toluene	91	8.047	8.047	0.000	98	1995717	250.0	282.7	
71 cis-1,3-Dichloropropene	75	8.326	8.327	-0.001	94	367540	250.0	284.3	
75 Ethyl methacrylate	69	8.412	8.412	0.000	91	365707	250.0	257.6	
76 1,1,2-Trichloroethane	97	8.521	8.522	-0.001	88	275035	250.0	265.1	
77 Tetrachloroethene	164	8.564	8.564	0.000	98	389051	250.0	262.0	
78 1,3-Dichloropropane	76	8.673	8.674	-0.001	94	486381	250.0	258.0	
79 2-Hexanone	43	8.752	8.753	-0.001	97	174692	250.0	222.9	
81 Chlorodibromomethane	129	8.886	8.880	0.006	91	231956	250.0	277.9	
82 Ethylene Dibromide	107	8.983	8.984	-0.001	97	233562	250.0	253.5	
84 Chlorobenzene	112	9.482	9.483	-0.001	91	1110362	250.0	256.6	
85 1,1,1,2-Tetrachloroethane	131	9.586	9.586	0.000	97	347096	250.0	269.0	
86 Ethylbenzene	106	9.592	9.592	0.000	98	749199	250.0	271.9	
87 m-Xylene & p-Xylene	106	9.732	9.732	0.000	98	933500	250.0	270.9	
88 o-Xylene	106	10.109	10.103	0.006	96	850175	250.0	266.2	
89 Styrene	104	10.133	10.134	-0.001	96	1273900	250.0	259.9	
90 Bromoform	173	10.304	10.304	0.000	98	107214	250.0	264.8	
91 Isopropylbenzene	105	10.480	10.480	0.000	96	2083413	250.0	258.7	
94 Bromobenzene	156	10.772	10.772	0.000	95	400010	250.0	255.2	
93 1,1,2,2-Tetrachloroethane	83	10.808	10.809	-0.001	93	270082	250.0	258.0	
96 trans-1,4-Dichloro-2-buten	53	10.845	10.845	0.000	71	48106	250.0	262.1	
95 1,2,3-Trichloropropane	110	10.851	10.851	0.000	86	68915	250.0	244.7	
97 N-Propylbenzene	120	10.900	10.900	0.000	97	639921	250.0	273.3	
98 2-Chlorotoluene	126	10.973	10.973	0.000	96	478168	250.0	250.7	
99 1,3,5-Trimethylbenzene	105	11.088	11.089	-0.001	96	1636253	250.0	281.7	
100 4-Chlorotoluene	126	11.100	11.101	-0.001	98	448346	250.0	267.8	
101 tert-Butylbenzene	119	11.392	11.393	-0.001	94	1493133	250.0	276.2	
103 1,2,4-Trimethylbenzene	105	11.459	11.460	-0.001	97	1612232	250.0	272.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
104 sec-Butylbenzene	105	11.618	11.618	0.000	95	2217769	250.0	284.0	
105 1,3-Dichlorobenzene	146	11.721	11.721	0.000	97	780582	250.0	262.7	
106 4-Isopropyltoluene	119	11.782	11.782	0.000	96	1754745	250.0	277.2	
107 1,4-Dichlorobenzene	146	11.830	11.831	-0.001	94	732940	250.0	258.2	
111 1,2-Dichlorobenzene	146	12.171	12.172	-0.001	98	656861	250.0	259.6	
110 n-Butylbenzene	91	12.189	12.184	0.005	97	1630975	250.0	275.6	
112 1,2-Dibromo-3-Chloropropan	75	12.968	12.962	0.006	84	18329	250.0	234.7	
113 1,2,4-Trichlorobenzene	180	13.777	13.778	-0.001	95	256636	250.0	260.9	
115 Hexachlorobutadiene	225	13.929	13.936	-0.007	96	308820	250.0	247.4	
116 Naphthalene	128	14.033	14.033	0.000	97	390467	250.0	247.1	
117 1,2,3-Trichlorobenzene	180	14.252	14.252	0.000	95	194809	250.0	253.2	
S 130 Xylenes, Total	106				0		500.0	537.0	
S 129 1,2-Dichloroethene, Total	96				0		500.0	530.0	
S 131 1,3-Dichloropropene, Total	1				0		500.0	550.7	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00017	Amount Added:	10.00	Units: uL
VOA8260INT_00022	Amount Added:	10.00	Units: uL
VOAACROPRI_00003	Amount Added:	40.00	Units: uL
VOA8260VOAPRI_00087	Amount Added:	10.00	Units: uL
voaWVA pri Re_00004	Amount Added:	10.00	Units: uL

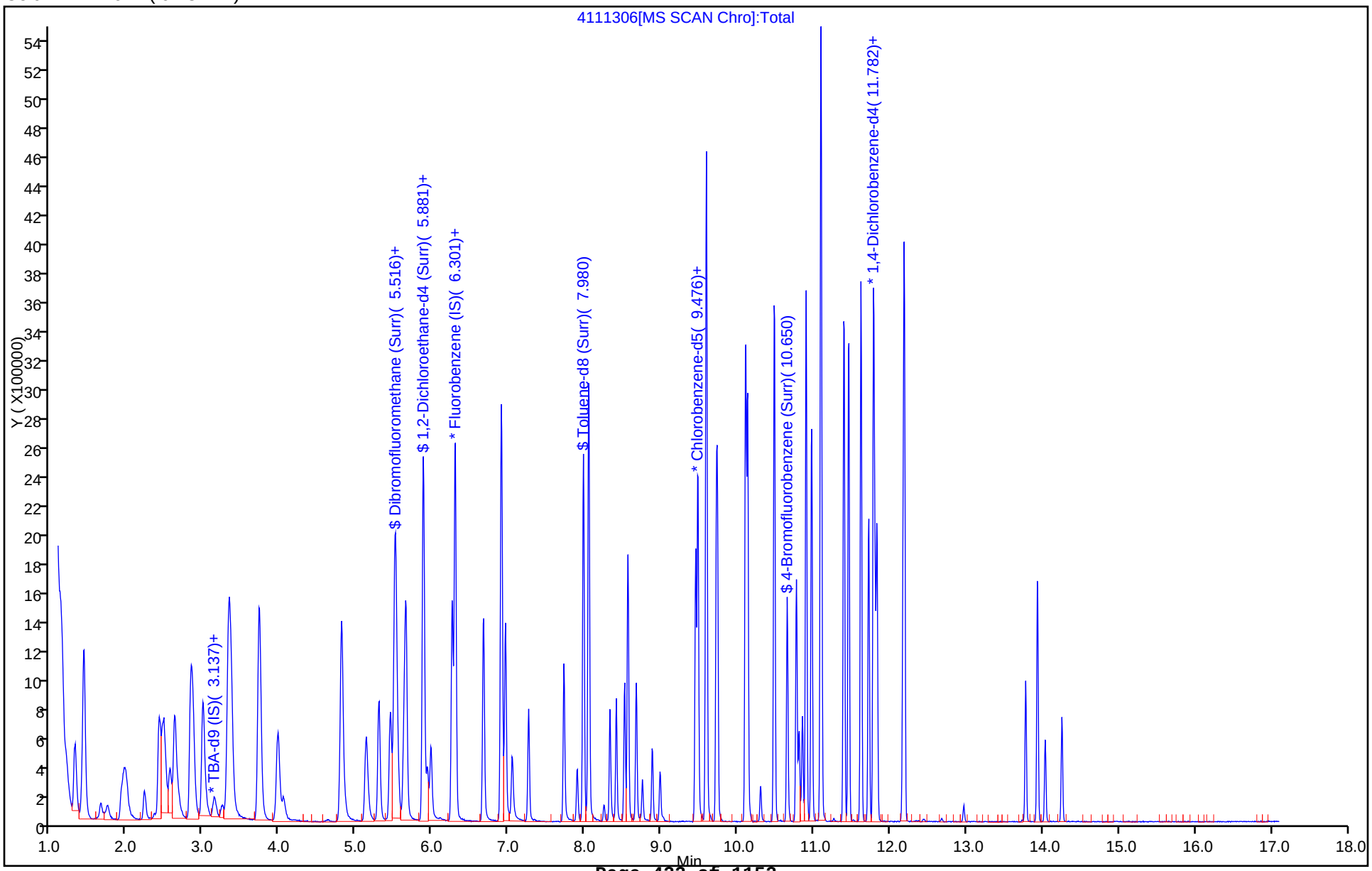
Report Date: 14-Nov-2014 08:03:58 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111306.D

Injection Date:	13-Nov-2014 15:34:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	IC			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

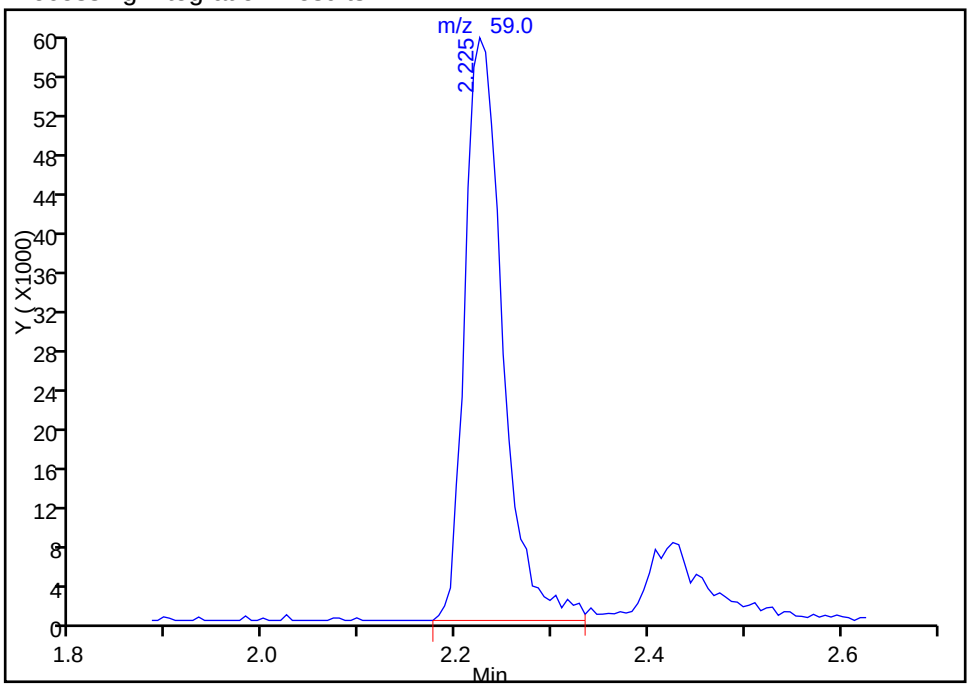
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111306.D
Injection Date: 13-Nov-2014 15:34:30 Instrument ID: CHHP4
Lims ID: IC
Client ID:
Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP4 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

19 Ethyl ether, CAS: 60-29-7

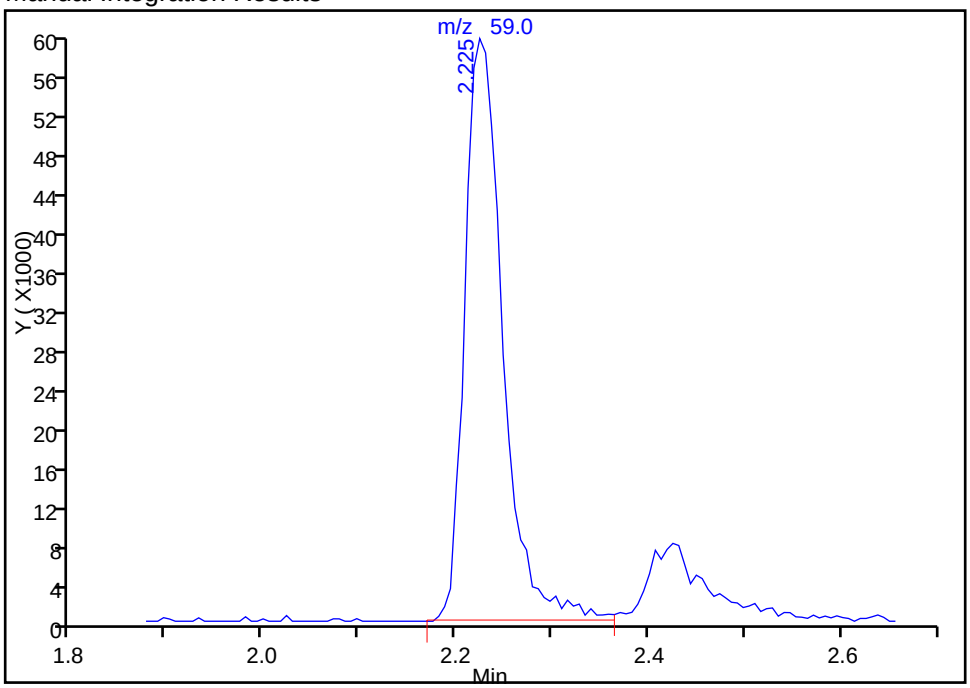
Processing Integration Results

RT: 2.22
Response: 163226
Amount: 203.2227



Manual Integration Results

RT: 2.22
Response: 163204
Amount: 147.6869



Reviewer: journetp, 13-Nov-2014 15:52:28
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Report Date: 14-Nov-2014 08:03:58 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111307.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 13-Nov-2014 16:01:30 ALS Bottle#: 10 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0004379-007
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub5

Method: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 14-Nov-2014 08:03:58 Calib Date: 13-Nov-2014 16:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111308.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK047

First Level Reviewer: journetp Date: 13-Nov-2014 15:33:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.151	3.144	0.007	99	276615	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.259	6.258	0.001	98	1411943	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.453	9.452	0.001	85	327049	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.808	11.807	0.001	95	380744	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.493	5.492	0.001	94	784706	625.0	619.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.888	5.887	0.001	96	687750	625.0	599.3	
$ 7 Toluene-d8 (Surr)	98	7.981	7.980	0.001	93	3050366	625.0	498.2	
$ 8 4-Bromofluorobenzene (Surr	95	10.652	10.651	0.001	88	1168062	625.0	586.9	
10 Dichlorodifluoromethane	85	1.204	1.209	-0.005	99	1425242	625.0	594.5	
11 Chloromethane	50	1.320	1.313	0.007	99	1873417	625.0	543.4	
12 Vinyl chloride	62	1.429	1.416	0.013	83	1271000	625.0	626.1	
13 Butadiene	54	1.435	1.434	0.001	97	1295697	625.0	613.9	
14 Bromomethane	94	1.654	1.653	0.001	91	205249	625.0	537.9	
15 Chloroethane	64	1.745	1.745	0.000	96	234915	625.0	611.2	
17 Trichlorofluoromethane	101	1.916	1.927	-0.011	95	947224	625.0	622.6	
16 Dichlorofluoromethane	67	1.958	1.951	0.007	97	965759	625.0	539.6	
19 Ethyl ether	59	2.232	2.225	0.007	98	426728	625.0	374.7	
20 Acrolein	56	2.366	2.359	0.007	99	83263	1125.0	1052.9	
21 1,1-Dichloroethene	96	2.415	2.414	0.001	97	1174902	625.0	624.2	
22 1,1,2-Trichloro-1,2,2-trif	101	2.482	2.487	-0.005	94	1314043	625.0	586.0	
23 Acetone	43	2.524	2.517	0.007	99	336404	625.0	645.6	
24 Iodomethane	142	2.561	2.560	0.001	97	1764732	625.0	600.7	
25 Carbon disulfide	76	2.621	2.621	0.000	99	4098766	625.0	652.2	
28 3-Chloro-1-propene	76	2.834	2.833	0.001	95	918988	625.0	622.8	
29 Methyl acetate	43	2.865	2.864	0.001	98	2692420	3125.0	2853.3	
30 Methylene Chloride	84	2.993	2.992	0.001	99	1288194	625.0	617.3	
31 2-Methyl-2-propanol	59	3.254	3.259	-0.005	96	524068	6250.0	6072.3	
32 Acrylonitrile	53	3.321	3.320	0.001	100	2460435	6250.0	6241.9	
33 trans-1,2-Dichloroethene	96	3.333	3.332	0.001	98	1300362	625.0	608.5	
34 Methyl tert-butyl ether	73	3.364	3.363	0.001	97	2001815	625.0	592.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 Vinyl acetate	43	3.729	3.728	0.001	67	1762970	625.0	615.7	
35 Hexane	57	3.729	3.728	0.001	93	2631619	625.0	615.7	
36 1,1-Dichloroethane	63	3.978	3.971	0.007	96	2374633	625.0	611.7	
41 2,2-Dichloropropane	77	4.799	4.805	-0.005	90	989114	625.0	640.7	
42 cis-1,2-Dichloroethene	96	4.812	4.817	-0.005	82	1278532	625.0	606.4	
43 2-Butanone (MEK)	43	4.854	4.865	-0.011	100	390511	625.0	640.8	
46 Chlorobromomethane	128	5.128	5.127	0.001	91	442240	625.0	622.0	
48 Tetrahydrofuran	42	5.152	5.151	0.001	93	381480	1250.0	1139.2	
49 Chloroform	83	5.298	5.297	0.001	93	1717983	625.0	603.1	
50 1,1,1-Trichloroethane	97	5.450	5.449	0.001	98	1465686	625.0	633.7	
51 Cyclohexane	56	5.517	5.516	0.001	93	3085324	625.0	588.3	
53 Carbon tetrachloride	117	5.633	5.626	0.007	97	1335309	625.0	660.0	
52 1,1-Dichloropropene	75	5.657	5.656	0.001	94	1558568	625.0	601.4	
54 Benzene	78	5.882	5.881	0.001	98	4273723	625.0	545.7	
59 Isobutyl alcohol	41	5.937	5.936	0.001	96	437048	15625	15639	
55 1,2-Dichloroethane	62	5.980	5.979	0.001	93	890231	625.0	597.7	
58 n-Heptane	43	6.296	6.295	0.001	94	2512809	625.0	547.6	
61 Trichloroethene	130	6.667	6.672	-0.005	98	1074892	625.0	592.5	
63 Methylcyclohexane	83	6.904	6.903	0.001	94	2314111	625.0	567.7	
64 1,2-Dichloropropane	63	6.959	6.958	0.001	99	1227431	625.0	590.9	
65 Dibromomethane	93	7.044	7.043	0.001	97	409624	625.0	611.6	
67 1,4-Dioxane	88	7.062	7.068	-0.006	96	121487	12500	12338	
68 Dichlorobromomethane	83	7.263	7.262	0.001	97	1059548	625.0	671.5	
74 trans-1,3-Dichloropropene	75	7.725	7.725	0.000	94	1409996	625.0	618.5	
72 4-Methyl-2-pentanone (MIBK	43	7.896	7.895	0.001	96	608401	625.0	597.9	
73 Toluene	91	8.048	8.047	0.001	95	3891300	625.0	596.0	
71 cis-1,3-Dichloropropene	75	8.328	8.327	0.001	93	955557	625.0	717.4	
75 Ethyl methacrylate	69	8.413	8.412	0.001	92	906418	625.0	619.5	
76 1,1,2-Trichloroethane	97	8.522	8.522	0.000	89	639056	625.0	576.7	
77 Tetrachloroethene	164	8.565	8.564	0.001	97	876254	625.0	552.4	
78 1,3-Dichloropropane	76	8.675	8.674	0.001	95	1165717	625.0	578.9	
79 2-Hexanone	43	8.754	8.753	0.001	96	548500	625.0	645.9	
81 Chlorodibromomethane	129	8.881	8.880	0.001	92	614666	625.0	689.4	
82 Ethylene Dibromide	107	8.985	8.984	0.001	98	588394	625.0	597.9	
84 Chlorobenzene	112	9.484	9.483	0.001	88	2393765	625.0	523.3	
85 1,1,1,2-Tetrachloroethane	131	9.587	9.586	0.001	95	807938	625.0	586.3	
86 Ethylbenzene	106	9.593	9.592	0.001	96	1544718	625.0	525.0	
87 m-Xylene & p-Xylene	106	9.733	9.732	0.001	95	2046967	625.0	556.1	
88 o-Xylene	106	10.104	10.103	0.001	94	1822348	625.0	534.2	
89 Styrene	104	10.135	10.134	0.001	93	2726504	625.0	624.6	
90 Bromoform	173	10.305	10.304	0.001	98	317998	625.0	624.3	
91 Isopropylbenzene	105	10.481	10.480	0.001	97	3984405	625.0	624.4	
94 Bromobenzene	156	10.773	10.772	0.001	95	973122	625.0	568.3	
93 1,1,2,2-Tetrachloroethane	83	10.810	10.809	0.001	93	662210	625.0	592.3	
96 trans-1,4-Dichloro-2-buten	53	10.846	10.845	0.001	73	141779	625.0	706.9	
95 1,2,3-Trichloropropane	110	10.852	10.851	0.001	87	185957	625.0	621.8	
97 N-Propylbenzene	120	10.901	10.900	0.001	94	1393134	625.0	609.3	
98 2-Chlorotoluene	126	10.974	10.973	0.001	97	1092021	625.0	523.9	
99 1,3,5-Trimethylbenzene	105	11.090	11.089	0.001	97	3157394	625.0	588.7	
100 4-Chlorotoluene	126	11.102	11.101	0.001	97	968646	625.0	529.5	
101 tert-Butylbenzene	119	11.394	11.393	0.001	93	3035317	625.0	597.6	
103 1,2,4-Trimethylbenzene	105	11.461	11.460	0.001	96	3318781	625.0	601.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
104 sec-Butylbenzene	105	11.619	11.618	0.001	95	4198749	625.0	587.0	
105 1,3-Dichlorobenzene	146	11.722	11.721	0.001	96	1828357	625.0	617.0	
106 4-Isopropyltoluene	119	11.783	11.782	0.001	93	3483029	625.0	595.1	
107 1,4-Dichlorobenzene	146	11.826	11.831	-0.005	92	1767424	625.0	569.8	
111 1,2-Dichlorobenzene	146	12.173	12.172	0.000	96	1534020	625.0	616.5	
110 n-Butylbenzene	91	12.191	12.184	0.007	94	3278863	625.0	599.5	
112 1,2-Dibromo-3-Chloropropan	75	12.963	12.962	0.001	93	60977	625.0	632.4	
113 1,2,4-Trichlorobenzene	180	13.779	13.778	0.001	94	704052	625.0	655.1	
115 Hexachlorobutadiene	225	13.931	13.936	-0.005	98	716089	625.0	525.0	
116 Naphthalene	128	14.034	14.033	0.001	98	1068002	625.0	624.8	
117 1,2,3-Trichlorobenzene	180	14.253	14.252	0.001	94	524291	625.0	624.3	
S 130 Xylenes, Total	106				0		1250.0	1090.3	
S 129 1,2-Dichloroethene, Total	96				0		1250.0	1214.8	
S 131 1,3-Dichloropropene, Total	1				0		1250.0	1335.8	

Reagents:

VOA8260SURR_00017	Amount Added:	25.00	Units: uL
VOA8260INT_00022	Amount Added:	10.00	Units: uL
VOAACROPRI_00003	Amount Added:	45.00	Units: uL
VOA8260VOAPRI_00087	Amount Added:	25.00	Units: uL
voaWVA pri Re_00004	Amount Added:	25.00	Units: uL

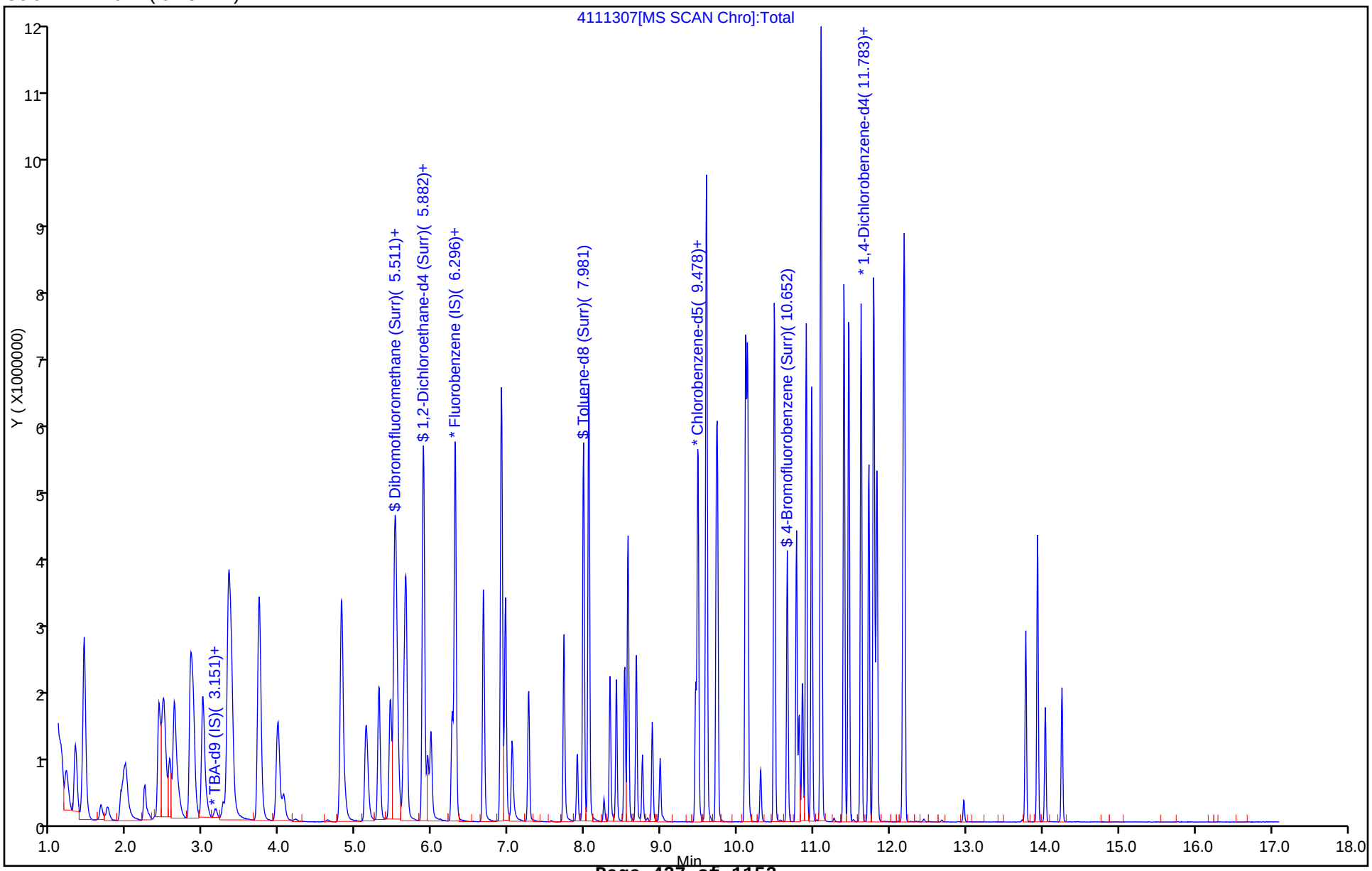
Report Date: 14-Nov-2014 08:03:58 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111307.D

Injection Date:	13-Nov-2014 16:01:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	IC			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111308.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 13-Nov-2014 16:27:30 ALS Bottle#: 11 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0004379-008
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub5

Method: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 14-Nov-2014 08:03:59 Calib Date: 13-Nov-2014 16:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111308.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK047

First Level Reviewer: journetp Date: 13-Nov-2014 15:50:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.180	3.144	0.036	99	285121	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.258	6.258	0.000	97	1444006	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.452	9.452	0.000	87	323932	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.806	11.807	-0.001	94	380353	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.498	5.492	0.006	94	1552470	1250.0	1197.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.893	5.887	0.006	95	1419269	1250.0	1209.4	
$ 7 Toluene-d8 (Surr)	98	7.980	7.980	0.000	92	4973234	1250.0	820.0	
$ 8 4-Bromofluorobenzene (Surr	95	10.650	10.651	-0.001	88	2178079	1250.0	1104.9	
10 Dichlorodifluoromethane	85	1.203	1.209	-0.006	99	2818625	1250.0	1149.7	
11 Chloromethane	50	1.331	1.313	0.018	99	3665874	1250.0	1039.8	
12 Vinyl chloride	62	1.434	1.416	0.018	97	2580955	1250.0	1679.5	
13 Butadiene	54	1.434	1.434	0.000	96	2571403	1250.0	1252.3	
14 Bromomethane	94	1.653	1.653	0.000	92	412904	1250.0	1058.2	
15 Chloroethane	64	1.738	1.745	-0.007	96	446169	1250.0	1252.8	
17 Trichlorofluoromethane	101	1.908	1.927	-0.019	96	1710503	1250.0	1250.3	
16 Dichlorofluoromethane	67	1.957	1.951	0.006	96	1745463	1250.0	953.6	
19 Ethyl ether	59	2.231	2.225	0.006	96	906382	1250.0	778.3	
20 Acrolein	56	2.365	2.359	0.006	98	95877	1250.0	1185.5	
21 1,1-Dichloroethene	96	2.413	2.414	-0.001	98	2223500	1250.0	1250.2	
22 1,1,2-Trichloro-1,2,2-trif	101	2.474	2.487	-0.013	95	2572296	1250.0	1121.7	
23 Acetone	43	2.535	2.517	0.018	98	657755	1250.0	1246.4	
24 Iodomethane	142	2.553	2.560	-0.007	98	3472713	1250.0	1155.8	
25 Carbon disulfide	76	2.614	2.621	-0.007	99	7832773	1250.0	1218.6	
28 3-Chloro-1-propene	76	2.827	2.833	-0.006	95	1891076	1250.0	1250.3	
29 Methyl acetate	43	2.870	2.864	0.006	97	4937443	6250.0	5116.3	
30 Methylene Chloride	84	2.991	2.992	-0.001	97	2474759	1250.0	1251.6	
31 2-Methyl-2-propanol	59	3.289	3.259	0.030	96	1025484	12500	11528	
32 Acrylonitrile	53	3.326	3.320	0.006	99	4547444	12500	12504	
33 trans-1,2-Dichloroethene	96	3.332	3.332	0.000	97	2490725	1250.0	1139.6	
34 Methyl tert-butyl ether	73	3.375	3.363	0.012	97	3852087	1250.0	1114.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 Vinyl acetate	43	3.727	3.728	-0.001	67	3332955	1250.0	1252.0	
35 Hexane	57	3.727	3.728	-0.001	94	4890957	1250.0	1252.1	
36 1,1-Dichloroethane	63	3.977	3.971	0.006	95	4551726	1250.0	1146.4	
41 2,2-Dichloropropane	77	4.804	4.805	0.000	92	1945572	1250.0	1232.3	
42 cis-1,2-Dichloroethene	96	4.816	4.817	-0.001	83	2415854	1250.0	1120.4	
43 2-Butanone (MEK)	43	4.859	4.865	-0.006	100	749894	1250.0	1247.1	
46 Chlorobromomethane	128	5.133	5.127	0.006	92	888624	1250.0	1222.1	
48 Tetrahydrofuran	42	5.157	5.151	0.006	93	788836	2500.0	2303.4	
49 Chloroform	83	5.303	5.297	0.006	93	3306749	1250.0	1135.0	
50 1,1,1-Trichloroethane	97	5.449	5.449	0.000	98	2888252	1250.0	1221.0	
51 Cyclohexane	56	5.522	5.516	0.006	94	5514912	1250.0	1028.3	
53 Carbon tetrachloride	117	5.632	5.626	0.006	98	2655134	1250.0	1283.2	
52 1,1-Dichloropropene	75	5.656	5.656	0.000	91	2932114	1250.0	1106.4	
54 Benzene	78	5.881	5.881	0.000	94	7082329	1250.0	884.2	
59 Isobutyl alcohol	41	5.948	5.936	0.012	95	898756	31250	31446	
55 1,2-Dichloroethane	62	5.984	5.979	0.005	93	1794671	1250.0	1178.2	
58 n-Heptane	43	6.301	6.295	0.006	90	4379109	1250.0	933.1	
61 Trichloroethene	130	6.672	6.672	0.000	95	2078691	1250.0	1120.3	
63 Methylcyclohexane	83	6.903	6.903	0.000	94	4054262	1250.0	972.4	
64 1,2-Dichloropropane	63	6.958	6.958	0.000	96	2342875	1250.0	1102.9	
65 Dibromomethane	93	7.043	7.043	0.000	96	832691	1250.0	1215.6	
67 1,4-Dioxane	88	7.061	7.068	-0.007	97	264670	25000	25030	
68 Dichlorobromomethane	83	7.262	7.262	0.000	95	2149442	1250.0	1332.0	
74 trans-1,3-Dichloropropene	75	7.724	7.725	-0.001	95	2701972	1250.0	1251.3	
72 4-Methyl-2-pentanone (MIBK	43	7.901	7.895	0.006	96	1160728	1250.0	1151.6	
73 Toluene	91	8.053	8.047	0.006	90	6029590	1250.0	1265.0	
71 cis-1,3-Dichloropropene	75	8.327	8.327	0.000	92	1957315	1250.0	1436.8	
75 Ethyl methacrylate	69	8.412	8.412	0.000	93	1697790	1250.0	1251.2	
76 1,1,2-Trichloroethane	97	8.521	8.522	-0.001	90	1220396	1250.0	1111.9	
77 Tetrachloroethene	164	8.564	8.564	0.000	95	1625840	1250.0	1034.9	
78 1,3-Dichloropropane	76	8.673	8.674	-0.001	96	2181877	1250.0	1094.0	
79 2-Hexanone	43	8.752	8.753	-0.001	96	1036391	1250.0	1246.1	
81 Chlorodibromomethane	129	8.880	8.880	0.000	92	1269498	1250.0	1437.6	
82 Ethylene Dibromide	107	8.984	8.984	0.000	97	1165315	1250.0	1195.5	
84 Chlorobenzene	112	9.482	9.483	-0.001	83	3954943	1250.0	876.5	
85 1,1,1,2-Tetrachloroethane	131	9.586	9.586	0.000	95	1449971	1250.0	1062.4	
86 Ethylbenzene	106	9.598	9.592	0.006	91	2436878	1250.0	836.1	
87 m-Xylene & p-Xylene	106	9.732	9.732	0.000	91	3496984	1250.0	959.2	
88 o-Xylene	106	10.109	10.103	0.006	91	2964517	1250.0	877.4	
89 Styrene	104	10.133	10.134	-0.001	88	4262750	1250.0	NQ	
90 Bromoform	173	10.304	10.304	0.000	97	690147	1250.0	1148.0	
91 Isopropylbenzene	105	10.486	10.480	0.006	93	5824294	1250.0	NQ	
94 Bromobenzene	156	10.772	10.772	0.000	95	1791912	1250.0	1047.5	
93 1,1,2,2-Tetrachloroethane	83	10.809	10.809	0.000	93	1269483	1250.0	1146.3	
96 trans-1,4-Dichloro-2-buten	53	10.845	10.845	0.000	90	325791	1250.0	1626.1	
95 1,2,3-Trichloropropane	110	10.857	10.851	0.006	86	364227	1250.0	1250.8	
97 N-Propylbenzene	120	10.906	10.900	0.006	89	2310781	1250.0	1255.2	
98 2-Chlorotoluene	126	10.973	10.973	0.000	93	1942287	1250.0	932.9	
99 1,3,5-Trimethylbenzene	105	11.094	11.089	0.005	96	4615267	1250.0	1300.2	
100 4-Chlorotoluene	126	11.107	11.101	0.006	95	1609777	1250.0	880.8	
101 tert-Butylbenzene	119	11.399	11.393	0.006	91	4711107	1250.0	1264.7	
103 1,2,4-Trimethylbenzene	105	11.460	11.460	0.000	92	4998205	1250.0	1265.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
104 sec-Butylbenzene	105	11.624	11.618	0.006	93	6042610	1250.0	NQ	
105 1,3-Dichlorobenzene	146	11.721	11.721	0.000	93	3172333	1250.0	1252.2	
106 4-Isopropyltoluene	119	11.788	11.782	0.006	95	5154059	1250.0	1277.2	
107 1,4-Dichlorobenzene	146	11.831	11.831	0.000	88	3043269	1250.0	982.0	
111 1,2-Dichlorobenzene	146	12.171	12.172	-0.001	92	2591506	1250.0	1252.6	
110 n-Butylbenzene	91	12.190	12.184	0.006	89	4829229	1250.0	1272.7	
112 1,2-Dibromo-3-Chloropropan	75	12.962	12.962	0.000	85	137878	1250.0	1248.9	
113 1,2,4-Trichlorobenzene	180	13.777	13.778	-0.001	95	1381410	1250.0	1286.7	
115 Hexachlorobutadiene	225	13.935	13.936	-0.001	97	1313471	1250.0	963.9	
116 Naphthalene	128	14.033	14.033	0.000	98	2051017	1250.0	1250.0	
117 1,2,3-Trichlorobenzene	180	14.252	14.252	0.000	94	1025305	1250.0	1250.1	
S 130 Xylenes, Total	106				0		2500.0	1836.6	
S 129 1,2-Dichloroethene, Total	96				0		2500.0	2259.9	
S 131 1,3-Dichloropropene, Total	1				0		2500.0	2688.0	

QC Flag Legend

Processing Flags

NQ - Not Quantifiable

Reagents:

VOA8260SURR_00017	Amount Added:	50.00	Units: uL
VOA8260INT_00022	Amount Added:	10.00	Units: uL
VOAACROPRI_00003	Amount Added:	50.00	Units: uL
VOA8260VOAPRI_00087	Amount Added:	50.00	Units: uL
voaWVA pri Re_00004	Amount Added:	50.00	Units: uL

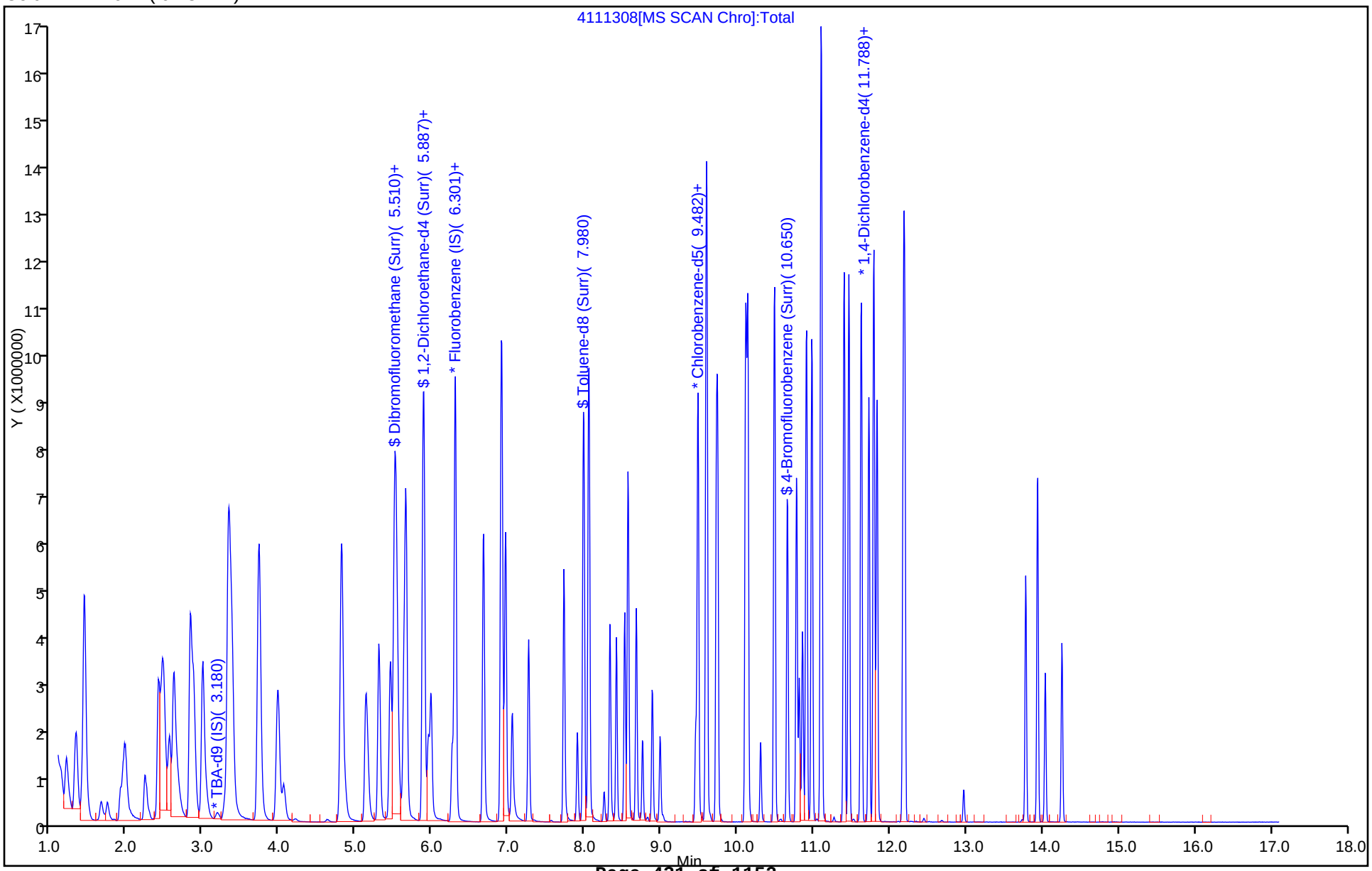
Report Date: 14-Nov-2014 08:03:59 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111308.D

Injection Date:	13-Nov-2014 16:27:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	IC			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCVIS 180-125940/3 Calibration Date: 11/21/2014 10:18

Instrument ID: CHHP4 Calib Start Date: 11/13/2014 12:52

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 11/13/2014 16:27

Lab File ID: 4112103.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.4245	0.3582		33.8	40.0	-15.6	
Chloromethane	Ave	0.6104	0.5847		38.3	40.0	-4.2	
Vinyl chloride	Qua		0.4164		39.0	40.0	-2.5	
1,3-Butadiene	Qua		0.4068		38.5	40.0	-3.8	
Bromomethane	Ave	0.0676	0.0653		38.6	40.0	-3.4	
Chloroethane	Qua		0.1163		65.2	40.0	63.1	
Trichlorofluoromethane	Qua		0.3958		55.7	40.0	39.2	
Dichlorofluoromethane	Ave	0.3169	0.4475		56.5	40.0	41.2	
Ethyl ether	Ave	0.2016	0.1306		25.9	40.0	-35.3	
1,1-Dichloroethene	Qua		0.3773		42.9	40.0	7.1	
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.3970	0.4126		41.6	40.0	3.9	
Acetone	Qua		0.0918		38.1	40.0	-4.9	
Iodomethane	Ave	0.5202	0.5188		39.9	40.0	-0.3	
Carbon disulfide	Ave	1.113	1.207		43.4	40.0	8.4	
Allyl chloride	Qua		0.2649		41.3	40.0	3.2	
Methyl acetate	Ave	0.1671	0.1580		189	200	-5.5	
Methylene Chloride	Qua		0.4361		40.8	40.0	2.1	
tert-Butyl alcohol	Ave	1.560	1.310		336	400	-16.0	
Acrylonitrile	Qua		0.0660		347	400	-13.3	
trans-1,2-Dichloroethene	Ave	0.3784	0.4014		42.4	40.0	6.1	
Methyl tert-butyl ether	Ave	0.5985	0.5608		37.5	40.0	-6.3	
Hexane	Qua		0.8735		41.6	40.0	4.1	
Vinyl acetate	Qua		0.5675		40.6	40.0	1.5	
1,1-Dichloroethane	Ave	0.6874	0.7275		42.3	40.0	5.8	
2,2-Dichloropropane	Ave	0.2733	0.3007		44.0	40.0	10.0	
cis-1,2-Dichloroethene	Ave	0.3733	0.3762		40.3	40.0	0.8	
2-Butanone (MEK)	Qua		0.1089		39.3	40.0	-1.8	
Chlorobromomethane	Ave	0.1259	0.1191		37.8	40.0	-5.4	
Tetrahydrofuran	Ave	0.0593	0.0490		66.1	80.0	-17.4	
Chloroform	Ave	0.5044	0.5081		40.3	40.0	0.7	
1,1,1-Trichloroethane	Ave	0.4095	0.4134		40.4	40.0	0.9	
Cyclohexane	Ave	0.9286	0.9506		40.9	40.0	2.4	
Carbon tetrachloride	Ave	0.3582	0.3777		42.2	40.0	5.4	
1,1-Dichloropropene	Ave	0.4588	0.4683		40.8	40.0	2.1	
Benzene	Ave	1.387	1.475		42.6	40.0	6.4	
Isobutyl alcohol	Ave	0.0049	0.0039		792	1000	-20.8	
1,2-Dichloroethane	Ave	0.2637	0.2471		37.5	40.0	-6.3	
n-Heptane	Ave	0.8125	0.8199		40.4	40.0	0.9	
Trichloroethene	Ave	0.3212	0.3234		40.3	40.0	0.7	
Methylcyclohexane	Ave	0.7218	0.7659		42.4	40.0	6.1	

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCVIS 180-125940/3 Calibration Date: 11/21/2014 10:18

Instrument ID: CHHP4 Calib Start Date: 11/13/2014 12:52

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 11/13/2014 16:27

Lab File ID: 4112103.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.3678	0.3651		39.7	40.0	-0.7	
Dibromomethane	Ave	0.1186	0.1158		39.1	40.0	-2.3	
1,4-Dioxane	Qua		0.0015		631	800	-21.2	
Dichlorobromomethane	Ave	0.2794	0.2880		41.2	40.0	3.1	
trans-1,3-Dichloropropene	Qua		1.771		40.0	40.0	-0.1	
4-Methyl-2-pentanone (MIBK)	Ave	0.7779	0.8395		43.2	40.0	7.9	
Toluene	Qua		6.633		44.4	40.0	10.9	
cis-1,3-Dichloropropene	Ave	0.2359	0.2276		38.6	40.0	-3.5	
Ethyl methacrylate	Qua		1.097		37.6	40.0	-5.9	
1,1,2-Trichloroethane	Ave	0.8471	0.8306		39.2	40.0	-1.9	
Tetrachloroethene	Ave	1.212	1.295		42.7	40.0	6.8	
1,3-Dichloropropane	Ave	1.539	1.490		38.7	40.0	-3.2	
2-Hexanone	Qua		0.6427		40.3	40.0	0.8	
Chlorodibromomethane	Ave	0.6815	0.6866		40.3	40.0	0.7	
1,2-Dibromoethane	Ave	0.7523	0.7089		37.7	40.0	-5.8	
Chlorobenzene	Lin2		3.664		41.3	40.0	3.2	
1,1,1,2-Tetrachloroethane	Ave	1.053	1.127		42.8	40.0	7.0	
Ethylbenzene	Ave	2.249	2.485		44.2	40.0	10.5	
m-Xylene & p-Xylene	Ave	2.814	3.065		43.6	40.0	8.9	
o-Xylene	Ave	2.608	2.852		43.7	40.0	9.4	
Styrene	Qua		4.217		41.1	40.0	2.8	
Bromoform	Qua		0.3019		38.4	40.0	-3.9	
Isopropylbenzene	Qua		7.226		42.5	40.0	6.3	
Bromobenzene	Ave	1.124	1.151		41.0	40.0	2.4	
1,1,2,2-Tetrachloroethane	Ave	0.8547	0.8093		37.9	40.0	-5.3	
trans-1,4-Dichloro-2-butene	Ave	0.1317	0.1225		37.2	40.0	-6.9	
1,2,3-Trichloropropane	Qua		0.1954		38.3	40.0	-4.2	
N-Propylbenzene	Qua		1.906		44.4	40.0	11.1	
2-Chlorotoluene	Ave	1.369	1.428		41.7	40.0	4.4	
1,3,5-Trimethylbenzene	Qua		5.050		46.9	40.0	17.3	
4-Chlorotoluene	Ave	1.201	1.313		43.7	40.0	9.3	
tert-Butylbenzene	Qua		4.600		46.1	40.0	15.3	
1,2,4-Trimethylbenzene	Qua		5.010		46.0	40.0	15.1	
sec-Butylbenzene	Qua		6.900		47.6	40.0	19.0	
1,3-Dichlorobenzene	Qua		2.294		42.3	40.0	5.8	
4-Isopropyltoluene	Qua		5.468		46.8	40.0	16.9	
1,4-Dichlorobenzene	Ave	2.037	2.094		41.1	40.0	2.8	
1,2-Dichlorobenzene	Qua		1.885		40.6	40.0	1.6	
n-Butylbenzene	Qua		5.096		46.7	40.0	16.8	
1,2-Dibromo-3-Chloropropane	Qua		0.0543		39.5	40.0	-1.2	
1,2,4-Trichlorobenzene	Ave	0.7056	0.6488		36.8	40.0	-8.1	

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCVIS 180-125940/3 Calibration Date: 11/21/2014 10:18

Instrument ID: CHHP4 Calib Start Date: 11/13/2014 12:52

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 11/13/2014 16:27

Lab File ID: 4112103.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobutadiene	Ave	0.8957	0.8997		40.2	40.0	0.5	
Naphthalene	Qua		0.9265		33.0	40.0	-17.6	
1,2,3-Trichlorobenzene	Qua		0.4755		34.8	40.0	-13.1	
Dibromofluoromethane (Surr)	Ave	0.2244	0.2457		43.8	40.0	9.5	
1,2-Dichloroethane-d4 (Surr)	Ave	0.2032	0.2037		40.1	40.0	0.2	
Toluene-d8 (Surr)	Ave	4.681	5.181		44.3	40.0	10.7	
4-Bromofluorobenzene (Surr)	Ave	1.521	1.687		44.3	40.0	10.9	

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112103.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 21-Nov-2014 10:18:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0004518-003
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub11

Method: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 11-Dec-2014 06:31:45 Calib Date: 13-Nov-2014 16:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111308.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: journetp Date: 21-Nov-2014 09:47:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.125	3.125	0.000	97	207475	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.258	6.258	0.000	98	1287017	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.451	9.451	0.000	86	273792	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.806	11.806	0.000	95	305638	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.491	5.491	0.000	93	252976	200.0	219.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.887	5.887	0.000	39	209703	200.0	200.5	
$ 7 Toluene-d8 (Surr)	98	7.979	7.979	0.000	94	1134714	200.0	221.4	
$ 8 4-Bromofluorobenzene (Surr	95	10.650	10.650	0.000	88	369423	200.0	221.7	
10 Dichlorodifluoromethane	85	1.208	1.208	0.000	99	368790	200.0	168.8	
11 Chloromethane	50	1.318	1.318	0.000	99	602014	200.0	191.6	
12 Vinyl chloride	62	1.415	1.415	0.000	98	428775	200.0	195.1	
13 Butadiene	54	1.433	1.433	0.000	95	418868	200.0	192.4	
14 Bromomethane	94	1.646	1.646	0.000	93	67194	200.0	193.2	
15 Chloroethane	64	1.738	1.738	0.000	98	119790	200.0	326.2	
17 Trichlorofluoromethane	101	1.932	1.932	0.000	74	407523	200.0	278.3	
16 Dichlorofluoromethane	67	1.951	1.951	0.000	97	460795	200.0	282.5	
19 Ethyl ether	59	2.224	2.224	0.000	96	134416	200.0	129.5	
21 1,1-Dichloroethene	96	2.425	2.425	0.000	97	388428	200.0	214.3	
22 1,1,2-Trichloro-1,2,2-trif	101	2.474	2.474	0.000	94	424766	200.0	207.8	
23 Acetone	43	2.510	2.510	0.000	98	94532	200.0	190.3	
24 Iodomethane	142	2.565	2.565	0.000	96	534205	200.0	199.5	
25 Carbon disulfide	76	2.626	2.626	0.000	99	1242237	200.0	216.8	
28 3-Chloro-1-propene	76	2.833	2.833	0.000	95	272783	200.0	206.4	
29 Methyl acetate	43	2.857	2.857	0.000	99	813169	1000.0	945.4	
30 Methylene Chloride	84	2.991	2.991	0.000	99	448987	200.0	204.2	
31 2-Methyl-2-propanol	59	3.228	3.228	0.000	96	108696	2000.0	1679.1	
32 Acrylonitrile	53	3.313	3.313	0.000	100	679107	2000.0	1734.9	
33 trans-1,2-Dichloroethene	96	3.338	3.338	0.000	98	413231	200.0	212.1	
34 Methyl tert-butyl ether	73	3.356	3.356	0.000	97	577416	200.0	187.4	
38 Vinyl acetate	43	3.733	3.733	0.000	66	584345	200.0	203.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Hexane	57	3.733	3.733	0.000	91	899331	200.0	208.2	
36 1,1-Dichloroethane	63	3.976	3.976	0.000	96	748992	200.0	211.7	
41 2,2-Dichloropropane	77	4.804	4.804	0.000	85	309645	200.0	220.1	
42 cis-1,2-Dichloroethene	96	4.816	4.816	0.000	82	387381	200.0	201.6	
43 2-Butanone (MEK)	43	4.846	4.846	0.000	99	112086	200.0	196.4	
46 Chlorobromomethane	128	5.126	5.126	0.000	90	122628	200.0	189.2	
48 Tetrahydrofuran	42	5.150	5.150	0.000	93	100824	400.0	330.3	
49 Chloroform	83	5.296	5.296	0.000	94	523190	200.0	201.5	
50 1,1,1-Trichloroethane	97	5.449	5.449	0.000	98	425634	200.0	201.9	
51 Cyclohexane	56	5.515	5.515	0.000	92	978707	200.0	204.7	
53 Carbon tetrachloride	117	5.631	5.631	0.000	97	388930	200.0	210.9	
52 1,1-Dichloropropene	75	5.649	5.649	0.000	96	482164	200.0	204.1	
54 Benzene	78	5.880	5.880	0.000	98	1519059	200.0	212.8	
59 Isobutyl alcohol	41	5.929	5.929	0.000	94	100918	5000.0	3961.6	
55 1,2-Dichloroethane	62	5.978	5.978	0.000	93	254433	200.0	187.4	
58 n-Heptane	43	6.300	6.300	0.000	94	844204	200.0	201.8	
61 Trichloroethene	130	6.671	6.671	0.000	98	333012	200.0	201.4	
63 Methylcyclohexane	83	6.902	6.902	0.000	93	788591	200.0	212.2	
64 1,2-Dichloropropane	63	6.957	6.957	0.000	98	375914	200.0	198.5	
65 Dibromomethane	93	7.042	7.042	0.000	95	119259	200.0	195.3	
67 1,4-Dioxane	88	7.061	7.061	0.000	61	29946	4000.0	3153.6	
68 Dichlorobromomethane	83	7.261	7.261	0.000	97	296548	200.0	206.2	
74 trans-1,3-Dichloropropene	75	7.724	7.724	0.000	94	387980	200.0	199.8	
72 4-Methyl-2-pentanone (MIBK	43	7.894	7.894	0.000	96	183882	200.0	215.8	
73 Toluene	91	8.046	8.046	0.000	98	1452861	200.0	221.8	
71 cis-1,3-Dichloropropene	75	8.326	8.326	0.000	94	234365	200.0	193.0	
75 Ethyl methacrylate	69	8.411	8.411	0.000	92	240343	200.0	188.2	
76 1,1,2-Trichloroethane	97	8.521	8.521	0.000	90	181938	200.0	196.1	
77 Tetrachloroethene	164	8.563	8.563	0.000	97	283712	200.0	213.7	
78 1,3-Dichloropropane	76	8.673	8.673	0.000	93	326401	200.0	193.6	
79 2-Hexanone	43	8.752	8.752	0.000	96	140763	200.0	201.6	
81 Chlorodibromomethane	129	8.880	8.880	0.000	91	150379	200.0	201.5	
82 Ethylene Dibromide	107	8.983	8.983	0.000	96	155279	200.0	188.5	
84 Chlorobenzene	112	9.482	9.482	0.000	93	802617	200.0	206.5	
85 1,1,1,2-Tetrachloroethane	131	9.585	9.585	0.000	97	246869	200.0	214.0	
86 Ethylbenzene	106	9.591	9.591	0.000	98	544219	200.0	220.9	
87 m-Xylene & p-Xylene	106	9.731	9.731	0.000	99	671304	200.0	217.9	
88 o-Xylene	106	10.102	10.102	0.000	96	624696	200.0	218.7	
89 Styrene	104	10.133	10.133	0.000	96	923591	200.0	205.6	
90 Bromoform	173	10.303	10.303	0.000	97	66116	200.0	192.1	
91 Isopropylbenzene	105	10.480	10.480	0.000	96	1582662	200.0	212.7	
94 Bromobenzene	156	10.772	10.772	0.000	95	281489	200.0	204.8	
93 1,1,2,2-Tetrachloroethane	83	10.808	10.808	0.000	92	177263	200.0	189.4	
96 trans-1,4-Dichloro-2-buten	53	10.845	10.845	0.000	71	29963	200.0	186.1	
95 1,2,3-Trichloropropane	110	10.851	10.851	0.000	87	47783	200.0	191.6	
97 N-Propylbenzene	120	10.899	10.899	0.000	98	465968	200.0	222.1	
98 2-Chlorotoluene	126	10.972	10.972	0.000	97	349217	200.0	208.7	
99 1,3,5-Trimethylbenzene	105	11.088	11.088	0.000	96	1234761	200.0	234.6	
100 4-Chlorotoluene	126	11.100	11.100	0.000	98	321051	200.0	218.6	
101 tert-Butylbenzene	119	11.392	11.392	0.000	94	1124732	200.0	230.7	
103 1,2,4-Trimethylbenzene	105	11.459	11.459	0.000	98	1224885	200.0	230.2	
104 sec-Butylbenzene	105	11.617	11.617	0.000	94	1687029	200.0	238.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 1,3-Dichlorobenzene	146	11.721	11.721	0.000	99	560842	200.0	211.6	
106 4-Isopropyltoluene	119	11.781	11.781	0.000	96	1337019	200.0	233.9	
107 1,4-Dichlorobenzene	146	11.830	11.830	0.000	94	512103	200.0	205.7	
111 1,2-Dichlorobenzene	146	12.171	12.171	0.000	98	460831	200.0	203.2	
110 n-Butylbenzene	91	12.189	12.189	0.000	97	1246101	200.0	233.6	
112 1,2-Dibromo-3-Chloropropan	75	12.962	12.962	0.000	84	13282	200.0	197.5	
113 1,2,4-Trichlorobenzene	180	13.777	13.777	0.000	94	158625	200.0	183.9	
115 Hexachlorobutadiene	225	13.935	13.935	0.000	95	219992	200.0	200.9	
116 Naphthalene	128	14.032	14.032	0.000	97	226547	200.0	164.8	
117 1,2,3-Trichlorobenzene	180	14.251	14.251	0.000	94	116271	200.0	173.8	
S 129 1,2-Dichloroethene, Total	96				0		400.0	413.7	
S 130 Xylenes, Total	106				0		400.0	436.6	
S 131 1,3-Dichloropropene, Total	1				0		400.0	392.8	

Reagents:

VOA8260VOAPRI_00088	Amount Added:	8.00	Units: uL
voaWVA pri Re_00004	Amount Added:	8.00	Units: uL
VOA8260INT_00024	Amount Added:	10.00	Units: uL
VOA8260SURR_00017	Amount Added:	8.00	Units: uL

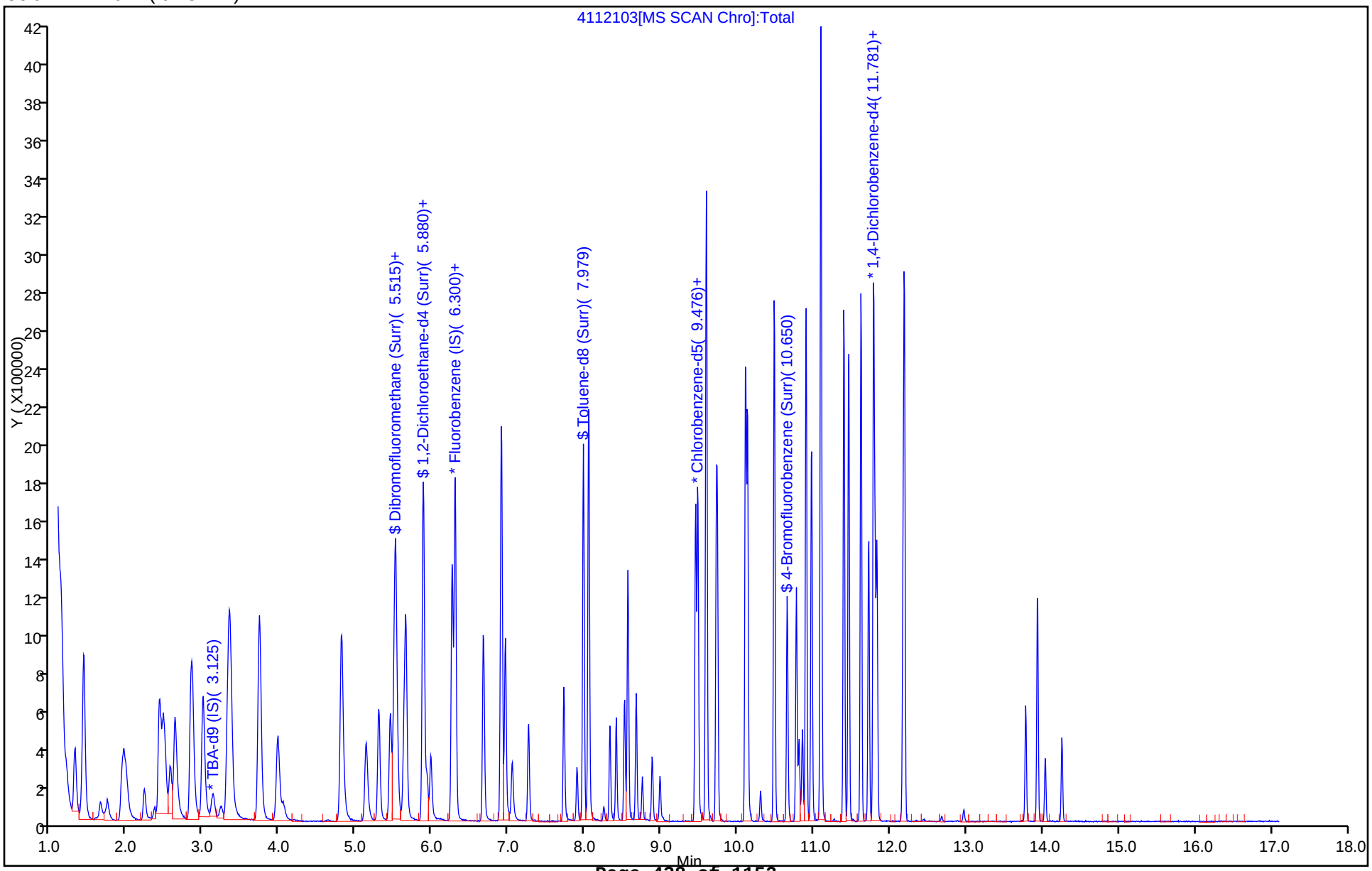
Report Date: 11-Dec-2014 06:31:46 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112103.D

Injection Date:	21-Nov-2014 10:18:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCV 180-125940/5 Calibration Date: 11/21/2014 11:28

Instrument ID: CHHP4 Calib Start Date: 11/03/2014 12:22

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 11/03/2014 16:24

Lab File ID: 4112105.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1085	0.1020		75.2	80.0	-6.0	

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112105.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 21-Nov-2014 11:28:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 180-0004518-005
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub40

Method: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Nov-2014 15:07:52 Calib Date: 13-Nov-2014 16:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111308.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK035

First Level Reviewer: journetp Date: 21-Nov-2014 11:03:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.120	3.120	0.000	99	231174	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.259	6.259	0.000	97	1460336	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.453	9.453	0.000	87	297539	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.801	11.801	0.000	96	280387	250.0	250.0	
20 Acrolein	56	2.360	2.360	0.000	98	60471	875.0	739.4	
26 Isopropyl alcohol	45	2.712	2.712	0.000	98	115705	2000.0	992.5	
27 Acetonitrile	40	2.822	2.822	0.000	99	1608466	2000.0	11861	
18 Ethanol	45	3.114	3.114	0.000	14	9112	10000	6663.2	
37 2-Chloro-1,3-butadiene	53	4.075	4.075	0.000	91	913744	200.0	271.7	
39 Isopropyl ether	45	4.105	4.105	0.000	97	1642042	200.0	227.9	
40 Tert-butyl ethyl ether	59	4.641	4.641	0.000	97	1094832	200.0	204.6	
44 Propionitrile	54	4.927	4.927	0.000	99	266697	2000.0	1301.7	
45 Ethyl acetate	43	4.945	4.945	0.000	99	285087	400.0	247.9	
47 Methacrylonitrile	41	5.115	5.115	0.000	93	1307971	2000.0	1319.9	
57 Isooctane	57	6.058	6.058	0.000	96	2802610	200.0	258.8	
56 Tert-amyl methyl ether	73	6.101	6.101	0.000	94	712519	200.0	182.1	
60 n-Butanol	56	6.685	6.685	0.000	93	84627	5000.0	2347.6	
62 Ethyl acrylate	55	6.843	6.843	0.000	99	247859	200.0	138.7	
66 Methyl methacrylate	69	7.080	7.080	0.000	96	282155	400.0	298.0	
69 2-Nitropropane	41	7.500	7.500	0.000	97	67647	400.0	312.2	
70 2-Chloroethyl vinyl ether	63	7.597	7.597	0.000	91	238406	400.0	376.1	
80 n-Butyl acetate	43	8.893	8.893	0.000	100	225050	200.0	138.4	
92 Cyclohexanone	55	10.554	10.554	0.000	92	125916	4000.0	2301.1	
102 Pentachloroethane	167	11.418	11.418	0.000	95	170117	200.0	337.4	
108 1,2,3-Trimethylbenzene	105	11.862	11.862	0.000	98	1278525	200.0	261.6	
109 Benzyl chloride	91	11.947	11.947	0.000	98	131497	200.0	203.2	
114 1,3,5-Trichlorobenzene	180	13.152	13.152	0.000	96	318166	200.0	244.4	
118 2-Methylnaphthalene	142	15.177	15.177	0.000	97	28310	200.0	121.1	

Reagents:

voaWlist2PriR_00001	Amount Added:	8.00	Units: uL
voaW2-clePriR_00007	Amount Added:	8.00	Units: uL
VOAACROPRI_00003	Amount Added:	35.00	Units: uL
VOA8260INT_00024	Amount Added:	10.00	Units: uL

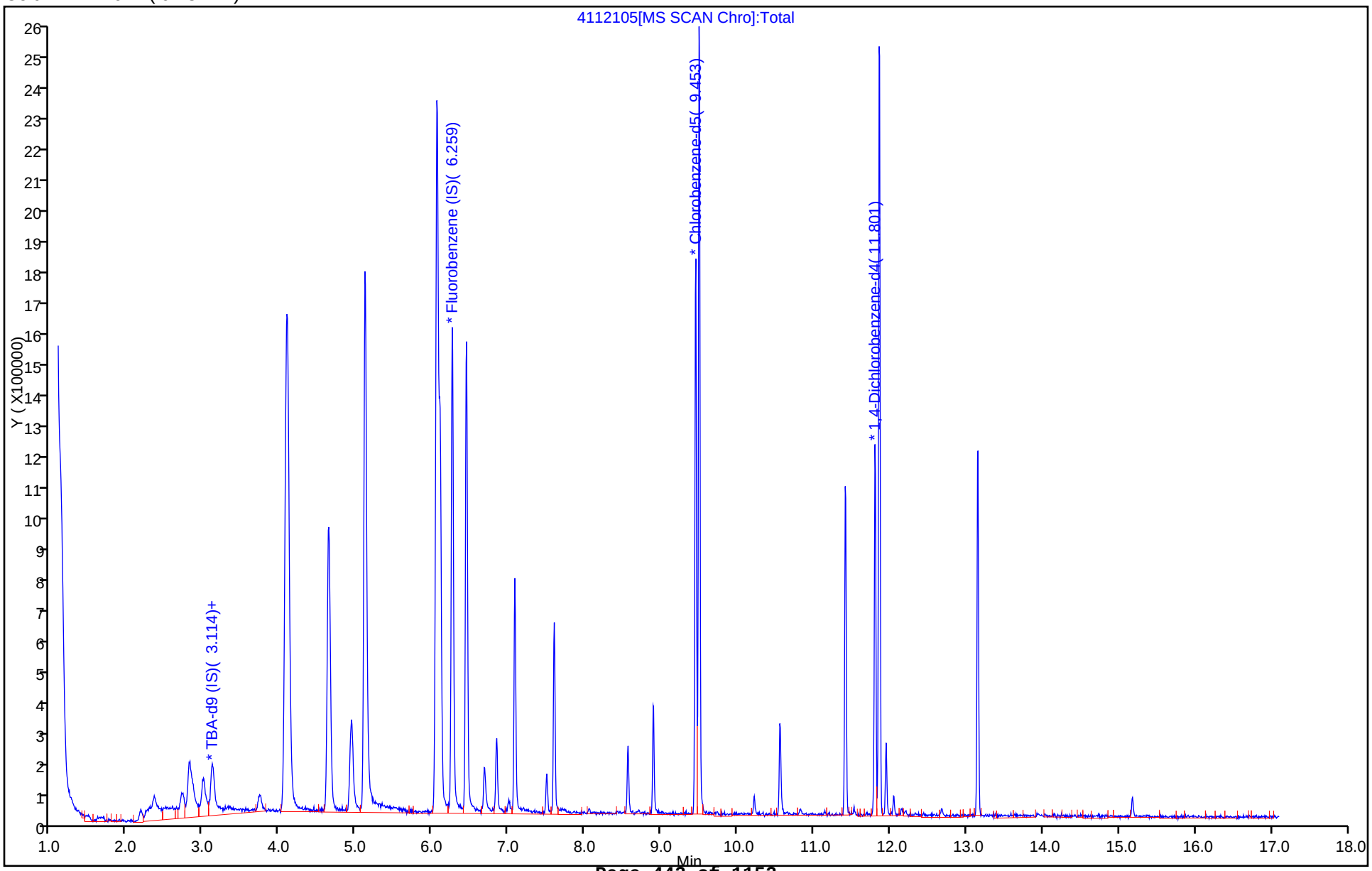
Report Date: 23-Nov-2014 15:07:52 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112105.D

Injection Date:	21-Nov-2014 11:28:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	CCV			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCV 180-125940/5 Calibration Date: 11/21/2014 11:28

Instrument ID: CHHP4 Calib Start Date: 11/11/2014 10:05

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 11/11/2014 13:13

Lab File ID: 4112105.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Ave	0.0232	0.1377		2370	400	493.0	
Chloroprene	Ave	0.5757	0.7821		54.3	40.0	35.9	
Isopropyl ether	Ave	1.234	1.406		45.6	40.0	13.9	
Propionitrile	Qua		0.0228		260	400	-34.9	
Methacrylonitrile	Qua		0.1120		264	400	-34.0	
Isooctane	Ave	1.854	2.399		51.8	40.0	29.4	
n-Butanol	Qua		0.0029		470	1000	-53.0	
Ethyl acrylate	Qua		1.041		27.7	40.0	-30.7	
Methyl methacrylate	Ave	0.1621	0.1208		59.6	80.0	-25.5	
2-Nitropropane	Ave	0.1820	0.1421		62.4	80.0	-21.9	
Cyclohexanone	Qua		0.0265		460	800	-42.5	
1,2,3-Trimethylbenzene	Ave	4.357	5.700		52.3	40.0	30.8	
Benzyl chloride	Qua		0.5862		40.6	40.0	1.6	
1,3,5-Trichlorobenzene	Ave	1.161	1.418		48.9	40.0	22.2	

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112105.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 21-Nov-2014 11:28:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 180-0004518-005
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub40

Method: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Nov-2014 15:07:52 Calib Date: 13-Nov-2014 16:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111308.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK035

First Level Reviewer: journetp Date: 21-Nov-2014 11:03:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.120	3.120	0.000	99	231174	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.259	6.259	0.000	97	1460336	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.453	9.453	0.000	87	297539	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.801	11.801	0.000	96	280387	250.0	250.0	
20 Acrolein	56	2.360	2.360	0.000	98	60471	875.0	739.4	
26 Isopropyl alcohol	45	2.712	2.712	0.000	98	115705	2000.0	992.5	
27 Acetonitrile	40	2.822	2.822	0.000	99	1608466	2000.0	11861	
18 Ethanol	45	3.114	3.114	0.000	14	9112	10000	6663.2	
37 2-Chloro-1,3-butadiene	53	4.075	4.075	0.000	91	913744	200.0	271.7	
39 Isopropyl ether	45	4.105	4.105	0.000	97	1642042	200.0	227.9	
40 Tert-butyl ethyl ether	59	4.641	4.641	0.000	97	1094832	200.0	204.6	
44 Propionitrile	54	4.927	4.927	0.000	99	266697	2000.0	1301.7	
45 Ethyl acetate	43	4.945	4.945	0.000	99	285087	400.0	247.9	
47 Methacrylonitrile	41	5.115	5.115	0.000	93	1307971	2000.0	1319.9	
57 Isooctane	57	6.058	6.058	0.000	96	2802610	200.0	258.8	
56 Tert-amyl methyl ether	73	6.101	6.101	0.000	94	712519	200.0	182.1	
60 n-Butanol	56	6.685	6.685	0.000	93	84627	5000.0	2347.6	
62 Ethyl acrylate	55	6.843	6.843	0.000	99	247859	200.0	138.7	
66 Methyl methacrylate	69	7.080	7.080	0.000	96	282155	400.0	298.0	
69 2-Nitropropane	41	7.500	7.500	0.000	97	67647	400.0	312.2	
70 2-Chloroethyl vinyl ether	63	7.597	7.597	0.000	91	238406	400.0	376.1	
80 n-Butyl acetate	43	8.893	8.893	0.000	100	225050	200.0	138.4	
92 Cyclohexanone	55	10.554	10.554	0.000	92	125916	4000.0	2301.1	
102 Pentachloroethane	167	11.418	11.418	0.000	95	170117	200.0	337.4	
108 1,2,3-Trimethylbenzene	105	11.862	11.862	0.000	98	1278525	200.0	261.6	
109 Benzyl chloride	91	11.947	11.947	0.000	98	131497	200.0	203.2	
114 1,3,5-Trichlorobenzene	180	13.152	13.152	0.000	96	318166	200.0	244.4	
118 2-Methylnaphthalene	142	15.177	15.177	0.000	97	28310	200.0	121.1	

Reagents:

voaWlist2PriR_00001	Amount Added:	8.00	Units: uL
voaW2-clePriR_00007	Amount Added:	8.00	Units: uL
VOAACROPRI_00003	Amount Added:	35.00	Units: uL
VOA8260INT_00024	Amount Added:	10.00	Units: uL

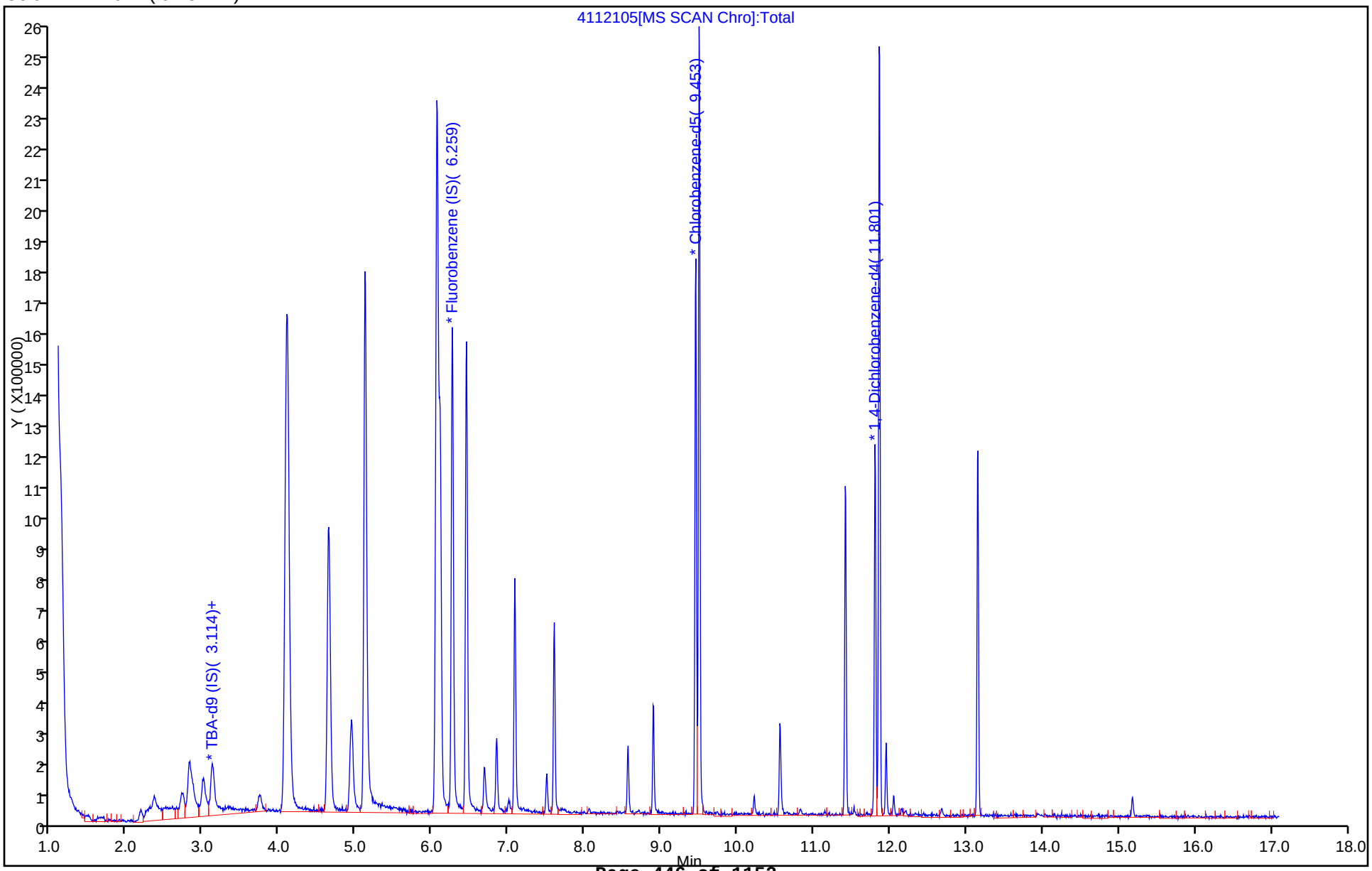
Report Date: 23-Nov-2014 15:07:52 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112105.D

Injection Date:	21-Nov-2014 11:28:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	CCV			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCV 180-125940/5 Calibration Date: 11/21/2014 11:28

Instrument ID: CHHP4 Calib Start Date: 11/13/2014 12:52

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 11/13/2014 16:27

Lab File ID: 4112105.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acrolein	Ave	0.0140	0.0118		148	175	-15.5	

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112105.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 21-Nov-2014 11:28:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 180-0004518-005
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub40

Method: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Nov-2014 15:07:52 Calib Date: 13-Nov-2014 16:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111308.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK035

First Level Reviewer: journetp Date: 21-Nov-2014 11:03:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.120	3.120	0.000	99	231174	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.259	6.259	0.000	97	1460336	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.453	9.453	0.000	87	297539	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.801	11.801	0.000	96	280387	250.0	250.0	
20 Acrolein	56	2.360	2.360	0.000	98	60471	875.0	739.4	
26 Isopropyl alcohol	45	2.712	2.712	0.000	98	115705	2000.0	992.5	
27 Acetonitrile	40	2.822	2.822	0.000	99	1608466	2000.0	11861	
18 Ethanol	45	3.114	3.114	0.000	14	9112	10000	6663.2	
37 2-Chloro-1,3-butadiene	53	4.075	4.075	0.000	91	913744	200.0	271.7	
39 Isopropyl ether	45	4.105	4.105	0.000	97	1642042	200.0	227.9	
40 Tert-butyl ethyl ether	59	4.641	4.641	0.000	97	1094832	200.0	204.6	
44 Propionitrile	54	4.927	4.927	0.000	99	266697	2000.0	1301.7	
45 Ethyl acetate	43	4.945	4.945	0.000	99	285087	400.0	247.9	
47 Methacrylonitrile	41	5.115	5.115	0.000	93	1307971	2000.0	1319.9	
57 Isooctane	57	6.058	6.058	0.000	96	2802610	200.0	258.8	
56 Tert-amyl methyl ether	73	6.101	6.101	0.000	94	712519	200.0	182.1	
60 n-Butanol	56	6.685	6.685	0.000	93	84627	5000.0	2347.6	
62 Ethyl acrylate	55	6.843	6.843	0.000	99	247859	200.0	138.7	
66 Methyl methacrylate	69	7.080	7.080	0.000	96	282155	400.0	298.0	
69 2-Nitropropane	41	7.500	7.500	0.000	97	67647	400.0	312.2	
70 2-Chloroethyl vinyl ether	63	7.597	7.597	0.000	91	238406	400.0	376.1	
80 n-Butyl acetate	43	8.893	8.893	0.000	100	225050	200.0	138.4	
92 Cyclohexanone	55	10.554	10.554	0.000	92	125916	4000.0	2301.1	
102 Pentachloroethane	167	11.418	11.418	0.000	95	170117	200.0	337.4	
108 1,2,3-Trimethylbenzene	105	11.862	11.862	0.000	98	1278525	200.0	261.6	
109 Benzyl chloride	91	11.947	11.947	0.000	98	131497	200.0	203.2	
114 1,3,5-Trichlorobenzene	180	13.152	13.152	0.000	96	318166	200.0	244.4	
118 2-Methylnaphthalene	142	15.177	15.177	0.000	97	28310	200.0	121.1	

Reagents:

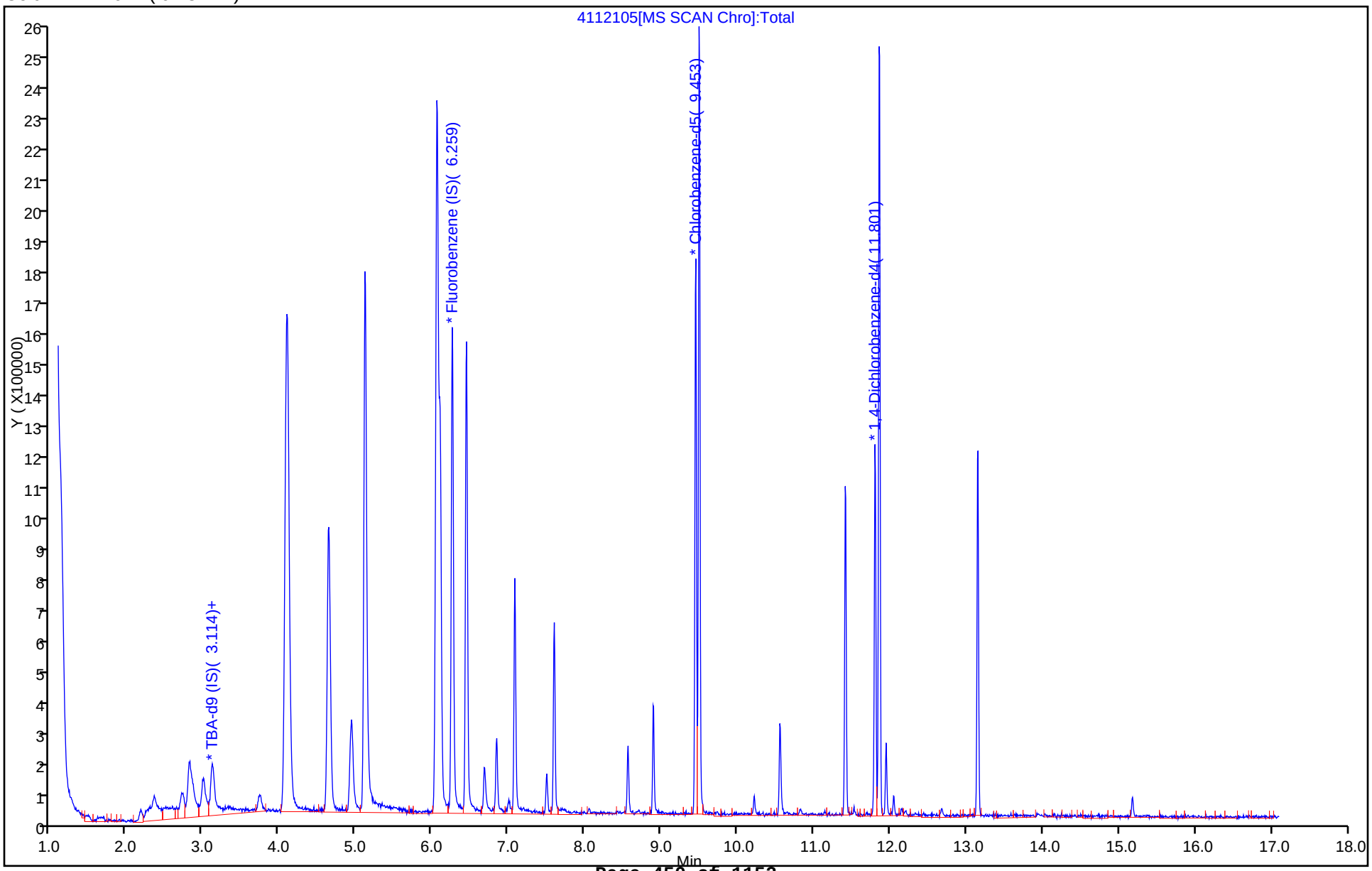
voaWlist2PriR_00001	Amount Added:	8.00	Units: uL
voaW2-clePriR_00007	Amount Added:	8.00	Units: uL
VOAACROPRI_00003	Amount Added:	35.00	Units: uL
VOA8260INT_00024	Amount Added:	10.00	Units: uL

Report Date: 23-Nov-2014 15:07:52 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112105.D				
Injection Date:	21-Nov-2014 11:28:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	CCV			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110301.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 03-Nov-2014 09:04:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 180-0004149-001
Operator ID: 034635 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Nov-2014 16:25:10 Calib Date: 03-Nov-2014 16:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110312.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 9 BFB	95	8.391	8.391	0.000	0	602192	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

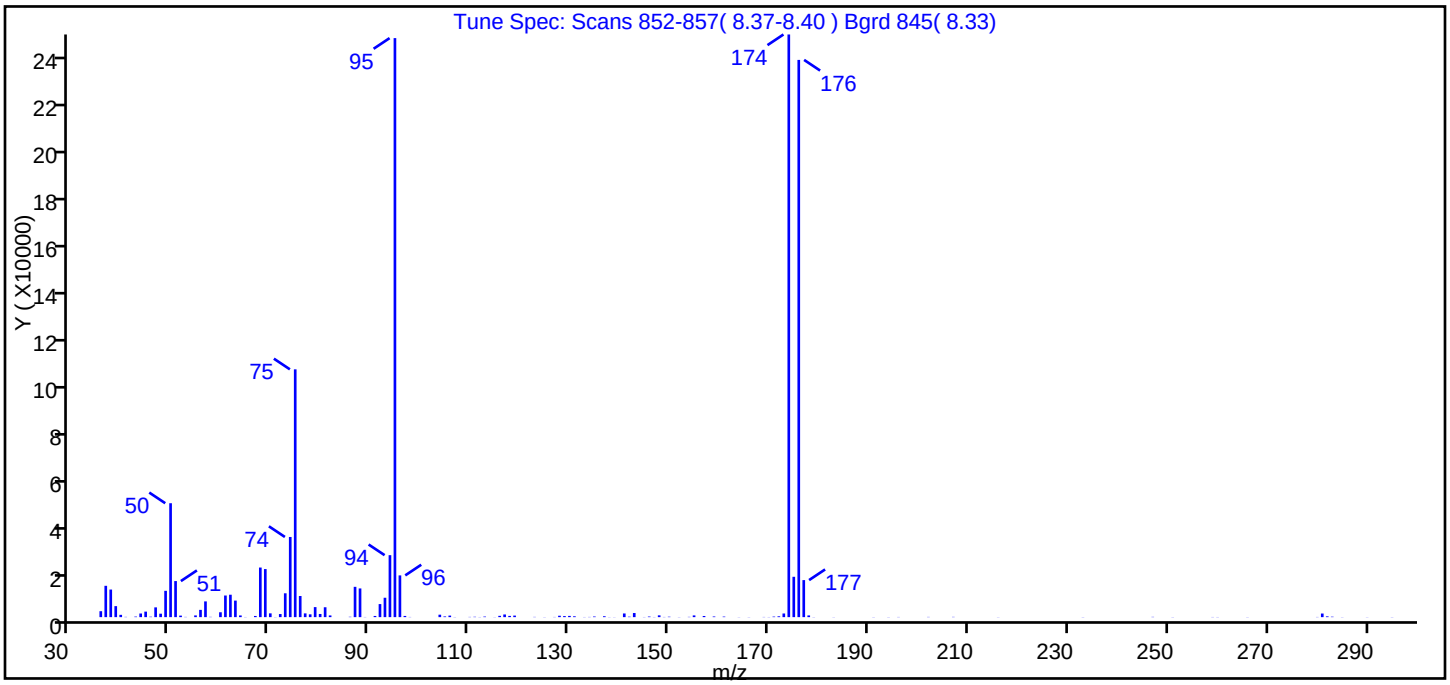
VOABFB50_00056 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110301.D
Injection Date: 03-Nov-2014 09:04:30 Instrument ID: CHHP4
Lims ID: BFB
Client ID:
Operator ID: 034635 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP4 Limit Group: VOA 8260C ICAL
Tune Method: BFB Method 8260

$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.70
75	30.00 - 60.00% of mass 95	42.80
96	5.00 - 9.00% of mass 95	7.20
173	Less than 2.00% of mass 174	0.60 (0.60)
174	50.00 - 120.00% of mass 95	100.60
175	5.00 - 9.00% of mass 174	7.00 (6.90)
176	95.00 - 101.00% of mass 174	96.20 (95.60)
177	5.00 - 9.00% of mass 176	6.40 (6.60)

Data File: \\PITCHROM\ChromData\CHHP4\20141103-4149.b\4110301.D\MSVOA_CHHP4.rslt\spectra.d
Injection Date: 03-Nov-2014 09:04:30
Spectrum: Tune Spec: Scans 852-857(8.37-8.40) Bgrd 845(8.33)
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 129

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2514	73.00	10086	118.00	524	170.00	66
37.00	13249	74.00	33904	119.00	658	171.00	231
38.00	11670	75.00	104792	123.00	102	172.00	352
39.00	4655	76.00	8941	125.00	58	173.00	1548
40.00	976	77.00	1587	127.00	80	174.00	246400
41.00	107	78.00	1187	128.00	592	175.00	17064
43.00	231	79.00	4241	129.00	443	176.00	235648
44.00	1541	80.00	1340	130.00	526	177.00	15664
45.00	2336	81.00	4181	131.00	359	178.00	721
46.00	186	82.00	720	133.00	67	179.00	59
47.00	4132	86.00	153	134.00	88	183.00	50
48.00	1457	87.00	12818	135.00	263	191.00	59
49.00	11130	88.00	12138	137.00	376	194.00	59
50.00	48176	89.00	70	138.00	53	196.00	78
51.00	15251	91.00	501	139.00	50	202.00	97
52.00	649	92.00	5525	141.00	1554	207.00	112
53.00	94	93.00	8201	142.00	191	216.00	50
55.00	729	94.00	26208	143.00	1741	233.00	60
56.00	3079	95.00	244864	145.00	66	247.00	116
57.00	6660	96.00	17656	146.00	250	251.00	59
58.00	119	97.00	509	147.00	66	259.00	72
60.00	2066	98.00	78	148.00	758	260.00	65
61.00	9147	104.00	1039	149.00	79	266.00	56
62.00	9483	105.00	301	150.00	183	280.00	80
63.00	6997	106.00	657	152.00	62	281.00	1531
64.00	713	107.00	63	154.00	114	282.00	324
65.00	65	110.00	96	155.00	729	283.00	190
67.00	498	111.00	154	157.00	476	285.00	56
68.00	20976	112.00	66	159.00	276	290.00	51
69.00	20328	113.00	240	161.00	233	295.00	61
70.00	1602	115.00	54	164.00	54		
71.00	57	116.00	553	166.00	59		
72.00	1312	117.00	1131	169.00	81		

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2514	73.00	10086	118.00	524	170.00	66
37.00	13249	74.00	33904	119.00	658	171.00	231
38.00	11670	75.00	104792	123.00	102	172.00	352
39.00	4655	76.00	8941	125.00	58	173.00	1548
40.00	976	77.00	1587	127.00	80	174.00	246400
41.00	107	78.00	1187	128.00	592	175.00	17064
43.00	231	79.00	4241	129.00	443	176.00	235648
44.00	1541	80.00	1340	130.00	526	177.00	15664
45.00	2336	81.00	4181	131.00	359	178.00	721
46.00	186	82.00	720	133.00	67	179.00	59
47.00	4132	86.00	153	134.00	88	183.00	50
48.00	1457	87.00	12818	135.00	263	191.00	59
49.00	11130	88.00	12138	137.00	376	194.00	59
50.00	48176	89.00	70	138.00	53	196.00	78
51.00	15251	91.00	501	139.00	50	202.00	97
52.00	649	92.00	5525	141.00	1554	207.00	112
53.00	94	93.00	8201	142.00	191	216.00	50
55.00	729	94.00	26208	143.00	1741	233.00	60
56.00	3079	95.00	244864	145.00	66	247.00	116
57.00	6660	96.00	17656	146.00	250	251.00	59
58.00	119	97.00	509	147.00	66	259.00	72
60.00	2066	98.00	78	148.00	758	260.00	65
61.00	9147	104.00	1039	149.00	79	266.00	56
62.00	9483	105.00	301	150.00	183	280.00	80
63.00	6997	106.00	657	152.00	62	281.00	1531
64.00	713	107.00	63	154.00	114	282.00	324
65.00	65	110.00	96	155.00	729	283.00	190
67.00	498	111.00	154	157.00	476	285.00	56
68.00	20976	112.00	66	159.00	276	290.00	51
69.00	20328	113.00	240	161.00	233	295.00	61
70.00	1602	115.00	54	164.00	54		
71.00	57	116.00	553	166.00	59		
72.00	1312	117.00	1131	169.00	81		

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File:	\\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111301.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	13-Nov-2014 12:08:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	180-0004379-001				
Operator ID:	034635	Instrument ID:	CHHP4		
Method:	\\PITCHROM\ChromData\CHHP4\20141113-4379.b\MSVOA_CHHP4.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	14-Nov-2014 08:03:51	Calib Date:	13-Nov-2014 16:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111308.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK047				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 9 BFB	95	8.395	8.395	0.000	0	360514	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

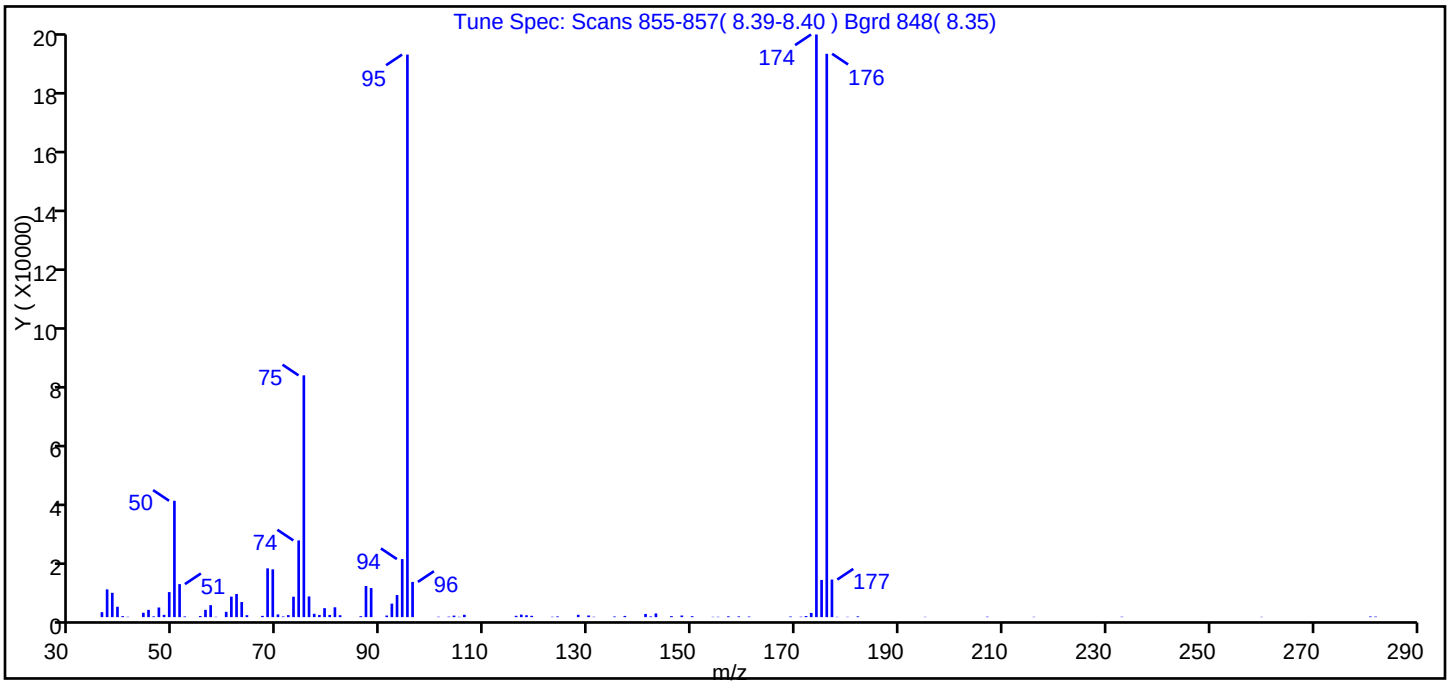
VOABFB50_00056 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111301.D
Injection Date: 13-Nov-2014 12:08:30 Instrument ID: CHHP4
Lims ID: BFB
Client ID:
Operator ID: 034635 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP4 Limit Group: VOA 8260C ICAL
Tune Method: BFB Method 8260

$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.70
75	30.00 - 60.00% of mass 95	43.00
96	5.00 - 9.00% of mass 95	6.30
173	Less than 2.00% of mass 174	0.70 (0.70)
174	50.00 - 120.00% of mass 95	103.60
175	5.00 - 9.00% of mass 174	6.60 (6.40)
176	95.00 - 101.00% of mass 174	100.10 (96.70)
177	5.00 - 9.00% of mass 176	6.70 (6.70)

Data File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111301.D\MSVOA_CHHP4.rslt\spectra.d
Injection Date: 13-Nov-2014 12:08:30
Spectrum: Tune Spec: Scans 855-857(8.39-8.40) Bgrd 848(8.35)
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 94

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1665	67.00	424	96.00	11785	155.00	124
37.00	9282	68.00	16322	101.00	132	157.00	272
38.00	8138	69.00	15991	103.00	162	159.00	247
39.00	3482	70.00	917	104.00	511	161.00	202
40.00	344	71.00	222	105.00	119	169.00	212
41.00	126	72.00	684	106.00	787	171.00	149
44.00	1467	73.00	6834	116.00	453	172.00	376
45.00	2433	74.00	25656	117.00	847	173.00	1411
46.00	256	75.00	80872	118.00	634	174.00	194880
47.00	3230	76.00	6921	119.00	452	175.00	12450
48.00	774	77.00	1122	123.00	126	176.00	188416
49.00	8373	78.00	705	124.00	248	177.00	12572
50.00	38920	79.00	3010	128.00	782	178.00	103
51.00	11049	80.00	722	130.00	555	180.00	106
52.00	243	81.00	3294	131.00	127	182.00	256
55.00	368	82.00	640	135.00	227	195.00	102
56.00	2439	86.00	320	137.00	412	207.00	159
57.00	4010	87.00	10424	141.00	1075	216.00	114
58.00	115	88.00	9727	142.00	237	233.00	139
60.00	1784	91.00	535	143.00	1236	260.00	102
61.00	6849	92.00	4519	146.00	348	281.00	220
62.00	7753	93.00	7386	148.00	546	282.00	180
63.00	5052	94.00	19416	150.00	313		
64.00	659	95.00	188160	154.00	107		

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112101.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 21-Nov-2014 08:52:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 180-0004518-001
Operator ID: 034635 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Nov-2014 15:19:12 Calib Date: 13-Nov-2014 16:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111308.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK035

First Level Reviewer: journetp Date: 21-Nov-2014 08:15:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 9 BFB	95	10.651	10.651	0.000	0	748779	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

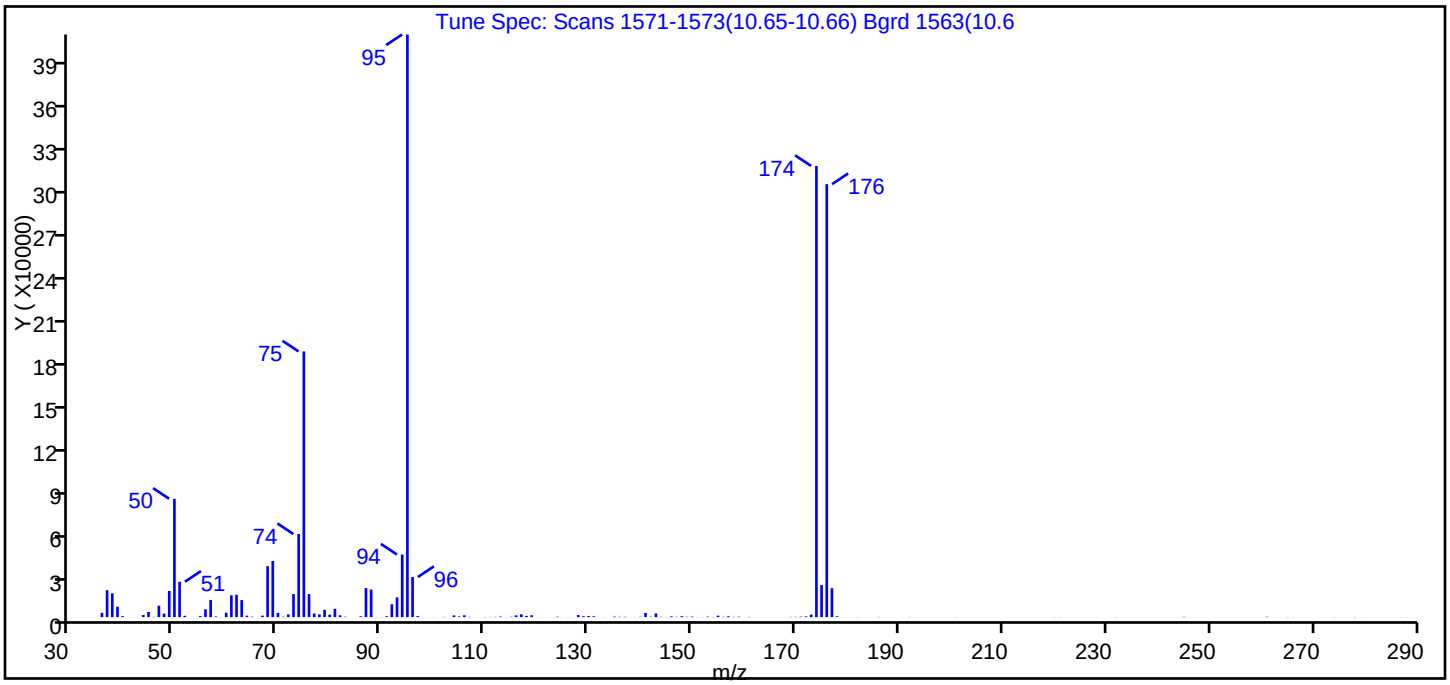
VOABFB50_00056 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112101.D
Injection Date: 21-Nov-2014 08:52:30 Instrument ID: CHHP4
Lims ID: BFB
Client ID:
Operator ID: 034635 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP4 Limit Group: VOA 8260C ICAL
Tune Method: BFB Method 8260

$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.3
75	30 to 60% of m/z 95	45.6
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.4 (0.6)
174	50 to 120% of m/z 95	77.4
175	5 to 9% of m/z 174	5.5 (7.1)
176	Greater than 95% but less than 101% of m/z 174	74.3 (96.0)
177	5 to 9% of m/z 176	5.0 (6.7)

Data File: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112101.D\MSVOA_CHHP4.rslt\spectra.d
Injection Date: 21-Nov-2014 08:52:30
Spectrum: Tune Spec: Scans 1571-1573(10.65-10.66) Bgrd 1563(10.6
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 132

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3033	75.00	186112	116.00	1242	156.00	252
37.00	18912	76.00	16168	117.00	1973	157.00	655
38.00	16672	77.00	2558	118.00	855	158.00	210
39.00	7307	78.00	1913	119.00	1346	159.00	349
40.00	718	79.00	5130	121.00	73	161.00	183
44.00	1468	80.00	1775	123.00	92	169.00	179
45.00	3651	81.00	5854	124.00	314	170.00	190
46.00	196	82.00	1300	126.00	85	171.00	343
47.00	8041	83.00	292	128.00	1466	172.00	553
48.00	2456	86.00	582	129.00	645	173.00	1782
49.00	18360	87.00	20352	130.00	839	174.00	316032
50.00	82896	88.00	19336	131.00	611	175.00	22464
51.00	24800	89.00	77	133.00	70	176.00	303296
52.00	946	90.00	71	135.00	405	177.00	20288
55.00	739	91.00	627	136.00	253	178.00	626
56.00	5479	92.00	9029	137.00	255	182.00	87
57.00	12031	93.00	13832	139.00	73	186.00	145
58.00	465	94.00	43856	140.00	244	192.00	129
59.00	101	95.00	408128	141.00	2901	193.00	67
60.00	3089	96.00	28112	142.00	305	201.00	69
61.00	15310	97.00	779	143.00	2584	220.00	82
62.00	15691	100.00	74	144.00	234	221.00	68
63.00	11961	102.00	171	145.00	139	228.00	72
64.00	1063	104.00	1239	146.00	523	232.00	91
65.00	297	105.00	501	147.00	235	245.00	244
67.00	1059	106.00	1321	148.00	683	261.00	263
68.00	35712	107.00	205	149.00	247	265.00	111
69.00	39304	110.00	105	150.00	383	266.00	68
70.00	2990	111.00	153	151.00	108	274.00	90
71.00	311	112.00	199	152.00	90	278.00	98
72.00	1888	113.00	408	153.00	346	280.00	67
73.00	16183	114.00	93	154.00	104	287.00	87
74.00	58200	115.00	258	155.00	1045	288.00	77

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3033	75.00	186112	116.00	1242	156.00	252
37.00	18912	76.00	16168	117.00	1973	157.00	655
38.00	16672	77.00	2558	118.00	855	158.00	210
39.00	7307	78.00	1913	119.00	1346	159.00	349
40.00	718	79.00	5130	121.00	73	161.00	183
44.00	1468	80.00	1775	123.00	92	169.00	179
45.00	3651	81.00	5854	124.00	314	170.00	190
46.00	196	82.00	1300	126.00	85	171.00	343
47.00	8041	83.00	292	128.00	1466	172.00	553
48.00	2456	86.00	582	129.00	645	173.00	1782
49.00	18360	87.00	20352	130.00	839	174.00	316032
50.00	82896	88.00	19336	131.00	611	175.00	22464
51.00	24800	89.00	77	133.00	70	176.00	303296
52.00	946	90.00	71	135.00	405	177.00	20288
55.00	739	91.00	627	136.00	253	178.00	626
56.00	5479	92.00	9029	137.00	255	182.00	87
57.00	12031	93.00	13832	139.00	73	186.00	145
58.00	465	94.00	43856	140.00	244	192.00	129
59.00	101	95.00	408128	141.00	2901	193.00	67
60.00	3089	96.00	28112	142.00	305	201.00	69
61.00	15310	97.00	779	143.00	2584	220.00	82
62.00	15691	100.00	74	144.00	234	221.00	68
63.00	11961	102.00	171	145.00	139	228.00	72
64.00	1063	104.00	1239	146.00	523	232.00	91
65.00	297	105.00	501	147.00	235	245.00	244
67.00	1059	106.00	1321	148.00	683	261.00	263
68.00	35712	107.00	205	149.00	247	265.00	111
69.00	39304	110.00	105	150.00	383	266.00	68
70.00	2990	111.00	153	151.00	108	274.00	90
71.00	311	112.00	199	152.00	90	278.00	98
72.00	1888	113.00	408	153.00	346	280.00	67
73.00	16183	114.00	93	154.00	104	287.00	87
74.00	58200	115.00	258	155.00	1045	288.00	77

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-125940/6

Matrix: Water Lab File ID: 4112106.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2014 12:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 125940 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.93
79-00-5	1,1,2-Trichloroethane	ND		5.0	1.2
75-34-3	1,1-Dichloroethane	ND		5.0	1.0
75-35-4	1,1-Dichloroethene	ND		5.0	1.1
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.68
107-06-2	1,2-Dichloroethane	ND		5.0	0.96
78-87-5	1,2-Dichloropropane	ND		5.0	1.3
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.51
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.53
110-75-8	2-Chloroethyl vinyl ether	ND		10	1.9
107-02-8	Acrolein	ND		100	5.7
107-13-1	Acrylonitrile	ND		50	9.0
71-43-2	Benzene	ND		5.0	0.99
75-25-2	Bromoform	ND		5.0	1.1
74-83-9	Bromomethane	ND		5.0	1.6
56-23-5	Carbon tetrachloride	ND		5.0	1.1
108-90-7	Chlorobenzene	ND		5.0	0.53
67-66-3	Chloroform	ND		5.0	1.0
74-87-3	Chloromethane	ND		5.0	1.4
124-48-1	Chlorodibromomethane	ND		5.0	0.65
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.73
75-27-4	Dichlorobromomethane	ND		5.0	0.93
100-41-4	Ethylbenzene	ND		5.0	0.62
75-09-2	Methylene Chloride	ND		5.0	1.1
127-18-4	Tetrachloroethene	ND		5.0	0.82
108-88-3	Toluene	ND		5.0	0.85
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.75
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	0.58
79-01-6	Trichloroethene	ND		5.0	0.80
75-01-4	Vinyl chloride	ND		5.0	1.3
75-00-3	Chloroethane	ND		5.0	0.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-125940/6

Matrix: Water Lab File ID: 4112106.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2014 12:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 125940 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	70		62-123
460-00-4	4-Bromofluorobenzene (Surr)	77		75-120
1868-53-7	Dibromofluoromethane (Surr)	82		80-120
2037-26-5	Toluene-d8 (Surr)	91		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112106.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 21-Nov-2014 12:05:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: mb
Misc. Info.: 180-0004518-006
Operator ID: 034635 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 11-Dec-2014 06:31:45 Calib Date: 13-Nov-2014 16:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111308.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: journetp Date: 21-Nov-2014 11:28:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.101	3.125	-0.024	98	244450	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.265	6.258	0.007	98	1823383	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.452	9.451	0.001	87	352413	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.807	11.806	0.001	96	310411	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.498	5.491	0.007	94	336360	250.0	205.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.894	5.887	0.007	96	258355	250.0	174.3	
$ 7 Toluene-d8 (Surr)	98	7.980	7.979	0.001	93	1507623	250.0	228.5	
$ 8 4-Bromofluorobenzene (Surr	95	10.651	10.650	0.001	87	412726	250.0	192.4	
10 Dichlorodifluoromethane	85		1.208					ND	
11 Chloromethane	50		1.318					ND	
12 Vinyl chloride	62		1.415					ND	
13 Butadiene	54		1.433					ND	
14 Bromomethane	94		1.646					ND	
15 Chloroethane	64		1.738					ND	
17 Trichlorofluoromethane	101		1.932					ND	
16 Dichlorofluoromethane	67		1.951					ND	
19 Ethyl ether	59		2.224					ND	
20 Acrolein	56		2.360					ND	
21 1,1-Dichloroethene	96		2.425					ND	
22 1,1,2-Trichloro-1,2,2-trif	101		2.474					ND	
23 Acetone	43		2.510					ND	
24 Iodomethane	142		2.565					ND	
25 Carbon disulfide	76		2.626					ND	
26 Isopropyl alcohol	45		2.712					ND	
27 Acetonitrile	40		2.822					ND	
28 3-Chloro-1-propene	76		2.833					ND	
29 Methyl acetate	43		2.857					ND	
30 Methylene Chloride	84		2.991					ND	
18 Ethanol	45		3.114					ND	
31 2-Methyl-2-propanol	59		3.228					ND	
32 Acrylonitrile	53		3.313					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
33 trans-1,2-Dichloroethene	96		3.338					ND	
34 Methyl tert-butyl ether	73		3.356					ND	
38 Vinyl acetate	43		3.733					ND	
35 Hexane	57		3.733					ND	
36 1,1-Dichloroethane	63		3.976					ND	
37 2-Chloro-1,3-butadiene	53		4.075					ND	
39 Isopropyl ether	45		4.105					ND	
40 Tert-butyl ethyl ether	59		4.641					ND	
41 2,2-Dichloropropane	77		4.804					ND	
42 cis-1,2-Dichloroethene	96		4.816					ND	
43 2-Butanone (MEK)	43		4.846					ND	
44 Propionitrile	54		4.927					ND	
45 Ethyl acetate	43		4.945					ND	
47 Methacrylonitrile	41		5.115					ND	
46 Chlorobromomethane	128		5.126					ND	
48 Tetrahydrofuran	42		5.150					ND	
49 Chloroform	83		5.296					ND	
50 1,1,1-Trichloroethane	97		5.449					ND	
51 Cyclohexane	56		5.515					ND	
53 Carbon tetrachloride	117		5.631					ND	
52 1,1-Dichloropropene	75		5.649					ND	
54 Benzene	78		5.880					ND	
59 Isobutyl alcohol	41		5.929					ND	
55 1,2-Dichloroethane	62		5.978					ND	
57 Isooctane	57		6.058					ND	
56 Tert-amyl methyl ether	73		6.101					ND	
58 n-Heptane	43		6.300					ND	
61 Trichloroethene	130		6.671					ND	
60 n-Butanol	56		6.685					ND	
62 Ethyl acrylate	55		6.843					ND	
63 Methylcyclohexane	83		6.902					ND	
64 1,2-Dichloropropane	63		6.957					ND	
65 Dibromomethane	93		7.042					ND	
67 1,4-Dioxane	88		7.061					ND	
66 Methyl methacrylate	69		7.080					ND	
68 Dichlorobromomethane	83		7.261					ND	
69 2-Nitropropane	41		7.500					ND	
70 2-Chloroethyl vinyl ether	63		7.597					ND	
74 trans-1,3-Dichloropropene	75		7.724					ND	
72 4-Methyl-2-pentanone (MIBK	43		7.894					ND	
73 Toluene	91		8.046					ND	
71 cis-1,3-Dichloropropene	75		8.326					ND	
75 Ethyl methacrylate	69		8.411					ND	
76 1,1,2-Trichloroethane	97		8.521					ND	
77 Tetrachloroethene	164		8.563					ND	
78 1,3-Dichloropropane	76		8.673					ND	
79 2-Hexanone	43		8.752					ND	
81 Chlorodibromomethane	129		8.880					ND	
80 n-Butyl acetate	43		8.893					ND	
82 Ethylene Dibromide	107		8.983					ND	
84 Chlorobenzene	112		9.482					ND	
85 1,1,1,2-Tetrachloroethane	131		9.585					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
86 Ethylbenzene	106		9.591					ND	
87 m-Xylene & p-Xylene	106		9.731					ND	
88 o-Xylene	106		10.102					ND	
89 Styrene	104		10.133					ND	
90 Bromoform	173		10.303					ND	
91 Isopropylbenzene	105		10.480					ND	
83 4-Chlorobenzotrifluoride	180		10.528					ND	
92 Cyclohexanone	55		10.554					ND	
94 Bromobenzene	156		10.772					ND	
93 1,1,2,2-Tetrachloroethane	83		10.808					ND	
96 trans-1,4-Dichloro-2-buten	53		10.845					ND	
95 1,2,3-Trichloropropane	110		10.851					ND	
97 N-Propylbenzene	120		10.899					ND	
98 2-Chlorotoluene	126		10.972					ND	
99 1,3,5-Trimethylbenzene	105		11.088					ND	
100 4-Chlorotoluene	126		11.100					ND	
101 tert-Butylbenzene	119		11.392					ND	
102 Pentachloroethane	167		11.418					ND	
103 1,2,4-Trimethylbenzene	105		11.459					ND	
104 sec-Butylbenzene	105		11.617					ND	
105 1,3-Dichlorobenzene	146		11.721					ND	
106 4-Isopropyltoluene	119		11.781					ND	
107 1,4-Dichlorobenzene	146		11.830					ND	
108 1,2,3-Trimethylbenzene	105		11.862					ND	
109 Benzyl chloride	91		11.947					ND	
111 1,2-Dichlorobenzene	146		12.171					ND	
110 n-Butylbenzene	91		12.189					ND	
112 1,2-Dibromo-3-Chloropropan	75		12.962					ND	
114 1,3,5-Trichlorobenzene	180		13.152					ND	
113 1,2,4-Trichlorobenzene	180		13.777					ND	
115 Hexachlorobutadiene	225		13.935					ND	
116 Naphthalene	128		14.032					ND	
117 1,2,3-Trichlorobenzene	180		14.251					ND	
118 2-Methylnaphthalene	142		15.177					ND	
119 1,2-dichloro-4-(trifluorom	214		0.000					ND	
127 2,3- & 3,4- Dichlorotoluen	125		0.000					ND	
125 2-Chlorobenzotrifluoride	180		0.000					ND	
123 2,5-Dichlorobenzotrifluori	214		0.000					ND	
121 2,4,5-Trichlorotoluene	159		0.000					ND	
120 2,4- & 2,5- & 2,6- Dichlor	125		0.000					ND	
128 2,3,6-Trichlorotoluene	159		0.000					ND	
126 2,4-Dichloro-1-(triflourom	214		0.000					ND	
124 3-Chlorobenzotrifluoride	180		0.000					ND	
122 3-Chlorotoluene	126		0.000					ND	
S 129 1,2-Dichloroethene, Total	96		1.000					ND	
S 130 Xylenes, Total	106		1.000					ND	
S 131 1,3-Dichloropropene, Total	1		0.000					ND	
T 133 Methyl n-amyl ketone TIC	43		0.000					ND	
T 132 Tetrahydrofuran TIC	42		6.255					ND	
T 134 Mesityl oxide TIC	83	7.980	7.915	0.065	27	1697			0

Reagents:

VOA8260SURR_00017	Amount Added:	10.00	Units: uL	Run Reagent
VOA8260INT_00024	Amount Added:	10.00	Units: uL	Run Reagent

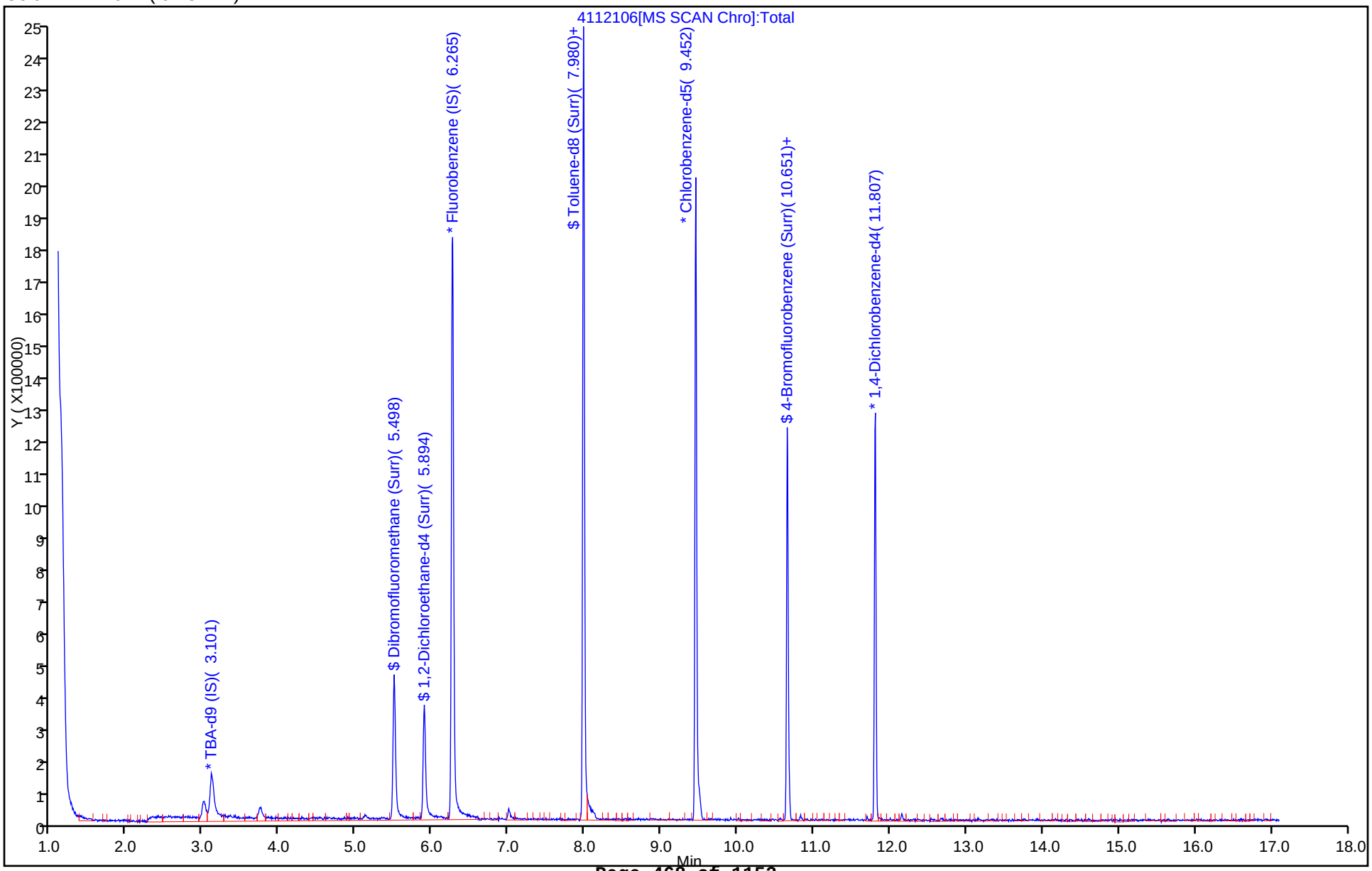
Report Date: 11-Dec-2014 06:31:48 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112106.D

Injection Date:	21-Nov-2014 12:05:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	mb			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-125940/12

Matrix: Water Lab File ID: 4112112.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2014 14:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 125940 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	37.3		5.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	39.5		5.0	0.93
79-00-5	1,1,2-Trichloroethane	40.5		5.0	1.2
75-34-3	1,1-Dichloroethane	40.1		5.0	1.0
75-35-4	1,1-Dichloroethene	37.8		5.0	1.1
95-50-1	1,2-Dichlorobenzene	38.1		5.0	0.68
107-06-2	1,2-Dichloroethane	38.5		5.0	0.96
78-87-5	1,2-Dichloropropane	39.0		5.0	1.3
541-73-1	1,3-Dichlorobenzene	38.5		5.0	0.51
106-46-7	1,4-Dichlorobenzene	37.8		5.0	0.53
107-02-8	Acrolein	169		100	5.7
107-13-1	Acrylonitrile	377		50	9.0
71-43-2	Benzene	41.4		5.0	0.99
75-25-2	Bromoform	39.2		5.0	1.1
74-83-9	Bromomethane	35.4		5.0	1.6
56-23-5	Carbon tetrachloride	38.0		5.0	1.1
108-90-7	Chlorobenzene	39.6		5.0	0.53
67-66-3	Chloroform	39.6		5.0	1.0
74-87-3	Chloromethane	37.1		5.0	1.4
124-48-1	Chlorodibromomethane	39.5		5.0	0.65
10061-01-5	cis-1,3-Dichloropropene	38.0		5.0	0.73
75-27-4	Dichlorobromomethane	41.7		5.0	0.93
100-41-4	Ethylbenzene	41.1		5.0	0.62
75-09-2	Methylene Chloride	39.4		5.0	1.1
127-18-4	Tetrachloroethene	38.7		5.0	0.82
108-88-3	Toluene	41.8		5.0	0.85
156-60-5	trans-1,2-Dichloroethene	38.7		5.0	0.75
10061-02-6	trans-1,3-Dichloropropene	37.6		5.0	0.58
79-01-6	Trichloroethene	37.4		5.0	0.80
75-01-4	Vinyl chloride	40.9		5.0	1.3
75-00-3	Chloroethane	40.6		5.0	0.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-125940/12

Matrix: Water Lab File ID: 4112112.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2014 14:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 125940 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		62-123
460-00-4	4-Bromofluorobenzene (Surr)	101		75-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112112.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 21-Nov-2014 14:46:30 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Misc. Info.: 180-0004518-012
Operator ID: 034635 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 11-Dec-2014 06:31:45 Calib Date: 13-Nov-2014 16:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111308.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: journetp Date: 23-Nov-2014 13:38:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.150	3.125	0.025	98	206094	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.258	6.258	0.000	98	1083197	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.452	9.451	0.001	87	242992	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.800	11.806	-0.006	97	282136	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.498	5.491	0.007	93	244699	250.0	251.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.887	5.887	0.000	95	215749	250.0	245.1	
$ 7 Toluene-d8 (Surr)	98	7.980	7.979	0.001	94	1117923	250.0	245.7	
$ 8 4-Bromofluorobenzene (Surr	95	10.650	10.650	0.000	88	372591	250.0	252.0	
10 Dichlorodifluoromethane	85	1.209	1.208	0.001	98	276533	200.0	150.4	
11 Chloromethane	50	1.312	1.318	-0.006	99	490787	200.0	185.6	
12 Vinyl chloride	62	1.416	1.415	0.001	98	375532	200.0	204.4	
13 Butadiene	54	1.434	1.433	0.001	93	352934	200.0	192.7	
14 Bromomethane	94	1.647	1.646	0.001	92	51769	200.0	176.9	
15 Chloroethane	64	1.738	1.738	0.000	90	64516	200.0	203.2	
17 Trichlorofluoromethane	101	1.927	1.932	-0.005	95	298850	200.0	241.7	
16 Dichlorofluoromethane	67	1.951	1.951	0.001	98	344926	200.0	251.2	
19 Ethyl ether	59	2.231	2.224	0.007	97	125366	200.0	143.5	
20 Acrolein	56	2.371	2.360	0.011	97	51142	875.0	843.0	
21 1,1-Dichloroethene	96	2.420	2.425	-0.005	97	289601	200.0	189.0	
22 1,1,2-Trichloro-1,2,2-trif	101	2.468	2.474	-0.006	96	319245	200.0	185.6	
23 Acetone	43	2.523	2.510	0.013	100	74479	200.0	177.3	
24 Iodomethane	142	2.559	2.565	-0.006	96	415110	200.0	184.2	
25 Carbon disulfide	76	2.620	2.626	-0.006	99	910047	200.0	188.7	
28 3-Chloro-1-propene	76	2.833	2.833	0.000	94	201695	200.0	182.0	
29 Methyl acetate	43	2.864	2.857	0.007	99	738288	1000.0	1019.9	
30 Methylene Chloride	84	2.985	2.991	-0.006	99	366681	200.0	196.8	
31 2-Methyl-2-propanol	59	3.253	3.228	0.025	95	119068	2000.0	1851.7	
32 Acrylonitrile	53	3.314	3.313	0.001	100	618476	2000.0	1885.4	
33 trans-1,2-Dichloroethene	96	3.332	3.338	-0.006	98	317572	200.0	193.7	
34 Methyl tert-butyl ether	73	3.362	3.356	0.006	97	487620	200.0	188.0	
38 Vinyl acetate	43	3.721	3.733	-0.012	67	431840	200.0	175.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Hexane	57	3.727	3.733	-0.006	91	664633	200.0	180.3	
36 1,1-Dichloroethane	63	3.971	3.976	-0.005	97	597180	200.0	200.5	
41 2,2-Dichloropropane	77	4.804	4.804	0.000	81	214529	200.0	181.1	
42 cis-1,2-Dichloroethene	96	4.810	4.816	-0.006	83	314392	200.0	194.4	
43 2-Butanone (MEK)	43	4.853	4.846	0.007	100	80749	200.0	167.7	
46 Chlorobromomethane	128	5.127	5.126	0.001	90	105547	200.0	193.5	
48 Tetrahydrofuran	42	5.157	5.150	0.007	93	87976	400.0	342.5	
49 Chloroform	83	5.297	5.296	0.001	93	432299	200.0	197.8	
50 1,1,1-Trichloroethane	97	5.449	5.449	0.001	98	331173	200.0	186.6	
51 Cyclohexane	56	5.516	5.515	0.001	92	762401	200.0	189.5	
53 Carbon tetrachloride	117	5.626	5.631	-0.005	97	295265	200.0	190.2	
52 1,1-Dichloropropene	75	5.650	5.649	0.001	97	384818	200.0	193.6	
54 Benzene	78	5.881	5.880	0.001	98	1243620	200.0	207.0	
59 Isobutyl alcohol	41	5.936	5.929	0.007	95	95460	5000.0	4452.5	
55 1,2-Dichloroethane	62	5.978	5.978	0.000	94	219892	200.0	192.5	
58 n-Heptane	43	6.295	6.300	-0.005	95	686510	200.0	195.0	
61 Trichloroethene	130	6.672	6.671	0.001	98	259977	200.0	186.8	
63 Methylcyclohexane	83	6.903	6.902	0.001	94	606601	200.0	194.0	
64 1,2-Dichloropropane	63	6.958	6.957	0.001	99	310762	200.0	195.0	
65 Dibromomethane	93	7.043	7.042	0.001	96	96790	200.0	188.4	
67 1,4-Dioxane	88	7.055	7.061	-0.006	51	26584	4000.0	3349.8	
68 Dichlorobromomethane	83	7.262	7.261	0.001	97	252319	200.0	208.4	
74 trans-1,3-Dichloropropene	75	7.724	7.724	0.000	95	324262	200.0	188.2	
72 4-Methyl-2-pentanone (MIBK	43	7.895	7.894	0.001	97	142280	200.0	188.2	
73 Toluene	91	8.047	8.046	0.001	98	1224775	200.0	208.8	
71 cis-1,3-Dichloropropene	75	8.327	8.326	0.001	94	194214	200.0	190.1	
75 Ethyl methacrylate	69	8.412	8.411	0.001	92	214421	200.0	189.2	
76 1,1,2-Trichloroethane	97	8.521	8.521	0.000	88	166606	200.0	202.4	
77 Tetrachloroethene	164	8.564	8.563	0.001	98	228195	200.0	193.6	
78 1,3-Dichloropropane	76	8.673	8.673	0.000	94	300063	200.0	200.6	
79 2-Hexanone	43	8.752	8.752	0.000	98	95893	200.0	156.6	
81 Chlorodibromomethane	129	8.880	8.880	0.000	92	130684	200.0	197.3	
82 Ethylene Dibromide	107	8.984	8.983	0.001	97	137768	200.0	188.4	
84 Chlorobenzene	112	9.476	9.482	-0.006	91	683819	200.0	198.0	
85 1,1,1,2-Tetrachloroethane	131	9.586	9.585	0.001	97	210366	200.0	205.5	
86 Ethylbenzene	106	9.592	9.591	0.001	98	449221	200.0	205.5	
87 m-Xylene & p-Xylene	106	9.732	9.731	0.001	99	550412	200.0	201.3	
88 o-Xylene	106	10.103	10.102	0.001	97	521640	200.0	205.8	
89 Styrene	104	10.133	10.133	0.000	96	787660	200.0	196.7	
90 Bromoform	173	10.298	10.303	-0.005	97	60007	200.0	195.9	
91 Isopropylbenzene	105	10.480	10.480	0.000	96	1313530	200.0	196.6	
94 Bromobenzene	156	10.772	10.772	0.000	95	237879	200.0	187.5	
93 1,1,2,2-Tetrachloroethane	83	10.803	10.808	-0.005	93	164054	200.0	197.5	
96 trans-1,4-Dichloro-2-buten	53	10.845	10.845	0.000	77	27535	200.0	185.3	
95 1,2,3-Trichloropropane	110	10.851	10.851	0.000	88	41928	200.0	181.8	
97 N-Propylbenzene	120	10.900	10.899	0.001	98	381952	200.0	194.7	
98 2-Chlorotoluene	126	10.973	10.972	0.001	96	290249	200.0	187.9	
99 1,3,5-Trimethylbenzene	105	11.088	11.088	0.000	96	1042403	200.0	210.5	
100 4-Chlorotoluene	126	11.101	11.100	0.001	98	270554	200.0	199.6	
101 tert-Butylbenzene	119	11.393	11.392	0.001	94	953781	200.0	208.7	
103 1,2,4-Trimethylbenzene	105	11.453	11.459	-0.006	97	1058178	200.0	213.0	
104 sec-Butylbenzene	105	11.618	11.617	0.001	94	1433381	200.0	214.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 1,3-Dichlorobenzene	146	11.721	11.721	0.000	98	474314	200.0	192.4	
106 4-Isopropyltoluene	119	11.782	11.781	0.001	96	1130468	200.0	210.5	
107 1,4-Dichlorobenzene	146	11.825	11.830	-0.005	92	433990	200.0	188.8	
111 1,2-Dichlorobenzene	146	12.171	12.171	0.000	98	401377	200.0	190.6	
110 n-Butylbenzene	91	12.184	12.189	-0.005	98	1066291	200.0	213.4	
112 1,2-Dibromo-3-Chloropropan	75	12.962	12.962	0.000	81	10452	200.0	171.0	
113 1,2,4-Trichlorobenzene	180	13.777	13.777	0.000	94	137401	200.0	172.5	
115 Hexachlorobutadiene	225	13.929	13.935	-0.006	97	185373	200.0	183.4	
116 Naphthalene	128	14.033	14.032	0.001	97	189860	200.0	150.1	
117 1,2,3-Trichlorobenzene	180	14.252	14.251	0.001	95	98511	200.0	159.9	
S 129 1,2-Dichloroethene, Total	96				0		400.0	388.1	
S 130 Xylenes, Total	106				0		400.0	407.1	
S 131 1,3-Dichloropropene, Total	1				0		400.0	378.2	

Reagents:

VOA8260VOA2ND_00090	Amount Added: 8.00	Units: uL		
VOAACROLEIN2N_00004	Amount Added: 35.00	Units: uL		
voaWVA 2nd Re_00005	Amount Added: 8.00	Units: uL		
VOA8260SURR_00017	Amount Added: 10.00	Units: uL	Run Reagent	
VOA8260INT_00024	Amount Added: 10.00	Units: uL	Run Reagent	

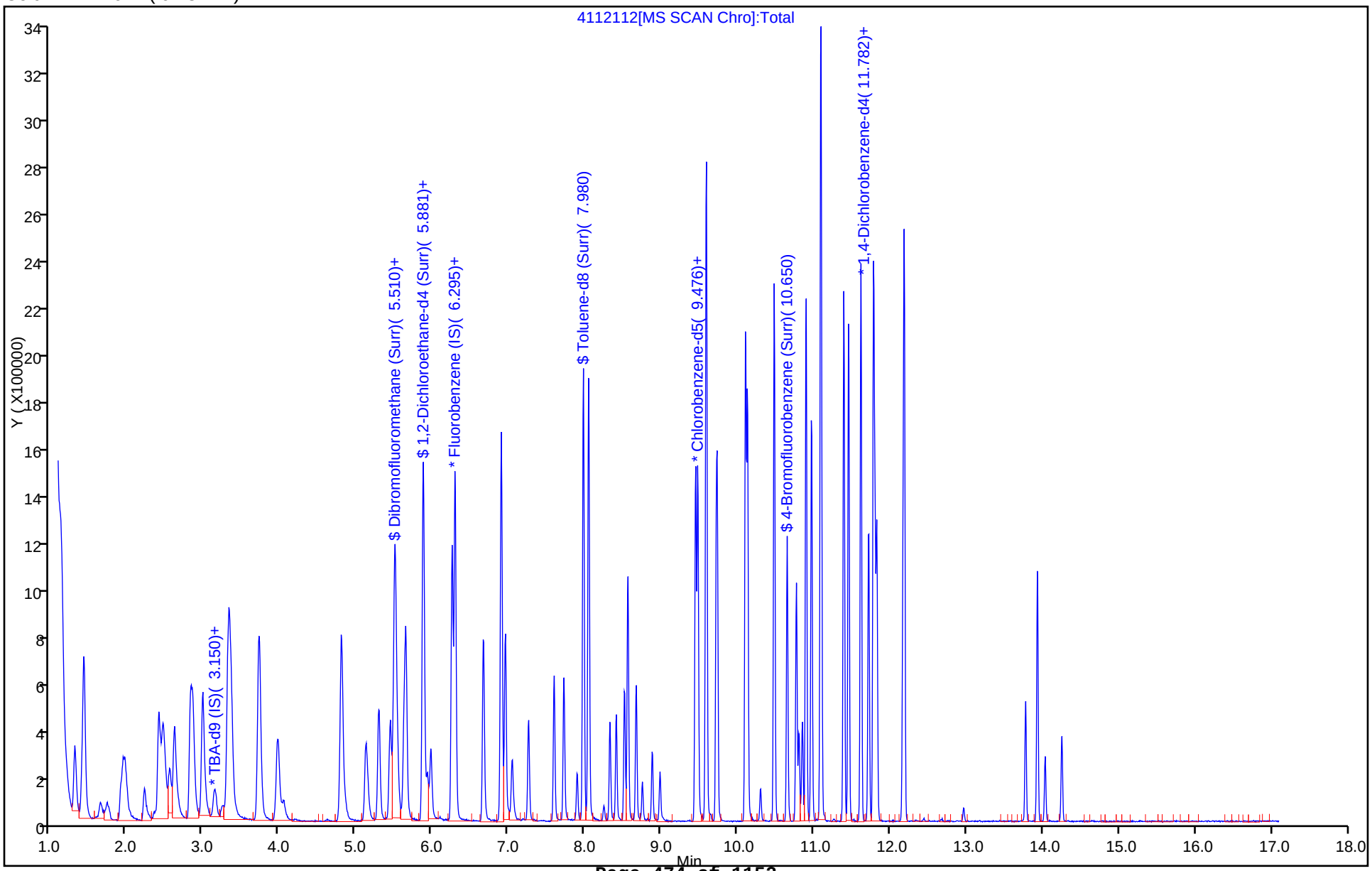
Report Date: 11-Dec-2014 06:31:50 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112112.D

Injection Date:	21-Nov-2014 14:46:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	lcs			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-018-111614 MS Lab Sample ID: 180-39026-1 MS

Matrix: Water Lab File ID: 4112113.D

Analysis Method: 8260C Date Collected: 11/16/2014 18:08

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2014 15:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 125940 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	35.3		5.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	35.2		5.0	0.93
79-00-5	1,1,2-Trichloroethane	35.8		5.0	1.2
75-34-3	1,1-Dichloroethane	37.9		5.0	1.0
75-35-4	1,1-Dichloroethene	37.1		5.0	1.1
95-50-1	1,2-Dichlorobenzene	36.1		5.0	0.68
107-06-2	1,2-Dichloroethane	36.4		5.0	0.96
78-87-5	1,2-Dichloropropane	36.4		5.0	1.3
541-73-1	1,3-Dichlorobenzene	36.8		5.0	0.51
106-46-7	1,4-Dichlorobenzene	36.4		5.0	0.53
107-02-8	Acrolein	186		100	5.7
107-13-1	Acrylonitrile	359		50	9.0
71-43-2	Benzene	38.3		5.0	0.99
75-25-2	Bromoform	36.0		5.0	1.1
74-83-9	Bromomethane	32.4		5.0	1.6
56-23-5	Carbon tetrachloride	35.3		5.0	1.1
108-90-7	Chlorobenzene	36.0		5.0	0.53
67-66-3	Chloroform	37.5		5.0	1.0
74-87-3	Chloromethane	34.0		5.0	1.4
124-48-1	Chlorodibromomethane	37.6		5.0	0.65
10061-01-5	cis-1,3-Dichloropropene	36.1		5.0	0.73
75-27-4	Dichlorobromomethane	39.2		5.0	0.93
100-41-4	Ethylbenzene	36.7		5.0	0.62
75-09-2	Methylene Chloride	36.5		5.0	1.1
127-18-4	Tetrachloroethene	34.0		5.0	0.82
108-88-3	Toluene	36.7		5.0	0.85
156-60-5	trans-1,2-Dichloroethene	35.9		5.0	0.75
10061-02-6	trans-1,3-Dichloropropene	33.5		5.0	0.58
79-01-6	Trichloroethene	35.0		5.0	0.80
75-01-4	Vinyl chloride	34.6		5.0	1.3
75-00-3	Chloroethane	38.6		5.0	0.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-018-111614 MS Lab Sample ID: 180-39026-1 MS

Matrix: Water Lab File ID: 4112113.D

Analysis Method: 8260C Date Collected: 11/16/2014 18:08

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2014 15:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 125940 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		62-123
460-00-4	4-Bromofluorobenzene (Surr)	92		75-120
1868-53-7	Dibromofluoromethane (Surr)	98		80-120
2037-26-5	Toluene-d8 (Surr)	94		80-120

Report Date: 23-Nov-2014 14:58:13 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112113.D
Lims ID: 180-39026-K-1 MS
Client ID:
Sample Type: MS
Inject. Date: 21-Nov-2014 15:13:30 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-39026-K-1 MS
Misc. Info.: 180-0004518-013
Operator ID: 034635 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Nov-2014 14:57:34 Calib Date: 13-Nov-2014 16:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111308.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK035

First Level Reviewer: journetp Date: 21-Nov-2014 18:14:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.137	3.120	0.017	98	214133	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.258	6.259	-0.001	98	1157627	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.452	9.453	-0.001	86	264007	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.800	11.801	-0.001	97	290513	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.491	5.491	0.000	93	255293	250.0	245.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.887	5.887	0.000	97	219801	250.0	233.6	
$ 7 Toluene-d8 (Surr)	98	7.979	7.979	0.000	93	1163738	250.0	235.4	
$ 8 4-Bromofluorobenzene (Surr	95	10.650	10.650	0.000	88	369955	250.0	230.3	
10 Dichlorodifluoromethane	85	1.209	1.208	0.000	99	272673	200.0	138.7	
11 Chloromethane	50	1.312	1.318	-0.006	99	480684	200.0	170.1	
12 Vinyl chloride	62	1.415	1.415	0.000	98	348099	200.0	172.8	
13 Butadiene	54	1.440	1.433	0.007	95	338723	200.0	169.4	
14 Bromomethane	94	1.659	1.646	0.013	91	50749	200.0	162.2	
15 Chloroethane	64	1.744	1.738	0.006	93	65707	200.0	193.1	
17 Trichlorofluoromethane	101	1.926	1.932	-0.006	95	287398	200.0	217.1	
16 Dichlorofluoromethane	67	1.951	1.951	0.001	98	335755	200.0	228.8	
19 Ethyl ether	59	2.218	2.224	-0.006	95	120494	200.0	129.1	
20 Acrolein	56	2.352	2.360	-0.008	99	60151	200.0	927.8	
21 1,1-Dichloroethene	96	2.419	2.425	-0.006	98	304143	200.0	185.6	
22 1,1,2-Trichloro-1,2,2-trif	101	2.474	2.474	0.000	95	320254	200.0	174.2	
23 Acetone	43	2.516	2.510	0.006	81	69897	200.0	154.2	
24 Iodomethane	142	2.565	2.565	0.000	96	417613	200.0	173.4	
25 Carbon disulfide	76	2.626	2.626	0.000	99	896112	200.0	173.9	
28 3-Chloro-1-propene	76	2.833	2.833	0.000	95	205475	200.0	173.8	
29 Methyl acetate	43	2.863	2.857	0.006	99	764891	1000.0	988.7	
30 Methylene Chloride	84	2.991	2.991	0.000	98	368276	200.0	182.3	
31 2-Methyl-2-propanol	59	3.234	3.228	0.006	95	104171	2000.0	1559.2	
32 Acrylonitrile	53	3.319	3.313	0.006	99	630889	2000.0	1795.0	
33 trans-1,2-Dichloroethene	96	3.332	3.338	-0.006	98	314435	200.0	179.4	
34 Methyl tert-butyl ether	73	3.362	3.356	0.006	97	504131	200.0	181.9	
38 Vinyl acetate	43	3.733	3.733	0.000	67	429865	200.0	162.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Hexane	57	3.733	3.733	0.000	92	656843	200.0	165.3	
36 1,1-Dichloroethane	63	3.970	3.976	-0.006	96	602515	200.0	189.3	
41 2,2-Dichloropropane	77	4.804	4.804	0.000	85	217906	200.0	172.2	
42 cis-1,2-Dichloroethene	96	4.810	4.816	-0.006	83	319374	200.0	184.8	
43 2-Butanone (MEK)	43	4.846	4.846	0.000	99	89979	200.0	175.0	
46 Chlorobromomethane	128	5.126	5.126	0.000	90	105432	200.0	180.9	
48 Tetrahydrofuran	42	5.157	5.150	0.007	92	95154	400.0	346.6	
49 Chloroform	83	5.297	5.296	0.001	95	438069	200.0	187.6	
50 1,1,1-Trichloroethane	97	5.449	5.449	0.001	98	334982	200.0	176.6	
51 Cyclohexane	56	5.516	5.515	0.001	93	749267	200.0	174.3	
53 Carbon tetrachloride	117	5.631	5.631	0.000	98	293146	200.0	176.7	
52 1,1-Dichloropropene	75	5.649	5.649	0.000	95	372265	200.0	175.2	
54 Benzene	78	5.881	5.880	0.001	97	1230522	200.0	191.6	
59 Isobutyl alcohol	41	5.941	5.929	0.012	95	98539	5000.0	4300.6	
55 1,2-Dichloroethane	62	5.978	5.978	0.000	93	222203	200.0	182.0	
58 n-Heptane	43	6.294	6.300	-0.006	95	683202	200.0	181.6	
61 Trichloroethene	130	6.671	6.671	0.000	97	260323	200.0	175.0	
63 Methylcyclohexane	83	6.903	6.902	0.001	94	597125	200.0	178.7	
64 1,2-Dichloropropane	63	6.957	6.957	0.000	99	310202	200.0	182.1	
65 Dibromomethane	93	7.043	7.042	0.001	95	100914	200.0	183.8	
67 1,4-Dioxane	88	7.061	7.061	0.000	96	28257	4000.0	3329.4	
68 Dichlorobromomethane	83	7.262	7.261	0.001	97	253354	200.0	195.8	
74 trans-1,3-Dichloropropene	75	7.724	7.724	0.000	95	313321	200.0	167.5	
72 4-Methyl-2-pentanone (MIBK	43	7.894	7.894	0.000	97	139224	200.0	169.5	
73 Toluene	91	8.046	8.046	0.000	98	1193509	200.0	183.7	
71 cis-1,3-Dichloropropene	75	8.326	8.326	0.000	94	197291	200.0	180.6	
75 Ethyl methacrylate	69	8.411	8.411	0.000	92	218746	200.0	177.4	
76 1,1,2-Trichloroethane	97	8.515	8.521	-0.006	89	159920	200.0	178.8	
77 Tetrachloroethene	164	8.563	8.563	0.000	98	217970	200.0	170.2	
78 1,3-Dichloropropane	76	8.673	8.673	0.000	94	297908	200.0	183.3	
79 2-Hexanone	43	8.752	8.752	0.000	98	104860	200.0	157.5	
81 Chlorodibromomethane	129	8.880	8.880	0.000	92	135328	200.0	188.0	
82 Ethylene Dibromide	107	8.983	8.983	0.000	96	132786	200.0	167.2	
84 Chlorobenzene	112	9.482	9.482	0.000	95	676884	200.0	179.9	
85 1,1,1,2-Tetrachloroethane	131	9.585	9.585	0.000	96	213207	200.0	191.7	
86 Ethylbenzene	106	9.592	9.591	0.001	98	436312	200.0	183.7	
87 m-Xylene & p-Xylene	106	9.731	9.731	0.000	99	541784	200.0	182.3	
88 o-Xylene	106	10.103	10.102	0.001	97	530232	200.0	192.5	
89 Styrene	104	10.133	10.133	0.000	96	790667	200.0	180.4	
90 Bromoform	173	10.303	10.303	0.000	96	59019	200.0	179.8	
91 Isopropylbenzene	105	10.480	10.480	0.000	96	1300074	200.0	176.6	
94 Bromobenzene	156	10.772	10.772	0.000	94	240836	200.0	184.3	
93 1,1,2,2-Tetrachloroethane	83	10.808	10.808	0.000	92	158687	200.0	175.8	
96 trans-1,4-Dichloro-2-buten	53	10.845	10.845	0.000	68	27250	200.0	178.1	
95 1,2,3-Trichloropropane	110	10.851	10.851	0.000	88	40914	200.0	171.8	
97 N-Propylbenzene	120	10.899	10.899	0.000	98	374360	200.0	184.3	
98 2-Chlorotoluene	126	10.972	10.972	0.000	97	288306	200.0	181.3	
99 1,3,5-Trimethylbenzene	105	11.088	11.088	0.000	95	1024350	200.0	199.0	
100 4-Chlorotoluene	126	11.094	11.100	-0.006	98	267869	200.0	191.9	
101 tert-Butylbenzene	119	11.392	11.392	0.000	94	935257	200.0	197.0	
103 1,2,4-Trimethylbenzene	105	11.459	11.459	0.000	97	1022034	200.0	197.6	
104 sec-Butylbenzene	105	11.617	11.617	0.000	94	1393483	200.0	200.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 1,3-Dichlorobenzene	146	11.721	11.721	0.000	99	469178	200.0	184.2	
106 4-Isopropyltoluene	119	11.782	11.781	0.001	96	1100525	200.0	196.8	
107 1,4-Dichlorobenzene	146	11.824	11.830	-0.006	94	431050	200.0	182.1	
111 1,2-Dichlorobenzene	146	12.171	12.171	0.000	97	392970	200.0	180.4	
110 n-Butylbenzene	91	12.189	12.189	0.000	98	1029439	200.0	197.6	
112 1,2-Dibromo-3-Chloropropan	75	12.968	12.962	0.006	81	11296	200.0	178.6	
113 1,2,4-Trichlorobenzene	180	13.777	13.777	0.000	95	133944	200.0	163.3	
115 Hexachlorobutadiene	225	13.929	13.935	-0.006	96	188883	200.0	181.5	
116 Naphthalene	128	14.032	14.032	0.000	97	193164	200.0	148.3	
117 1,2,3-Trichlorobenzene	180	14.251	14.251	0.000	96	100760	200.0	158.9	
S 129 1,2-Dichloroethene, Total	96				0		400.0	364.2	
S 130 Xylenes, Total	106				0		400.0	374.9	
S 131 1,3-Dichloropropene, Total	1				0		400.0	348.2	

Reagents:

VOA8260VOA2ND_00090	Amount Added:	8.00	Units: uL	
VOAACROLEIN2N_00004	Amount Added:	8.00	Units: uL	
voaWVA 2nd Re_00005	Amount Added:	8.00	Units: uL	
VOA8260SURR_00017	Amount Added:	10.00	Units: uL	Run Reagent
VOA8260INT_00024	Amount Added:	10.00	Units: uL	Run Reagent

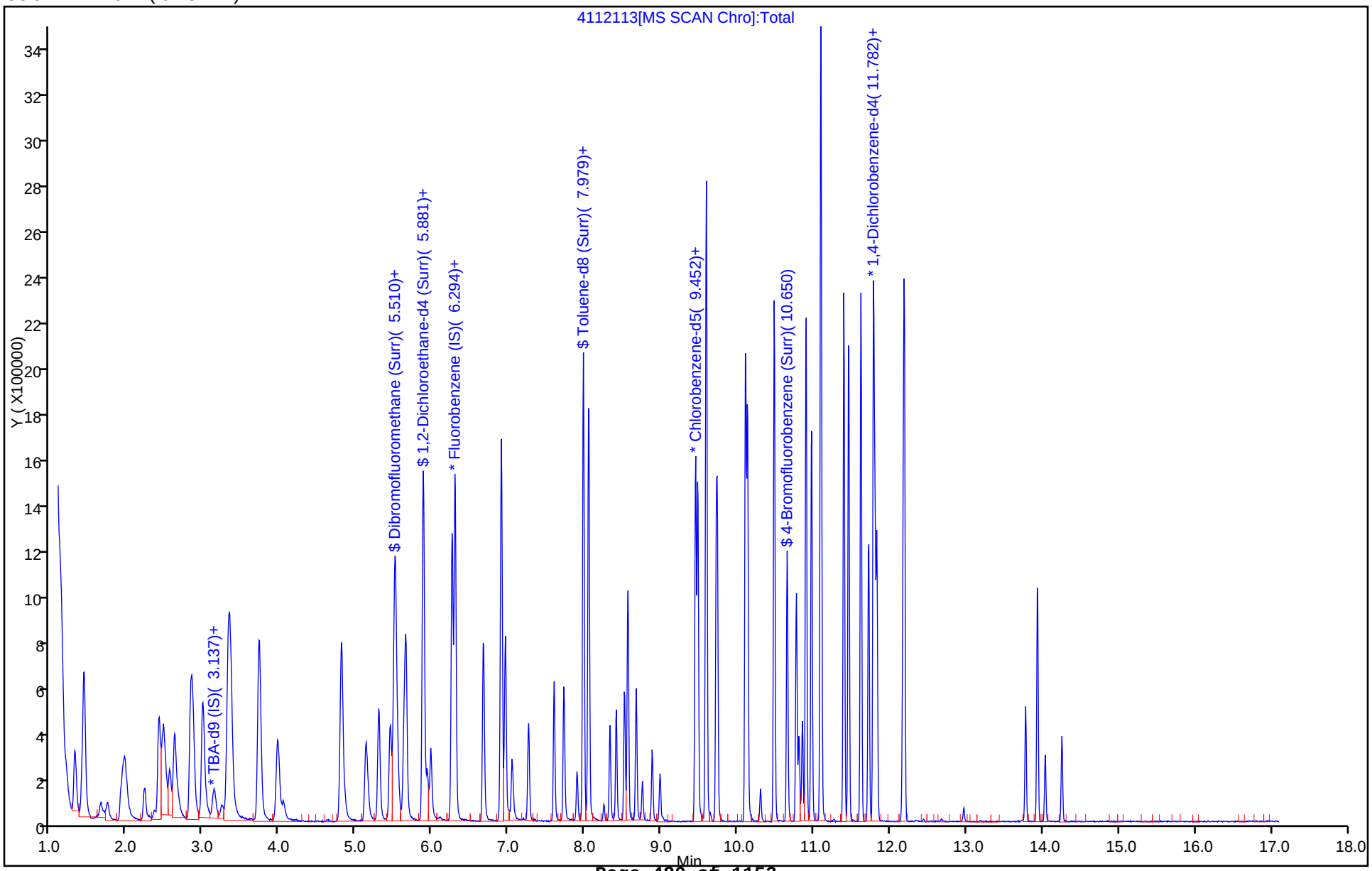
Report Date: 23-Nov-2014 14:58:13 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112113.D

Injection Date:	21-Nov-2014 15:13:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	180-39026-K-1 MS			Worklist Smp#:	13
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-018-111614 MSD Lab Sample ID: 180-39026-1 MSD

Matrix: Water Lab File ID: 4112114.D

Analysis Method: 8260C Date Collected: 11/16/2014 18:08

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2014 15:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 125940 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	35.2		5.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	36.0		5.0	0.93
79-00-5	1,1,2-Trichloroethane	36.9		5.0	1.2
75-34-3	1,1-Dichloroethane	37.4		5.0	1.0
75-35-4	1,1-Dichloroethene	35.7		5.0	1.1
95-50-1	1,2-Dichlorobenzene	37.6		5.0	0.68
107-06-2	1,2-Dichloroethane	36.4		5.0	0.96
78-87-5	1,2-Dichloropropane	37.2		5.0	1.3
541-73-1	1,3-Dichlorobenzene	37.0		5.0	0.51
106-46-7	1,4-Dichlorobenzene	36.6		5.0	0.53
107-02-8	Acrolein	178		100	5.7
107-13-1	Acrylonitrile	354		50	9.0
71-43-2	Benzene	38.7		5.0	0.99
75-25-2	Bromoform	34.9		5.0	1.1
74-83-9	Bromomethane	34.2		5.0	1.6
56-23-5	Carbon tetrachloride	35.7		5.0	1.1
108-90-7	Chlorobenzene	36.7		5.0	0.53
67-66-3	Chloroform	37.0		5.0	1.0
74-87-3	Chloromethane	34.2		5.0	1.4
124-48-1	Chlorodibromomethane	35.6		5.0	0.65
10061-01-5	cis-1,3-Dichloropropene	37.2		5.0	0.73
75-27-4	Dichlorobromomethane	38.7		5.0	0.93
100-41-4	Ethylbenzene	37.5		5.0	0.62
75-09-2	Methylene Chloride	37.3		5.0	1.1
127-18-4	Tetrachloroethene	34.7		5.0	0.82
108-88-3	Toluene	37.5		5.0	0.85
156-60-5	trans-1,2-Dichloroethene	36.1		5.0	0.75
10061-02-6	trans-1,3-Dichloropropene	34.2		5.0	0.58
79-01-6	Trichloroethene	35.3		5.0	0.80
75-01-4	Vinyl chloride	37.6		5.0	1.3
75-00-3	Chloroethane	35.3		5.0	0.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-018-111614 MSD Lab Sample ID: 180-39026-1 MSD

Matrix: Water Lab File ID: 4112114.D

Analysis Method: 8260C Date Collected: 11/16/2014 18:08

Sample wt/vol: 5(mL) Date Analyzed: 11/21/2014 15:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 125940 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		62-123
460-00-4	4-Bromofluorobenzene (Surr)	95		75-120
1868-53-7	Dibromofluoromethane (Surr)	98		80-120
2037-26-5	Toluene-d8 (Surr)	91		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112114.D
Lims ID: 180-39026-K-1 MSD
Client ID:
Sample Type: MSD
Inject. Date: 21-Nov-2014 15:40:30 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-39026-K-1 msd
Misc. Info.: 180-0004518-014
Operator ID: 034635 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 23-Nov-2014 14:57:34 Calib Date: 13-Nov-2014 16:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20141113-4379.b\4111308.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK035

First Level Reviewer: journetp Date: 21-Nov-2014 18:14:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	3.155	3.120	0.035	98	217664	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	6.258	6.259	-0.001	98	1208755	250.0	250.0	
* 3 Chlorobenzene-d5	119	9.452	9.453	-0.001	85	276312	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	11.800	11.801	-0.001	96	316732	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	5.491	5.491	0.000	94	265854	250.0	245.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	5.887	5.887	0.000	96	231820	250.0	236.0	
$ 7 Toluene-d8 (Surr)	98	7.979	7.979	0.000	93	1181109	250.0	228.3	
$ 8 4-Bromofluorobenzene (Surr	95	10.650	10.650	0.000	88	397270	250.0	236.3	
10 Dichlorodifluoromethane	85	1.196	1.208	-0.012	100	283122	200.0	138.0	
11 Chloromethane	50	1.312	1.318	-0.006	99	505011	200.0	171.1	
12 Vinyl chloride	62	1.415	1.415	0.000	98	390036	200.0	187.9	
13 Butadiene	54	1.427	1.433	-0.006	92	374762	200.0	181.6	
14 Bromomethane	94	1.653	1.646	0.007	92	55773	200.0	170.8	
15 Chloroethane	64	1.732	1.738	-0.006	94	63050	200.0	176.6	
17 Trichlorofluoromethane	101	1.914	1.932	-0.018	96	303228	200.0	219.4	
16 Dichlorofluoromethane	67	1.951	1.951	0.001	98	364690	200.0	238.0	
19 Ethyl ether	59	2.224	2.224	0.000	96	123847	200.0	127.0	
20 Acrolein	56	2.358	2.360	-0.002	99	60219	875.0	889.5	
21 1,1-Dichloroethene	96	2.413	2.425	-0.012	97	305446	200.0	178.3	
22 1,1,2-Trichloro-1,2,2-trif	101	2.468	2.474	-0.006	94	335561	200.0	174.8	
23 Acetone	43	2.516	2.510	0.006	99	59462	200.0	123.3	
24 Iodomethane	142	2.553	2.565	-0.012	95	446769	200.0	177.6	
25 Carbon disulfide	76	2.620	2.626	-0.006	99	941412	200.0	175.0	
28 3-Chloro-1-propene	76	2.833	2.833	0.000	95	210339	200.0	170.5	
29 Methyl acetate	43	2.863	2.857	0.006	99	759112	1000.0	939.7	
30 Methylene Chloride	84	2.991	2.991	0.000	99	391774	200.0	186.6	
31 2-Methyl-2-propanol	59	3.246	3.228	0.018	94	118268	2000.0	1741.5	
32 Acrylonitrile	53	3.313	3.313	0.000	99	650889	2000.0	1772.4	
33 trans-1,2-Dichloroethene	96	3.332	3.338	-0.006	99	330384	200.0	180.6	
34 Methyl tert-butyl ether	73	3.362	3.356	0.006	96	513771	200.0	177.5	
38 Vinyl acetate	43	3.727	3.733	-0.006	66	447728	200.0	162.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Hexane	57	3.721	3.733	-0.012	92	684124	200.0	164.8	
36 1,1-Dichloroethane	63	3.970	3.976	-0.006	96	621280	200.0	186.9	
41 2,2-Dichloropropane	77	4.798	4.804	-0.006	67	231636	200.0	175.3	
42 cis-1,2-Dichloroethene	96	4.810	4.816	-0.006	82	336867	200.0	186.6	
43 2-Butanone (MEK)	43	4.852	4.846	0.006	99	72326	200.0	134.3	
46 Chlorobromomethane	128	5.126	5.126	0.000	90	114567	200.0	188.2	
48 Tetrahydrofuran	42	5.151	5.150	0.001	95	93961	400.0	327.8	
49 Chloroform	83	5.297	5.296	0.001	94	451620	200.0	185.2	
50 1,1,1-Trichloroethane	97	5.449	5.449	0.001	98	348709	200.0	176.1	
51 Cyclohexane	56	5.510	5.515	-0.005	92	791400	200.0	176.3	
53 Carbon tetrachloride	117	5.631	5.631	0.000	96	309013	200.0	178.4	
52 1,1-Dichloropropene	75	5.649	5.649	0.000	96	397738	200.0	179.3	
54 Benzene	78	5.881	5.880	0.001	97	1296950	200.0	193.4	
59 Isobutyl alcohol	41	5.935	5.929	0.006	96	87548	5000.0	3659.3	
55 1,2-Dichloroethane	62	5.978	5.978	0.000	95	231991	200.0	181.9	
58 n-Heptane	43	6.294	6.300	-0.006	94	708178	200.0	180.3	
61 Trichloroethene	130	6.665	6.671	-0.006	97	273977	200.0	176.4	
63 Methylcyclohexane	83	6.903	6.902	0.001	94	628280	200.0	180.0	
64 1,2-Dichloropropane	63	6.957	6.957	0.000	99	330781	200.0	186.0	
65 Dibromomethane	93	7.043	7.042	0.001	98	100720	200.0	175.7	
67 1,4-Dioxane	88	7.061	7.061	0.000	96	28507	4000.0	3202.3	
68 Dichlorobromomethane	83	7.262	7.261	0.001	99	261502	200.0	193.6	
74 trans-1,3-Dichloropropene	75	7.724	7.724	0.000	94	334599	200.0	170.9	
72 4-Methyl-2-pentanone (MIBK	43	7.900	7.894	0.006	95	137751	200.0	160.2	
73 Toluene	91	8.046	8.046	0.000	99	1270059	200.0	187.3	
71 cis-1,3-Dichloropropene	75	8.326	8.326	0.000	94	212135	200.0	186.0	
75 Ethyl methacrylate	69	8.411	8.411	0.000	92	220389	200.0	170.7	
76 1,1,2-Trichloroethane	97	8.521	8.521	0.000	89	172667	200.0	184.4	
77 Tetrachloroethene	164	8.563	8.563	0.000	97	232607	200.0	173.6	
78 1,3-Dichloropropane	76	8.673	8.673	0.000	94	310024	200.0	182.2	
79 2-Hexanone	43	8.752	8.752	0.000	96	92383	200.0	133.9	
81 Chlorodibromomethane	129	8.880	8.880	0.000	92	134191	200.0	178.1	
82 Ethylene Dibromide	107	8.983	8.983	0.000	97	144457	200.0	173.7	
84 Chlorobenzene	112	9.476	9.482	-0.006	92	722651	200.0	183.7	
85 1,1,1,2-Tetrachloroethane	131	9.585	9.585	0.000	95	226805	200.0	194.8	
86 Ethylbenzene	106	9.592	9.591	0.001	98	466034	200.0	187.5	
87 m-Xylene & p-Xylene	106	9.731	9.731	0.000	99	581077	200.0	186.9	
88 o-Xylene	106	10.103	10.102	0.001	97	546711	200.0	189.7	
89 Styrene	104	10.133	10.133	0.000	96	837739	200.0	182.9	
90 Bromoform	173	10.303	10.303	0.000	97	59599	200.0	174.3	
91 Isopropylbenzene	105	10.480	10.480	0.000	96	1387174	200.0	180.5	
94 Bromobenzene	156	10.772	10.772	0.000	95	259138	200.0	181.9	
93 1,1,2,2-Tetrachloroethane	83	10.808	10.808	0.000	93	169833	200.0	179.8	
96 trans-1,4-Dichloro-2-buten	53	10.845	10.845	0.000	71	28377	200.0	170.1	
95 1,2,3-Trichloropropane	110	10.851	10.851	0.000	87	47583	200.0	183.8	
97 N-Propylbenzene	120	10.899	10.899	0.000	98	402338	200.0	181.4	
98 2-Chlorotoluene	126	10.972	10.972	0.000	96	316578	200.0	182.6	
99 1,3,5-Trimethylbenzene	105	11.088	11.088	0.000	95	1111563	200.0	197.8	
100 4-Chlorotoluene	126	11.100	11.100	0.000	98	287427	200.0	188.9	
101 tert-Butylbenzene	119	11.392	11.392	0.000	94	1006408	200.0	194.0	
103 1,2,4-Trimethylbenzene	105	11.453	11.459	-0.006	98	1110838	200.0	196.9	
104 sec-Butylbenzene	105	11.617	11.617	0.000	95	1497288	200.0	196.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 1,3-Dichlorobenzene	146	11.721	11.721	0.000	98	513417	200.0	185.0	
106 4-Isopropyltoluene	119	11.782	11.781	0.001	96	1192554	200.0	195.4	
107 1,4-Dichlorobenzene	146	11.824	11.830	-0.006	95	471991	200.0	182.9	
111 1,2-Dichlorobenzene	146	12.171	12.171	0.000	98	444742	200.0	187.9	
110 n-Butylbenzene	91	12.183	12.189	-0.006	97	1117956	200.0	196.7	
112 1,2-Dibromo-3-Chloropropan	75	12.962	12.962	0.000	79	11175	200.0	163.7	
113 1,2,4-Trichlorobenzene	180	13.777	13.777	0.000	93	150942	200.0	168.8	
115 Hexachlorobutadiene	225	13.935	13.935	0.000	96	206804	200.0	182.2	
116 Naphthalene	128	14.032	14.032	0.000	97	221705	200.0	155.9	
117 1,2,3-Trichlorobenzene	180	14.251	14.251	0.000	95	113873	200.0	164.5	
S 129 1,2-Dichloroethene, Total	96				0		400.0	367.2	
S 130 Xylenes, Total	106				0		400.0	376.5	
S 131 1,3-Dichloropropene, Total	1				0		400.0	356.9	

Reagents:

VOA8260VOA2ND_00090	Amount Added:	8.00	Units: uL	
VOAACROLEIN2N_00004	Amount Added:	35.00	Units: uL	
voaWVA 2nd Re_00005	Amount Added:	8.00	Units: uL	
VOA8260SURR_00017	Amount Added:	10.00	Units: uL	Run Reagent
VOA8260INT_00024	Amount Added:	10.00	Units: uL	Run Reagent

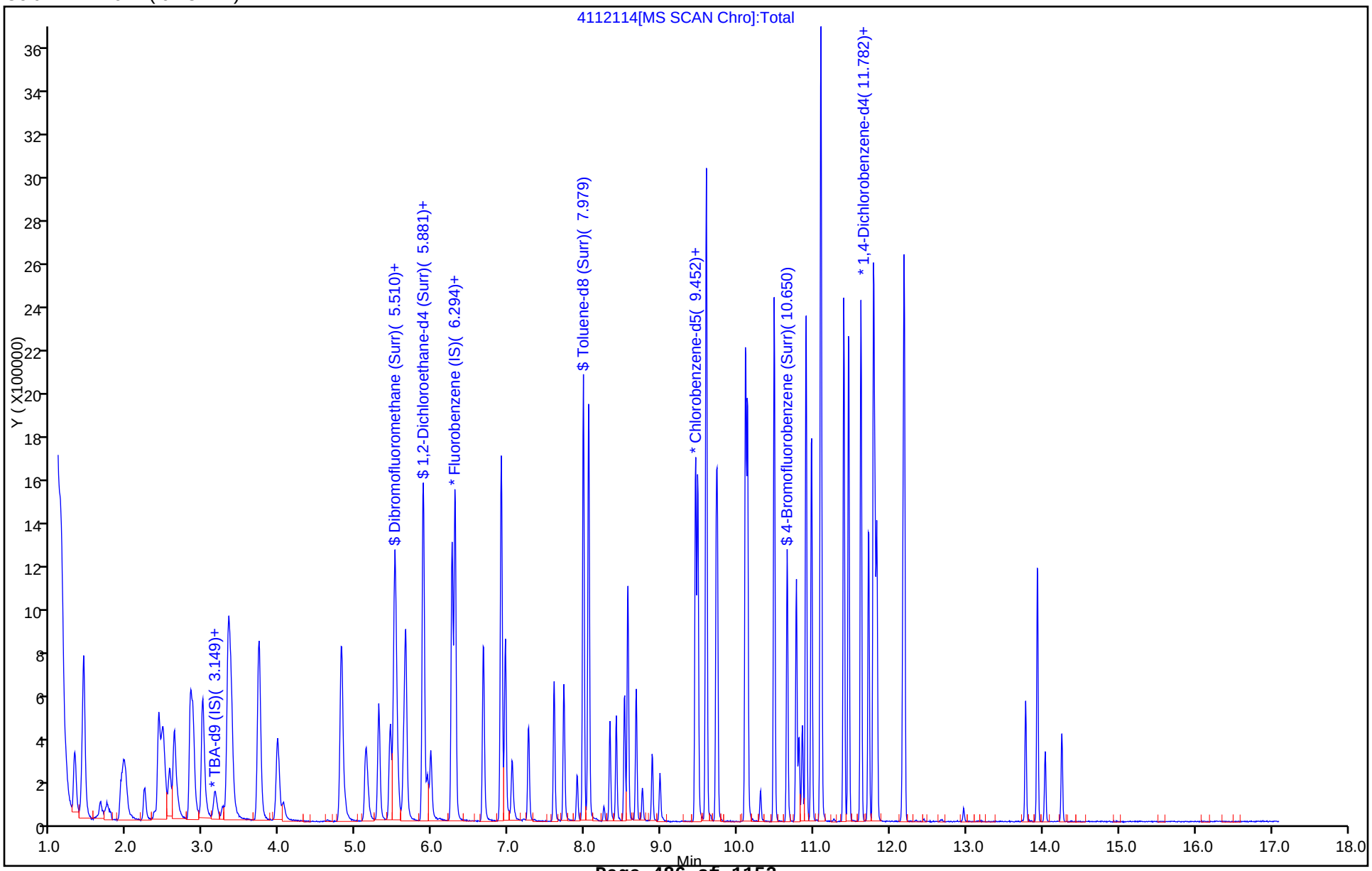
Report Date: 23-Nov-2014 14:58:12 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20141121-4518.b\4112114.D

Injection Date:	21-Nov-2014 15:40:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	180-39026-K-1 MSD			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Instrument ID: CHHP4 Start Date: 11/03/2014 09:04

Analysis Batch Number: 123648 End Date: 11/04/2014 14:07

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-123648/1		11/03/2014 09:04	1	4110301.D	DB-624 0.18(mm)
IC 180-123648/4		11/03/2014 12:22	1	4110304.D	DB-624 0.18(mm)
IC 180-123648/5		11/03/2014 12:49	1	4110305.D	DB-624 0.18(mm)
IC 180-123648/6		11/03/2014 13:15	1	4110306.D	DB-624 0.18(mm)
ICIS 180-123648/7		11/03/2014 13:42	1	4110307.D	DB-624 0.18(mm)
IC 180-123648/9		11/03/2014 14:35	1	4110309.D	DB-624 0.18(mm)
IC 180-123648/10		11/03/2014 15:02	1	4110310.D	DB-624 0.18(mm)
IC 180-123648/12		11/03/2014 16:24	1	4110312.D	DB-624 0.18(mm)
ICV 180-123648/15		11/03/2014 18:49	1		DB-624 0.18(mm)
ICV 180-123648/16		11/04/2014 14:07	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Instrument ID: CHHP4 Start Date: 11/13/2014 12:08

Analysis Batch Number: 125014 End Date: 11/13/2014 20:41

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-125014/1		11/13/2014 12:08	1	4111301.D	DB-624 0.18(mm)
IC 180-125014/2		11/13/2014 12:52	1	4111302.D	DB-624 0.18(mm)
IC 180-125014/3		11/13/2014 13:19	1	4111303.D	DB-624 0.18(mm)
IC 180-125014/4		11/13/2014 13:46	1	4111304.D	DB-624 0.18(mm)
ICIS 180-125014/5		11/13/2014 15:08	1	4111305.D	DB-624 0.18(mm)
IC 180-125014/6		11/13/2014 15:34	1	4111306.D	DB-624 0.18(mm)
IC 180-125014/7		11/13/2014 16:01	1	4111307.D	DB-624 0.18(mm)
IC 180-125014/8		11/13/2014 16:27	1	4111308.D	DB-624 0.18(mm)
ICV 180-125014/14		11/13/2014 20:41	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Instrument ID: CHHP4 Start Date: 11/21/2014 08:52

Analysis Batch Number: 125940 End Date: 11/21/2014 20:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-125940/1		11/21/2014 08:52	1	4112101.D	DB-624 0.18(mm)
CCVIS 180-125940/3		11/21/2014 10:18	1	4112103.D	DB-624 0.18(mm)
CCV 180-125940/5		11/21/2014 11:28	1	4112105.D	DB-624 0.18(mm)
MB 180-125940/6		11/21/2014 12:05	1	4112106.D	DB-624 0.18(mm)
180-39026-5	TRIP BLANK	11/21/2014 12:32	1	4112107.D	DB-624 0.18(mm)
180-39026-1	ST-018-111614	11/21/2014 12:59	1	4112108.D	DB-624 0.18(mm)
180-39026-2	ST-UNNAMED-111614	11/21/2014 13:26	1	4112109.D	DB-624 0.18(mm)
180-39026-3	ST-DUP1-111614	11/21/2014 13:53	1	4112110.D	DB-624 0.18(mm)
180-39026-4	ST-014-111614	11/21/2014 14:19	1	4112111.D	DB-624 0.18(mm)
LCS 180-125940/12		11/21/2014 14:46	1	4112112.D	DB-624 0.18(mm)
180-39026-1 MS	ST-018-111614 MS	11/21/2014 15:13	1	4112113.D	DB-624 0.18(mm)
180-39026-1 MSD	ST-018-111614 MSD	11/21/2014 15:40	1	4112114.D	DB-624 0.18(mm)
ZZZZZ		11/21/2014 16:36	1		DB-624 0.18(mm)
ZZZZZ		11/21/2014 17:03	1		DB-624 0.18(mm)
ZZZZZ		11/21/2014 17:30	1		DB-624 0.18(mm)
ZZZZZ		11/21/2014 17:57	1		DB-624 0.18(mm)
ZZZZZ		11/21/2014 19:17	1		DB-624 0.18(mm)
ZZZZZ		11/21/2014 19:44	1		DB-624 0.18(mm)
ZZZZZ		11/21/2014 20:11	1		DB-624 0.18(mm)
ZZZZZ		11/21/2014 20:38	1		DB-624 0.18(mm)

Method 8270D Low Level

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

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Rxi-5SilMS ID: 0.32 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
ST-018-111614	180-39026-1	3 X	12 X	54	56	25 X	66
ST-018-111614 RE	180-39026-1 RE	38	53	66	67	59	71
ST-UNNAMED-111614	180-39026-2	47	58	58	65	73	56
ST-DUP1-111614	180-39026-3	26 X	44	70	76	62	74
ST-DUP1-111614 RE	180-39026-3 RE	34	54	63	68	71	76
ST-014-111614	180-39026-4	41	51	55	56	66	65
	MB 180-125791/1-A	67	61	63	63	54	57
	MB 180-126402/1-A	74	75	73	70	71	77
	LCS 180-125791/2-A	67	65	64	65	71	58
	LCS 180-126402/2-A	74	74	73	71	76	70
	LCSD 180-125791/3-A	68	66	64	64	72	59
	LCSD 180-126402/3-A	71	70	70	68	74	68

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	30-150
PHL = Phenol-d5 (Surr)	30-150
NBZ = Nitrobenzene-d5 (Surr)	30-150
FBP = 2-Fluorobiphenyl	30-150
TBP = 2,4,6-Tribromophenol (Surr)	30-150
TPH = Terphenyl-d14 (Surr)	10-150

Column to be used to flag recovery values

FORM II 8270D LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Matrix: Water Level: Low Lab File ID: V1124009.D

Lab ID: LCS 180-125791/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acenaphthene	20.0	13.0	65	30-150	
Acenaphthylene	20.0	13.4	67	30-150	
Anthracene	20.0	13.0	65	30-150	
Benzidine	20.0	4.75 J	24	10-150	
Benzo[a]anthracene	20.0	13.4	67	30-150	
Benzo[b]fluoranthene	20.0	12.6	63	30-150	
Benzo[k]fluoranthene	20.0	13.7	68	30-150	
Benzoic acid	20.0	15.0	75	10-150	
Benzo[g,h,i]perylene	20.0	13.4	67	30-150	
Benzo[a]pyrene	20.0	12.9	64	30-150	
Bis(2-chloroethoxy)methane	20.0	12.2	61	30-150	
Bis(2-chloroethyl)ether	20.0	12.4	62	30-150	
Bis(2-ethylhexyl) phthalate	20.0	12.7	64	30-150	
2,2'-oxybis[1-chloropropane]	20.0	11.6	58	30-150	
4-Bromophenyl phenyl ether	20.0	13.4	67	30-150	
4-Chlorophenyl phenyl ether	20.0	13.7	69	30-150	
2-Chloronaphthalene	20.0	12.0	60	30-150	
Butyl benzyl phthalate	20.0	12.7	63	30-150	
Chrysene	20.0	13.4	67	30-150	
Dibenz(a,h)anthracene	20.0	13.3	66	30-150	
Di-n-butyl phthalate	20.0	12.5	63	30-150	
Di-n-octyl phthalate	20.0	12.0	60	10-150	
Diethyl phthalate	20.0	13.6	68	30-150	
Dimethyl phthalate	20.0	13.6	68	30-150	
3,3'-Dichlorobenzidine	20.0	11.4	57	10-150	
2,4-Dinitrotoluene	20.0	13.6	68	30-150	
2,6-Dinitrotoluene	20.0	13.5	67	30-150	
2-Chlorophenol	20.0	12.6	63	30-150	
2,4-Dichlorophenol	20.0	12.7	63	30-150	
2,4-Dimethylphenol	20.0	12.6	63	30-150	
2,4-Dinitrophenol	40.0	19.3	48	10-150	
2-Nitrophenol	20.0	12.9	64	30-150	
2,4,6-Trichlorophenol	20.0	12.8	64	30-150	
1,2-Diphenylhydrazine(as Azobenzene)	20.0	12.6	63	30-150	
1,2,4-Trichlorobenzene	20.0	13.3	66	30-150	
4-Chloro-3-methylphenol	20.0	13.4	67	30-150	
4-Nitrophenol	40.0	28.6	72	30-150	
4,6-Dinitro-2-methylphenol	40.0	26.1	65	30-150	
Fluoranthene	20.0	12.8	64	30-150	
Fluorene	20.0	14.3	71	30-150	
Hexachlorobenzene	20.0	13.2	66	30-150	

Column to be used to flag recovery and RPD values

FORM III 8270D LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Matrix: Water Level: Low Lab File ID: V1124009.D

Lab ID: LCS 180-125791/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Hexachlorobutadiene	20.0	13.5	68	30-150	
Hexachlorocyclopentadiene	20.0	14.2	71	30-150	
Hexachloroethane	20.0	13.3	67	30-150	
Indeno[1,2,3-cd]pyrene	20.0	13.2	66	30-150	
Isophorone	20.0	12.6	63	30-150	
Naphthalene	20.0	13.4	67	30-150	
Nitrobenzene	20.0	13.0	65	30-150	
N-Nitrosodi-n-propylamine	20.0	13.6	68	30-150	
N-Nitrosodimethylamine	20.0	12.8	64	30-150	
N-Nitrosodiphenylamine	20.0	13.0	65	30-150	
Phenanthrene	20.0	12.8	64	30-150	
Pyrene	20.0	12.7	63	30-150	
Pentachlorophenol	40.0	23.6	59	10-150	
Phenol	20.0	13.1	66	30-150	

Column to be used to flag recovery and RPD values

FORM III 8270D LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Matrix: Water Level: Low Lab File ID: D1128009.D

Lab ID: LCS 180-126402/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acenaphthene	20.0	14.6	73	30-150	
Acenaphthylene	20.0	15.2	76	30-150	
Anthracene	20.0	15.7	78	30-150	
Benzidine	20.0	ND	22	10-150	
Benzo[a]anthracene	20.0	15.6	78	30-150	
Benzo[b]fluoranthene	20.0	16.7	83	30-150	
Benzo[k]fluoranthene	20.0	15.9	79	30-150	
Benzoic acid	20.0	11.4	57	10-150	
Benzo[g,h,i]perylene	20.0	16.4	82	30-150	
Benzo[a]pyrene	20.0	16.2	81	30-150	
Bis(2-chloroethoxy)methane	20.0	14.4	72	30-150	
Bis(2-chloroethyl)ether	20.0	14.5	73	30-150	
Bis(2-ethylhexyl) phthalate	20.0	16.9	84	30-150	
2,2'-oxybis[1-chloropropane]	20.0	12.7	63	30-150	
4-Bromophenyl phenyl ether	20.0	14.6	73	30-150	
4-Chlorophenyl phenyl ether	20.0	14.8	74	30-150	
2-Chloronaphthalene	20.0	13.5	68	30-150	
Butyl benzyl phthalate	20.0	16.7	84	30-150	
Chrysene	20.0	15.3	77	30-150	
Dibenz(a,h)anthracene	20.0	16.9	84	30-150	
Di-n-butyl phthalate	20.0	16.3	81	30-150	
Di-n-octyl phthalate	20.0	20.1	101	10-150	
Diethyl phthalate	20.0	15.6	78	30-150	
Dimethyl phthalate	20.0	15.3	77	30-150	
3,3'-Dichlorobenzidine	20.0	14.1	71	10-150	
2,4-Dinitrotoluene	20.0	17.8	89	30-150	
2,6-Dinitrotoluene	20.0	15.9	80	30-150	
2-Chlorophenol	20.0	14.7	73	30-150	
2,4-Dichlorophenol	20.0	15.0	75	30-150	
2,4-Dimethylphenol	20.0	14.4	72	30-150	
2,4-Dinitrophenol	40.0	29.7	74	10-150	
2-Nitrophenol	20.0	15.9	79	30-150	
2,4,6-Trichlorophenol	20.0	15.0	75	30-150	
1,2-Diphenylhydrazine(as Azobenzene)	20.0	15.3	76	30-150	
1,2,4-Trichlorobenzene	20.0	14.4	72	30-150	
4-Chloro-3-methylphenol	20.0	15.6	78	30-150	
4-Nitrophenol	40.0	33.5	84	30-150	
4,6-Dinitro-2-methylphenol	40.0	30.6	77	30-150	
Fluoranthene	20.0	15.4	77	30-150	
Fluorene	20.0	15.9	80	30-150	
Hexachlorobenzene	20.0	14.5	72	30-150	

Column to be used to flag recovery and RPD values

FORM III 8270D LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Matrix: Water Level: Low Lab File ID: D1128009.D

Lab ID: LCS 180-126402/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Hexachlorobutadiene	20.0	14.2	71	30-150	
Hexachlorocyclopentadiene	20.0	15.4	77	30-150	
Hexachloroethane	20.0	15.1	75	30-150	
Indeno[1,2,3-cd]pyrene	20.0	16.6	83	30-150	
Isophorone	20.0	14.9	75	30-150	
Naphthalene	20.0	14.8	74	30-150	
Nitrobenzene	20.0	14.7	74	30-150	
N-Nitrosodi-n-propylamine	20.0	13.7	68	30-150	
N-Nitrosodimethylamine	20.0	13.9	69	30-150	
N-Nitrosodiphenylamine	20.0	15.3	76	30-150	
Phenanthrene	20.0	15.4	77	30-150	
Pyrene	20.0	15.0	75	30-150	
Pentachlorophenol	40.0	26.7	67	10-150	
Phenol	20.0	14.4	72	30-150	

Column to be used to flag recovery and RPD values

FORM III 8270D LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Matrix: Water Level: Low Lab File ID: V1124010.D

Lab ID: LCSD 180-125791/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acenaphthene	20.0	13.0	65	0	35	30-150	
Acenaphthylene	20.0	13.4	67	0	35	30-150	
Anthracene	20.0	13.3	67	2	35	30-150	
Benzidine	20.0	ND	23	3	35	10-150	
Benzo[a]anthracene	20.0	13.6	68	1	35	30-150	
Benzo[b]fluoranthene	20.0	13.1	65	4	35	30-150	
Benzo[k]fluoranthene	20.0	13.7	68	0	35	30-150	
Benzoic acid	20.0	15.5	78	4	35	10-150	
Benzo[g,h,i]perylene	20.0	13.4	67	0	35	30-150	
Benzo[a]pyrene	20.0	13.4	67	4	35	30-150	
Bis(2-chloroethoxy)methane	20.0	12.7	64	4	35	30-150	
Bis(2-chloroethyl)ether	20.0	12.7	63	2	35	30-150	
Bis(2-ethylhexyl) phthalate	20.0	12.7	63	0	35	30-150	
2,2'-oxybis[1-chloropropane]	20.0	11.8	59	2	35	30-150	
4-Bromophenyl phenyl ether	20.0	13.9	70	3	35	30-150	
4-Chlorophenyl phenyl ether	20.0	13.6	68	1	35	30-150	
2-Chloronaphthalene	20.0	11.9	60	1	35	30-150	
Butyl benzyl phthalate	20.0	12.4	62	2	35	30-150	
Chrysene	20.0	13.7	68	2	35	30-150	
Dibenz(a,h)anthracene	20.0	13.4	67	1	35	30-150	
Di-n-butyl phthalate	20.0	13.1	66	4	35	30-150	
Di-n-octyl phthalate	20.0	12.5	63	4	35	10-150	
Diethyl phthalate	20.0	13.4	67	2	35	30-150	
Dimethyl phthalate	20.0	13.7	68	1	35	30-150	
3,3'-Dichlorobenzidine	20.0	11.7	59	3	35	10-150	
2,4-Dinitrotoluene	20.0	13.6	68	1	35	30-150	
2,6-Dinitrotoluene	20.0	13.5	67	0	35	30-150	
2-Chlorophenol	20.0	12.8	64	2	35	30-150	
2,4-Dichlorophenol	20.0	13.0	65	3	35	30-150	
2,4-Dimethylphenol	20.0	13.1	65	4	35	30-150	
2,4-Dinitrophenol	40.0	17.8	45	8	35	10-150	
2-Nitrophenol	20.0	13.1	65	2	35	30-150	
2,4,6-Trichlorophenol	20.0	13.1	66	2	35	30-150	
1,2-Diphenylhydrazine(as Azobenzene)	20.0	13.1	66	4	35	30-150	
1,2,4-Trichlorobenzene	20.0	13.5	67	2	35	30-150	
4-Chloro-3-methylphenol	20.0	13.3	66	1	35	30-150	
4-Nitrophenol	40.0	27.6	69	4	35	30-150	
4,6-Dinitro-2-methylphenol	40.0	27.0	67	3	35	30-150	
Fluoranthene	20.0	13.4	67	4	35	30-150	
Fluorene	20.0	14.2	71	0	35	30-150	
Hexachlorobenzene	20.0	13.1	66	0	35	30-150	

Column to be used to flag recovery and RPD values

FORM III 8270D LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Matrix: Water Level: Low Lab File ID: V1124010.D

Lab ID: LCSD 180-125791/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Hexachlorobutadiene	20.0	13.6	68	1	35	30-150	
Hexachlorocyclopentadiene	20.0	13.8	69	3	35	30-150	
Hexachloroethane	20.0	14.0	70	5	35	30-150	
Indeno[1,2,3-cd]pyrene	20.0	13.1	66	0	35	30-150	
Isophorone	20.0	13.1	66	4	35	30-150	
Naphthalene	20.0	13.8	69	3	35	30-150	
Nitrobenzene	20.0	12.6	63	3	35	30-150	
N-Nitrosodi-n-propylamine	20.0	14.0	70	3	35	30-150	
N-Nitrosodimethylamine	20.0	13.5	68	6	35	30-150	
N-Nitrosodiphenylamine	20.0	13.7	69	5	35	30-150	
Phenanthrene	20.0	12.7	64	1	35	30-150	
Pyrene	20.0	12.3	62	3	35	30-150	
Pentachlorophenol	40.0	25.0	62	6	35	10-150	
Phenol	20.0	13.4	67	2	35	30-150	

Column to be used to flag recovery and RPD values

FORM III 8270D LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Matrix: Water Level: Low Lab File ID: D1128010.D

Lab ID: LCSD 180-126402/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acenaphthene	20.0	14.0	70	4	35	30-150	
Acenaphthylene	20.0	14.4	72	5	35	30-150	
Anthracene	20.0	15.4	77	2	35	30-150	
Benzidine	20.0	ND	22	2	35	10-150	
Benzo[a]anthracene	20.0	15.0	75	4	35	30-150	
Benzo[b]fluoranthene	20.0	15.6	78	7	35	30-150	
Benzo[k]fluoranthene	20.0	15.5	78	2	35	30-150	
Benzoic acid	20.0	11.5	57	0	35	10-150	
Benzo[g,h,i]perylene	20.0	15.8	79	4	35	30-150	
Benzo[a]pyrene	20.0	15.6	78	4	35	30-150	
Bis(2-chloroethoxy)methane	20.0	13.9	69	3	35	30-150	
Bis(2-chloroethyl)ether	20.0	13.6	68	7	35	30-150	
Bis(2-ethylhexyl) phthalate	20.0	15.9	80	6	35	30-150	
2,2'-oxybis[1-chloropropane]	20.0	11.8	59	7	35	30-150	
4-Bromophenyl phenyl ether	20.0	14.3	71	3	35	30-150	
4-Chlorophenyl phenyl ether	20.0	14.0	70	5	35	30-150	
2-Chloronaphthalene	20.0	12.7	63	6	35	30-150	
Butyl benzyl phthalate	20.0	16.0	80	4	35	30-150	
Chrysene	20.0	14.6	73	5	35	30-150	
Dibenz(a,h)anthracene	20.0	16.4	82	3	35	30-150	
Di-n-butyl phthalate	20.0	15.9	79	3	35	30-150	
Di-n-octyl phthalate	20.0	19.2	96	5	35	10-150	
Diethyl phthalate	20.0	14.6	73	6	35	30-150	
Dimethyl phthalate	20.0	14.4	72	6	35	30-150	
3,3'-Dichlorobenzidine	20.0	13.4	67	6	35	10-150	
2,4-Dinitrotoluene	20.0	16.7	83	6	35	30-150	
2,6-Dinitrotoluene	20.0	15.1	76	5	35	30-150	
2-Chlorophenol	20.0	13.7	69	7	35	30-150	
2,4-Dichlorophenol	20.0	14.0	70	6	35	30-150	
2,4-Dimethylphenol	20.0	14.1	70	2	35	30-150	
2,4-Dinitrophenol	40.0	28.5	71	4	35	10-150	
2-Nitrophenol	20.0	15.0	75	5	35	30-150	
2,4,6-Trichlorophenol	20.0	14.1	71	6	35	30-150	
1,2-Diphenylhydrazine(as Azobenzene)	20.0	14.8	74	3	35	30-150	
1,2,4-Trichlorobenzene	20.0	13.7	68	5	35	30-150	
4-Chloro-3-methylphenol	20.0	14.9	74	5	35	30-150	
4-Nitrophenol	40.0	31.5	79	6	35	30-150	
4,6-Dinitro-2-methylphenol	40.0	30.0	75	2	35	30-150	
Fluoranthene	20.0	15.0	75	3	35	30-150	
Fluorene	20.0	14.9	75	6	35	30-150	
Hexachlorobenzene	20.0	14.2	71	2	35	30-150	

Column to be used to flag recovery and RPD values

FORM III 8270D LL

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Matrix: Water Level: Low Lab File ID: D1128010.D

Lab ID: LCSD 180-126402/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Hexachlorobutadiene	20.0	13.8	69	3	35	30-150	
Hexachlorocyclopentadiene	20.0	14.9	75	3	35	30-150	
Hexachloroethane	20.0	14.2	71	6	35	30-150	
Indeno[1,2,3-cd]pyrene	20.0	15.9	80	4	35	30-150	
Isophorone	20.0	14.3	72	4	35	30-150	
Naphthalene	20.0	14.2	71	4	35	30-150	
Nitrobenzene	20.0	14.0	70	5	35	30-150	
N-Nitrosodi-n-propylamine	20.0	13.0	65	6	35	30-150	
N-Nitrosodimethylamine	20.0	13.2	66	5	35	30-150	
N-Nitrosodiphenylamine	20.0	14.8	74	3	35	30-150	
Phenanthrene	20.0	15.0	75	2	35	30-150	
Pyrene	20.0	14.8	74	1	35	30-150	
Pentachlorophenol	40.0	26.1	65	2	35	10-150	
Phenol	20.0	13.5	67	7	35	30-150	

Column to be used to flag recovery and RPD values

FORM III 8270D LL

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab File ID: V1124005.D Lab Sample ID: MB 180-125791/1-A

Matrix: Water Date Extracted: 11/20/2014 09:07

Instrument ID: CH731 Date Analyzed: 11/24/2014 12:57

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-125791/2-A	V1124009.D	11/24/2014 15:24
	LCSD 180-125791/3-A	V1124010.D	11/24/2014 15:53
ST-018-111614	180-39026-1	V1124016.D	11/24/2014 18:40
ST-UNNAMED-111614	180-39026-2	V1124017.D	11/24/2014 19:08
ST-DUP1-111614	180-39026-3	V1124018.D	11/24/2014 19:35
ST-014-111614	180-39026-4	V1124019.D	11/24/2014 20:02

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab File ID: D1128005.D Lab Sample ID: MB 180-126402/1-A

Matrix: Water Date Extracted: 11/25/2014 09:59

Instrument ID: CH732 Date Analyzed: 11/28/2014 14:09

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-126402/2-A	D1128009.D	11/28/2014 15:56
	LCSD 180-126402/3-A	D1128010.D	11/28/2014 16:22
ST-018-111614 RE	180-39026-1 RE	D1128022.D	11/28/2014 21:45
ST-DUP1-111614 RE	180-39026-3 RE	D1128023.D	11/28/2014 22:11

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab File ID: V1118002.D DFTPP Injection Date: 11/18/2014

Instrument ID: CH731 DFTPP Injection Time: 04:03

Analysis Batch No.: 125450

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	32.4	
68	Less than 2.0 % of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	45.8	
70	Less than 2.0 % of mass 69	0.2	(0.4)1
127	40.0 - 60.0 % of mass 198	40.7	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.3	
275	10.0 - 30.0 % of mass 198	21.5	
365	Greater than 1.0 % of mass 198	2.4	
441	Present but less than mass 443	5.5	(71.8)3
442	Greater than 40.0 % of mass 198	40.5	
443	17.0 - 23.0 % of mass 442	7.7	(19.0)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 180-125450/3	V1118003.D	11/18/2014	04:22
	IC 180-125450/4	V1118004.D	11/18/2014	04:50
	IC 180-125450/5	V1118005.D	11/18/2014	05:19
	ICIS 180-125450/6	V1118006.D	11/18/2014	05:47
	IC 180-125450/7	V1118007.D	11/18/2014	06:17
	IC 180-125450/8	V1118008.D	11/18/2014	06:45
	IC 180-125450/9	V1118009.D	11/18/2014	07:14
	IC 180-125450/10	V1118010.D	11/18/2014	07:43

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab File ID: V1124002.D DFTPP Injection Date: 11/24/2014

Instrument ID: CH731 DFTPP Injection Time: 11:43

Analysis Batch No.: 126233

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	36.1	
68	Less than 2.0 % of mass 69	0.4	(0.7)1
69	Mass 69 relative abundance	51.6	
70	Less than 2.0 % of mass 69	0.2	(0.4)1
127	40.0 - 60.0 % of mass 198	40.5	
197	Less than 1.0 % of mass 198	0.9	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.4	
275	10.0 - 30.0 % of mass 198	24.4	
365	Greater than 1.0 % of mass 198	2.0	
441	Present but less than mass 443	7.4	(83.8)3
442	Greater than 40.0 % of mass 198	46.8	
443	17.0 - 23.0 % of mass 442	8.8	(18.8)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

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
	CCVIS 180-126233/3	V1124003.D	11/24/2014	12:00
	MB 180-125791/1-A	V1124005.D	11/24/2014	12:57
	LCS 180-125791/2-A	V1124009.D	11/24/2014	15:24
	LCSD 180-125791/3-A	V1124010.D	11/24/2014	15:53
ST-018-111614	180-39026-1	V1124016.D	11/24/2014	18:40
ST-UNNAMED-111614	180-39026-2	V1124017.D	11/24/2014	19:08
ST-DUP1-111614	180-39026-3	V1124018.D	11/24/2014	19:35
ST-014-111614	180-39026-4	V1124019.D	11/24/2014	20:02

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab File ID: D1112002.D DFTPP Injection Date: 11/12/2014

Instrument ID: CH732 DFTPP Injection Time: 10:04

Analysis Batch No.: 124766

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	40.7	
68	Less than 2.0 % of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	36.8	
70	Less than 2.0 % of mass 69	0.2	(0.4)1
127	40.0 - 60.0 % of mass 198	48.1	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.6	
275	10.0 - 30.0 % of mass 198	21.0	
365	Greater than 1.0 % of mass 198	2.0	
441	Present but less than mass 443	9.8	(77.4)3
442	Greater than 40.0 % of mass 198	65.1	
443	17.0 - 23.0 % of mass 442	12.6	(19.4)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 180-124766/3	D1112003.D	11/12/2014	10:20
	IC 180-124766/4	D1112004.D	11/12/2014	10:46
	IC 180-124766/5	D1112005.D	11/12/2014	11:13
	ICIS 180-124766/6	D1112006.D	11/12/2014	11:40
	IC 180-124766/7	D1112007.D	11/12/2014	12:08
	IC 180-124766/8	D1112008.D	11/12/2014	12:35
	IC 180-124766/9	D1112009.D	11/12/2014	13:02
	IC 180-124766/10	D1112010.D	11/12/2014	13:29

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab File ID: D1128002.D DFTPP Injection Date: 11/28/2014

Instrument ID: CH732 DFTPP Injection Time: 13:01

Analysis Batch No.: 126682

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	41.2	
68	Less than 2.0 % of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	37.2	
70	Less than 2.0 % of mass 69	0.2	(0.5)1
127	40.0 - 60.0 % of mass 198	50.0	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.8	
275	10.0 - 30.0 % of mass 198	20.0	
365	Greater than 1.0 % of mass 198	1.8	
441	Present but less than mass 443	8.5	(77.5)3
442	Greater than 40.0 % of mass 198	56.5	
443	17.0 - 23.0 % of mass 442	11.0	(19.5)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

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
	CCVIS 180-126682/3	D1128003.D	11/28/2014	13:16
	MB 180-126402/1-A	D1128005.D	11/28/2014	14:09
	LCS 180-126402/2-A	D1128009.D	11/28/2014	15:56
	LCSD 180-126402/3-A	D1128010.D	11/28/2014	16:22
ST-018-111614 RE	180-39026-1 RE	D1128022.D	11/28/2014	21:45
ST-DUP1-111614 RE	180-39026-3 RE	D1128023.D	11/28/2014	22:11

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Sample No.: CCVIS 180-126233/3 Date Analyzed: 11/24/2014 12:00

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): V1124003.D Heated Purge: (Y/N) N

Calibration ID: 19203

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		95418	6.28	330882	7.48	261163	9.10
UPPER LIMIT		190836	6.78	661764	7.98	522326	9.60
LOWER LIMIT		47709	5.78	165441	6.98	130582	8.60
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-125791/1-A		104629	6.28	363598	7.48	285868	9.10
LCS 180-125791/2-A		118649	6.28	407660	7.48	306862	9.10
LCSD 180-125791/3-A		117040	6.28	401439	7.49	311317	9.11
180-39026-1	ST-018-111614	101916	6.28	363206	7.48	276145	9.10
180-39026-2	ST-UNNAMED-111614	115416	6.29	399980	7.49	283945	9.11
180-39026-3	ST-DUP1-111614	114910	6.29	388187	7.49	262896	9.11
180-39026-4	ST-014-111614	117868	6.28	398836	7.49	298598	9.10

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

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 LL

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Sample No.: CCVIS 180-126233/3 Date Analyzed: 11/24/2014 12:00

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): V1124003.D Heated Purge: (Y/N) N

Calibration ID: 19203

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		567448	10.47	620643	13.95	449502	16.86
UPPER LIMIT		1134896	10.97	1241286	14.45	899004	17.36
LOWER LIMIT		283724	9.97	310322	13.45	224751	16.36
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-125791/1-A		642544	10.47	699014	13.96	514128	16.87
LCS 180-125791/2-A		687038	10.47	707432	13.96	515955	16.87
LCSD 180-125791/3-A		661260	10.47	715382	13.97	513302	16.88
180-39026-1	ST-018-111614	601120	10.47	566397	13.98	482553	16.89
180-39026-2	ST-UNNAMED-111614	555232	10.48	548216	13.99	453133	16.91
180-39026-3	ST-DUP1-111614	525712	10.47	489879	13.98	425707	16.89
180-39026-4	ST-014-111614	612663	10.47	579590	13.97	449319	16.89

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

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 LL

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Sample No.: CCVIS 180-126682/3 Date Analyzed: 11/28/2014 13:16

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): D1128003.D Heated Purge: (Y/N) N

Calibration ID: 19137

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		220832	6.29	992198	7.60	579578	9.33
UPPER LIMIT		441664	6.79	1984396	8.10	1159156	9.83
LOWER LIMIT		110416	5.79	496099	7.10	289789	8.83
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-126402/1-A		235741	6.27	1094668	7.58	653944	9.32
LCS 180-126402/2-A		206508	6.26	956835	7.58	572808	9.32
LCSD 180-126402/3-A		220455	6.26	1005325	7.58	604162	9.32
180-39026-1 RE	ST-018-111614 RE	198531	6.27	917959	7.59	536102	9.33
180-39026-3 RE	ST-DUP1-111614 RE	205445	6.27	919680	7.59	558503	9.33

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

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 LL

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Sample No.: CCVIS 180-126682/3 Date Analyzed: 11/28/2014 13:16

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): D1128003.D Heated Purge: (Y/N) N

Calibration ID: 19137

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		913220	10.80	765150	14.67	550122	17.61
UPPER LIMIT		1826440	11.30	1530300	15.17	1100244	18.11
LOWER LIMIT		456610	10.30	382575	14.17	275061	17.11
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-126402/1-A		1067189	10.79	842670	14.66	626717	17.60
LCS 180-126402/2-A		919449	10.79	778117	14.67	541516	17.60
LCSD 180-126402/3-A		943355	10.80	790526	14.67	543658	17.61
180-39026-1 RE	ST-018-111614 RE	855941	10.80	709098	14.69	563733	17.63
180-39026-3 RE	ST-DUP1-111614 RE	898458	10.81	684635	14.70	542897	17.64

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

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 LL

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-018-111614 | Lab Sample ID: 180-39026-1

Matrix: Water | Lab File ID: V1124016.D

Analysis Method: 8270D LL | Date Collected: 11/16/2014 18:08

Extract. Method: 3520C | Date Extracted: 11/20/2014 09:07

Sample wt/vol: 260(mL) | Date Analyzed: 11/24/2014 18:40

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 126233 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		0.19	0.028
208-96-8	Acenaphthylene	ND		0.19	0.021
120-12-7	Anthracene	ND		0.19	0.018
92-87-5	Benzidine	ND		19	4.6
56-55-3	Benzo[a]anthracene	ND		0.19	0.035
205-99-2	Benzo[b]fluoranthene	ND		0.19	0.047
207-08-9	Benzo[k]fluoranthene	ND		0.19	0.029
65-85-0	Benzoic acid	ND		4.8	1.6
191-24-2	Benzo[g,h,i]perylene	ND		0.19	0.028
50-32-8	Benzo[a]pyrene	ND		0.19	0.027
111-91-1	Bis(2-chloroethoxy)methane	ND		0.96	0.13
111-44-4	Bis(2-chloroethyl)ether	ND		0.96	0.030
117-81-7	Bis(2-ethylhexyl) phthalate	2.0		1.9	0.42
108-60-1	2,2'-oxybis[1-chloropropane]	ND		0.96	0.023
101-55-3	4-Bromophenyl phenyl ether	ND		0.96	0.11
7005-72-3	4-Chlorophenyl phenyl ether	ND		0.96	0.077
91-58-7	2-Chloronaphthalene	ND		0.19	0.030
85-68-7	Butyl benzyl phthalate	ND		0.96	0.21
218-01-9	Chrysene	ND		0.19	0.030
53-70-3	Dibenz(a,h)anthracene	ND		0.19	0.026
84-74-2	Di-n-butyl phthalate	ND		0.96	0.23
117-84-0	Di-n-octyl phthalate	ND		0.96	0.20
84-66-2	Diethyl phthalate	ND		0.96	0.29
131-11-3	Dimethyl phthalate	ND		0.96	0.18
91-94-1	3,3'-Dichlorobenzidine	ND		0.96	0.14
121-14-2	2,4-Dinitrotoluene	ND		0.96	0.21
606-20-2	2,6-Dinitrotoluene	ND		0.96	0.13
95-57-8	2-Chlorophenol	ND		0.96	0.22
120-83-2	2,4-Dichlorophenol	ND		0.96	0.065
105-67-9	2,4-Dimethylphenol	ND		0.96	0.16
51-28-5	2,4-Dinitrophenol	ND		4.8	2.4
88-75-5	2-Nitrophenol	ND		0.96	0.11
88-06-2	2,4,6-Trichlorophenol	ND		0.96	0.29
122-66-7	1,2-Diphenylhydrazine(as Azobenzene)	ND		0.96	0.11

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-018-111614 | Lab Sample ID: 180-39026-1

Matrix: Water | Lab File ID: V1124016.D

Analysis Method: 8270D LL | Date Collected: 11/16/2014 18:08

Extract. Method: 3520C | Date Extracted: 11/20/2014 09:07

Sample wt/vol: 260(mL) | Date Analyzed: 11/24/2014 18:40

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 126233 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-82-1	1,2,4-Trichlorobenzene	ND		0.96	0.082
59-50-7	4-Chloro-3-methylphenol	ND		0.96	0.16
100-02-7	4-Nitrophenol	ND		4.8	0.77
534-52-1	4,6-Dinitro-2-methylphenol	ND		4.8	1.5
206-44-0	Fluoranthene	ND		0.19	0.020
86-73-7	Fluorene	ND		0.19	0.023
118-74-1	Hexachlorobenzene	ND		0.96	0.059
87-68-3	Hexachlorobutadiene	ND		0.96	0.090
77-47-4	Hexachlorocyclopentadiene	ND		0.96	0.13
67-72-1	Hexachloroethane	ND		0.96	0.13
193-39-5	Indeno[1,2,3-cd]pyrene	ND		0.19	0.042
78-59-1	Isophorone	ND		0.96	0.071
91-20-3	Naphthalene	0.16	J	0.19	0.022
98-95-3	Nitrobenzene	ND		1.9	0.14
621-64-7	N-Nitrosodi-n-propylamine	ND		0.96	0.048
62-75-9	N-Nitrosodimethylamine	ND		0.96	0.11
86-30-6	N-Nitrosodiphenylamine	ND		0.96	0.12
85-01-8	Phenanthrene	0.075	J	0.19	0.040
129-00-0	Pyrene	ND		0.19	0.022
87-86-5	Pentachlorophenol	ND		0.96	0.48
108-95-2	Phenol	ND		0.96	0.053

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	25	X	30-150
321-60-8	2-Fluorobiphenyl	56		30-150
367-12-4	2-Fluorophenol (Surr)	3	X	30-150
4165-60-0	Nitrobenzene-d5 (Surr)	54		30-150
4165-62-2	Phenol-d5 (Surr)	12	X	30-150
1718-51-0	Terphenyl-d14 (Surr)	66		10-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141124-4564.b\V1124016.D
Lims ID: 180-39026-E-1-A Lab Sample ID: 180-39026-1
Client ID: ST-018-111614
Sample Type: Client
Inject. Date: 24-Nov-2014 18:40:30 ALS Bottle#: 15 Worklist Smp#: 16
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004564-016
Misc. Info.: 180-39026-E-1-A
Operator ID: 003200 Instrument ID: CH731

Method: \\PITCHROM\ChromData\CH731\20141124-4564.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 25-Nov-2014 04:12:16 Calib Date: 18-Nov-2014 07:43:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: piccolinov Date: 25-Nov-2014 04:00:04

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 1,4-Dichlorobenzene-d4	152	6.280	6.277	0.003	88	101916	8.00	
*	2 Naphthalene-d8	136	7.482	7.479	0.003	97	363206	8.00	
*	3 Acenaphthene-d10	164	9.101	9.098	0.003	91	276145	8.00	
*	4 Phenanthrene-d10	188	10.474	10.465	0.009	96	601120	8.00	
*	5 Chrysene-d12	240	13.978	13.948	0.030	95	566397	8.00	
*	6 Perylene-d12	264	16.885	16.855	0.031	97	482553	8.00	
$	7 2-Fluorophenol	112	4.945	4.931	0.014	85	18830	1.14	
$	8 Phenol-d5	99	5.928	5.919	0.009	88	94378	4.70	
$	9 Nitrobenzene-d5	82	6.804	6.801	0.003	91	554328	21.6	
$	10 2-Fluorobiphenyl	172	8.465	8.462	0.003	99	1186614	22.3	
$	11 2,4,6-Tribromophenol	330	9.828	9.819	0.009	82	72173	10.0	
$	12 Terphenyl-d14	244	12.237	12.212	0.025	98	1787021	26.5	
	14 N-Nitrosodimethylamine	74		2.490				ND	
	27 Phenol	94		5.935				ND	
	29 Bis(2-chloroethyl)ether	93		6.015				ND	
	31 2-Chlorophenol	128		6.074				ND	
	40 2,2'-oxybis[1-chloropropan	45		6.539				ND	
	44 N-Nitrosodi-n-propylamine	70		6.656				ND	
	47 Hexachloroethane	117		6.769				ND	
	48 Nitrobenzene	77		6.817				ND	
	50 Isophorone	82		7.041				ND	
	51 2-Nitrophenol	139		7.121				ND	
	52 2,4-Dimethylphenol	107		7.148				ND	
	56 Benzoic acid	122		7.196				ND	
	55 Bis(2-chloroethoxy)methane	93		7.233				ND	
	57 2,4-Dichlorophenol	162		7.340				ND	
	59 1,2,4-Trichlorobenzene	180		7.426				ND	
	60 Naphthalene	128	7.504	7.500	0.004	97	16762	0.3245	
	64 Hexachlorobutadiene	225		7.618				ND	
	70 4-Chloro-3-methylphenol	107		7.965				ND	
	76 Hexachlorocyclopentadiene	237		8.286				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
78 2,4,6-Trichlorophenol	196		8.387				ND	
81 2-Chloronaphthalene	162		8.585				ND	
86 Dimethyl phthalate	163		8.809				ND	
88 2,6-Dinitrotoluene	165		8.868				ND	
89 Acenaphthylene	152		8.970				ND	
92 2,4-Dinitrophenol	184		9.124				ND	
91 Acenaphthene	153		9.124				ND	
93 4-Nitrophenol	109		9.162				ND	
94 2,4-Dinitrotoluene	165		9.242				ND	
101 Diethyl phthalate	149	9.448	9.445	0.003	93	24648	0.4791	
104 4-Chlorophenyl phenyl ethe	204		9.579				ND	
106 Fluorene	166		9.600				ND	
108 4,6-Dinitro-2-methylphenol	198		9.621				ND	
109 N-Nitrosodiphenylamine	169		9.680				ND	
111 1,2-Diphenylhydrazine	77		9.723				ND	
116 4-Bromophenyl phenyl ether	248		10.027				ND	
118 Hexachlorobenzene	284		10.113				ND	
122 Pentachlorophenol	266		10.284				ND	
126 Phenanthrene	178	10.495	10.487	0.008	91	12925	0.1550	
128 Anthracene	178		10.535				ND	
132 Di-n-butyl phthalate	149	10.976	10.962	0.014	84	16517	0.2016	
137 Fluoranthene	202		11.763				ND	
138 Benzidine	184		11.886				ND	
139 Pyrene	202		12.063				ND	
144 Butyl benzyl phthalate	149		12.896				ND	
149 3,3'-Dichlorobenzidine	252		13.847				ND	
151 Bis(2-ethylhexyl) phthalat	149	13.909	13.884	0.025	93	176745	4.20	
152 Benzo[a]anthracene	228		13.927				ND	
153 Chrysene	228		13.996				ND	
156 Di-n-octyl phthalate	149		15.177				ND	
158 Benzo[b]fluoranthene	252		16.059				ND	
159 Benzo[k]fluoranthene	252		16.112				ND	
160 Benzo[a]pyrene	252		16.742				ND	
163 Indeno[1,2,3-cd]pyrene	276		19.066				ND	
164 Dibenz(a,h)anthracene	278		19.093				ND	
165 Benzo[g,h,i]perylene	276		19.654				ND	

Reagents:

SVTAPITINTRNi_00006 Amount Added: 1.00 Units: uL Run Reagent

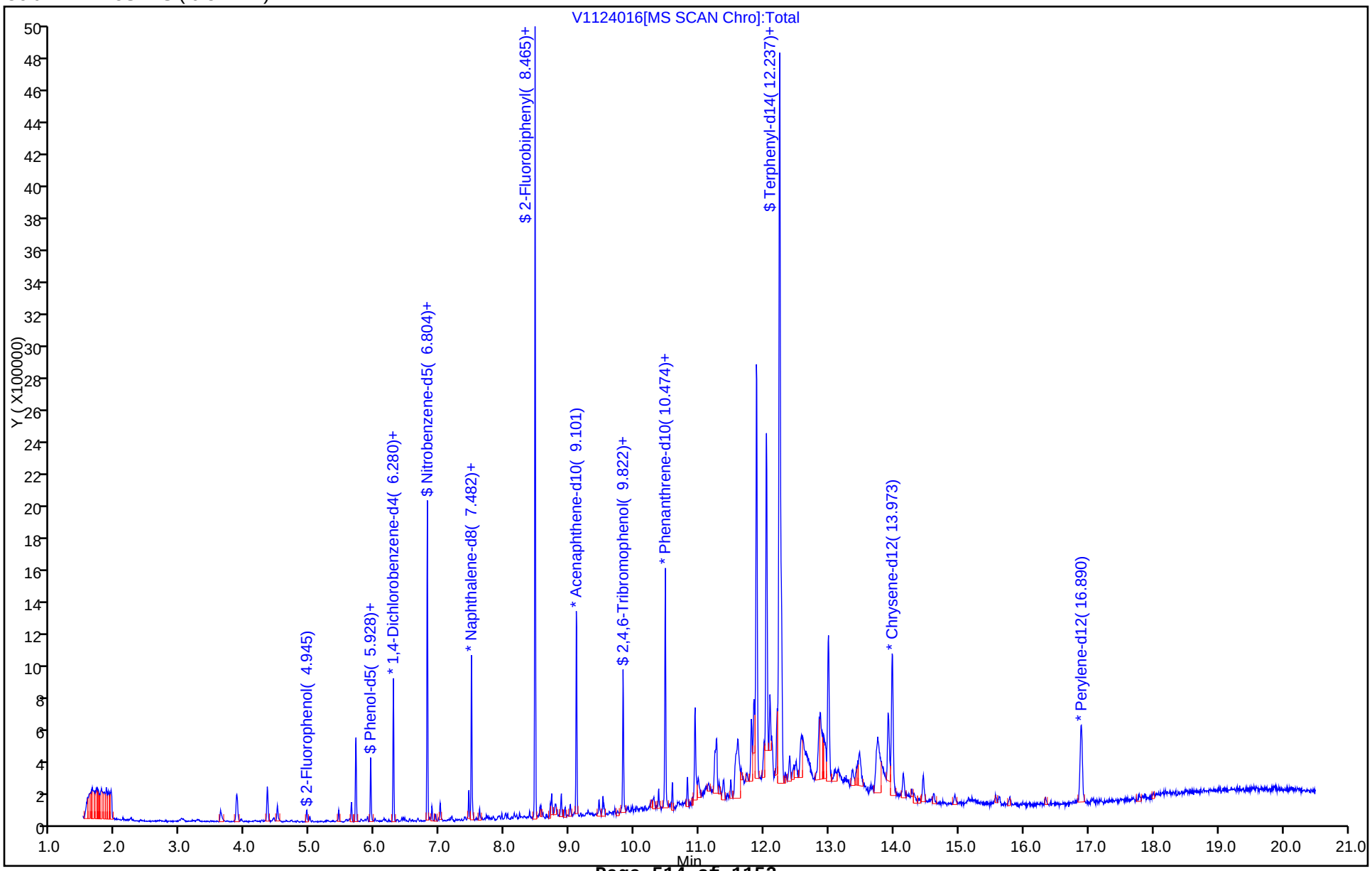
Report Date: 25-Nov-2014 04:12:32 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20141124-4564.b\V1124016.D

Injection Date:	24-Nov-2014 18:40:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	180-39026-E-1-A	Lab Sample ID:	180-39026-1	Worklist Smp#:	16
Client ID:	ST-018-111614				
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)

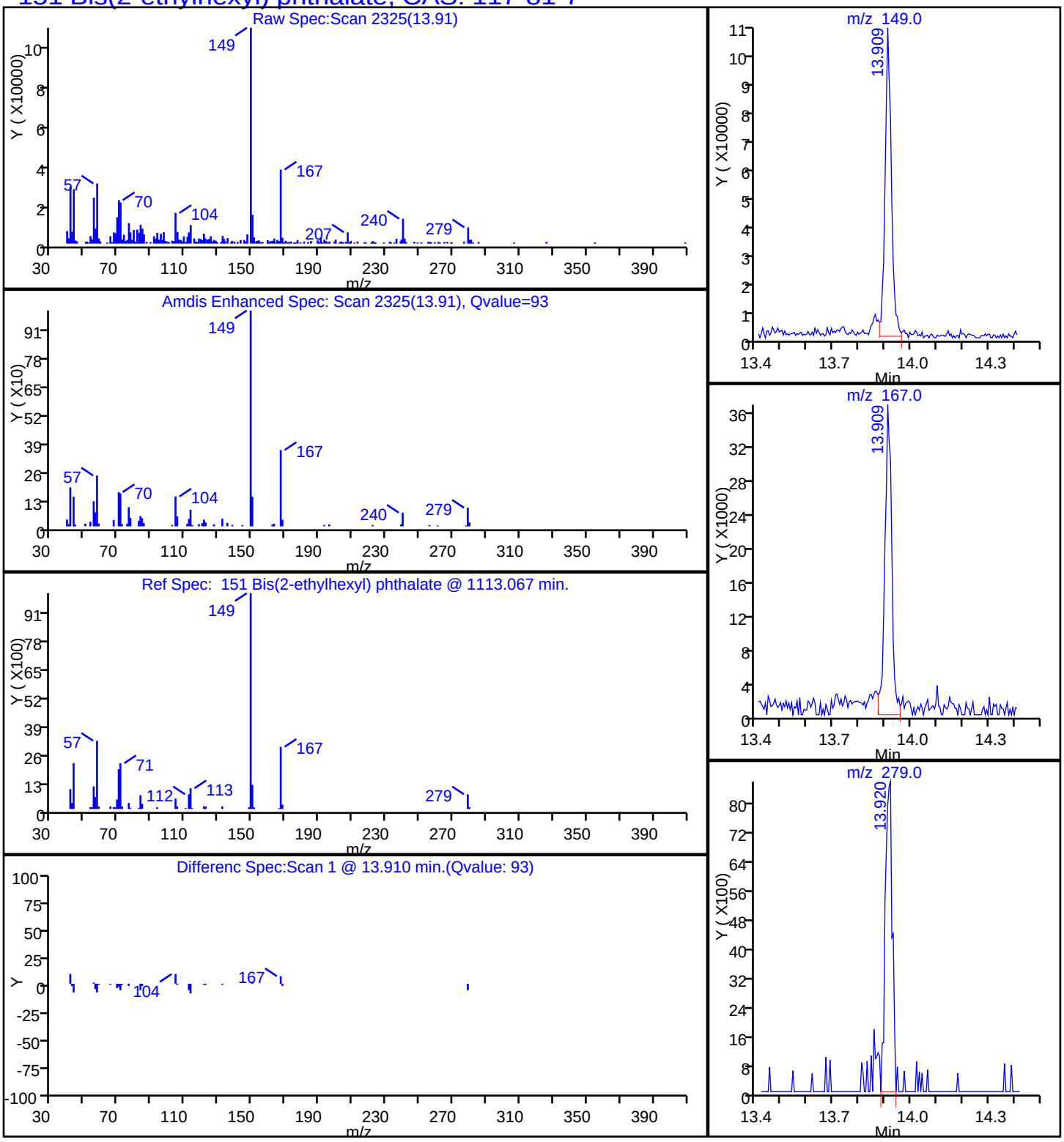


Report Date: 25-Nov-2014 04:12:32 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141124-4564.b\V1124016.D				
Injection Date:	24-Nov-2014 18:40:30	Instrument ID:	CH731		
Lims ID:	180-39026-E-1-A	Lab Sample ID:	180-39026-1		
Client ID:	ST-018-111614				
Operator ID:	003200	ALS Bottle#:	15	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

151 Bis(2-ethylhexyl) phthalate, CAS: 117-81-7

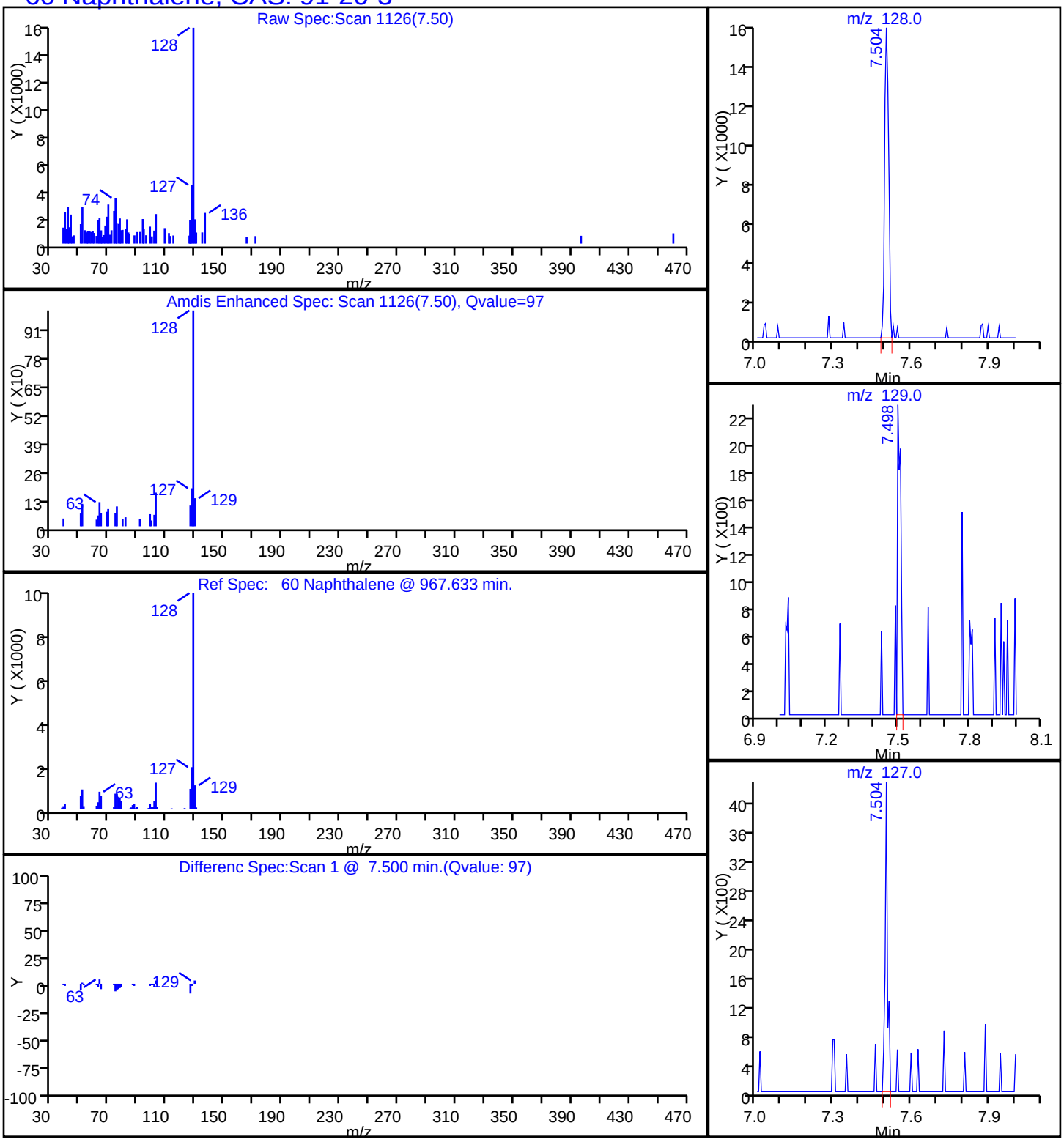


Report Date: 25-Nov-2014 04:12:32 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141124-4564.b\V1124016.D		
Injection Date:	24-Nov-2014 18:40:30	Instrument ID:	CH731
Lims ID:	180-39026-E-1-A	Lab Sample ID:	180-39026-1
Client ID:	ST-018-111614		
Operator ID:	003200	ALS Bottle#:	15 Worklist Smp#: 16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN

60 Naphthalene, CAS: 91-20-3

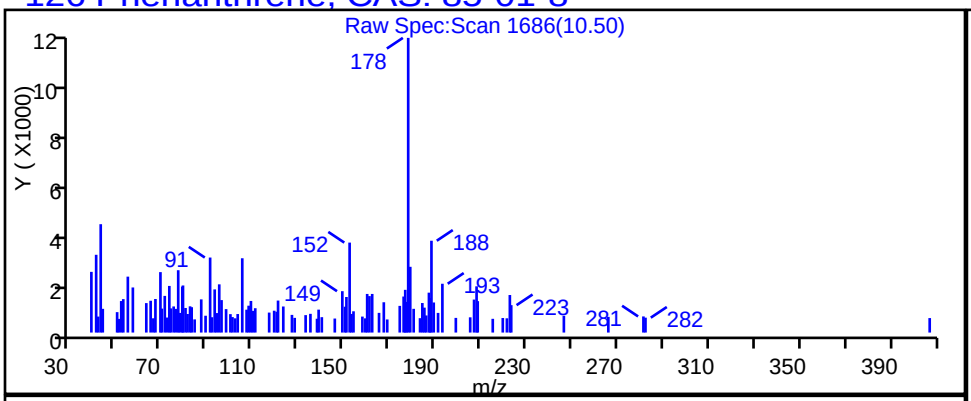


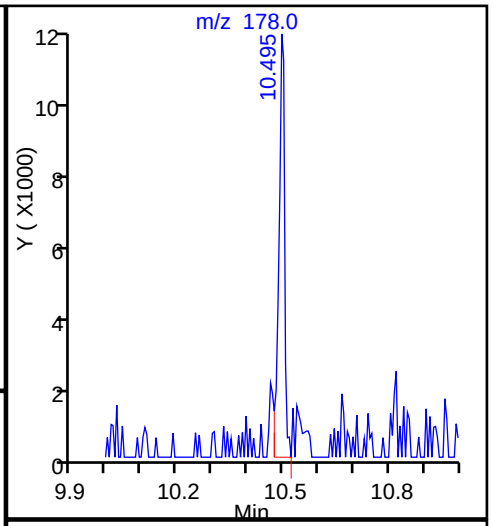
Report Date: 25-Nov-2014 04:12:32 Chrom Revision: 2.2 06-Nov-2014 14:50:32

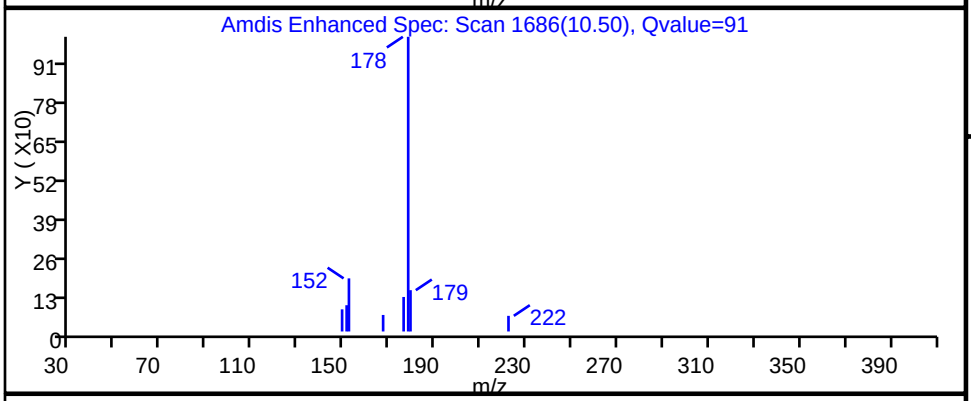
TestAmerica Pittsburgh

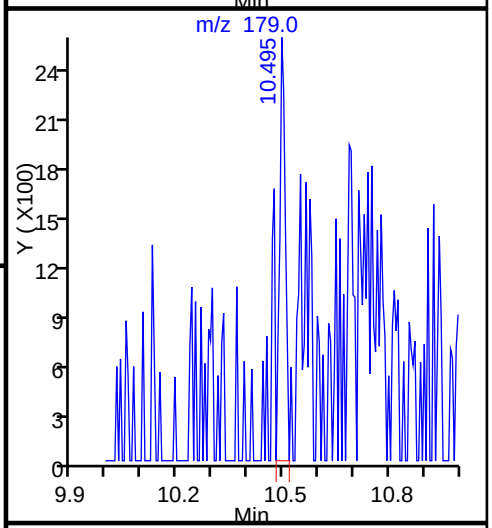
Data File:	\\PITCHROM\ChromData\CH731\20141124-4564.b\V1124016.D		
Injection Date:	24-Nov-2014 18:40:30	Instrument ID:	CH731
Lims ID:	180-39026-E-1-A	Lab Sample ID:	180-39026-1
Client ID:	ST-018-111614		
Operator ID:	003200	ALS Bottle#:	15 Worklist Smp#: 16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN

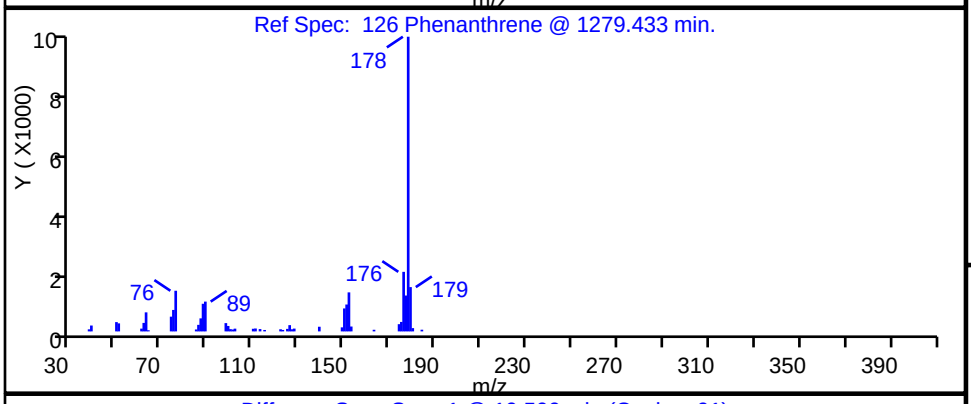
126 Phenanthrene, CAS: 85-01-8

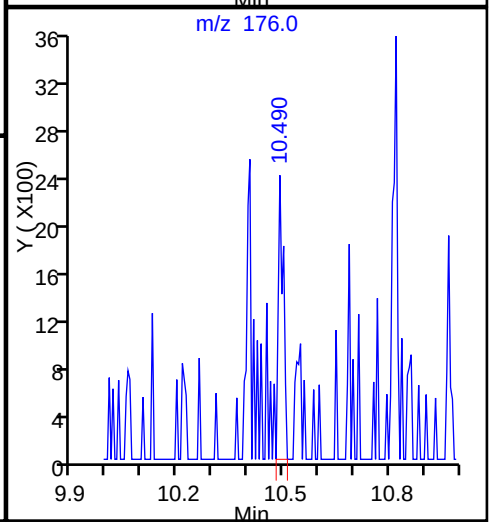


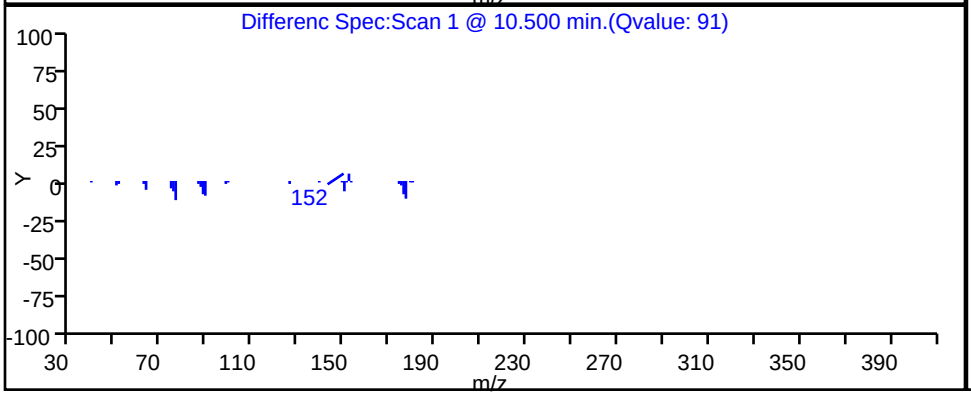












FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-018-111614 RE | Lab Sample ID: 180-39026-1 RE

Matrix: Water | Lab File ID: D1128022.D

Analysis Method: 8270D LL | Date Collected: 11/16/2014 18:08

Extract. Method: 3520C | Date Extracted: 11/25/2014 09:59

Sample wt/vol: 260(mL) | Date Analyzed: 11/28/2014 21:45

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 126682 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	0.029	J H	0.19	0.028
208-96-8	Acenaphthylene	ND	H	0.19	0.021
120-12-7	Anthracene	0.024	J H	0.19	0.018
92-87-5	Benzidine	ND	H	19	4.6
56-55-3	Benzo[a]anthracene	ND	H	0.19	0.035
205-99-2	Benzo[b]fluoranthene	ND	H	0.19	0.047
207-08-9	Benzo[k]fluoranthene	ND	H	0.19	0.029
65-85-0	Benzoic acid	ND	H	4.8	1.6
191-24-2	Benzo[g,h,i]perylene	ND	H	0.19	0.028
50-32-8	Benzo[a]pyrene	ND	H	0.19	0.027
111-91-1	Bis(2-chloroethoxy)methane	ND	H	0.96	0.13
111-44-4	Bis(2-chloroethyl)ether	ND	H	0.96	0.030
117-81-7	Bis(2-ethylhexyl) phthalate	1.5	J H	1.9	0.42
108-60-1	2,2'-oxybis[1-chloropropane]	ND	H	0.96	0.023
101-55-3	4-Bromophenyl phenyl ether	ND	H	0.96	0.11
7005-72-3	4-Chlorophenyl phenyl ether	ND	H	0.96	0.077
91-58-7	2-Chloronaphthalene	ND	H	0.19	0.030
85-68-7	Butyl benzyl phthalate	0.41	J H	0.96	0.21
218-01-9	Chrysene	ND	H	0.19	0.030
53-70-3	Dibenz(a,h)anthracene	ND	H	0.19	0.026
84-74-2	Di-n-butyl phthalate	ND	H	0.96	0.23
117-84-0	Di-n-octyl phthalate	ND	H	0.96	0.20
84-66-2	Diethyl phthalate	ND	H	0.96	0.29
131-11-3	Dimethyl phthalate	ND	H	0.96	0.18
91-94-1	3,3'-Dichlorobenzidine	ND	H	0.96	0.14
121-14-2	2,4-Dinitrotoluene	ND	H	0.96	0.21
606-20-2	2,6-Dinitrotoluene	ND	H	0.96	0.13
95-57-8	2-Chlorophenol	ND	H	0.96	0.22
120-83-2	2,4-Dichlorophenol	ND	H	0.96	0.065
105-67-9	2,4-Dimethylphenol	ND	H	0.96	0.16
51-28-5	2,4-Dinitrophenol	ND	H	4.8	2.4
88-75-5	2-Nitrophenol	ND	H	0.96	0.11
88-06-2	2,4,6-Trichlorophenol	ND	H	0.96	0.29
122-66-7	1,2-Diphenylhydrazine(as Azobenzene)	ND	H	0.96	0.11

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-018-111614 RE | Lab Sample ID: 180-39026-1 RE

Matrix: Water | Lab File ID: D1128022.D

Analysis Method: 8270D LL | Date Collected: 11/16/2014 18:08

Extract. Method: 3520C | Date Extracted: 11/25/2014 09:59

Sample wt/vol: 260(mL) | Date Analyzed: 11/28/2014 21:45

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 126682 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-82-1	*1,2,4-Trichlorobenzene*	*ND*	*H*	*0.96*	*0.082*
59-50-7	*4-Chloro-3-methylphenol*	*ND*	*H*	*0.96*	*0.16*
100-02-7	*4-Nitrophenol*	*ND*	*H*	*4.8*	*0.77*
534-52-1	*4,6-Dinitro-2-methylphenol*	*ND*	*H*	*4.8*	*1.5*
206-44-0	*Fluoranthene*	*0.028*	*J H*	*0.19*	*0.020*
86-73-7	*Fluorene*	*0.025*	*J H*	*0.19*	*0.023*
118-74-1	*Hexachlorobenzene*	*ND*	*H*	*0.96*	*0.059*
87-68-3	*Hexachlorobutadiene*	*ND*	*H*	*0.96*	*0.090*
77-47-4	*Hexachlorocyclopentadiene*	*ND*	*H*	*0.96*	*0.13*
67-72-1	*Hexachloroethane*	*ND*	*H*	*0.96*	*0.13*
193-39-5	*Indeno[1,2,3-cd]pyrene*	*ND*	*H*	*0.19*	*0.042*
78-59-1	*Isophorone*	*ND*	*H*	*0.96*	*0.071*
91-20-3	*Naphthalene*	*0.050*	*J H*	*0.19*	*0.022*
98-95-3	*Nitrobenzene*	*ND*	*H*	*1.9*	*0.14*
621-64-7	*N-Nitrosodi-n-propylamine*	*ND*	*H*	*0.96*	*0.048*
62-75-9	*N-Nitrosodimethylamine*	*ND*	*H*	*0.96*	*0.11*
86-30-6	*N-Nitrosodiphenylamine*	*ND*	*H*	*0.96*	*0.12*
85-01-8	*Phenanthrene*	*0.061*	*J H*	*0.19*	*0.040*
129-00-0	*Pyrene*	*ND*	*H*	*0.19*	*0.022*
87-86-5	*Pentachlorophenol*	*ND*	*H*	*0.96*	*0.48*
108-95-2	*Phenol*	*0.14*	*J H*	*0.96*	*0.053*

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	59		30-150
321-60-8	2-Fluorobiphenyl	67		30-150
367-12-4	2-Fluorophenol (Surr)	38		30-150
4165-60-0	Nitrobenzene-d5 (Surr)	66		30-150
4165-62-2	Phenol-d5 (Surr)	53		30-150
1718-51-0	Terphenyl-d14 (Surr)	71		10-150

Report Date: 01-Dec-2014 02:15:48 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20141128-4633.b\D1128022.D
Lims ID: 180-39026-F-1-A Lab Sample ID: 180-39026-1
Client ID: ST-018-111614
Sample Type: Client
Inject. Date: 28-Nov-2014 21:45:30 ALS Bottle#: 21 Worklist Smp#: 22
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004633-022
Misc. Info.: 180-39026-F-1-A
Operator ID: 003200 Instrument ID: CH732

Method: \\PITCHROM\ChromData\CH732\20141128-4633.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 01-Dec-2014 02:15:20 Calib Date: 12-Nov-2014 13:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: piccolinov Date: 01-Dec-2014 02:09:23

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 1,4-Dichlorobenzene-d4	152	6.265	6.287	-0.022	94	198531	8.00	
*	2 Naphthalene-d8	136	7.585	7.596	-0.011	99	917959	8.00	
*	3 Acenaphthene-d10	164	9.326	9.327	-0.001	92	536102	8.00	
*	4 Phenanthrene-d10	188	10.801	10.801	0.000	97	855941	8.00	
*	5 Chrysene-d12	240	14.690	14.674	0.016	96	709098	8.00	
*	6 Perylene-d12	264	17.634	17.607	0.027	95	563733	8.00	
$	7 2-Fluorophenol	112	4.786	4.818	-0.032	89	363116	15.1	
$	8 Phenol-d5	99	5.881	5.902	-0.021	97	754406	21.0	
$	9 Nitrobenzene-d5	82	6.842	6.853	-0.011	87	881154	26.5	
$	10 2-Fluorobiphenyl	172	8.643	8.648	-0.005	99	2310054	27.0	
$	11 2,4,6-Tribromophenol	330	10.090	10.091	-0.001	90	202920	23.8	
$	12 Terphenyl-d14	244	12.804	12.788	0.016	99	2210361	28.5	
	14 N-Nitrosodimethylamine	74		2.269				ND	
	26 Phenol	94	5.891	5.913	-0.022	94	12216	0.3007	
	29 Bis(2-chloroethyl)ether	93		5.998				ND	
	30 2-Chlorophenol	128		6.062				ND	
	38 2,2'-oxybis[1-chloropropan	45		6.570				ND	
	41 N-Nitrosodi-n-propylamine	70		6.698				ND	
	45 Hexachloroethane	117		6.821				ND	
	46 Nitrobenzene	77		6.875				ND	
	48 Isophorone	82		7.115				ND	
	49 2-Nitrophenol	139		7.206				ND	
	50 2,4-Dimethylphenol	107		7.238				ND	
	52 Benzoic acid	122		7.291				ND	
	53 Bis(2-chloroethoxy)methane	93		7.323				ND	
	54 2,4-Dichlorophenol	162		7.446				ND	
	56 1,2,4-Trichlorobenzene	180		7.537				ND	
	58 Naphthalene	128	7.606	7.617	-0.011	95	12247	0.1033	
	62 Hexachlorobutadiene	225		7.740				ND	
	67 4-Chloro-3-methylphenol	107		8.119				ND	
	72 Hexachlorocyclopentadiene	237		8.461				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
74 2,4,6-Trichlorophenol	196		8.568				ND	
77 2-Chloronaphthalene	162		8.782				ND	
82 Dimethyl phthalate	163		9.017				ND	
84 2,6-Dinitrotoluene	165		9.086				ND	
85 Acenaphthylene	152	9.188	9.188	0.000	95	4764	0.0385	
87 2,4-Dinitrophenol	184		9.353				ND	
88 Acenaphthene	153	9.353	9.359	-0.006	85	4644	0.0609	
89 4-Nitrophenol	109		9.396				ND	
91 2,4-Dinitrotoluene	165		9.482				ND	
98 Diethyl phthalate	149	9.695	9.695	0.000	98	34511	0.4654	
100 4-Chlorophenyl phenyl ethe	204		9.834				ND	
103 Fluorene	166	9.855	9.855	0.000	91	4266	0.0516	
104 4,6-Dinitro-2-methylphenol	198		9.882				ND	
105 N-Nitrosodiphenylamine	169		9.946				ND	
90 1,2-Diphenylhydrazine	77		9.989				ND	
110 4-Bromophenyl phenyl ether	248		10.310				ND	
112 Hexachlorobenzene	284		10.406				ND	
116 Pentachlorophenol	266		10.593				ND	
121 Phenanthrene	178	10.828	10.828	0.000	96	15630	0.1271	
122 Anthracene	178	10.886	10.881	0.005	50	6192	0.0492	
126 Di-n-butyl phthalate	149	11.373	11.367	0.006	99	30827	0.2309	
131 Fluoranthene	202	12.286	12.281	0.005	97	6863	0.0585	
132 Benzidine	184		12.425				ND	
133 Pyrene	202		12.612				ND	
138 Butyl benzyl phthalate	149	13.568	13.552	0.016	97	43728	0.8475	
144 3,3'-Dichlorobenzidine	252		14.573				ND	
145 Bis(2-ethylhexyl) phthalat	149	14.631	14.615	0.016	98	211700	3.05	
146 Benzo[a]anthracene	228		14.653				ND	
147 Chrysene	228		14.722				ND	
150 Di-n-octyl phthalate	149		15.940				ND	
152 Benzo[b]fluoranthene	252		16.822				ND	
153 Benzo[k]fluoranthene	252		16.881				ND	
154 Benzo[a]pyrene	252		17.490				ND	
157 Indeno[1,2,3-cd]pyrene	276		20.107				ND	
158 Dibenz(a,h)anthracene	278		20.139				ND	
159 Benzo[g,h,i]perylene	276		20.828				ND	

Reagents:

SVTAPITINTRNi_00006 Amount Added: 1.00 Units: uL Run Reagent

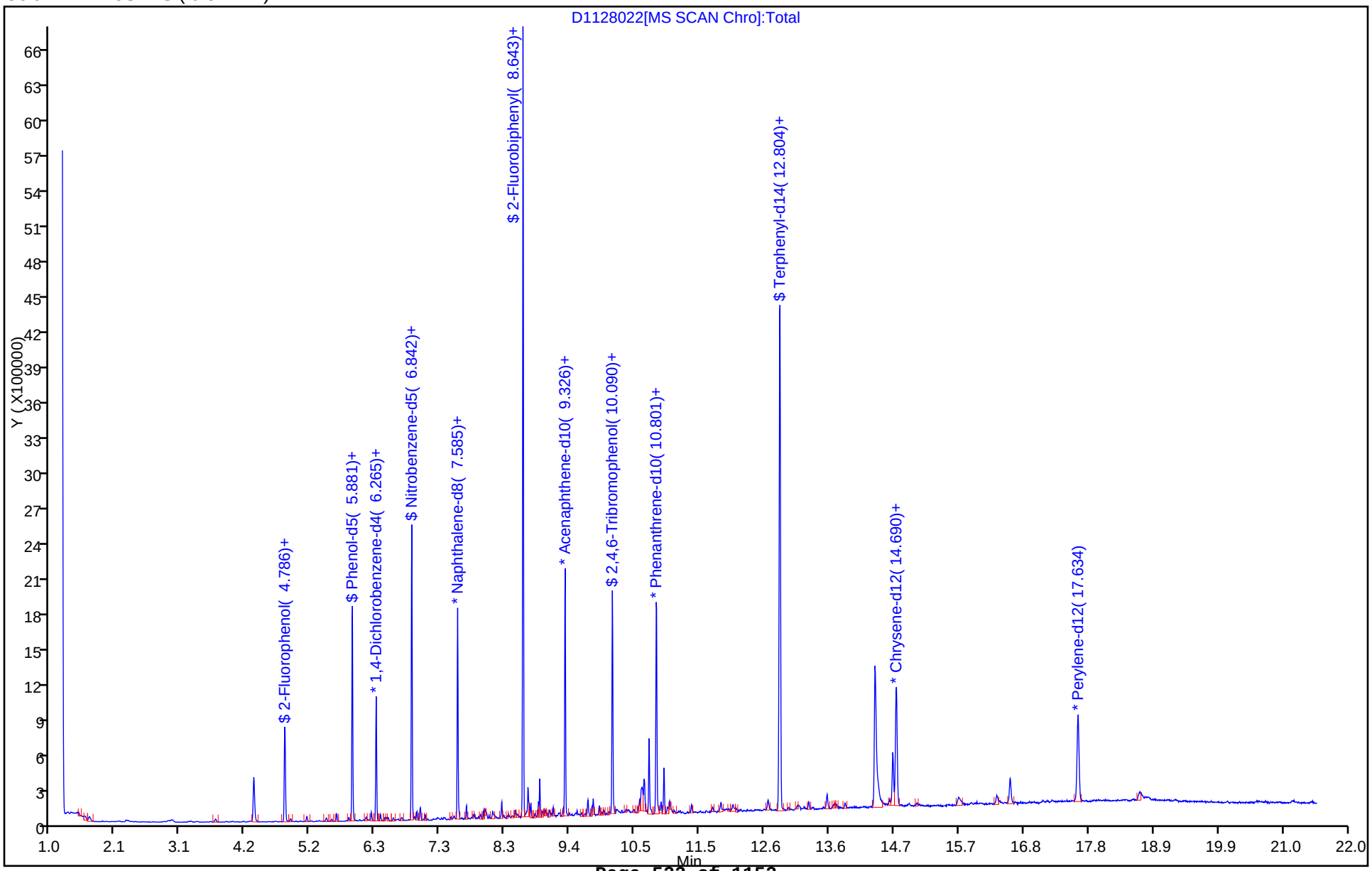
Report Date: 01-Dec-2014 02:15:48 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20141128-4633.b\D1128022.D

Injection Date:	28-Nov-2014 21:45:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	180-39026-F-1-A	Lab Sample ID:	180-39026-1	Worklist Smp#:	22
Client ID:	ST-018-111614				
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)

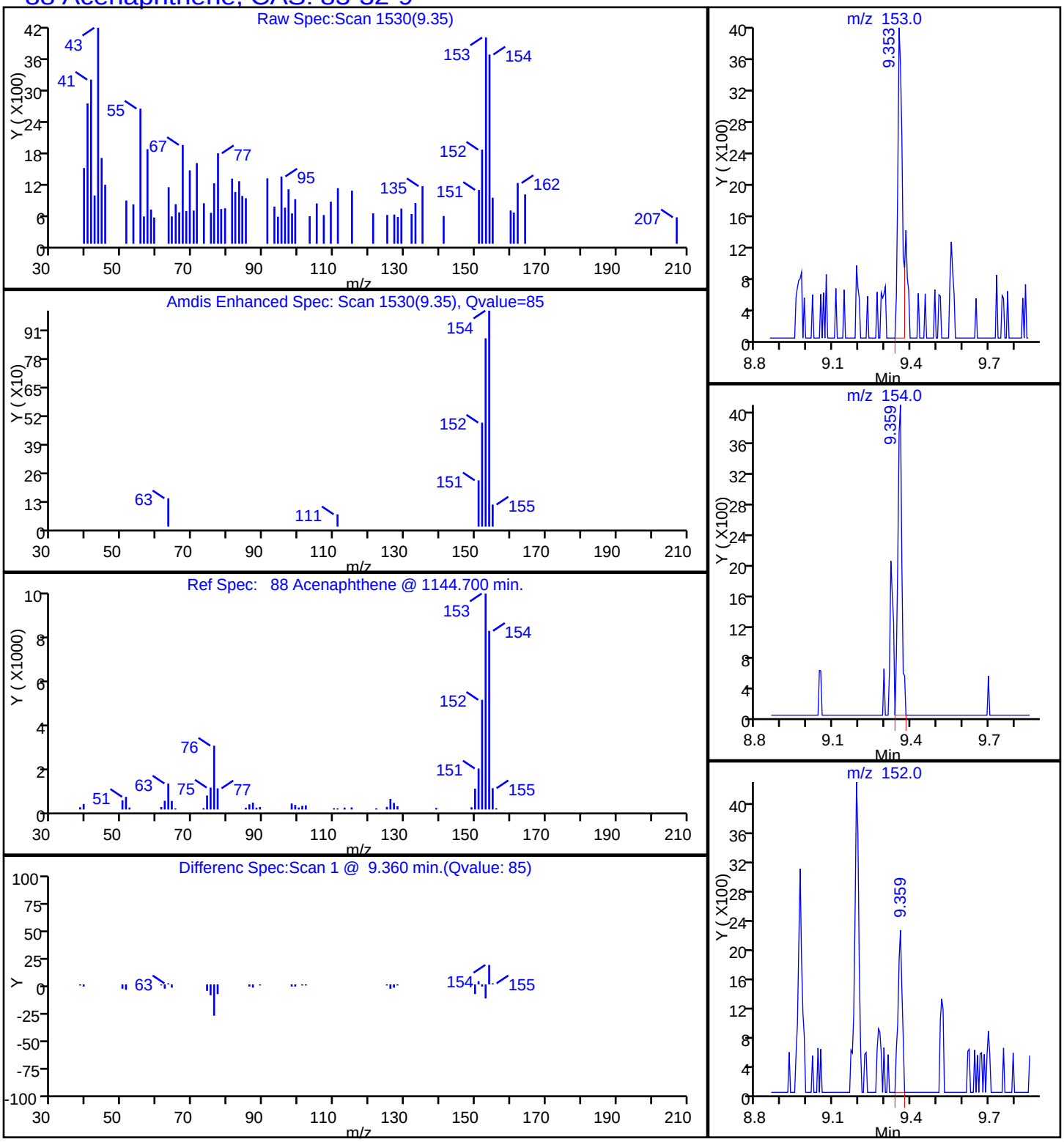


Report Date: 01-Dec-2014 02:15:49 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH732\20141128-4633.b\D1128022.D				
Injection Date:	28-Nov-2014 21:45:30	Instrument ID:	CH732		
Lims ID:	180-39026-F-1-A	Lab Sample ID:	180-39026-1		
Client ID:	ST-018-111614				
Operator ID:	003200	ALS Bottle#:	21	Worklist Smp#:	22
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

88 Acenaphthene, CAS: 83-32-9

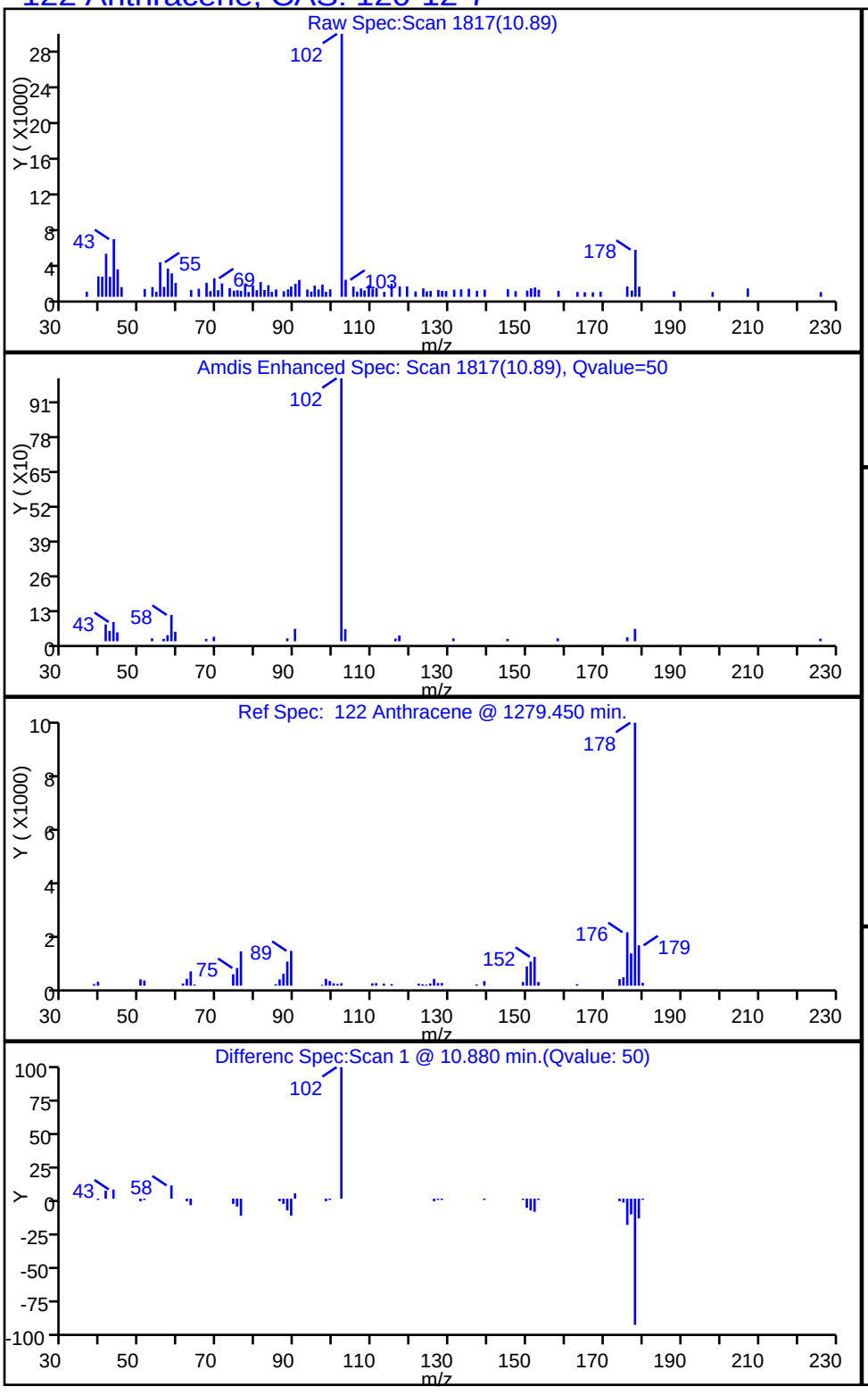


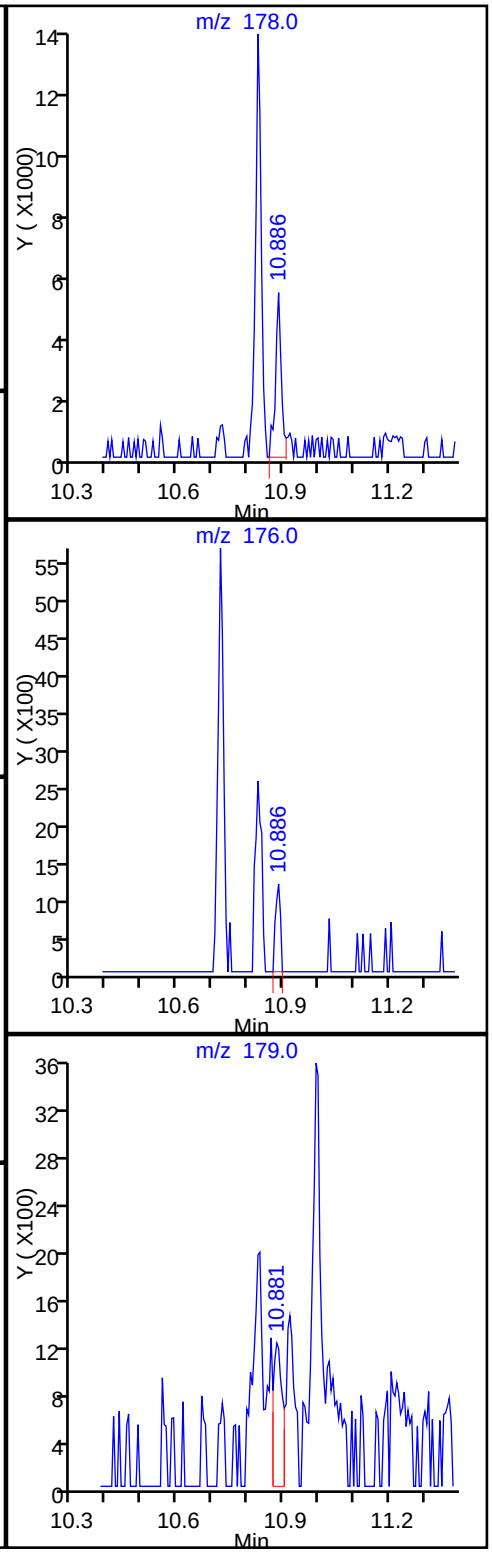
Report Date: 01-Dec-2014 02:15:49 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH732\20141128-4633.b\D1128022.D				
Injection Date:	28-Nov-2014 21:45:30	Instrument ID:	CH732		
Lims ID:	180-39026-F-1-A	Lab Sample ID:	180-39026-1		
Client ID:	ST-018-111614				
Operator ID:	003200	ALS Bottle#:	21	Worklist Smp#:	22
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

122 Anthracene, CAS: 120-12-7



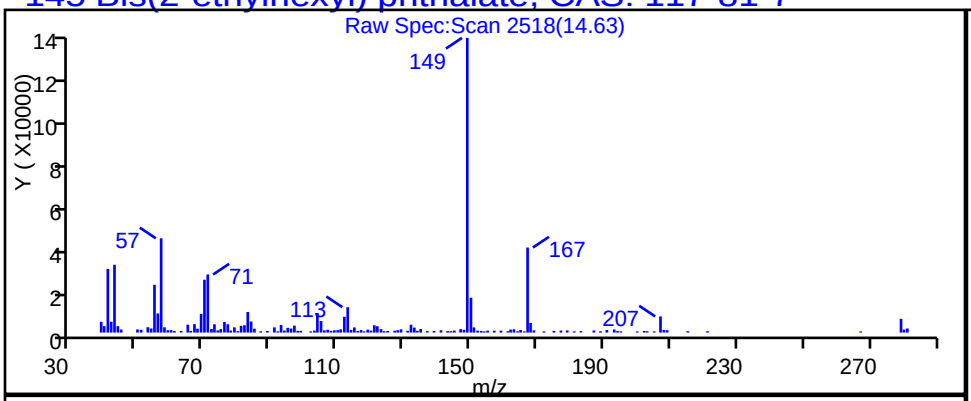


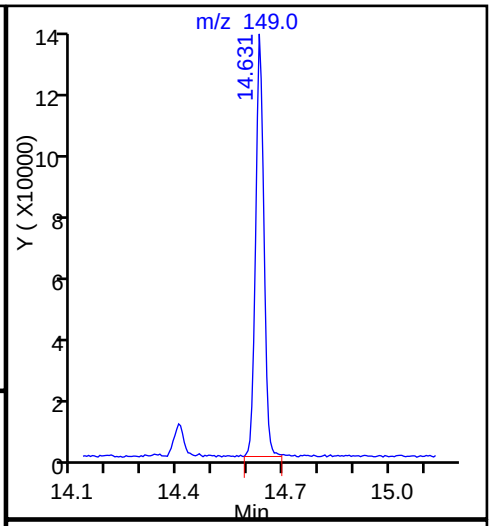
Report Date: 01-Dec-2014 02:15:49 Chrom Revision: 2.2 06-Nov-2014 14:50:32

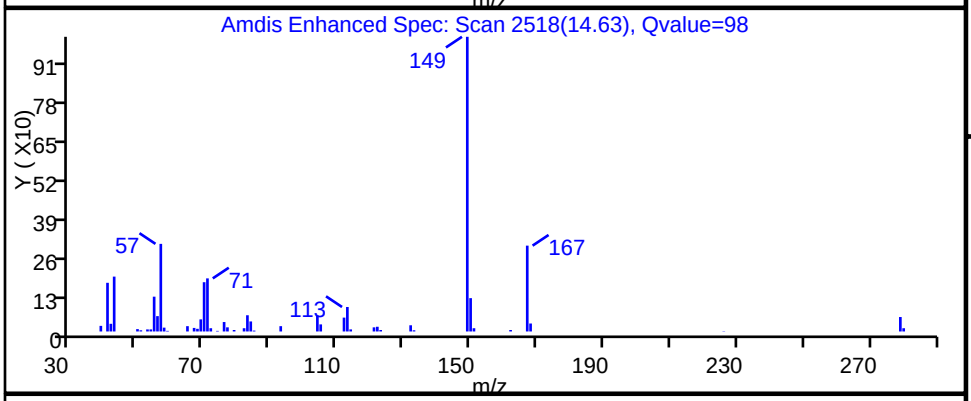
TestAmerica Pittsburgh

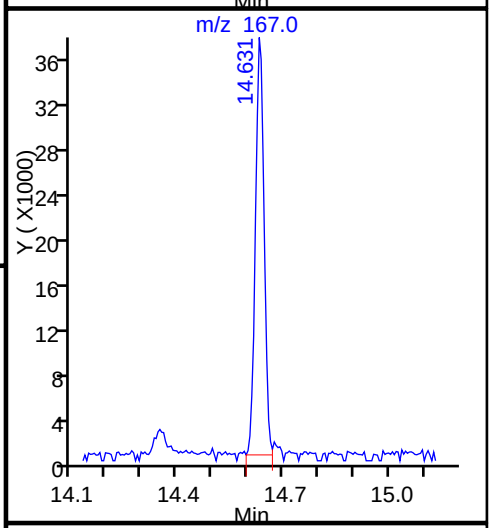
Data File:	\\PITCHROM\ChromData\CH732\20141128-4633.b\D1128022.D				
Injection Date:	28-Nov-2014 21:45:30	Instrument ID:	CH732		
Lims ID:	180-39026-F-1-A	Lab Sample ID:	180-39026-1		
Client ID:	ST-018-111614				
Operator ID:	003200	ALS Bottle#:	21	Worklist Smp#:	22
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

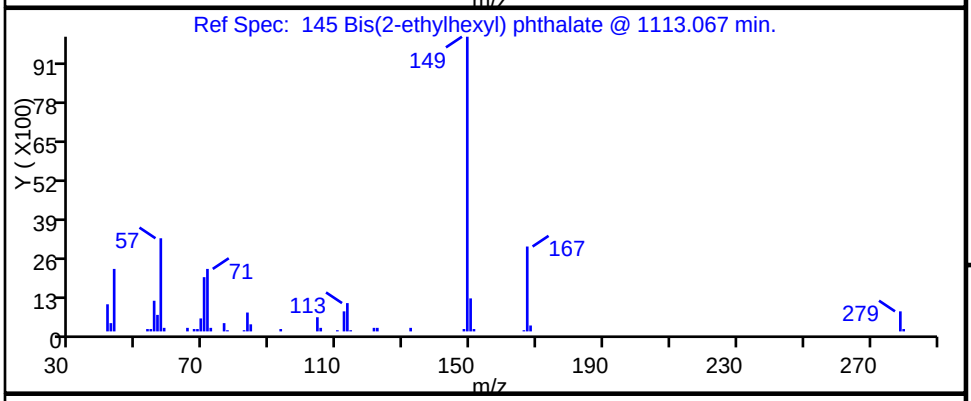
145 Bis(2-ethylhexyl) phthalate, CAS: 117-81-7

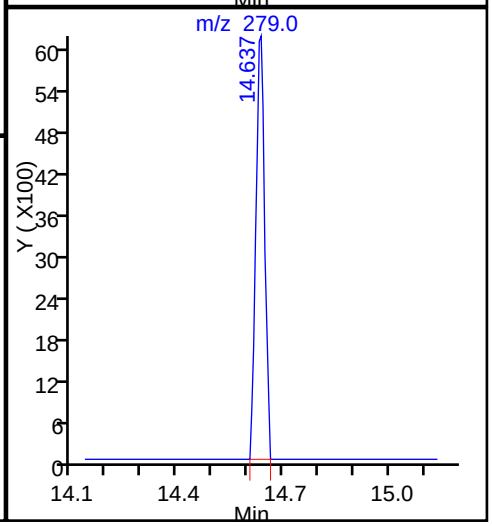


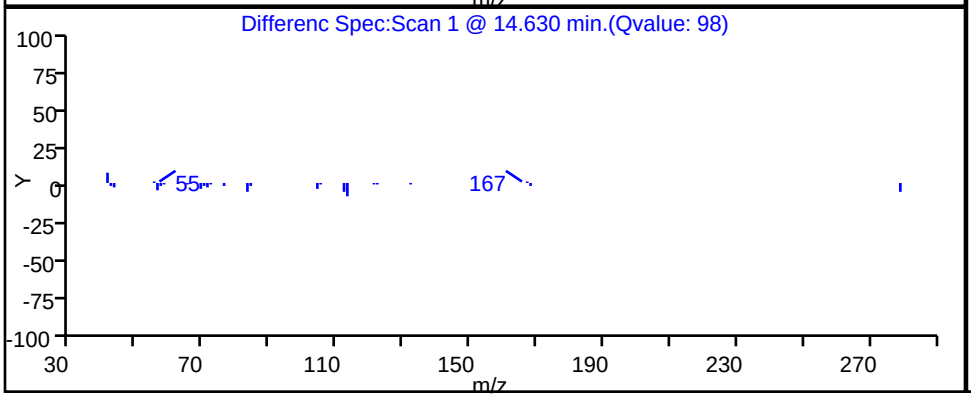










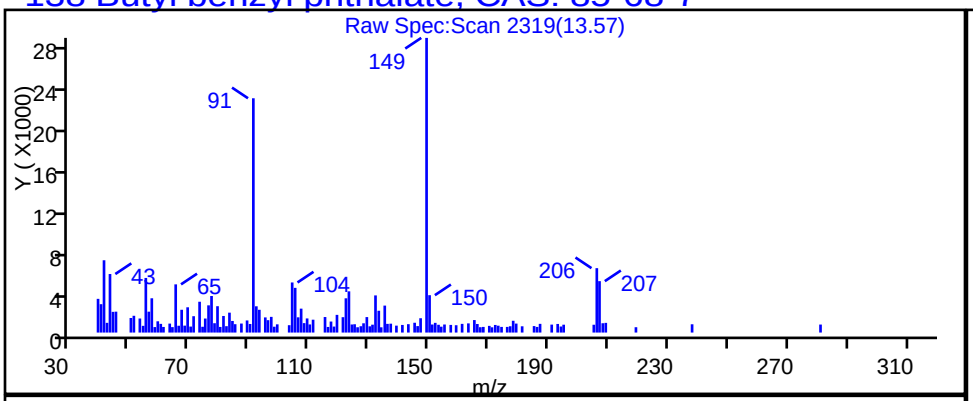


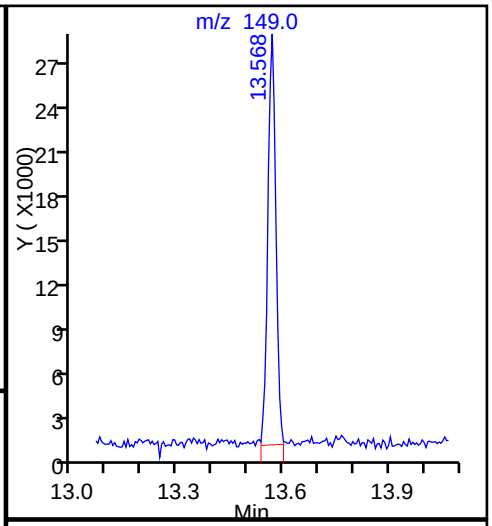
Report Date: 01-Dec-2014 02:15:49 Chrom Revision: 2.2 06-Nov-2014 14:50:32

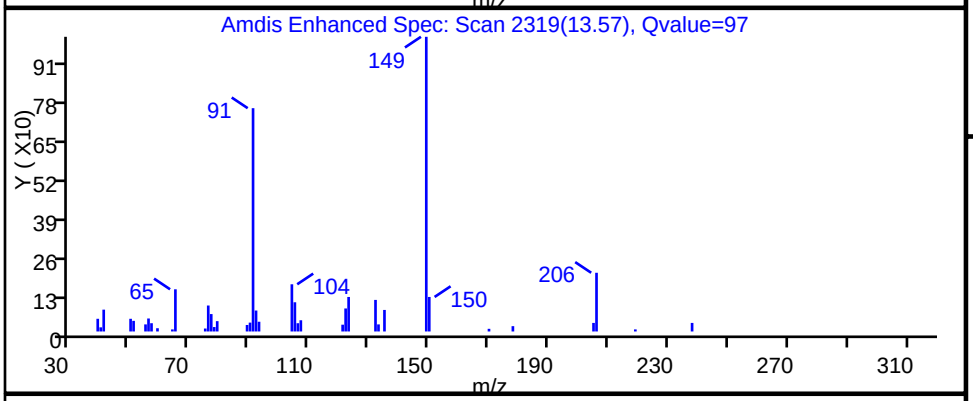
TestAmerica Pittsburgh

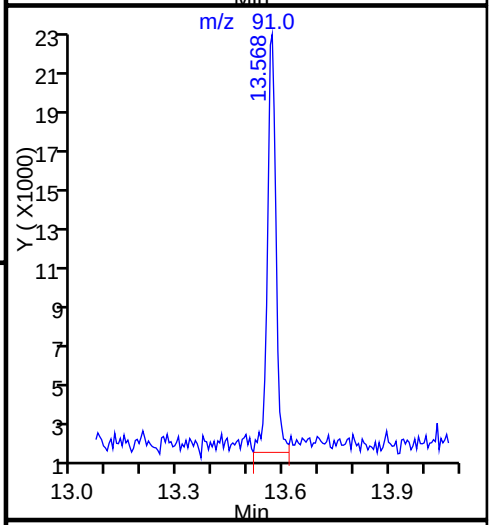
Data File:	\\PITCHROM\ChromData\CH732\20141128-4633.b\D1128022.D				
Injection Date:	28-Nov-2014 21:45:30	Instrument ID:	CH732		
Lims ID:	180-39026-F-1-A	Lab Sample ID:	180-39026-1		
Client ID:	ST-018-111614				
Operator ID:	003200	ALS Bottle#:	21	Worklist Smp#:	22
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

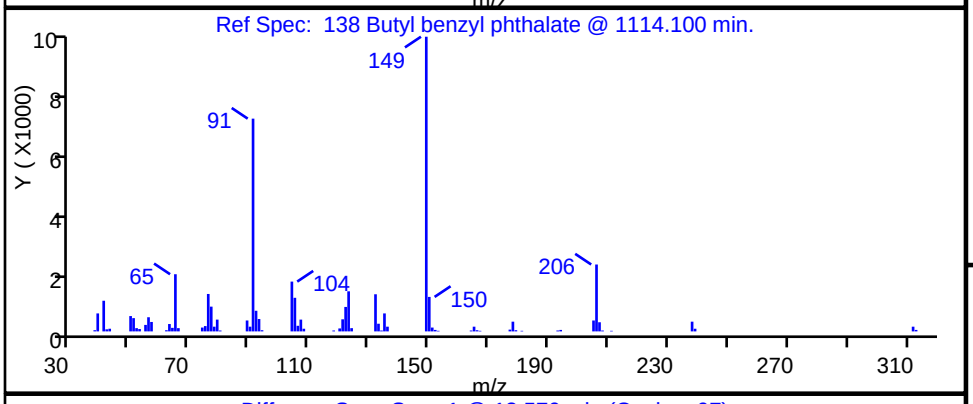
138 Butyl benzyl phthalate, CAS: 85-68-7

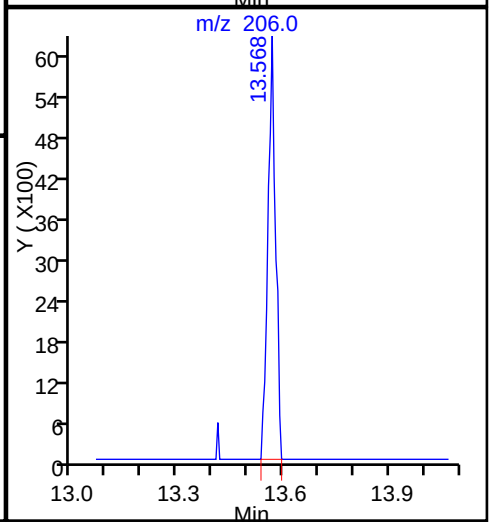


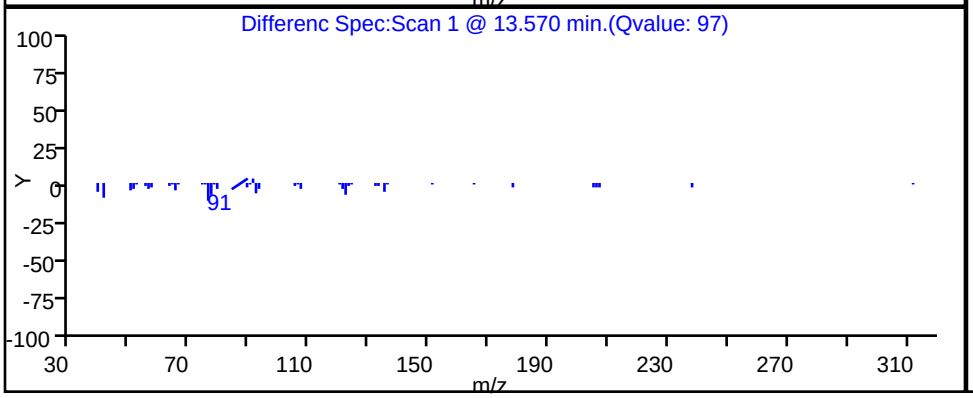










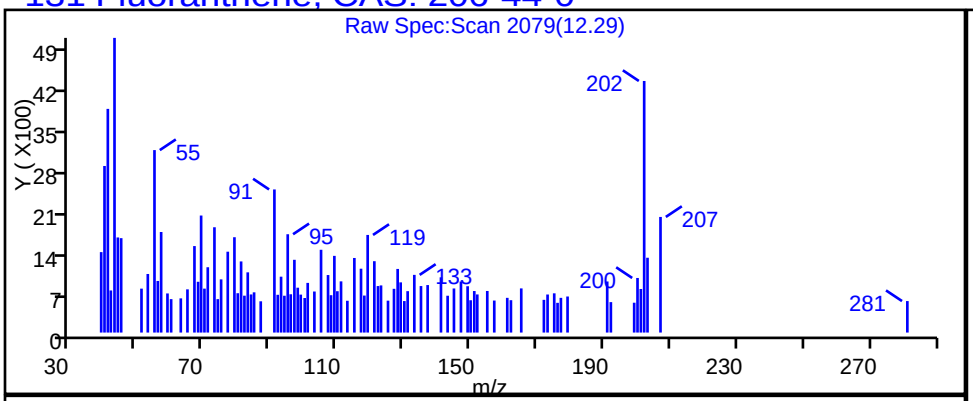


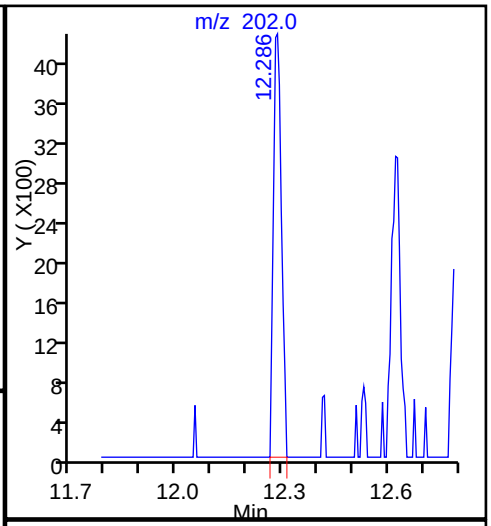
Report Date: 01-Dec-2014 02:15:49 Chrom Revision: 2.2 06-Nov-2014 14:50:32

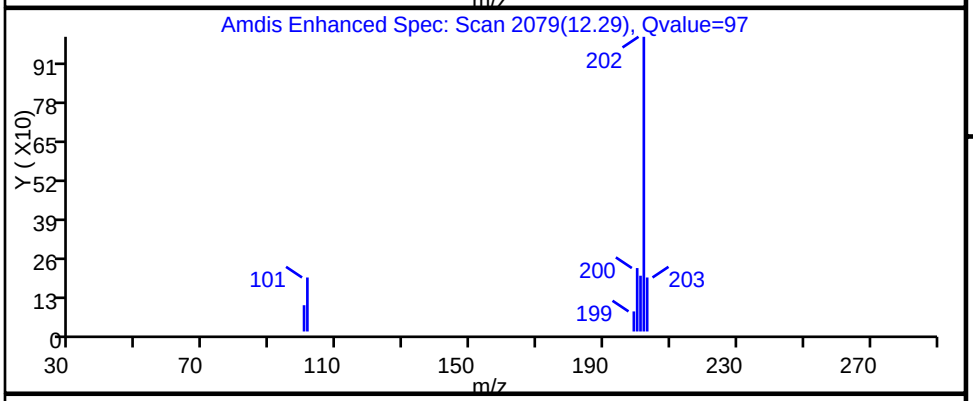
TestAmerica Pittsburgh

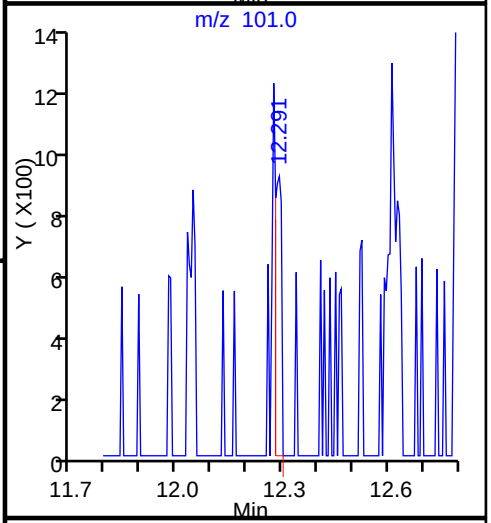
Data File:	\\PITCHROM\ChromData\CH732\20141128-4633.b\D1128022.D				
Injection Date:	28-Nov-2014 21:45:30	Instrument ID:	CH732		
Lims ID:	180-39026-F-1-A	Lab Sample ID:	180-39026-1		
Client ID:	ST-018-111614				
Operator ID:	003200	ALS Bottle#:	21	Worklist Smp#:	22
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

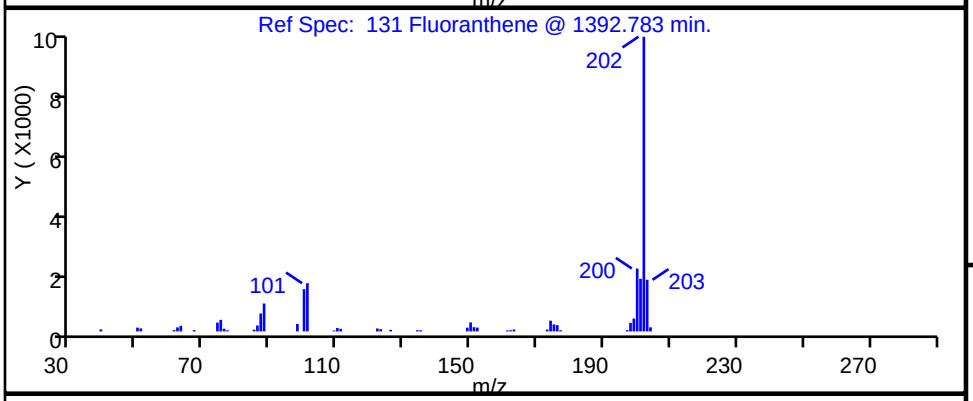
131 Fluoranthene, CAS: 206-44-0

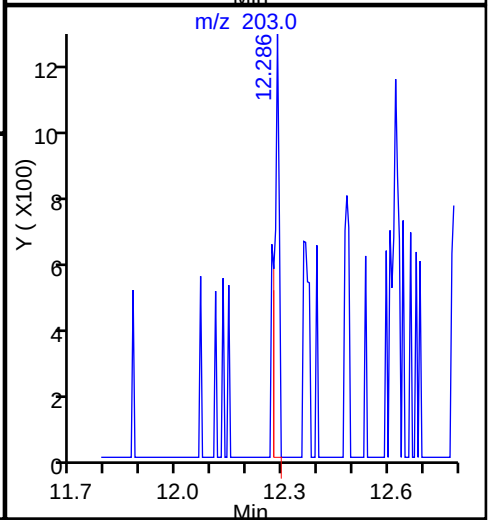


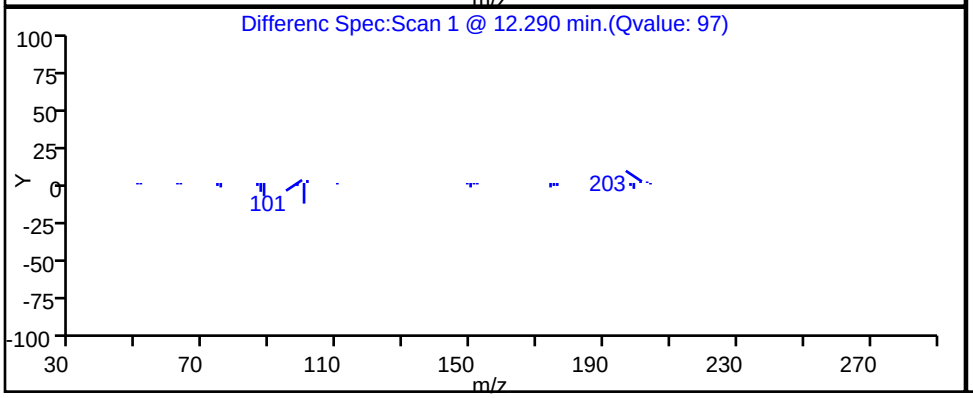












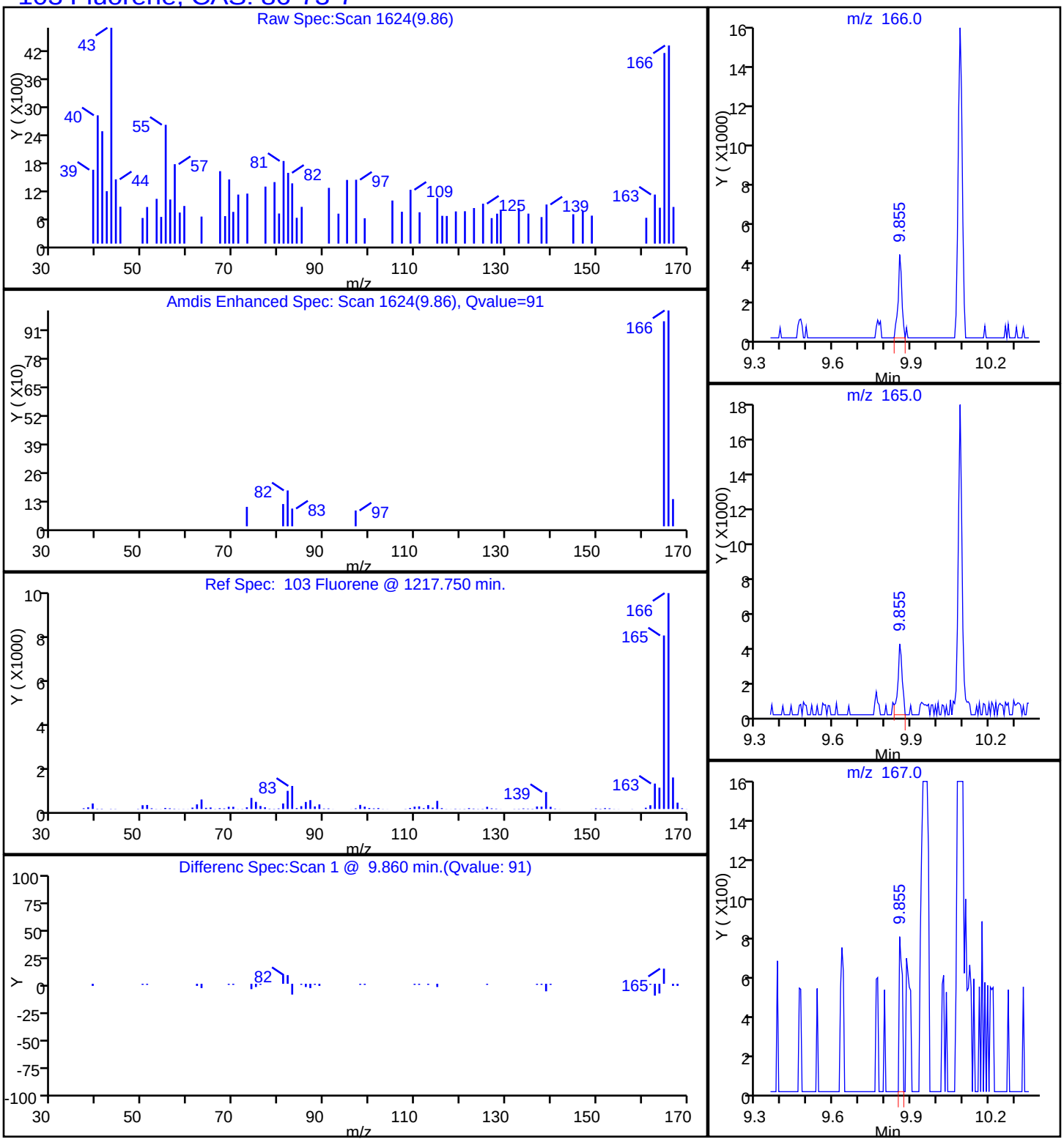
Report Date: 01-Dec-2014 02:15:49 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20141128-4633.b\D1128022.D

Injection Date:	28-Nov-2014 21:45:30	Instrument ID:	CH732		
Lims ID:	180-39026-F-1-A	Lab Sample ID:	180-39026-1		
Client ID:	ST-018-111614				
Operator ID:	003200	ALS Bottle#:	21	Worklist Smp#:	22
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

103 Fluorene, CAS: 86-73-7

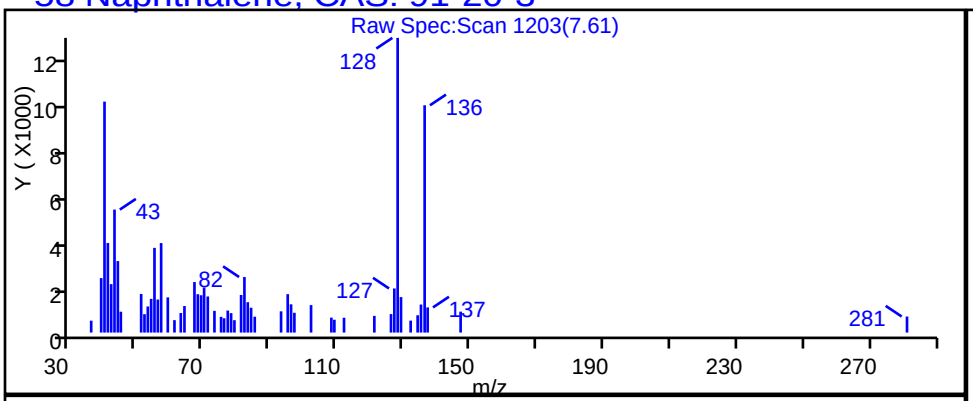


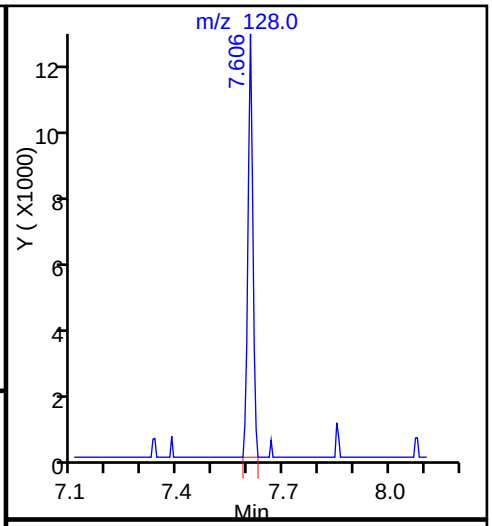
Report Date: 01-Dec-2014 02:15:49 Chrom Revision: 2.2 06-Nov-2014 14:50:32

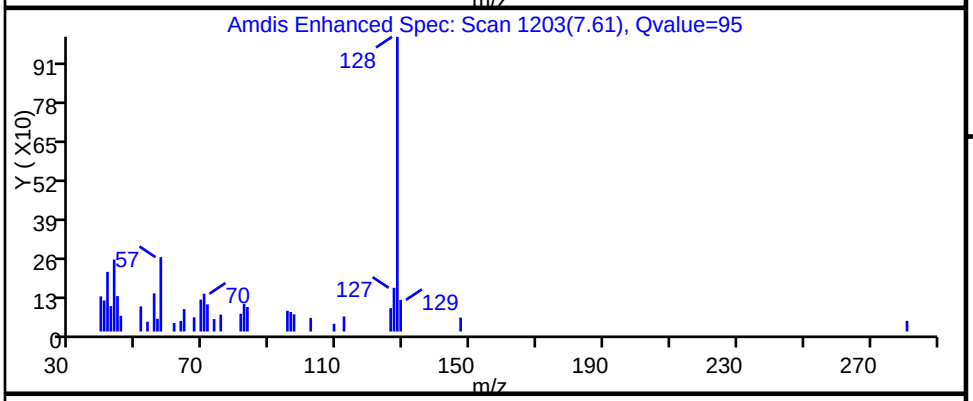
TestAmerica Pittsburgh

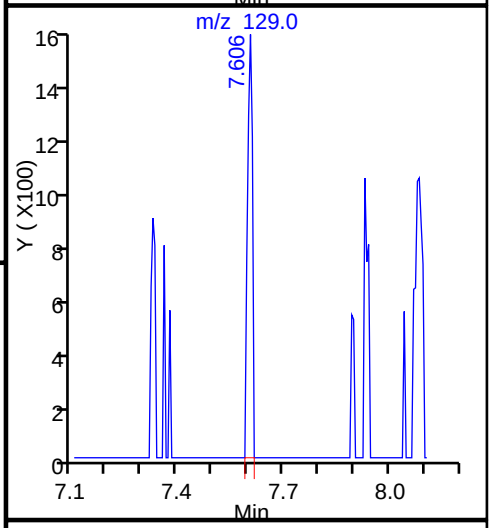
Data File:	\\PITCHROM\ChromData\CH732\20141128-4633.b\D1128022.D				
Injection Date:	28-Nov-2014 21:45:30	Instrument ID:	CH732		
Lims ID:	180-39026-F-1-A	Lab Sample ID:	180-39026-1		
Client ID:	ST-018-111614				
Operator ID:	003200	ALS Bottle#:	21	Worklist Smp#:	22
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

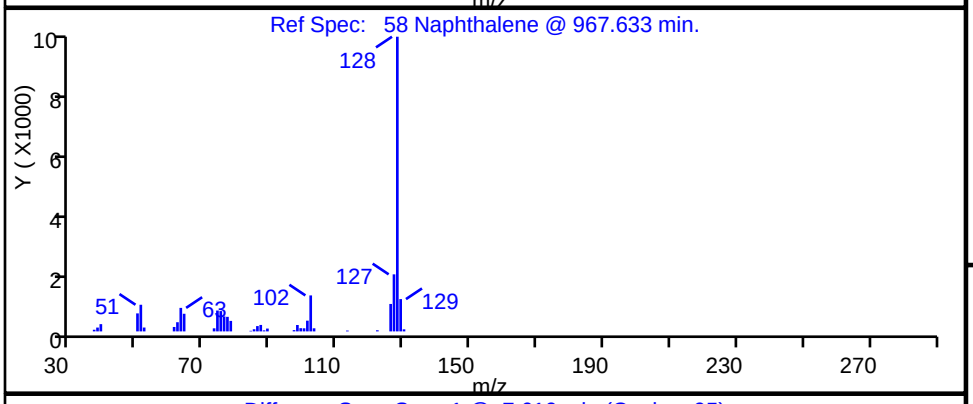
58 Naphthalene, CAS: 91-20-3

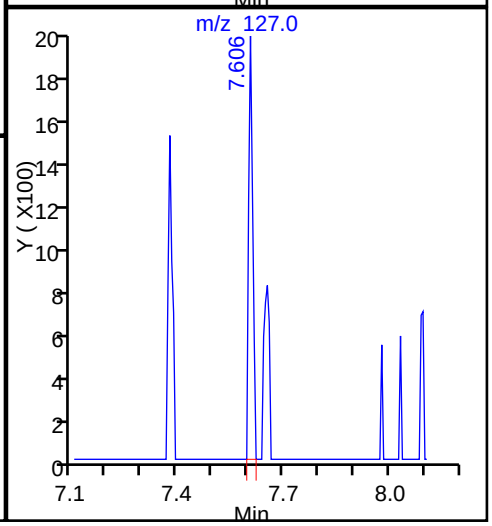


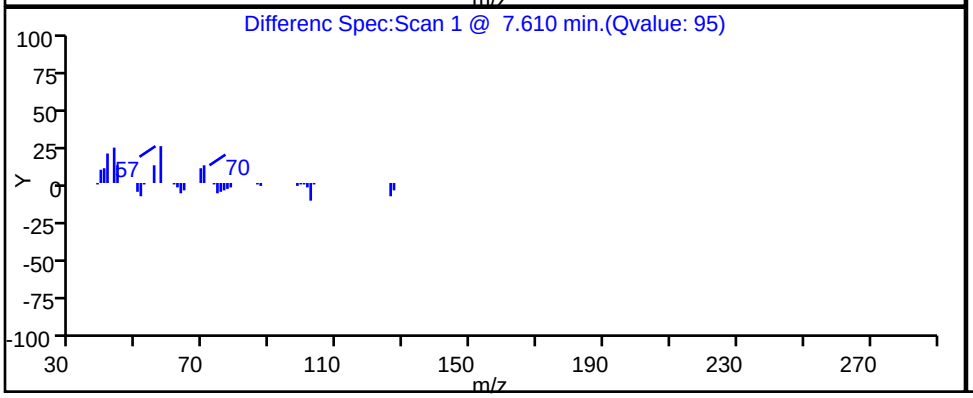












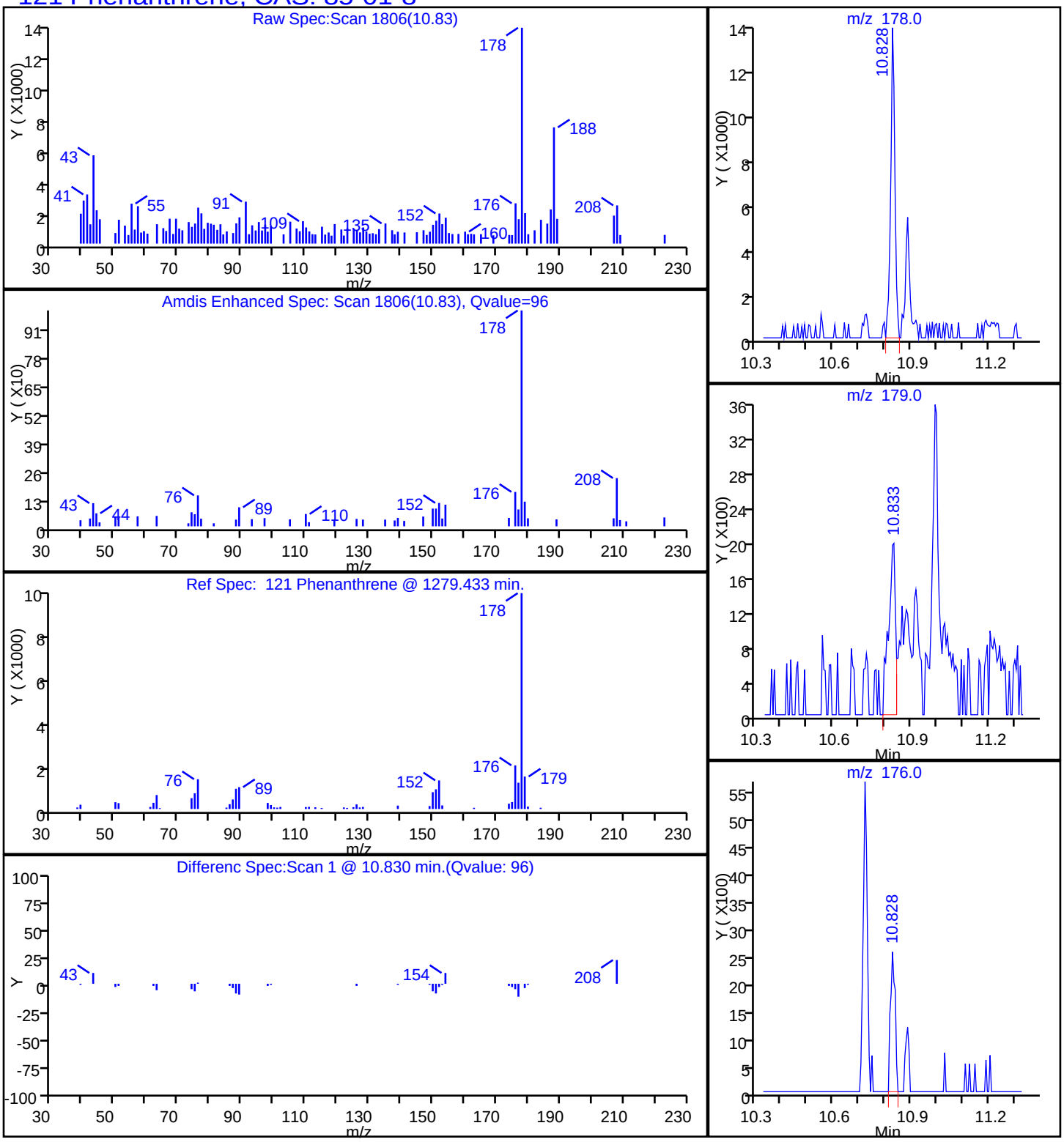
Report Date: 01-Dec-2014 02:15:49 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20141128-4633.b\D1128022.D

Injection Date:	28-Nov-2014 21:45:30	Instrument ID:	CH732
Lims ID:	180-39026-F-1-A	Lab Sample ID:	180-39026-1
Client ID:	ST-018-111614		
Operator ID:	003200	ALS Bottle#:	21 Worklist Smp#: 22
Injection Vol:	2.0 ul	Dil. Factor:	1.0000
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN

121 Phenanthrene, CAS: 85-01-8

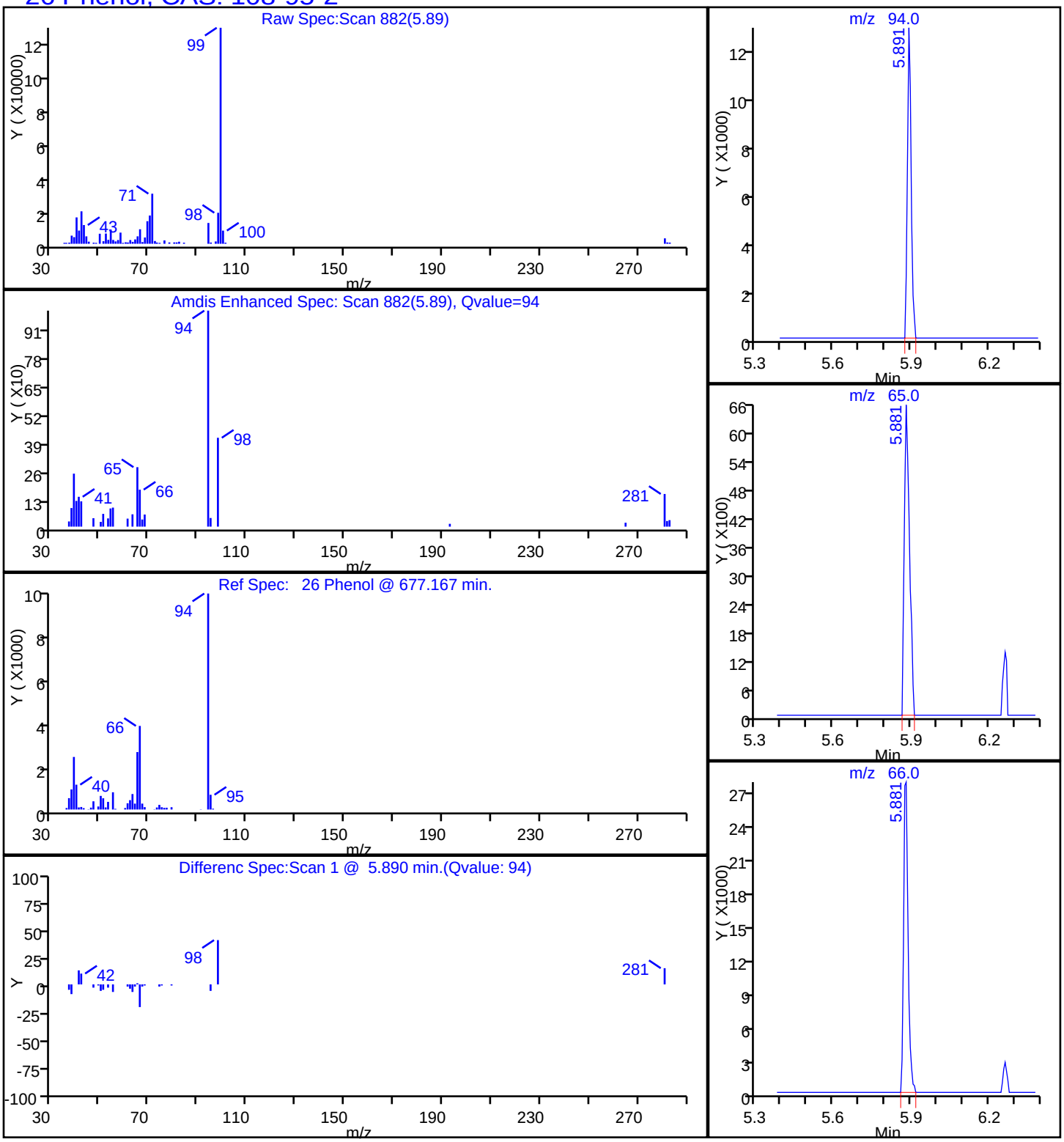


Report Date: 01-Dec-2014 02:15:48 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH732\20141128-4633.b\D1128022.D				
Injection Date:	28-Nov-2014 21:45:30	Instrument ID:	CH732		
Lims ID:	180-39026-F-1-A	Lab Sample ID:	180-39026-1		
Client ID:	ST-018-111614				
Operator ID:	003200	ALS Bottle#:	21	Worklist Smp#:	22
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

26 Phenol, CAS: 108-95-2



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-UNNAMED-111614 | Lab Sample ID: 180-39026-2

Matrix: Water | Lab File ID: V1124017.D

Analysis Method: 8270D LL | Date Collected: 11/16/2014 18:55

Extract. Method: 3520C | Date Extracted: 11/20/2014 09:07

Sample wt/vol: 260(mL) | Date Analyzed: 11/24/2014 19:08

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 126233 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		0.19	0.028
208-96-8	Acenaphthylene	ND		0.19	0.021
120-12-7	Anthracene	ND		0.19	0.018
92-87-5	Benzidine	ND		19	4.6
56-55-3	Benzo[a]anthracene	ND		0.19	0.035
205-99-2	Benzo[b]fluoranthene	ND		0.19	0.047
207-08-9	Benzo[k]fluoranthene	ND		0.19	0.029
65-85-0	Benzoic acid	ND		4.8	1.6
191-24-2	Benzo[g,h,i]perylene	ND		0.19	0.028
50-32-8	Benzo[a]pyrene	ND		0.19	0.027
111-91-1	Bis(2-chloroethoxy)methane	ND		0.96	0.13
111-44-4	Bis(2-chloroethyl)ether	ND		0.96	0.030
117-81-7	Bis(2-ethylhexyl) phthalate	ND		1.9	0.42
108-60-1	2,2'-oxybis[1-chloropropane]	ND		0.96	0.023
101-55-3	4-Bromophenyl phenyl ether	ND		0.96	0.11
7005-72-3	4-Chlorophenyl phenyl ether	ND		0.96	0.077
91-58-7	2-Chloronaphthalene	ND		0.19	0.030
85-68-7	Butyl benzyl phthalate	ND		0.96	0.21
218-01-9	Chrysene	ND		0.19	0.030
53-70-3	Dibenz(a,h)anthracene	ND		0.19	0.026
84-74-2	Di-n-butyl phthalate	ND		0.96	0.23
117-84-0	Di-n-octyl phthalate	ND		0.96	0.20
84-66-2	Diethyl phthalate	ND		0.96	0.29
131-11-3	Dimethyl phthalate	ND		0.96	0.18
91-94-1	3,3'-Dichlorobenzidine	ND		0.96	0.14
121-14-2	2,4-Dinitrotoluene	ND		0.96	0.21
606-20-2	2,6-Dinitrotoluene	ND		0.96	0.13
95-57-8	2-Chlorophenol	ND		0.96	0.22
120-83-2	2,4-Dichlorophenol	ND		0.96	0.065
105-67-9	2,4-Dimethylphenol	ND		0.96	0.16
51-28-5	2,4-Dinitrophenol	ND		4.8	2.4
88-75-5	2-Nitrophenol	ND		0.96	0.11
88-06-2	2,4,6-Trichlorophenol	ND		0.96	0.29
122-66-7	1,2-Diphenylhydrazine(as Azobenzene)	ND		0.96	0.11

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-UNNAMED-111614 | Lab Sample ID: 180-39026-2

Matrix: Water | Lab File ID: V1124017.D

Analysis Method: 8270D LL | Date Collected: 11/16/2014 18:55

Extract. Method: 3520C | Date Extracted: 11/20/2014 09:07

Sample wt/vol: 260(mL) | Date Analyzed: 11/24/2014 19:08

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 126233 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-82-1	1,2,4-Trichlorobenzene	ND		0.96	0.082
59-50-7	4-Chloro-3-methylphenol	ND		0.96	0.16
100-02-7	4-Nitrophenol	ND		4.8	0.77
534-52-1	4,6-Dinitro-2-methylphenol	ND		4.8	1.5
206-44-0	Fluoranthene	ND		0.19	0.020
86-73-7	Fluorene	ND		0.19	0.023
118-74-1	Hexachlorobenzene	ND		0.96	0.059
87-68-3	Hexachlorobutadiene	ND		0.96	0.090
77-47-4	Hexachlorocyclopentadiene	ND		0.96	0.13
67-72-1	Hexachloroethane	ND		0.96	0.13
193-39-5	Indeno[1,2,3-cd]pyrene	ND		0.19	0.042
78-59-1	Isophorone	ND		0.96	0.071
91-20-3	Naphthalene	ND		0.19	0.022
98-95-3	Nitrobenzene	ND		1.9	0.14
621-64-7	N-Nitrosodi-n-propylamine	ND		0.96	0.048
62-75-9	N-Nitrosodimethylamine	ND		0.96	0.11
86-30-6	N-Nitrosodiphenylamine	ND		0.96	0.12
85-01-8	Phenanthrene	ND		0.19	0.040
129-00-0	Pyrene	ND		0.19	0.022
87-86-5	Pentachlorophenol	ND		0.96	0.48
108-95-2	Phenol	ND		0.96	0.053

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	73		30-150
321-60-8	2-Fluorobiphenyl	65		30-150
367-12-4	2-Fluorophenol (Surr)	47		30-150
4165-60-0	Nitrobenzene-d5 (Surr)	58		30-150
4165-62-2	Phenol-d5 (Surr)	58		30-150
1718-51-0	Terphenyl-d14 (Surr)	56		10-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141124-4564.b\V1124017.D
Lims ID: 180-39026-E-2-A Lab Sample ID: 180-39026-2
Client ID: ST-UNNAMED-111614
Sample Type: Client
Inject. Date: 24-Nov-2014 19:08:30 ALS Bottle#: 16 Worklist Smp#: 17
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004564-017
Misc. Info.: 180-39026-E-2-A
Operator ID: 003200 Instrument ID: CH731

Method: \\PITCHROM\ChromData\CH731\20141124-4564.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 25-Nov-2014 04:12:16 Calib Date: 18-Nov-2014 07:43:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: piccolinov Date: 25-Nov-2014 04:00:53

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 1,4-Dichlorobenzene-d4	152	6.290	6.277	0.013	89	115416	8.00	
*	2 Naphthalene-d8	136	7.492	7.479	0.013	97	399980	8.00	
*	3 Acenaphthene-d10	164	9.111	9.098	0.013	92	283945	8.00	
*	4 Phenanthrene-d10	188	10.484	10.465	0.019	96	555232	8.00	
*	5 Chrysene-d12	240	13.994	13.948	0.046	95	548216	8.00	
*	6 Perylene-d12	264	16.910	16.855	0.056	97	453133	8.00	
$	7 2-Fluorophenol	112	4.949	4.931	0.018	91	352749	18.9	
$	8 Phenol-d5	99	5.932	5.919	0.013	86	526200	23.2	
$	9 Nitrobenzene-d5	82	6.814	6.801	0.013	91	651602	23.1	
$	10 2-Fluorobiphenyl	172	8.475	8.462	0.013	99	1422958	26.0	
$	11 2,4,6-Tribromophenol	330	9.837	9.819	0.018	83	193561	29.0	
$	12 Terphenyl-d14	244	12.247	12.212	0.035	99	1455525	22.3	
	14 N-Nitrosodimethylamine	74		2.490				ND	
	27 Phenol	94		5.935				ND	
	29 Bis(2-chloroethyl)ether	93		6.015				ND	
	31 2-Chlorophenol	128		6.074				ND	
	40 2,2'-oxybis[1-chloropropan	45		6.539				ND	
	44 N-Nitrosodi-n-propylamine	70		6.656				ND	
	47 Hexachloroethane	117		6.769				ND	
	48 Nitrobenzene	77		6.817				ND	
	50 Isophorone	82		7.041				ND	
	51 2-Nitrophenol	139		7.121				ND	
	52 2,4-Dimethylphenol	107		7.148				ND	
	56 Benzoic acid	122		7.196				ND	
	55 Bis(2-chloroethoxy)methane	93		7.233				ND	
	57 2,4-Dichlorophenol	162		7.340				ND	
	59 1,2,4-Trichlorobenzene	180		7.426				ND	
	60 Naphthalene	128		7.500				ND	
	64 Hexachlorobutadiene	225		7.618				ND	
	70 4-Chloro-3-methylphenol	107		7.965				ND	
	76 Hexachlorocyclopentadiene	237		8.286				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
78 2,4,6-Trichlorophenol	196		8.387				ND	
81 2-Chloronaphthalene	162		8.585				ND	
86 Dimethyl phthalate	163		8.809				ND	
88 2,6-Dinitrotoluene	165		8.868				ND	
89 Acenaphthylene	152		8.970				ND	
92 2,4-Dinitrophenol	184		9.124				ND	
91 Acenaphthene	153		9.124				ND	
93 4-Nitrophenol	109		9.162				ND	
94 2,4-Dinitrotoluene	165		9.242				ND	
101 Diethyl phthalate	149	9.464	9.445	0.019	95	28702	0.5426	
104 4-Chlorophenyl phenyl ethe	204		9.579				ND	
106 Fluorene	166		9.600				ND	
108 4,6-Dinitro-2-methylphenol	198		9.621				ND	
109 N-Nitrosodiphenylamine	169		9.680				ND	
111 1,2-Diphenylhydrazine	77		9.723				ND	
116 4-Bromophenyl phenyl ether	248		10.027				ND	
118 Hexachlorobenzene	284		10.113				ND	
122 Pentachlorophenol	266		10.284				ND	
126 Phenanthrene	178		10.487				ND	
128 Anthracene	178		10.535				ND	
132 Di-n-butyl phthalate	149		10.962				ND	
137 Fluoranthene	202		11.763				ND	
138 Benzidine	184		11.886				ND	
139 Pyrene	202		12.063				ND	
144 Butyl benzyl phthalate	149		12.896				ND	
149 3,3'-Dichlorobenzidine	252		13.847				ND	
151 Bis(2-ethylhexyl) phthalat	149	13.930	13.884	0.046	80	20719	0.5081	
152 Benzo[a]anthracene	228		13.927				ND	
153 Chrysene	228		13.996				ND	
156 Di-n-octyl phthalate	149		15.177				ND	
158 Benzo[b]fluoranthene	252		16.059				ND	
159 Benzo[k]fluoranthene	252		16.112				ND	
160 Benzo[a]pyrene	252		16.742				ND	
163 Indeno[1,2,3-cd]pyrene	276		19.066				ND	
164 Dibenz(a,h)anthracene	278		19.093				ND	
165 Benzo[g,h,i]perylene	276		19.654				ND	

Reagents:

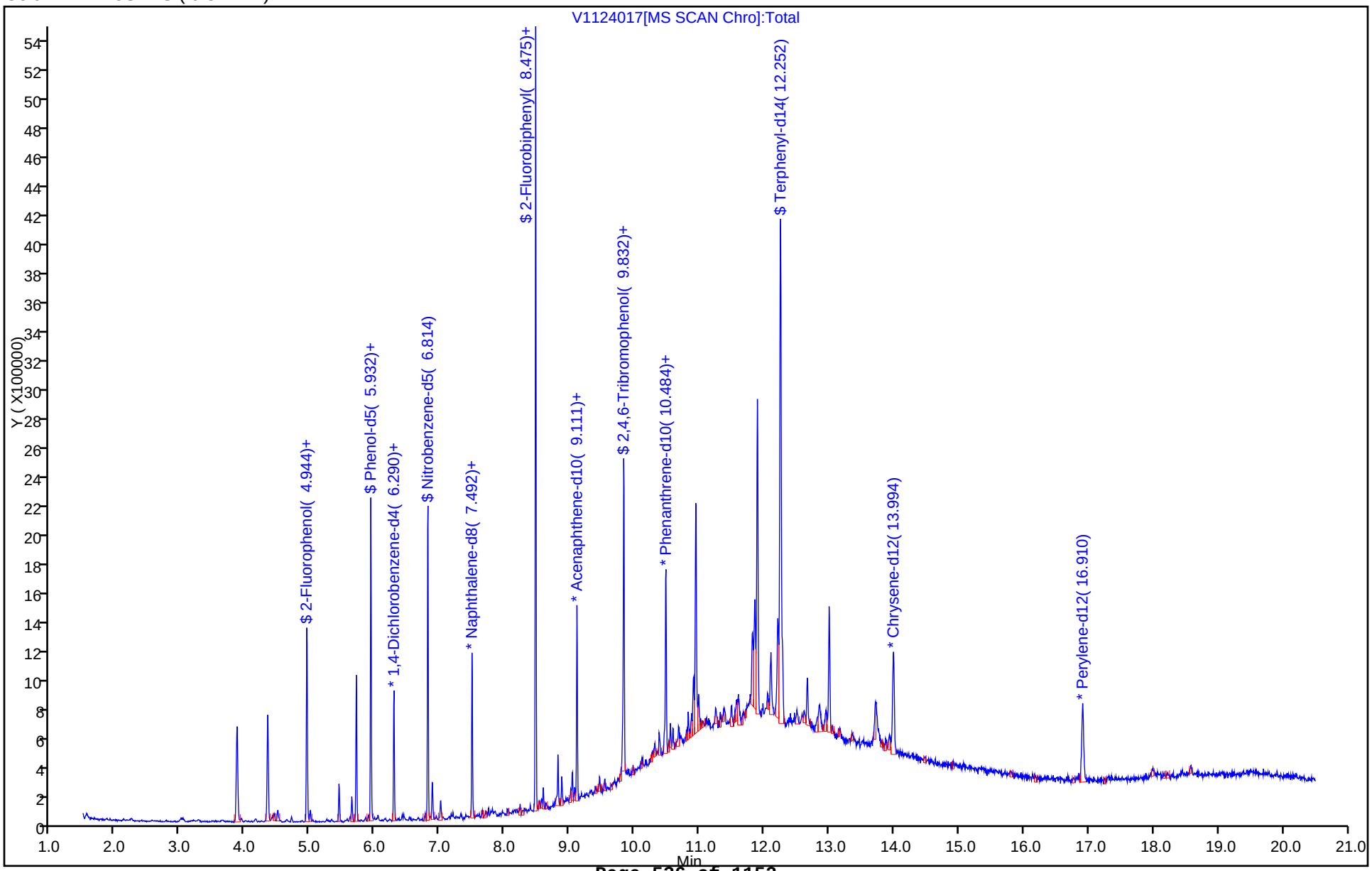
SVTAPITINTRNi_00006 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 25-Nov-2014 04:12:33 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141124-4564.b\V1124017.D				
Injection Date:	24-Nov-2014 19:08:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	180-39026-E-2-A	Lab Sample ID:	180-39026-2	Worklist Smp#:	17
Client ID:	ST-UNNAMED-111614				
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-DUP1-111614 | Lab Sample ID: 180-39026-3

Matrix: Water | Lab File ID: V1124018.D

Analysis Method: 8270D LL | Date Collected: 11/16/2014 00:00

Extract. Method: 3520C | Date Extracted: 11/20/2014 09:07

Sample wt/vol: 260(mL) | Date Analyzed: 11/24/2014 19:35

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 126233 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		0.19	0.028
208-96-8	Acenaphthylene	ND		0.19	0.021
120-12-7	Anthracene	ND		0.19	0.018
92-87-5	Benzidine	ND		19	4.6
56-55-3	Benzo[a]anthracene	ND		0.19	0.035
205-99-2	Benzo[b]fluoranthene	ND		0.19	0.047
207-08-9	Benzo[k]fluoranthene	ND		0.19	0.029
65-85-0	Benzoic acid	ND		4.8	1.6
191-24-2	Benzo[g,h,i]perylene	ND		0.19	0.028
50-32-8	Benzo[a]pyrene	ND		0.19	0.027
111-91-1	Bis(2-chloroethoxy)methane	ND		0.96	0.13
111-44-4	Bis(2-chloroethyl)ether	ND		0.96	0.030
117-81-7	Bis(2-ethylhexyl) phthalate	ND		1.9	0.42
108-60-1	2,2'-oxybis[1-chloropropane]	ND		0.96	0.023
101-55-3	4-Bromophenyl phenyl ether	ND		0.96	0.11
7005-72-3	4-Chlorophenyl phenyl ether	ND		0.96	0.077
91-58-7	2-Chloronaphthalene	ND		0.19	0.030
85-68-7	Butyl benzyl phthalate	0.51	J	0.96	0.21
218-01-9	Chrysene	ND		0.19	0.030
53-70-3	Dibenz(a,h)anthracene	ND		0.19	0.026
84-74-2	Di-n-butyl phthalate	ND		0.96	0.23
117-84-0	Di-n-octyl phthalate	ND		0.96	0.20
84-66-2	Diethyl phthalate	ND		0.96	0.29
131-11-3	Dimethyl phthalate	ND		0.96	0.18
91-94-1	3,3'-Dichlorobenzidine	ND		0.96	0.14
121-14-2	2,4-Dinitrotoluene	ND		0.96	0.21
606-20-2	2,6-Dinitrotoluene	ND		0.96	0.13
95-57-8	2-Chlorophenol	ND		0.96	0.22
120-83-2	2,4-Dichlorophenol	ND		0.96	0.065
105-67-9	2,4-Dimethylphenol	ND		0.96	0.16
51-28-5	2,4-Dinitrophenol	ND		4.8	2.4
88-75-5	2-Nitrophenol	ND		0.96	0.11
88-06-2	2,4,6-Trichlorophenol	ND		0.96	0.29
122-66-7	1,2-Diphenylhydrazine(as Azobenzene)	ND		0.96	0.11

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-DUP1-111614 | Lab Sample ID: 180-39026-3

Matrix: Water | Lab File ID: V1124018.D

Analysis Method: 8270D LL | Date Collected: 11/16/2014 00:00

Extract. Method: 3520C | Date Extracted: 11/20/2014 09:07

Sample wt/vol: 260(mL) | Date Analyzed: 11/24/2014 19:35

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 126233 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-82-1	1,2,4-Trichlorobenzene	ND		0.96	0.082
59-50-7	4-Chloro-3-methylphenol	ND		0.96	0.16
100-02-7	4-Nitrophenol	ND		4.8	0.77
534-52-1	4,6-Dinitro-2-methylphenol	ND		4.8	1.5
206-44-0	Fluoranthene	ND		0.19	0.020
86-73-7	Fluorene	ND		0.19	0.023
118-74-1	Hexachlorobenzene	ND		0.96	0.059
87-68-3	Hexachlorobutadiene	ND		0.96	0.090
77-47-4	Hexachlorocyclopentadiene	ND		0.96	0.13
67-72-1	Hexachloroethane	ND		0.96	0.13
193-39-5	Indeno[1,2,3-cd]pyrene	ND		0.19	0.042
78-59-1	Isophorone	ND		0.96	0.071
91-20-3	Naphthalene	ND		0.19	0.022
98-95-3	Nitrobenzene	ND		1.9	0.14
621-64-7	N-Nitrosodi-n-propylamine	ND		0.96	0.048
62-75-9	N-Nitrosodimethylamine	ND		0.96	0.11
86-30-6	N-Nitrosodiphenylamine	ND		0.96	0.12
85-01-8	Phenanthrene	ND		0.19	0.040
129-00-0	Pyrene	ND		0.19	0.022
87-86-5	Pentachlorophenol	ND		0.96	0.48
108-95-2	Phenol	ND		0.96	0.053

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	62		30-150
321-60-8	2-Fluorobiphenyl	76		30-150
367-12-4	2-Fluorophenol (Surr)	26	X	30-150
4165-60-0	Nitrobenzene-d5 (Surr)	70		30-150
4165-62-2	Phenol-d5 (Surr)	44		30-150
1718-51-0	Terphenyl-d14 (Surr)	74		10-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141124-4564.b\V1124018.D
Lims ID: 180-39026-E-3-A Lab Sample ID: 180-39026-3
Client ID: ST-DUP1-111614
Sample Type: Client
Inject. Date: 24-Nov-2014 19:35:30 ALS Bottle#: 17 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004564-018
Misc. Info.: 180-39026-E-3-A
Operator ID: 003200 Instrument ID: CH731

Method: \\PITCHROM\ChromData\CH731\20141124-4564.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 25-Nov-2014 04:12:16 Calib Date: 18-Nov-2014 07:43:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: piccolinov Date: 25-Nov-2014 04:01:46

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.285	6.277	0.008	90	114910	8.00	
* 2 Naphthalene-d8	136	7.487	7.479	0.008	97	388187	8.00	
* 3 Acenaphthene-d10	164	9.106	9.098	0.008	92	262896	8.00	
* 4 Phenanthrene-d10	188	10.474	10.465	0.009	96	525712	8.00	
* 5 Chrysene-d12	240	13.978	13.948	0.030	95	489879	8.00	
* 6 Perylene-d12	264	16.890	16.855	0.036	97	425707	8.00	
$ 7 2-Fluorophenol	112	4.939	4.931	0.008	89	195058	10.5	
$ 8 Phenol-d5	99	5.928	5.919	0.009	85	399448	17.7	
$ 9 Nitrobenzene-d5	82	6.804	6.801	0.003	91	766719	28.0	
$ 10 2-Fluorobiphenyl	172	8.470	8.462	0.008	99	1550351	30.6	
$ 11 2,4,6-Tribromophenol	330	9.827	9.819	0.008	80	157245	24.9	
$ 12 Terphenyl-d14	244	12.237	12.212	0.025	99	1731824	29.7	
14 N-Nitrosodimethylamine	74		2.490				ND	
27 Phenol	94		5.935				ND	
29 Bis(2-chloroethyl)ether	93		6.015				ND	
31 2-Chlorophenol	128		6.074				ND	
40 2,2'-oxybis[1-chloropropan	45		6.539				ND	
44 N-Nitrosodi-n-propylamine	70		6.656				ND	
47 Hexachloroethane	117		6.769				ND	
48 Nitrobenzene	77		6.817				ND	
50 Isophorone	82		7.041				ND	
51 2-Nitrophenol	139		7.121				ND	
52 2,4-Dimethylphenol	107		7.148				ND	
56 Benzoic acid	122		7.196				ND	
55 Bis(2-chloroethoxy)methane	93		7.233				ND	
57 2,4-Dichlorophenol	162		7.340				ND	
59 1,2,4-Trichlorobenzene	180		7.426				ND	
60 Naphthalene	128		7.500				ND	
64 Hexachlorobutadiene	225		7.618				ND	
70 4-Chloro-3-methylphenol	107		7.965				ND	
76 Hexachlorocyclopentadiene	237		8.286				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
78 2,4,6-Trichlorophenol	196		8.387				ND	
81 2-Chloronaphthalene	162		8.585				ND	
86 Dimethyl phthalate	163		8.809				ND	
88 2,6-Dinitrotoluene	165		8.868				ND	
89 Acenaphthylene	152		8.970				ND	
92 2,4-Dinitrophenol	184		9.124				ND	
91 Acenaphthene	153		9.124				ND	
93 4-Nitrophenol	109		9.162				ND	
94 2,4-Dinitrotoluene	165		9.242				ND	
101 Diethyl phthalate	149	9.453	9.445	0.008	93	15399	0.3144	
104 4-Chlorophenyl phenyl ethe	204		9.579				ND	
106 Fluorene	166		9.600				ND	
108 4,6-Dinitro-2-methylphenol	198		9.621				ND	
109 N-Nitrosodiphenylamine	169		9.680				ND	
111 1,2-Diphenylhydrazine	77		9.723				ND	
116 4-Bromophenyl phenyl ether	248		10.027				ND	
118 Hexachlorobenzene	284		10.113				ND	
122 Pentachlorophenol	266		10.284				ND	
126 Phenanthrene	178		10.487				ND	
128 Anthracene	178		10.535				ND	
132 Di-n-butyl phthalate	149	10.981	10.962	0.019	96	31032	0.4331	
137 Fluoranthene	202		11.763				ND	
138 Benzidine	184		11.886				ND	
139 Pyrene	202		12.063				ND	
144 Butyl benzyl phthalate	149	12.920	12.896	0.024	51	28988	1.06	
149 3,3'-Dichlorobenzidine	252		13.847				ND	
151 Bis(2-ethylhexyl) phthalat	149	13.914	13.884	0.030	88	31232	0.8571	
152 Benzo[a]anthracene	228	13.909	13.927	-0.018	20	2072	0.0281	
153 Chrysene	228		13.996				ND	
156 Di-n-octyl phthalate	149		15.177				ND	
158 Benzo[b]fluoranthene	252		16.059				ND	
159 Benzo[k]fluoranthene	252		16.112				ND	
160 Benzo[a]pyrene	252		16.742				ND	
163 Indeno[1,2,3-cd]pyrene	276		19.066				ND	
164 Dibenz(a,h)anthracene	278		19.093				ND	
165 Benzo[g,h,i]perylene	276		19.654				ND	

Reagents:

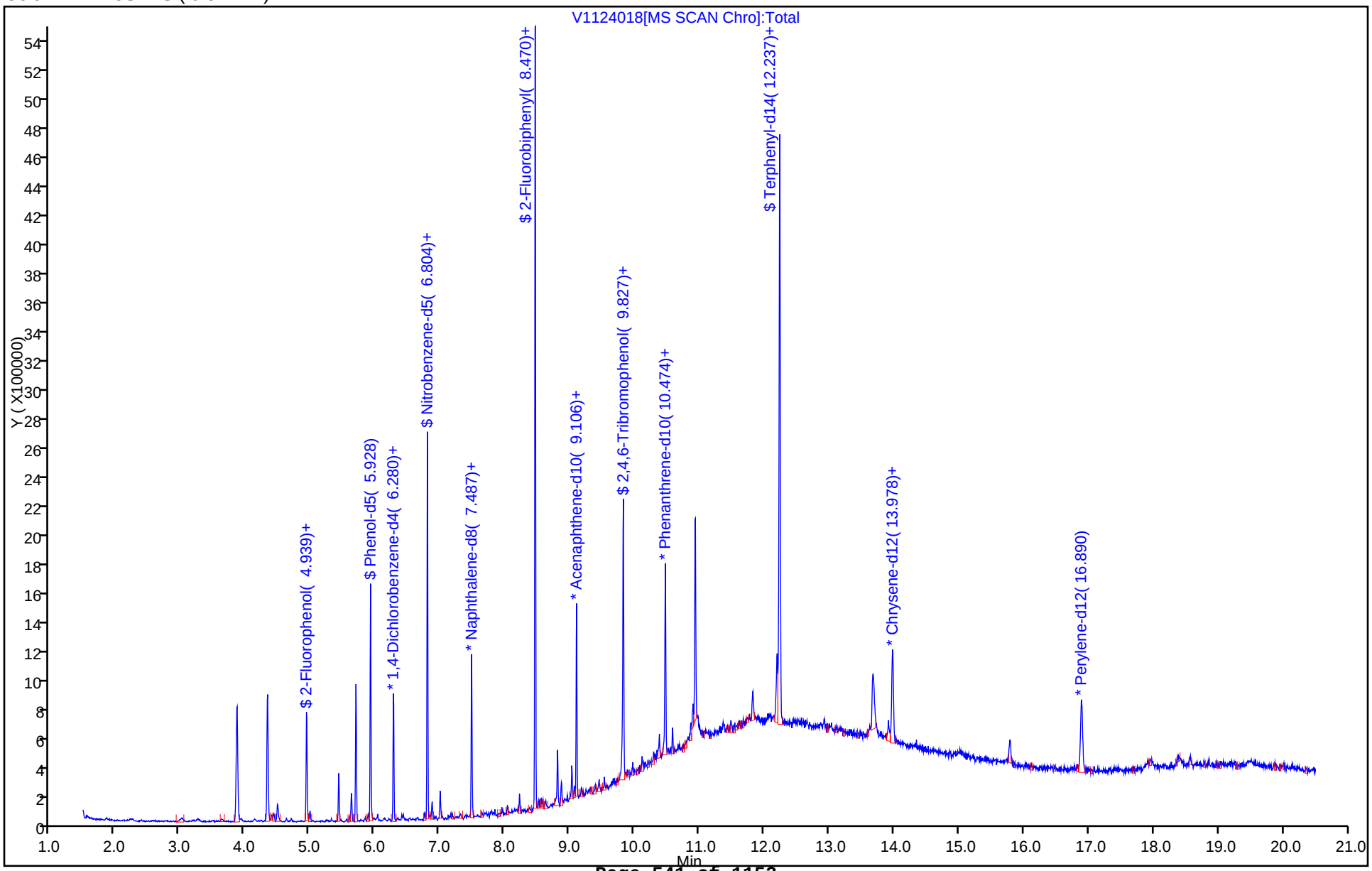
SVTAPITINTRNi_00006 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 25-Nov-2014 04:12:34 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141124-4564.b\V1124018.D				
Injection Date:	24-Nov-2014 19:35:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	180-39026-E-3-A	Lab Sample ID:	180-39026-3	Worklist Smp#:	18
Client ID:	ST-DUP1-111614				
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)

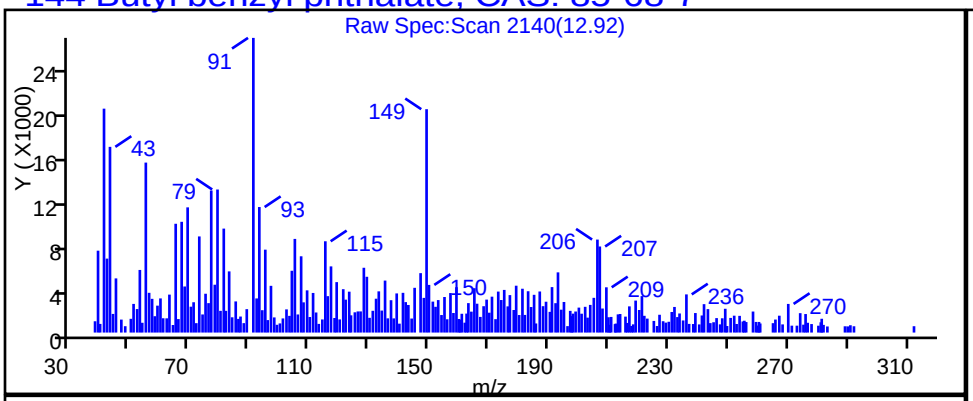


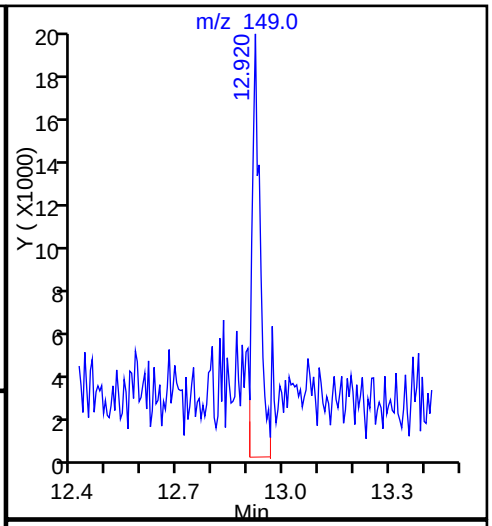
Report Date: 25-Nov-2014 04:12:35 Chrom Revision: 2.2 06-Nov-2014 14:50:32

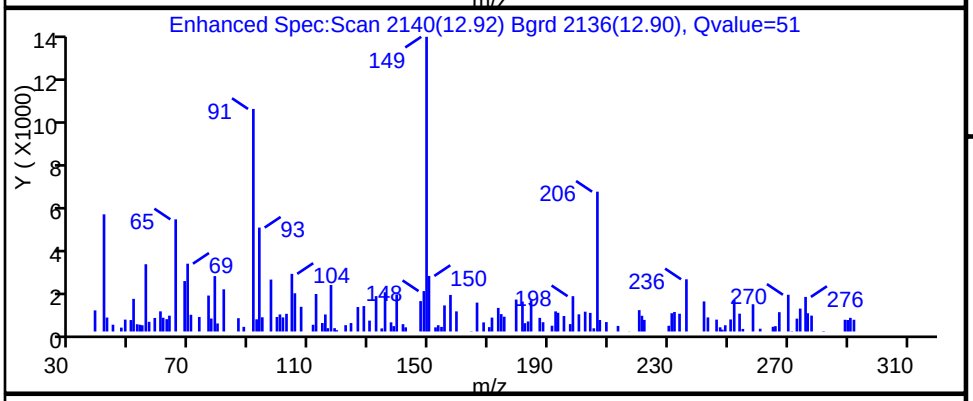
TestAmerica Pittsburgh

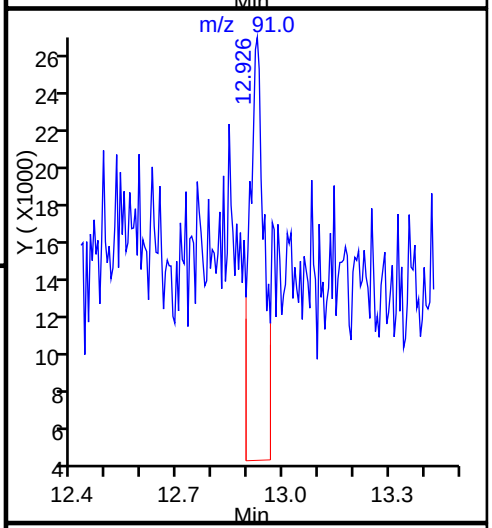
Data File:	\\PITCHROM\ChromData\CH731\20141124-4564.b\V1124018.D				
Injection Date:	24-Nov-2014 19:35:30	Instrument ID:	CH731		
Lims ID:	180-39026-E-3-A	Lab Sample ID:	180-39026-3		
Client ID:	ST-DUP1-111614				
Operator ID:	003200	ALS Bottle#:	17	Worklist Smp#:	18
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

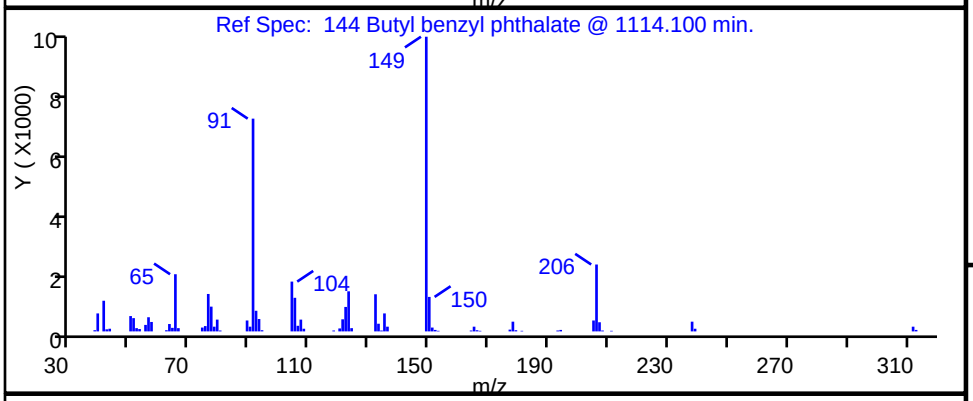
144 Butyl benzyl phthalate, CAS: 85-68-7

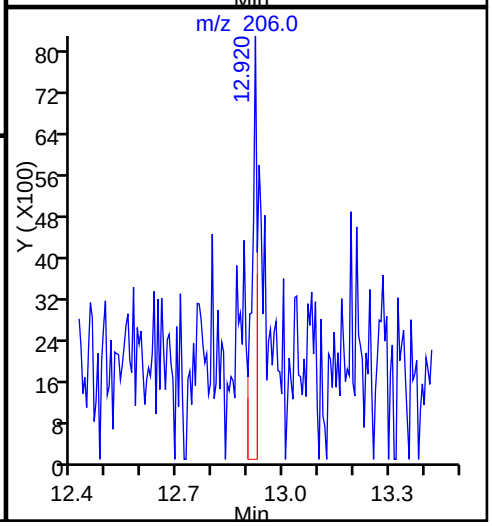


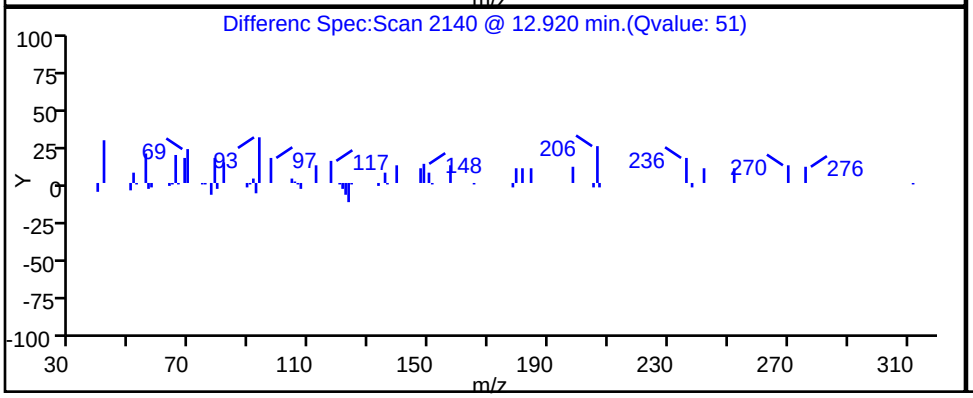












FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-DUP1-111614 RE | Lab Sample ID: 180-39026-3 RE

Matrix: Water | Lab File ID: D1128023.D

Analysis Method: 8270D LL | Date Collected: 11/16/2014 00:00

Extract. Method: 3520C | Date Extracted: 11/25/2014 09:59

Sample wt/vol: 260(mL) | Date Analyzed: 11/28/2014 22:11

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 126682 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND	H	0.19	0.028
208-96-8	Acenaphthylene	ND	H	0.19	0.021
120-12-7	Anthracene	0.019	J H	0.19	0.018
92-87-5	Benzidine	ND	H	19	4.6
56-55-3	Benzo[a]anthracene	ND	H	0.19	0.035
205-99-2	Benzo[b]fluoranthene	ND	H	0.19	0.047
207-08-9	Benzo[k]fluoranthene	ND	H	0.19	0.029
65-85-0	Benzoic acid	ND	H	4.8	1.6
191-24-2	Benzo[g,h,i]perylene	ND	H	0.19	0.028
50-32-8	Benzo[a]pyrene	ND	H	0.19	0.027
111-91-1	Bis(2-chloroethoxy)methane	ND	H	0.96	0.13
111-44-4	Bis(2-chloroethyl)ether	ND	H	0.96	0.030
117-81-7	Bis(2-ethylhexyl) phthalate	0.42	J H	1.9	0.42
108-60-1	2,2'-oxybis[1-chloropropane]	ND	H	0.96	0.023
101-55-3	4-Bromophenyl phenyl ether	ND	H	0.96	0.11
7005-72-3	4-Chlorophenyl phenyl ether	ND	H	0.96	0.077
91-58-7	2-Chloronaphthalene	ND	H	0.19	0.030
85-68-7	Butyl benzyl phthalate	0.47	J H	0.96	0.21
218-01-9	Chrysene	ND	H	0.19	0.030
53-70-3	Dibenz(a,h)anthracene	ND	H	0.19	0.026
84-74-2	Di-n-butyl phthalate	ND	H	0.96	0.23
117-84-0	Di-n-octyl phthalate	ND	H	0.96	0.20
84-66-2	Diethyl phthalate	0.53	J H	0.96	0.29
131-11-3	Dimethyl phthalate	ND	H	0.96	0.18
91-94-1	3,3'-Dichlorobenzidine	ND	H	0.96	0.14
121-14-2	2,4-Dinitrotoluene	ND	H	0.96	0.21
606-20-2	2,6-Dinitrotoluene	ND	H	0.96	0.13
95-57-8	2-Chlorophenol	ND	H	0.96	0.22
120-83-2	2,4-Dichlorophenol	ND	H	0.96	0.065
105-67-9	2,4-Dimethylphenol	ND	H	0.96	0.16
51-28-5	2,4-Dinitrophenol	ND	H	4.8	2.4
88-75-5	2-Nitrophenol	ND	H	0.96	0.11
88-06-2	2,4,6-Trichlorophenol	ND	H	0.96	0.29
122-66-7	1,2-Diphenylhydrazine(as Azobenzene)	ND	H	0.96	0.11

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-DUP1-111614 RE | Lab Sample ID: 180-39026-3 RE

Matrix: Water | Lab File ID: D1128023.D

Analysis Method: 8270D LL | Date Collected: 11/16/2014 00:00

Extract. Method: 3520C | Date Extracted: 11/25/2014 09:59

Sample wt/vol: 260(mL) | Date Analyzed: 11/28/2014 22:11

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 126682 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-82-1	*1,2,4-Trichlorobenzene*	*ND*	*H*	*0.96*	*0.082*
59-50-7	*4-Chloro-3-methylphenol*	*ND*	*H*	*0.96*	*0.16*
100-02-7	*4-Nitrophenol*	*ND*	*H*	*4.8*	*0.77*
534-52-1	*4,6-Dinitro-2-methylphenol*	*ND*	*H*	*4.8*	*1.5*
206-44-0	*Fluoranthene*	*ND*	*H*	*0.19*	*0.020*
86-73-7	*Fluorene*	*ND*	*H*	*0.19*	*0.023*
118-74-1	*Hexachlorobenzene*	*ND*	*H*	*0.96*	*0.059*
87-68-3	*Hexachlorobutadiene*	*ND*	*H*	*0.96*	*0.090*
77-47-4	*Hexachlorocyclopentadiene*	*ND*	*H*	*0.96*	*0.13*
67-72-1	*Hexachloroethane*	*ND*	*H*	*0.96*	*0.13*
193-39-5	*Indeno[1,2,3-cd]pyrene*	*ND*	*H*	*0.19*	*0.042*
78-59-1	*Isophorone*	*ND*	*H*	*0.96*	*0.071*
91-20-3	*Naphthalene*	*ND*	*H*	*0.19*	*0.022*
98-95-3	*Nitrobenzene*	*ND*	*H*	*1.9*	*0.14*
621-64-7	*N-Nitrosodi-n-propylamine*	*ND*	*H*	*0.96*	*0.048*
62-75-9	*N-Nitrosodimethylamine*	*ND*	*H*	*0.96*	*0.11*
86-30-6	*N-Nitrosodiphenylamine*	*ND*	*H*	*0.96*	*0.12*
85-01-8	*Phenanthrene*	*ND*	*H*	*0.19*	*0.040*
129-00-0	*Pyrene*	*ND*	*H*	*0.19*	*0.022*
87-86-5	*Pentachlorophenol*	*ND*	*H*	*0.96*	*0.48*
108-95-2	*Phenol*	*ND*	*H*	*0.96*	*0.053*

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	71		30-150
321-60-8	2-Fluorobiphenyl	68		30-150
367-12-4	2-Fluorophenol (Surr)	34		30-150
4165-60-0	Nitrobenzene-d5 (Surr)	63		30-150
4165-62-2	Phenol-d5 (Surr)	54		30-150
1718-51-0	Terphenyl-d14 (Surr)	76		10-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20141128-4633.b\D1128023.D
Lims ID: 180-39026-F-3-A Lab Sample ID: 180-39026-3
Client ID: ST-DUP1-111614
Sample Type: Client
Inject. Date: 28-Nov-2014 22:11:30 ALS Bottle#: 22 Worklist Smp#: 23
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004633-023
Misc. Info.: 180-39026-F-3-A
Operator ID: 003200 Instrument ID: CH732

Method: \\PITCHROM\ChromData\CH732\20141128-4633.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 01-Dec-2014 02:15:20 Calib Date: 12-Nov-2014 13:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: piccolinov Date: 01-Dec-2014 02:10:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.271	6.287	-0.016	94	205445	8.00	
* 2 Naphthalene-d8	136	7.585	7.596	-0.011	99	919680	8.00	
* 3 Acenaphthene-d10	164	9.327	9.327	0.000	91	558503	8.00	
* 4 Phenanthrene-d10	188	10.806	10.801	0.005	97	898458	8.00	
* 5 Chrysene-d12	240	14.696	14.674	0.022	96	684635	8.00	
* 6 Perylene-d12	264	17.639	17.607	0.032	95	542897	8.00	
$ 7 2-Fluorophenol	112	4.791	4.818	-0.027	89	337143	13.5	
$ 8 Phenol-d5	99	5.881	5.902	-0.021	97	794891	21.4	
$ 9 Nitrobenzene-d5	82	6.842	6.853	-0.011	87	834810	25.1	
$ 10 2-Fluorobiphenyl	172	8.648	8.648	0.000	99	2414891	27.1	
$ 11 2,4,6-Tribromophenol	330	10.096	10.091	0.005	93	252633	28.2	
$ 12 Terphenyl-d14	244	12.804	12.788	0.016	99	2282161	30.5	
14 N-Nitrosodimethylamine	74		2.269				ND	
26 Phenol	94		5.913				ND	
29 Bis(2-chloroethyl)ether	93		5.998				ND	
30 2-Chlorophenol	128		6.062				ND	
38 2,2'-oxybis[1-chloropropan	45		6.570				ND	
41 N-Nitrosodi-n-propylamine	70		6.698				ND	
45 Hexachloroethane	117		6.821				ND	
46 Nitrobenzene	77		6.875				ND	
48 Isophorone	82		7.115				ND	
49 2-Nitrophenol	139		7.206				ND	
50 2,4-Dimethylphenol	107		7.238				ND	
52 Benzoic acid	122	7.275	7.291	-0.016	85	8216	2.76	
53 Bis(2-chloroethoxy)methane	93		7.323				ND	
54 2,4-Dichlorophenol	162		7.446				ND	
56 1,2,4-Trichlorobenzene	180		7.537				ND	
58 Naphthalene	128	7.606	7.617	-0.011	85	5238	0.0441	
62 Hexachlorobutadiene	225		7.740				ND	
67 4-Chloro-3-methylphenol	107		8.119				ND	
72 Hexachlorocyclopentadiene	237		8.461				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
74 2,4,6-Trichlorophenol	196		8.568				ND	
77 2-Chloronaphthalene	162		8.782				ND	
82 Dimethyl phthalate	163		9.017				ND	
84 2,6-Dinitrotoluene	165		9.086				ND	
85 Acenaphthylene	152		9.188				ND	
87 2,4-Dinitrophenol	184		9.353				ND	
88 Acenaphthene	153		9.359				ND	
89 4-Nitrophenol	109		9.396				ND	
91 2,4-Dinitrotoluene	165		9.482				ND	
98 Diethyl phthalate	149	9.695	9.695	0.000	98	85264	1.10	
100 4-Chlorophenyl phenyl ethe	204		9.834				ND	
103 Fluorene	166		9.855				ND	
104 4,6-Dinitro-2-methylphenol	198		9.882				ND	
105 N-Nitrosodiphenylamine	169		9.946				ND	
90 1,2-Diphenylhydrazine	77		9.989				ND	
110 4-Bromophenyl phenyl ether	248		10.310				ND	
112 Hexachlorobenzene	284		10.406				ND	
116 Pentachlorophenol	266		10.593				ND	
121 Phenanthrene	178	10.833	10.828	0.005	53	9503	0.0736	
122 Anthracene	178	10.887	10.881	0.006	67	5303	0.0402	
126 Di-n-butyl phthalate	149	11.378	11.367	0.011	97	28506	0.2034	
131 Fluoranthene	202		12.281				ND	
132 Benzidine	184		12.425				ND	
133 Pyrene	202		12.612				ND	
138 Butyl benzyl phthalate	149	13.574	13.552	0.022	97	48862	0.9809	
144 3,3'-Dichlorobenzidine	252		14.573				ND	
145 Bis(2-ethylhexyl) phthalat	149	14.637	14.615	0.022	97	58300	0.8707	
146 Benzo[a]anthracene	228		14.653				ND	
147 Chrysene	228		14.722				ND	
150 Di-n-octyl phthalate	149		15.940				ND	
152 Benzo[b]fluoranthene	252		16.822				ND	
153 Benzo[k]fluoranthene	252		16.881				ND	
154 Benzo[a]pyrene	252		17.490				ND	
157 Indeno[1,2,3-cd]pyrene	276		20.107				ND	
158 Dibenz(a,h)anthracene	278		20.139				ND	
159 Benzo[g,h,i]perylene	276		20.828				ND	

Reagents:

SVTAPITINTRNi_00006 Amount Added: 1.00 Units: uL Run Reagent

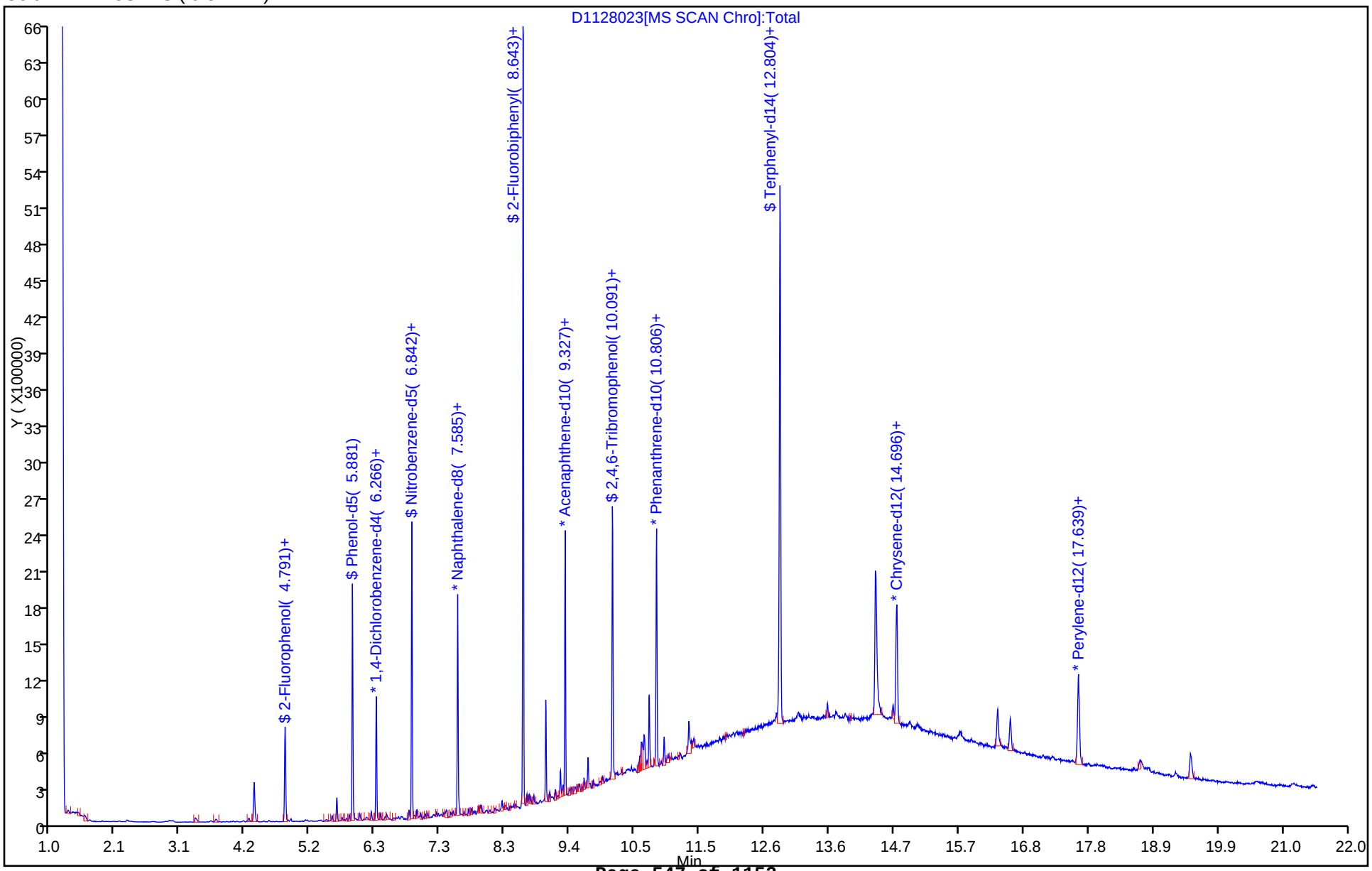
Report Date: 01-Dec-2014 02:15:50 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20141128-4633.b\D1128023.D

Injection Date:	28-Nov-2014 22:11:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	180-39026-F-3-A	Lab Sample ID:	180-39026-3	Worklist Smp#:	23
Client ID:	ST-DUP1-111614				
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)

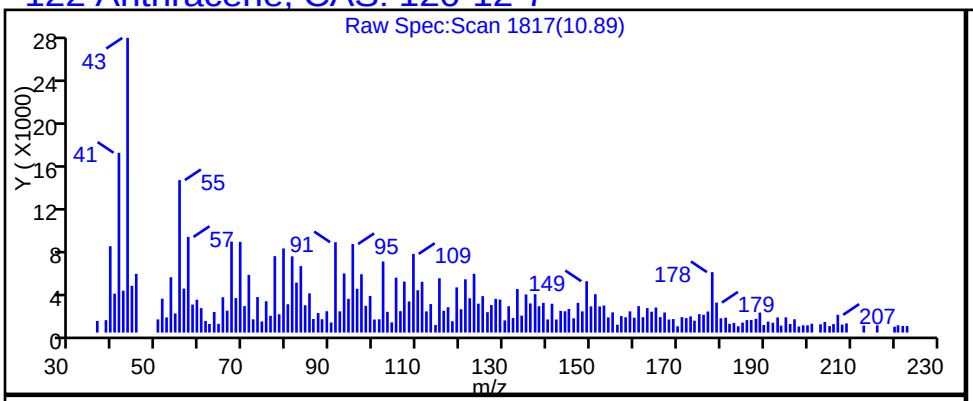


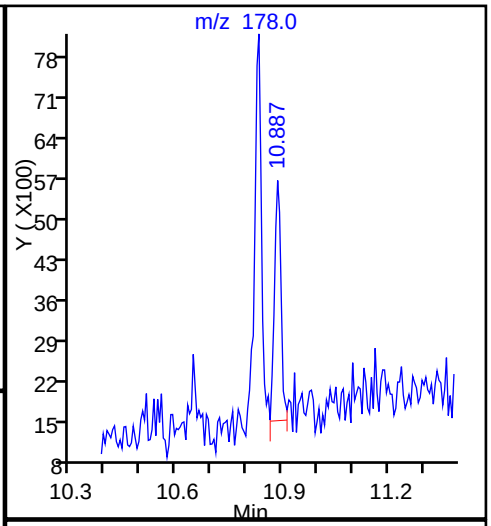
Report Date: 01-Dec-2014 02:15:50 Chrom Revision: 2.2 06-Nov-2014 14:50:32

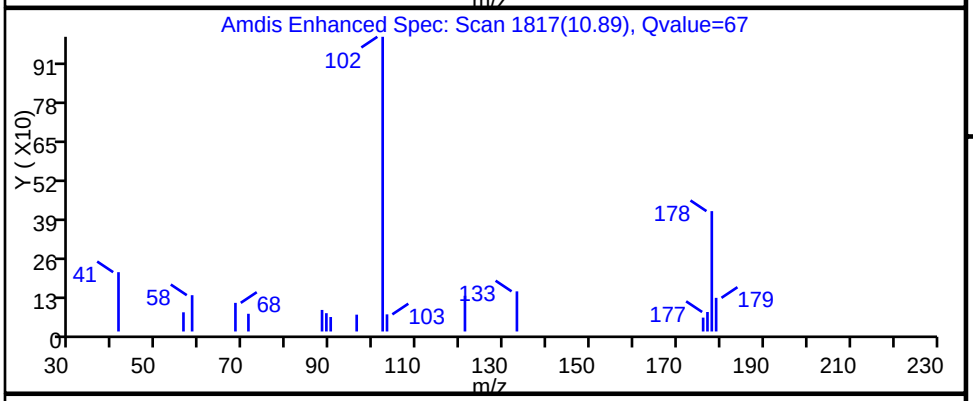
TestAmerica Pittsburgh

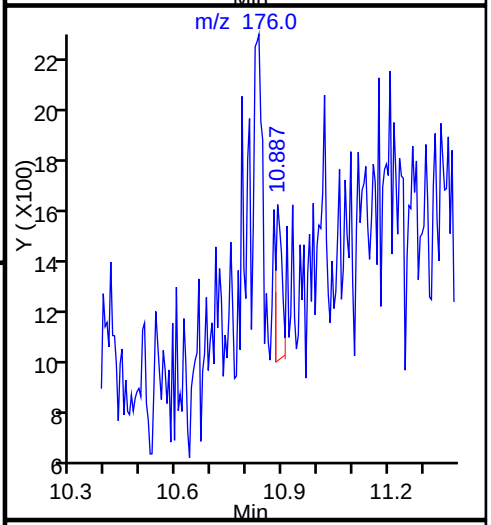
Data File:	\\PITCHROM\ChromData\CH732\20141128-4633.b\D1128023.D				
Injection Date:	28-Nov-2014 22:11:30	Instrument ID:	CH732		
Lims ID:	180-39026-F-3-A	Lab Sample ID:	180-39026-3		
Client ID:	ST-DUP1-111614				
Operator ID:	003200	ALS Bottle#:	22	Worklist Smp#:	23
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

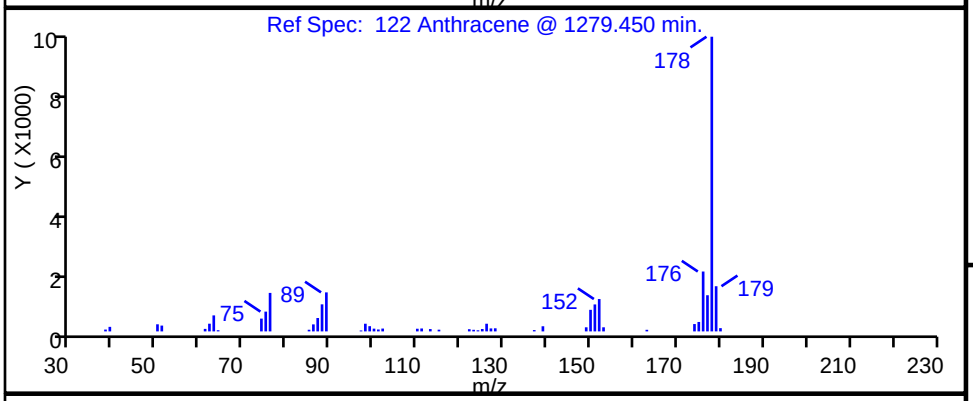
122 Anthracene, CAS: 120-12-7

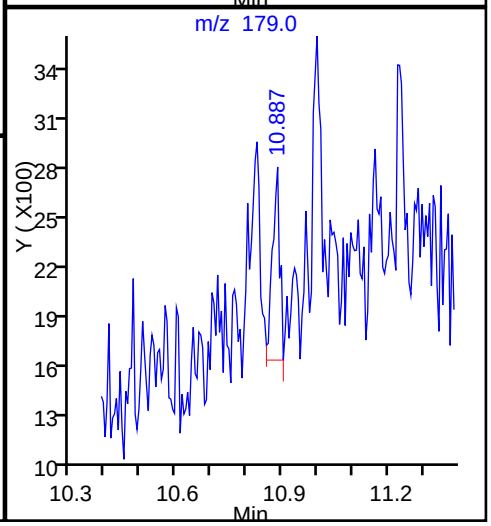


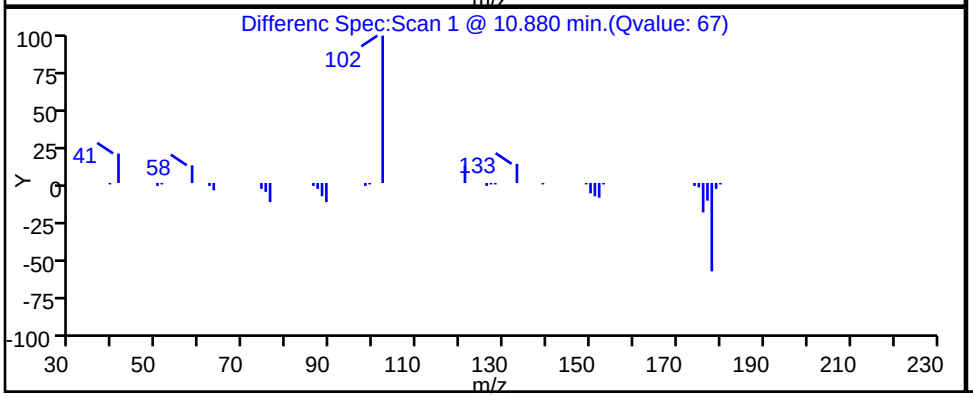










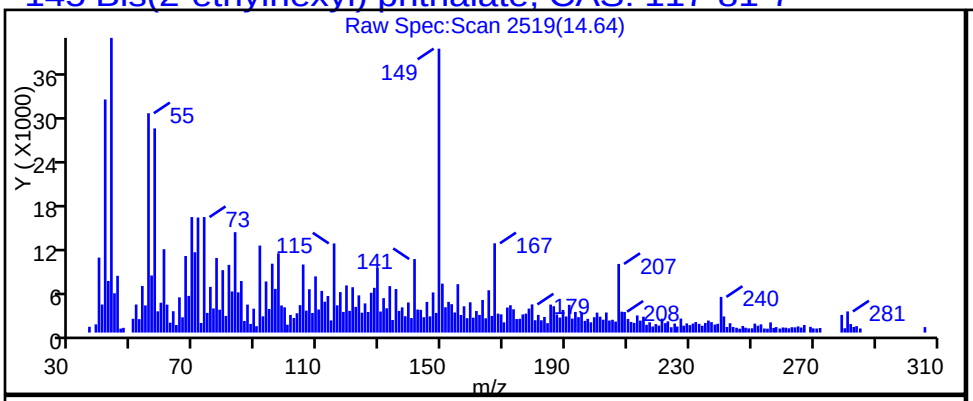


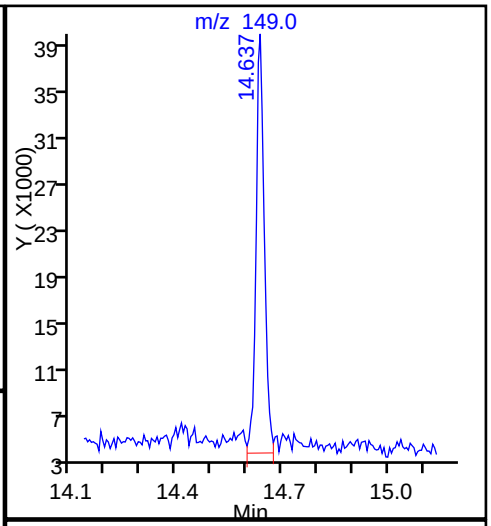
Report Date: 01-Dec-2014 02:15:50 Chrom Revision: 2.2 06-Nov-2014 14:50:32

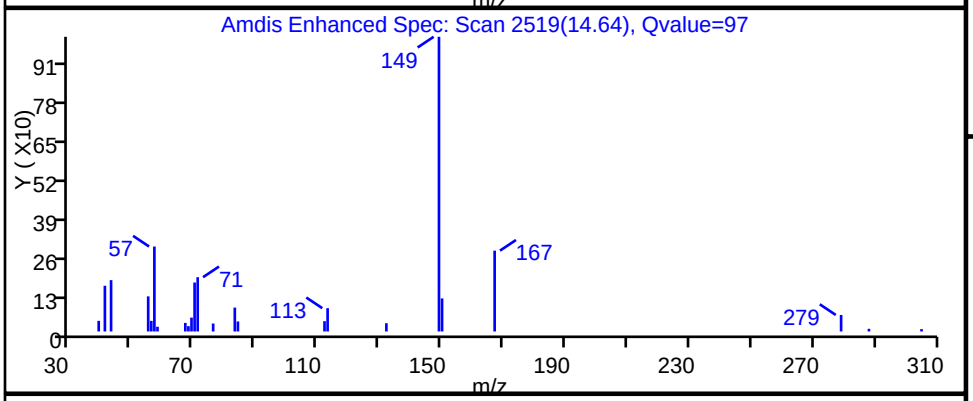
TestAmerica Pittsburgh

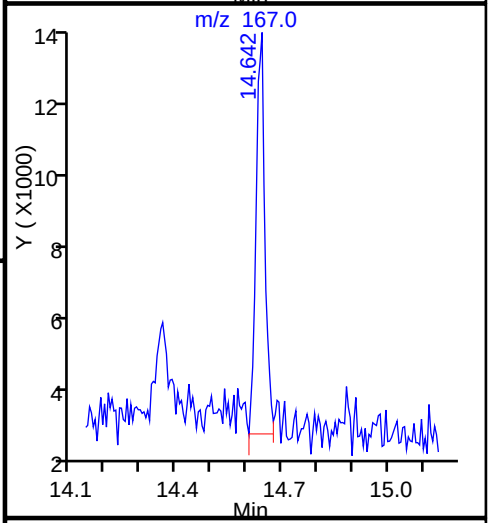
Data File:	\\PITCHROM\ChromData\CH732\20141128-4633.b\D1128023.D				
Injection Date:	28-Nov-2014 22:11:30	Instrument ID:	CH732		
Lims ID:	180-39026-F-3-A	Lab Sample ID:	180-39026-3		
Client ID:	ST-DUP1-111614				
Operator ID:	003200	ALS Bottle#:	22	Worklist Smp#:	23
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

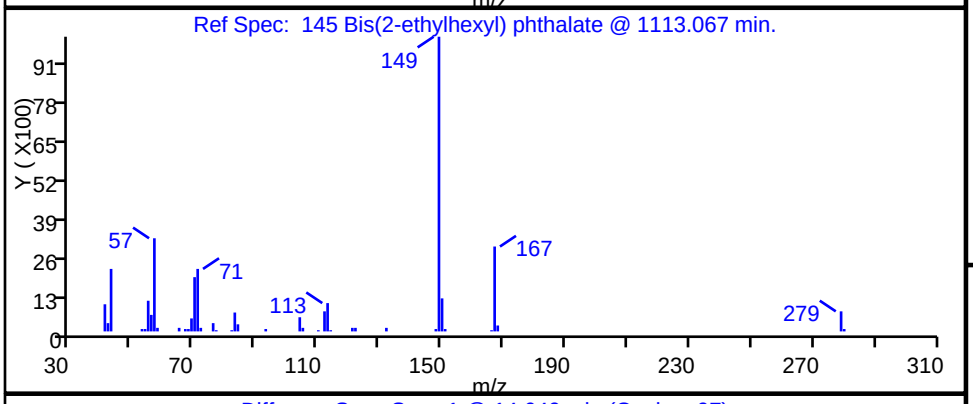
145 Bis(2-ethylhexyl) phthalate, CAS: 117-81-7

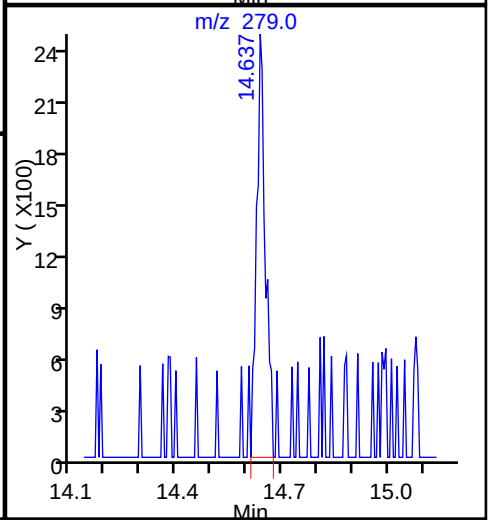


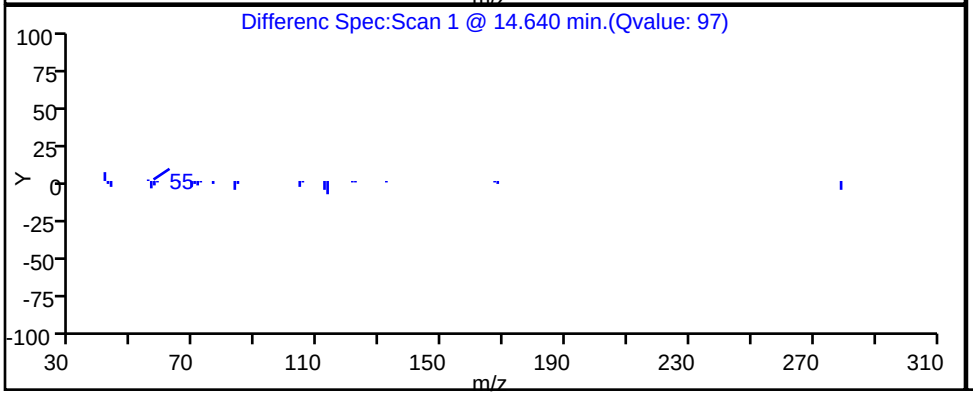










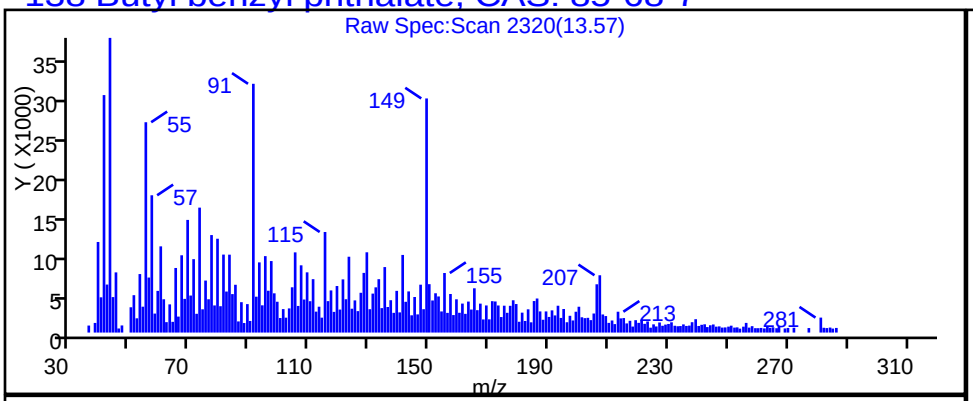


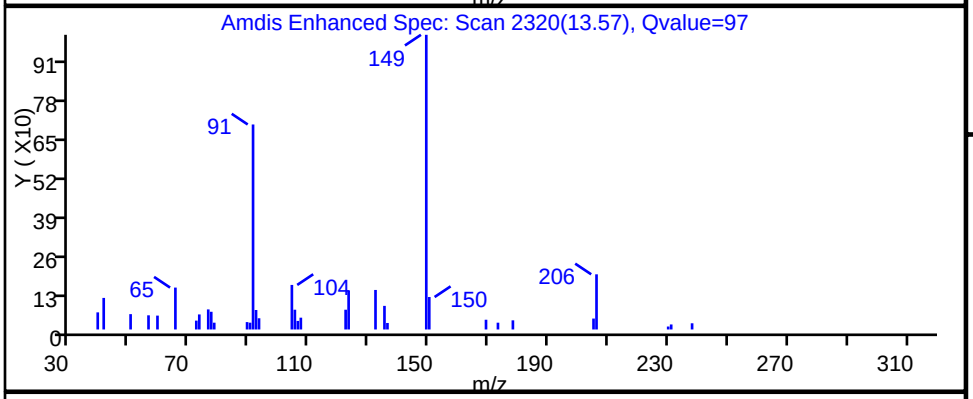
Report Date: 01-Dec-2014 02:15:50 Chrom Revision: 2.2 06-Nov-2014 14:50:32

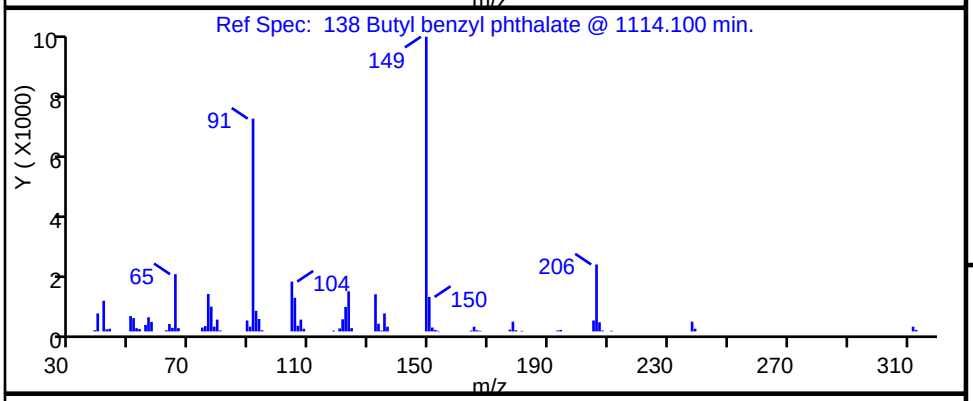
TestAmerica Pittsburgh

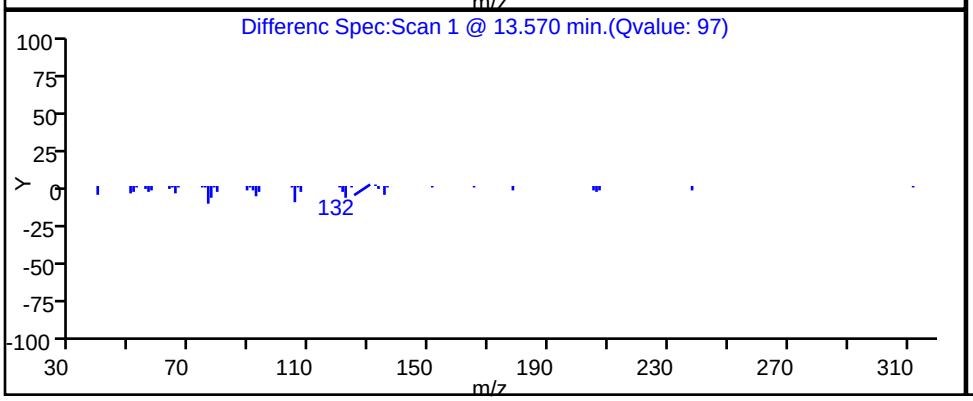
Data File:	\\PITCHROM\ChromData\CH732\20141128-4633.b\D1128023.D				
Injection Date:	28-Nov-2014 22:11:30	Instrument ID:	CH732		
Lims ID:	180-39026-F-3-A	Lab Sample ID:	180-39026-3		
Client ID:	ST-DUP1-111614				
Operator ID:	003200	ALS Bottle#:	22	Worklist Smp#:	23
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

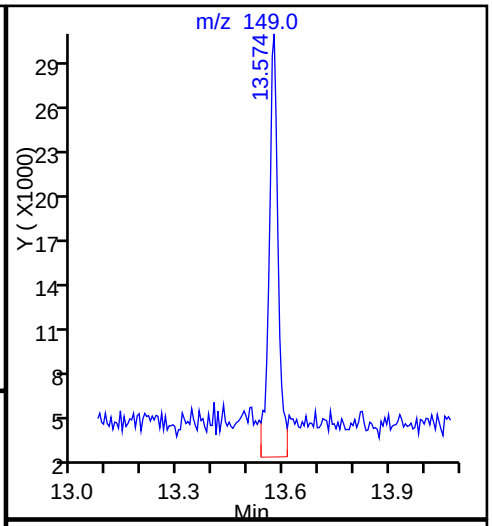
138 Butyl benzyl phthalate, CAS: 85-68-7

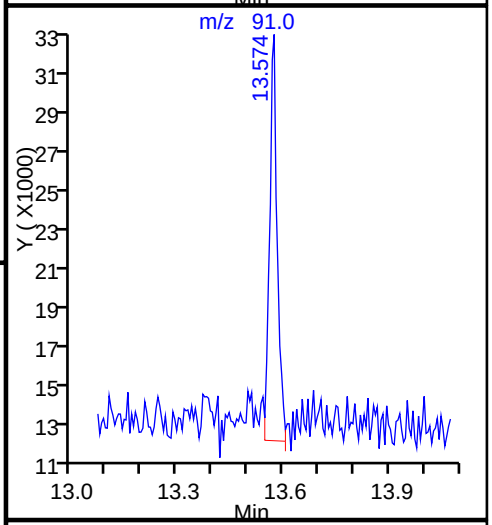


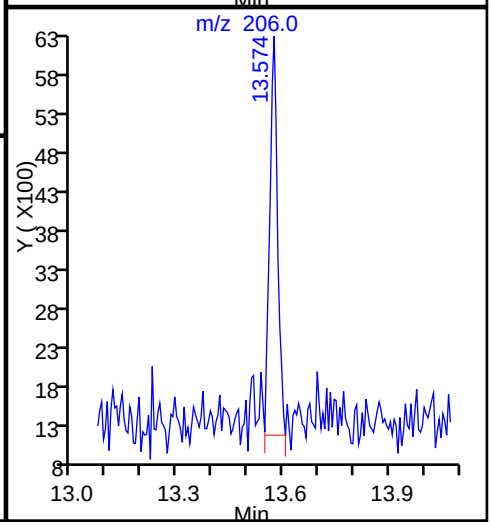










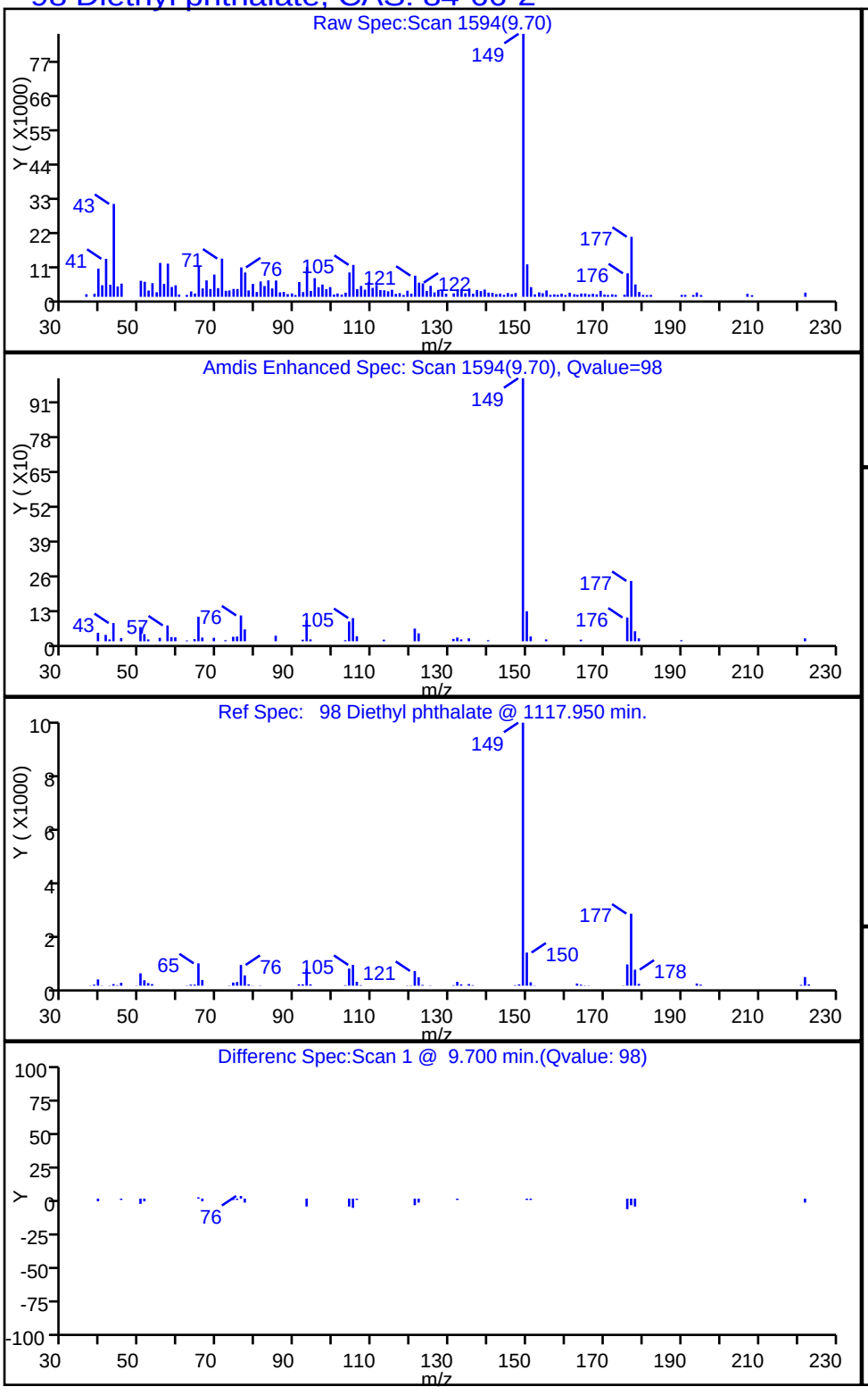


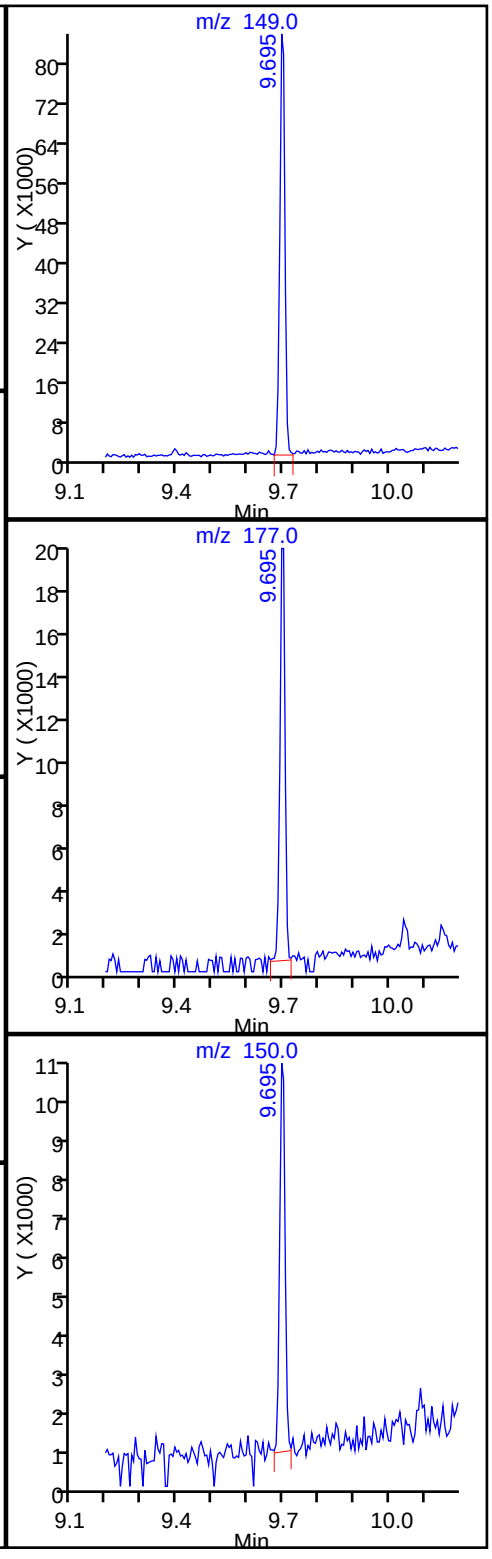
Report Date: 01-Dec-2014 02:15:50 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH732\20141128-4633.b\D1128023.D				
Injection Date:	28-Nov-2014 22:11:30	Instrument ID:	CH732		
Lims ID:	180-39026-F-3-A	Lab Sample ID:	180-39026-3		
Client ID:	ST-DUP1-111614				
Operator ID:	003200	ALS Bottle#:	22	Worklist Smp#:	23
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

98 Diethyl phthalate, CAS: 84-66-2





FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-014-111614 | Lab Sample ID: 180-39026-4

Matrix: Water | Lab File ID: V1124019.D

Analysis Method: 8270D LL | Date Collected: 11/16/2014 19:15

Extract. Method: 3520C | Date Extracted: 11/20/2014 09:07

Sample wt/vol: 260(mL) | Date Analyzed: 11/24/2014 20:02

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 126233 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		0.19	0.028
208-96-8	Acenaphthylene	ND		0.19	0.021
120-12-7	Anthracene	0.050	J	0.19	0.018
92-87-5	Benzidine	ND		19	4.6
56-55-3	Benzo[a]anthracene	ND		0.19	0.035
205-99-2	Benzo[b]fluoranthene	ND		0.19	0.047
207-08-9	Benzo[k]fluoranthene	ND		0.19	0.029
65-85-0	Benzoic acid	ND		4.8	1.6
191-24-2	Benzo[g,h,i]perylene	ND		0.19	0.028
50-32-8	Benzo[a]pyrene	ND		0.19	0.027
111-91-1	Bis(2-chloroethoxy)methane	ND		0.96	0.13
111-44-4	Bis(2-chloroethyl)ether	ND		0.96	0.030
117-81-7	Bis(2-ethylhexyl) phthalate	ND		1.9	0.42
108-60-1	2,2'-oxybis[1-chloropropane]	ND		0.96	0.023
101-55-3	4-Bromophenyl phenyl ether	ND		0.96	0.11
7005-72-3	4-Chlorophenyl phenyl ether	ND		0.96	0.077
91-58-7	2-Chloronaphthalene	ND		0.19	0.030
85-68-7	Butyl benzyl phthalate	0.35	J	0.96	0.21
218-01-9	Chrysene	ND		0.19	0.030
53-70-3	Dibenz(a,h)anthracene	ND		0.19	0.026
84-74-2	Di-n-butyl phthalate	ND		0.96	0.23
117-84-0	Di-n-octyl phthalate	ND		0.96	0.20
84-66-2	Diethyl phthalate	ND		0.96	0.29
131-11-3	Dimethyl phthalate	ND		0.96	0.18
91-94-1	3,3'-Dichlorobenzidine	ND		0.96	0.14
121-14-2	2,4-Dinitrotoluene	ND		0.96	0.21
606-20-2	2,6-Dinitrotoluene	ND		0.96	0.13
95-57-8	2-Chlorophenol	ND		0.96	0.22
120-83-2	2,4-Dichlorophenol	ND		0.96	0.065
105-67-9	2,4-Dimethylphenol	ND		0.96	0.16
51-28-5	2,4-Dinitrophenol	ND		4.8	2.4
88-75-5	2-Nitrophenol	ND		0.96	0.11
88-06-2	2,4,6-Trichlorophenol	ND		0.96	0.29
122-66-7	1,2-Diphenylhydrazine(as Azobenzene)	ND		0.96	0.11

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-014-111614 | Lab Sample ID: 180-39026-4

Matrix: Water | Lab File ID: V1124019.D

Analysis Method: 8270D LL | Date Collected: 11/16/2014 19:15

Extract. Method: 3520C | Date Extracted: 11/20/2014 09:07

Sample wt/vol: 260(mL) | Date Analyzed: 11/24/2014 20:02

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 126233 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-82-1	1,2,4-Trichlorobenzene	ND		0.96	0.082
59-50-7	4-Chloro-3-methylphenol	ND		0.96	0.16
100-02-7	4-Nitrophenol	ND		4.8	0.77
534-52-1	4,6-Dinitro-2-methylphenol	ND		4.8	1.5
206-44-0	Fluoranthene	0.11	J	0.19	0.020
86-73-7	Fluorene	0.14	J	0.19	0.023
118-74-1	Hexachlorobenzene	ND		0.96	0.059
87-68-3	Hexachlorobutadiene	ND		0.96	0.090
77-47-4	Hexachlorocyclopentadiene	ND		0.96	0.13
67-72-1	Hexachloroethane	ND		0.96	0.13
193-39-5	Indeno[1,2,3-cd]pyrene	ND		0.19	0.042
78-59-1	Isophorone	ND		0.96	0.071
91-20-3	Naphthalene	ND		0.19	0.022
98-95-3	Nitrobenzene	ND		1.9	0.14
621-64-7	N-Nitrosodi-n-propylamine	ND		0.96	0.048
62-75-9	N-Nitrosodimethylamine	ND		0.96	0.11
86-30-6	N-Nitrosodiphenylamine	ND		0.96	0.12
85-01-8	Phenanthrene	0.19		0.19	0.040
129-00-0	Pyrene	0.078	J	0.19	0.022
87-86-5	Pentachlorophenol	ND		0.96	0.48
108-95-2	Phenol	ND		0.96	0.053

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	66		30-150
321-60-8	2-Fluorobiphenyl	56		30-150
367-12-4	2-Fluorophenol (Surr)	41		30-150
4165-60-0	Nitrobenzene-d5 (Surr)	55		30-150
4165-62-2	Phenol-d5 (Surr)	51		30-150
1718-51-0	Terphenyl-d14 (Surr)	65		10-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141124-4564.b\V1124019.D
Lims ID: 180-39026-E-4-A Lab Sample ID: 180-39026-4
Client ID: ST-014-111614
Sample Type: Client
Inject. Date: 24-Nov-2014 20:02:30 ALS Bottle#: 18 Worklist Smp#: 19
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004564-019
Misc. Info.: 180-39026-E-4-A
Operator ID: 003200 Instrument ID: CH731

Method: \\PITCHROM\ChromData\CH731\20141124-4564.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 25-Nov-2014 04:12:16 Calib Date: 18-Nov-2014 07:43:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: piccolinov Date: 25-Nov-2014 04:02:41

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 1,4-Dichlorobenzene-d4	152	6.278	6.277	0.001	90	117868	8.00	
*	2 Naphthalene-d8	136	7.486	7.479	0.007	97	398836	8.00	
*	3 Acenaphthene-d10	164	9.104	9.098	0.006	91	298598	8.00	
*	4 Phenanthrene-d10	188	10.472	10.465	0.007	95	612663	8.00	
*	5 Chrysene-d12	240	13.971	13.948	0.023	95	579590	8.00	
*	6 Perylene-d12	264	16.888	16.855	0.034	97	449319	8.00	
$	7 2-Fluorophenol	112	4.943	4.931	0.012	89	311881	16.4	
$	8 Phenol-d5	99	5.926	5.919	0.007	86	474013	20.4	
$	9 Nitrobenzene-d5	82	6.802	6.801	0.001	91	614581	21.8	
$	10 2-Fluorobiphenyl	172	8.463	8.462	0.001	99	1296672	22.5	
$	11 2,4,6-Tribromophenol	330	9.825	9.819	0.006	84	195586	26.6	
$	12 Terphenyl-d14	244	12.235	12.212	0.023	99	1801924	26.1	
	14 N-Nitrosodimethylamine	74		2.490				ND	
	27 Phenol	94		5.935				ND	
	29 Bis(2-chloroethyl)ether	93		6.015				ND	
	31 2-Chlorophenol	128		6.074				ND	
	40 2,2'-oxybis[1-chloropropan	45		6.539				ND	
	44 N-Nitrosodi-n-propylamine	70		6.656				ND	
	47 Hexachloroethane	117		6.769				ND	
	48 Nitrobenzene	77		6.817				ND	
	50 Isophorone	82		7.041				ND	
	51 2-Nitrophenol	139		7.121				ND	
	52 2,4-Dimethylphenol	107		7.148				ND	
	56 Benzoic acid	122		7.196				ND	
	55 Bis(2-chloroethoxy)methane	93		7.233				ND	
	57 2,4-Dichlorophenol	162		7.340				ND	
	59 1,2,4-Trichlorobenzene	180		7.426				ND	
	60 Naphthalene	128		7.500				ND	
	64 Hexachlorobutadiene	225		7.618				ND	
	70 4-Chloro-3-methylphenol	107		7.965				ND	
	76 Hexachlorocyclopentadiene	237		8.286				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
78 2,4,6-Trichlorophenol	196		8.387				ND	
81 2-Chloronaphthalene	162		8.585				ND	
86 Dimethyl phthalate	163		8.809				ND	
88 2,6-Dinitrotoluene	165		8.868				ND	
89 Acenaphthylene	152		8.970				ND	
92 2,4-Dinitrophenol	184		9.124				ND	
91 Acenaphthene	153		9.124				ND	
93 4-Nitrophenol	109		9.162				ND	
94 2,4-Dinitrotoluene	165		9.242				ND	
101 Diethyl phthalate	149	9.452	9.445	0.007	93	15453	0.2778	
104 4-Chlorophenyl phenyl ethe	204		9.579				ND	
106 Fluorene	166	9.601	9.600	0.001	93	14387	0.2837	
108 4,6-Dinitro-2-methylphenol	198		9.621				ND	
109 N-Nitrosodiphenylamine	169		9.680				ND	
111 1,2-Diphenylhydrazine	77		9.723				ND	
116 4-Bromophenyl phenyl ether	248		10.027				ND	
118 Hexachlorobenzene	284		10.113				ND	
122 Pentachlorophenol	266		10.284				ND	
126 Phenanthrene	178	10.493	10.487	0.006	96	34204	0.4025	
128 Anthracene	178	10.547	10.535	0.012	68	8879	0.1037	
132 Di-n-butyl phthalate	149	10.979	10.962	0.017	95	21357	0.2558	
137 Fluoranthene	202	11.775	11.763	0.012	73	24248	0.2308	
138 Benzidine	184		11.886				ND	
139 Pyrene	202	12.080	12.063	0.017	94	15904	0.1621	
144 Butyl benzyl phthalate	149	12.919	12.896	0.023	91	23908	0.7373	
149 3,3'-Dichlorobenzidine	252		13.847				ND	
151 Bis(2-ethylhexyl) phthalat	149		13.884				ND	
152 Benzo[a]anthracene	228		13.927				ND	
153 Chrysene	228		13.996				ND	
156 Di-n-octyl phthalate	149		15.177				ND	
158 Benzo[b]fluoranthene	252		16.059				ND	
159 Benzo[k]fluoranthene	252		16.112				ND	
160 Benzo[a]pyrene	252		16.742				ND	
163 Indeno[1,2,3-cd]pyrene	276		19.066				ND	
164 Dibenz(a,h)anthracene	278		19.093				ND	
165 Benzo[g,h,i]perylene	276		19.654				ND	

Reagents:

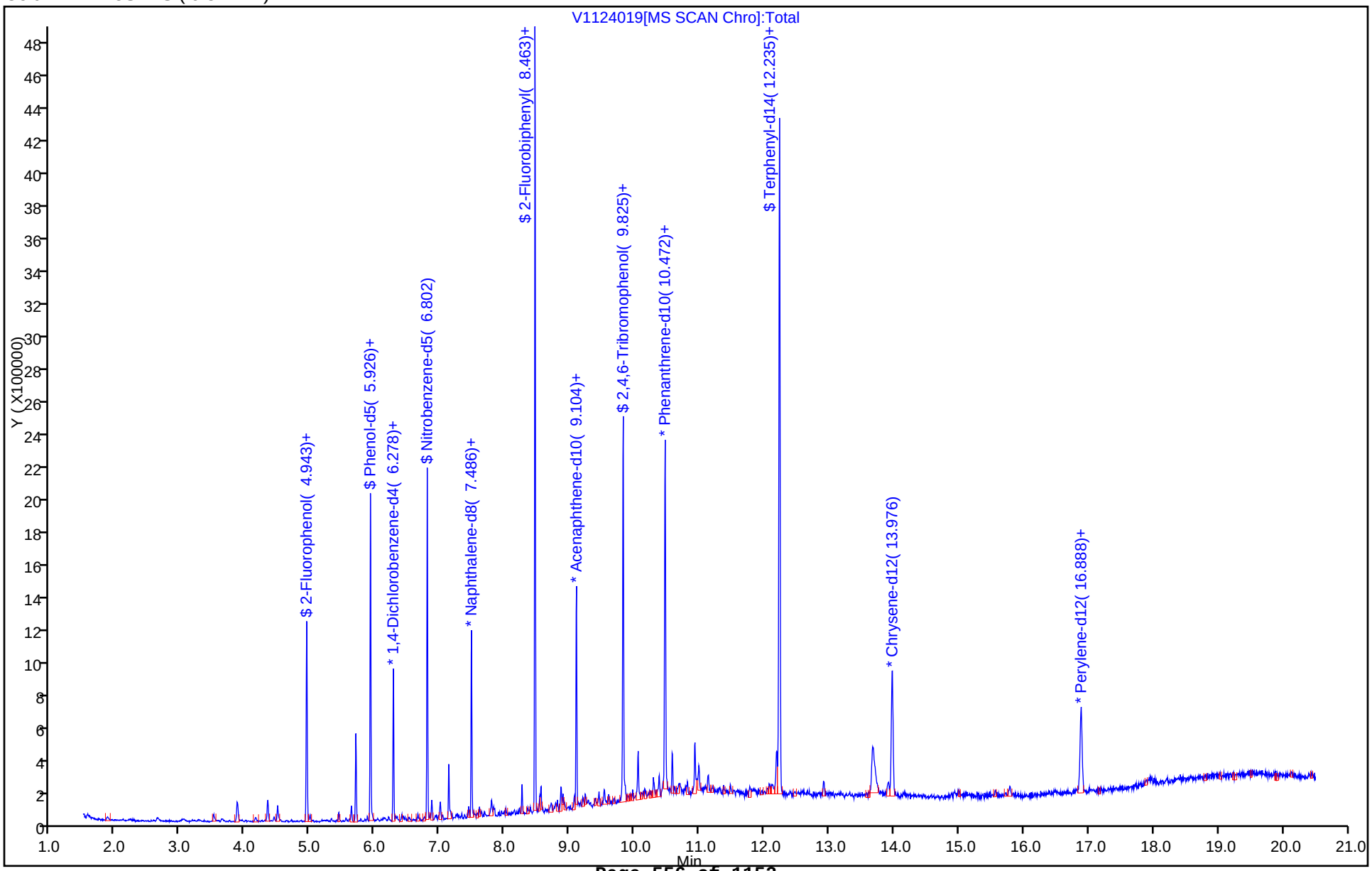
SVTAPITINTRNi_00006 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 25-Nov-2014 04:12:36 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141124-4564.b\V1124019.D				
Injection Date:	24-Nov-2014 20:02:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	180-39026-E-4-A	Lab Sample ID:	180-39026-4	Worklist Smp#:	19
Client ID:	ST-014-111614				
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



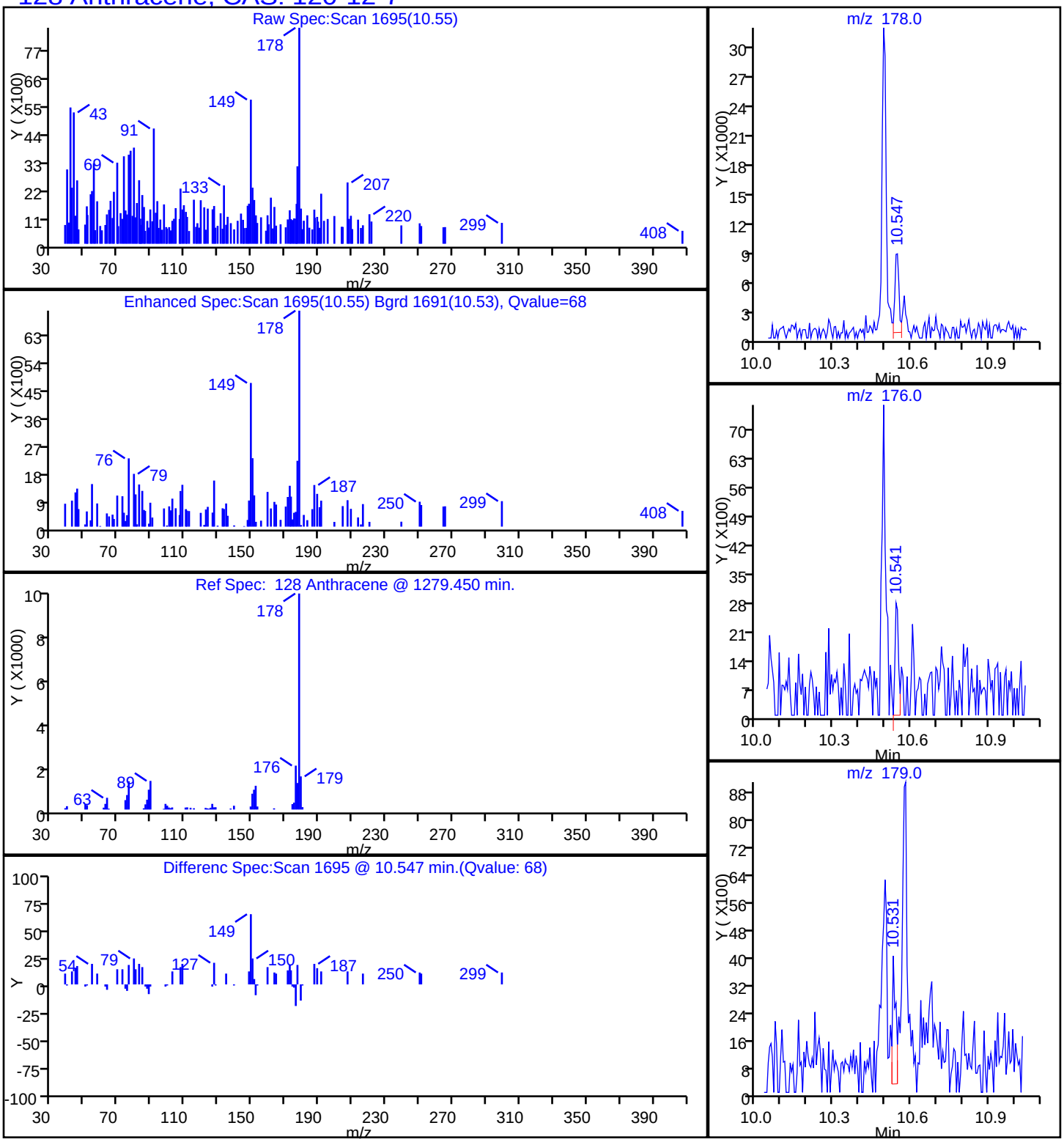
Report Date: 25-Nov-2014 04:12:36 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20141124-4564.b\V1124019.D

Injection Date:	24-Nov-2014 20:02:30	Instrument ID:	CH731		
Lims ID:	180-39026-E-4-A	Lab Sample ID:	180-39026-4		
Client ID:	ST-014-111614				
Operator ID:	003200	ALS Bottle#:	18	Worklist Smp#:	19
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

128 Anthracene, CAS: 120-12-7

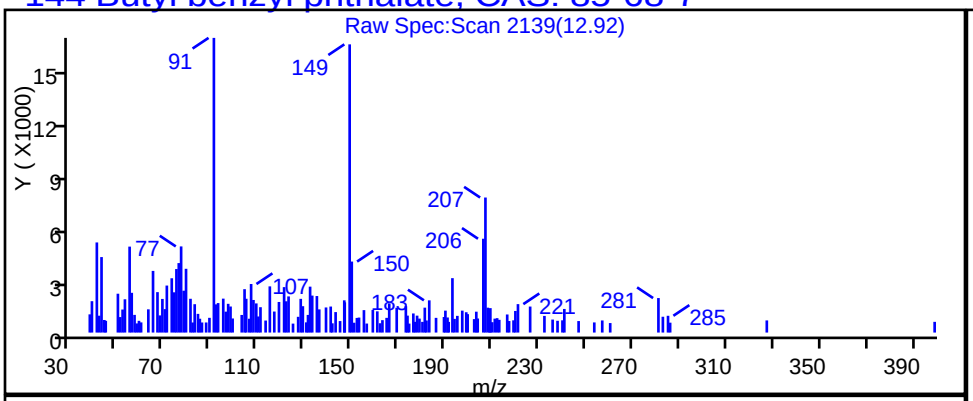


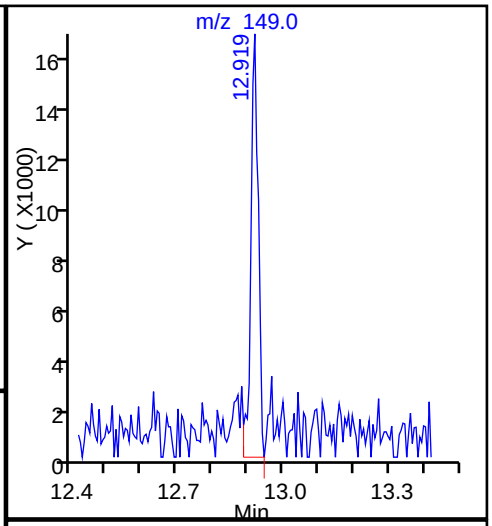
Report Date: 25-Nov-2014 04:12:36 Chrom Revision: 2.2 06-Nov-2014 14:50:32

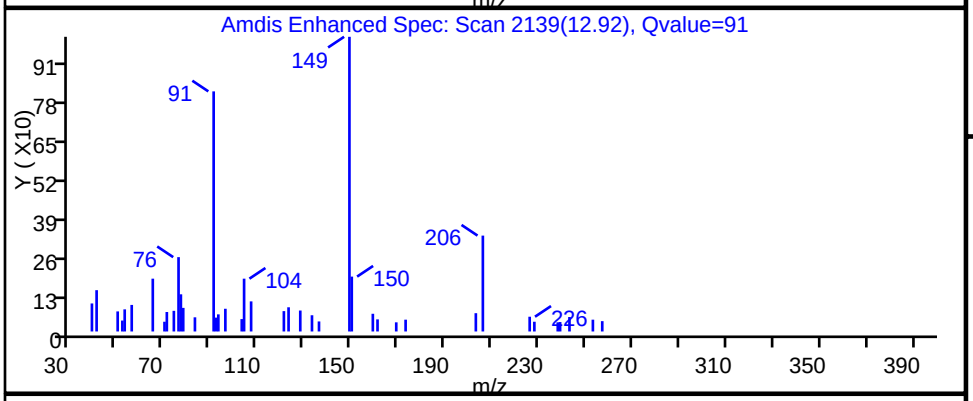
TestAmerica Pittsburgh

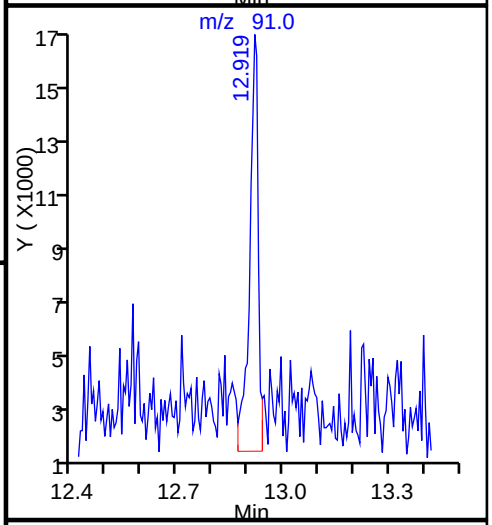
Data File:	\\PITCHROM\ChromData\CH731\20141124-4564.b\V1124019.D				
Injection Date:	24-Nov-2014 20:02:30	Instrument ID:	CH731		
Lims ID:	180-39026-E-4-A	Lab Sample ID:	180-39026-4		
Client ID:	ST-014-111614				
Operator ID:	003200	ALS Bottle#:	18	Worklist Smp#:	19
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

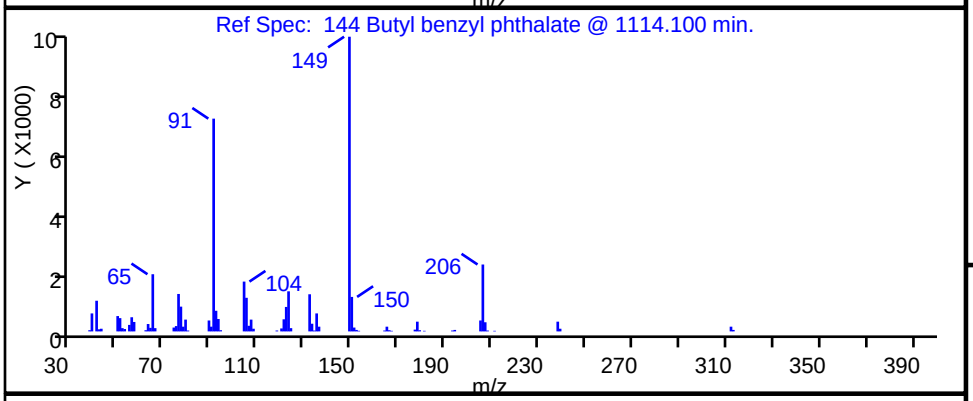
144 Butyl benzyl phthalate, CAS: 85-68-7

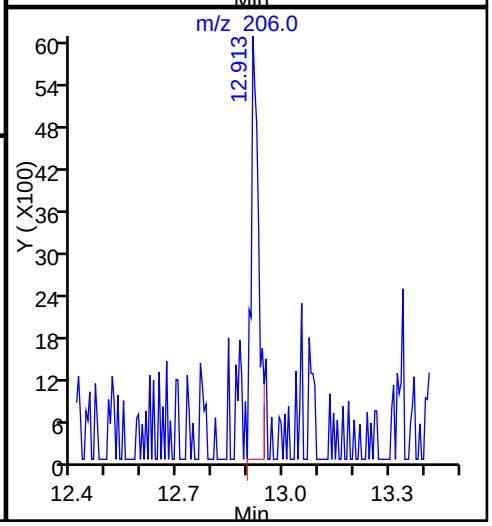


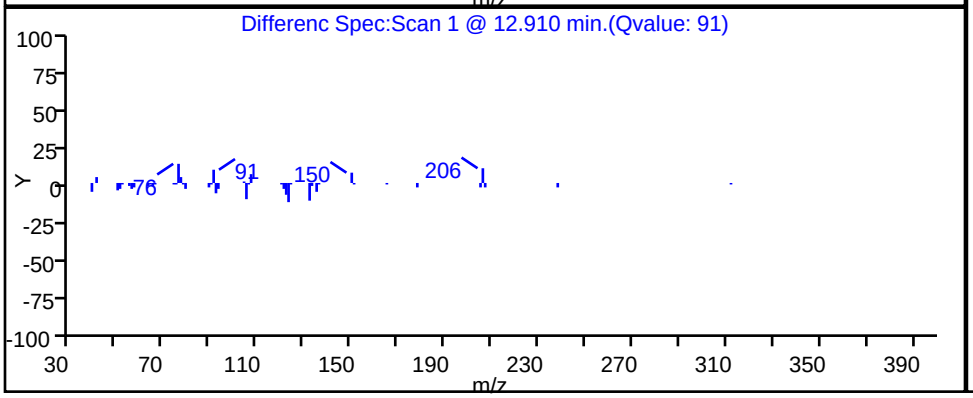












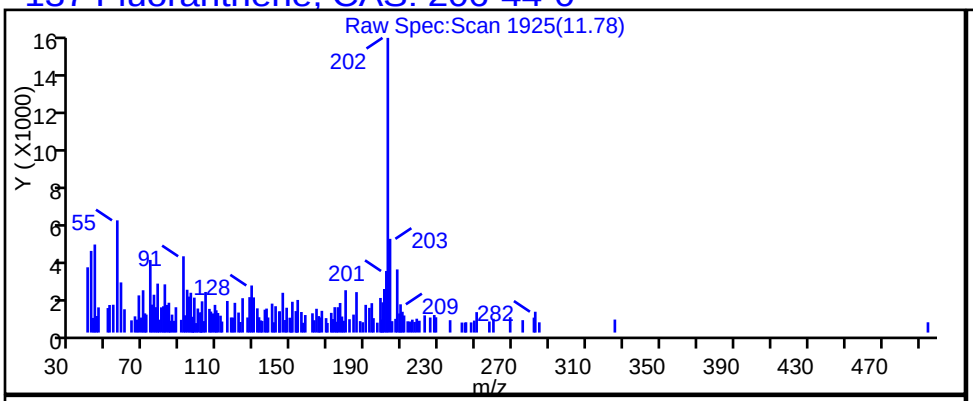
Report Date: 25-Nov-2014 04:12:36 Chrom Revision: 2.2 06-Nov-2014 14:50:32

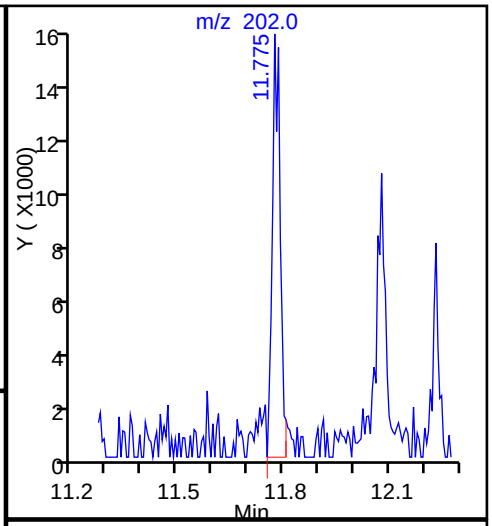
TestAmerica Pittsburgh

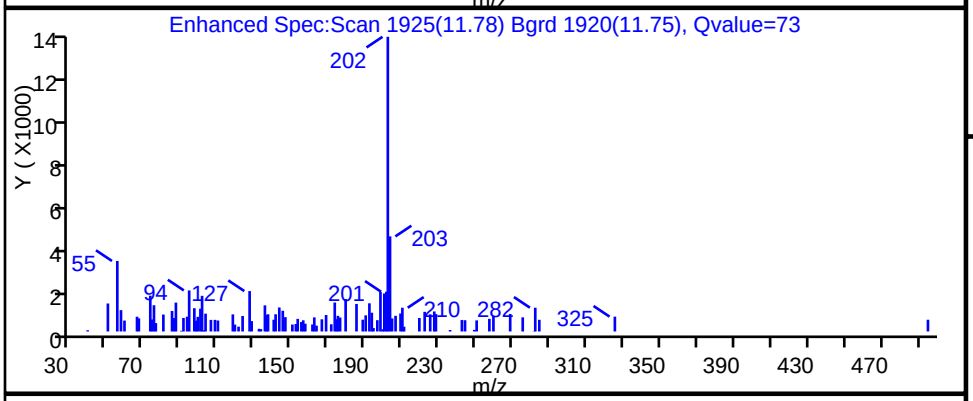
Data File: \\PITCHROM\ChromData\CH731\20141124-4564.b\V1124019.D

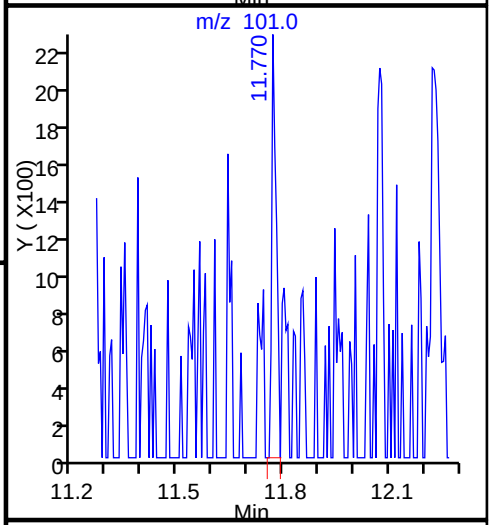
Injection Date:	24-Nov-2014 20:02:30	Instrument ID:	CH731		
Lims ID:	180-39026-E-4-A	Lab Sample ID:	180-39026-4		
Client ID:	ST-014-111614				
Operator ID:	003200	ALS Bottle#:	18	Worklist Smp#:	19
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

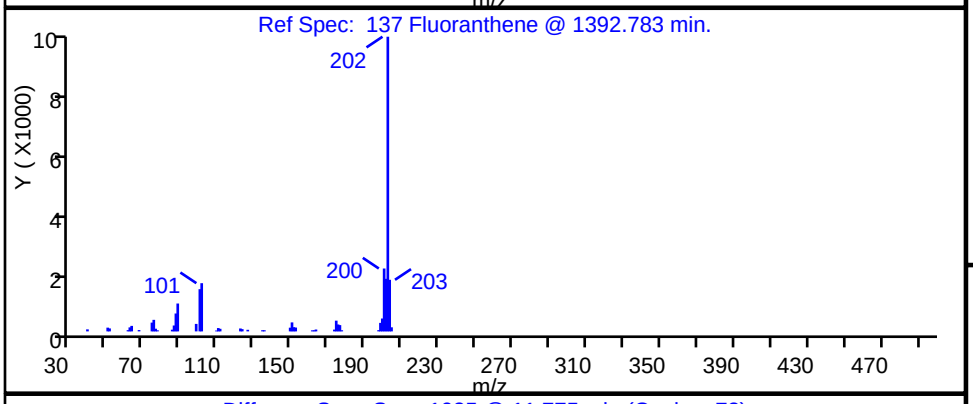
137 Fluoranthene, CAS: 206-44-0

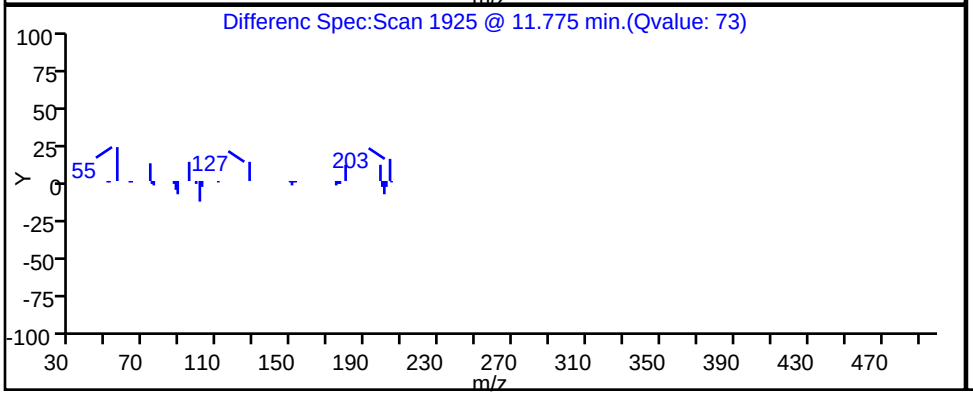


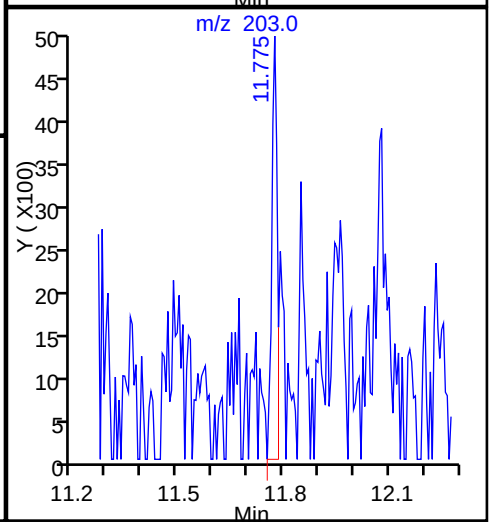










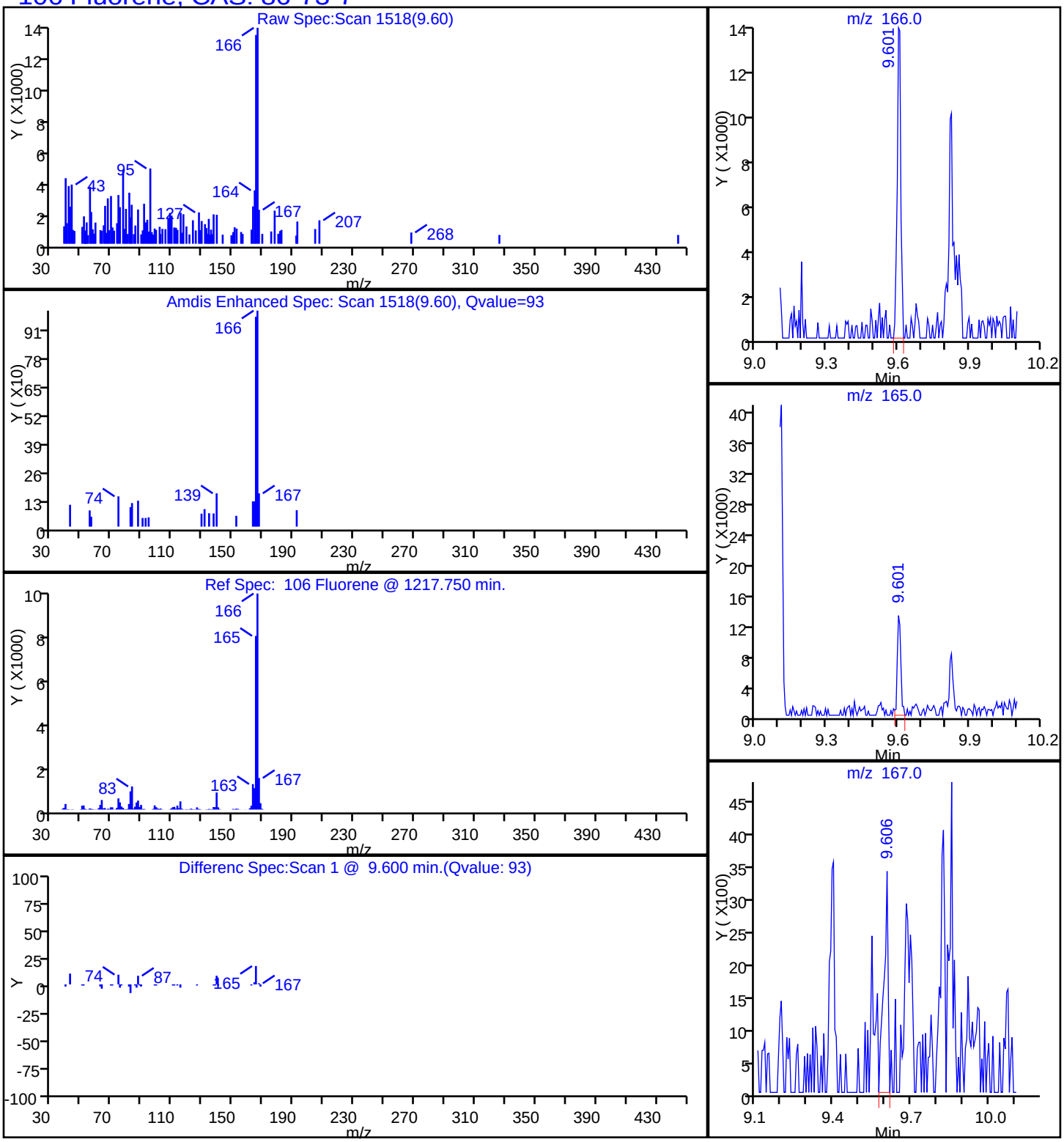


Report Date: 25-Nov-2014 04:12:36 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141124-4564.b\V1124019.D				
Injection Date:	24-Nov-2014 20:02:30	Instrument ID:	CH731		
Lims ID:	180-39026-E-4-A	Lab Sample ID:	180-39026-4		
Client ID:	ST-014-111614				
Operator ID:	003200	ALS Bottle#:	18	Worklist Smp#:	19
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

106 Fluorene, CAS: 86-73-7



Report Date: 25-Nov-2014 04:12:36 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

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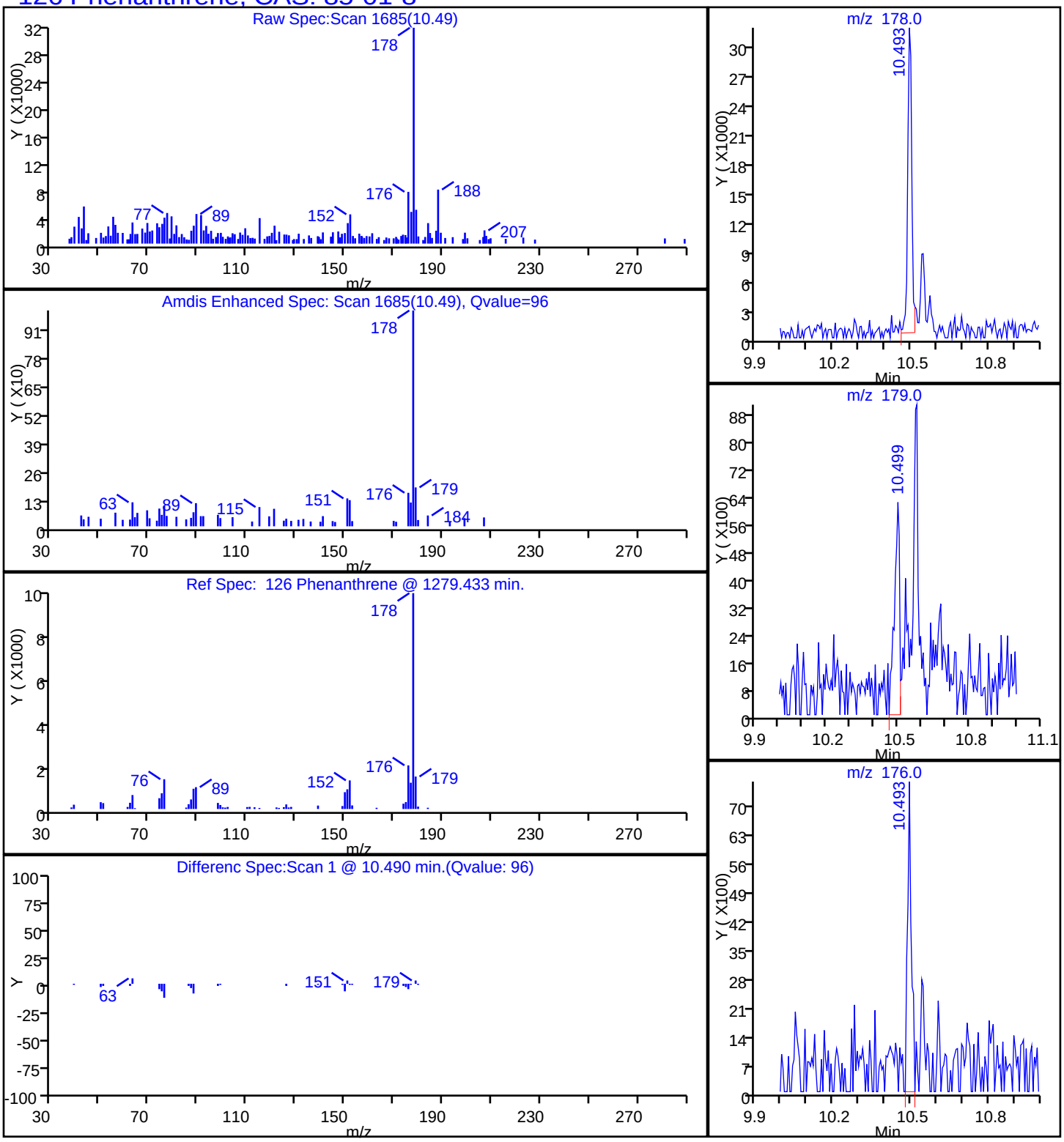
Injection Date:	24-Nov-2014 20:02:30	Instrument ID:	CH731		
Lims ID:	180-39026-E-4-A	Lab Sample ID:	180-39026-4		
Client ID:	ST-014-111614				
Operator ID:	003200	ALS Bottle#:	18	Worklist Smp#:	19
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

126 Phenanthrene, CAS: 85-01-8



Report Date: 25-Nov-2014 04:12:36 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

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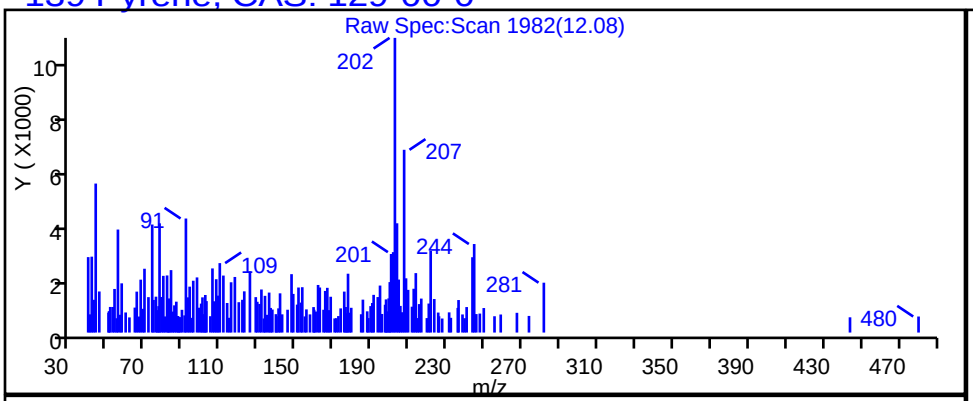
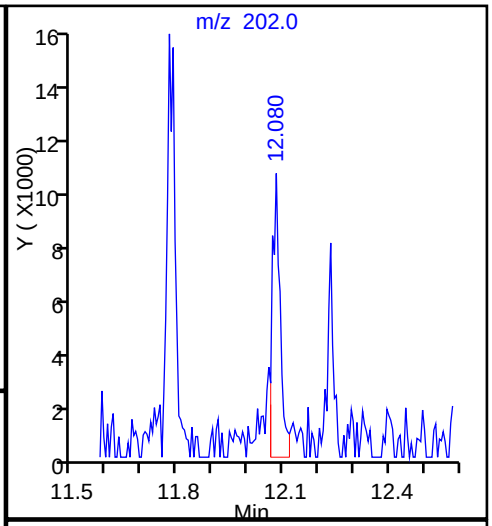
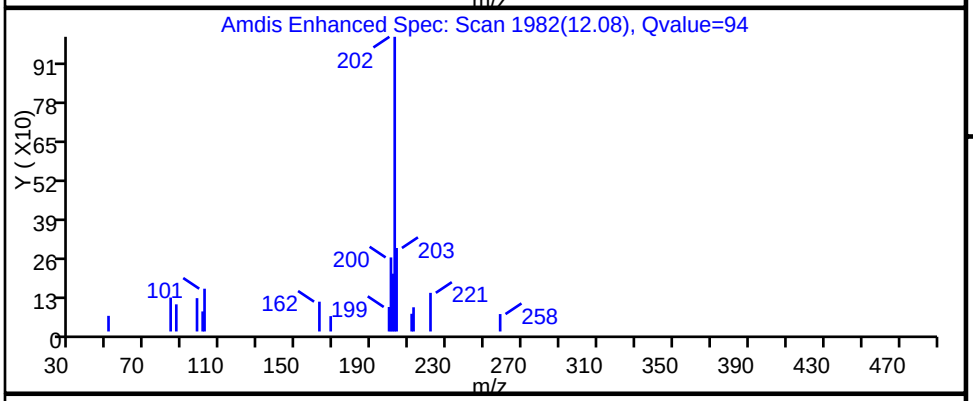
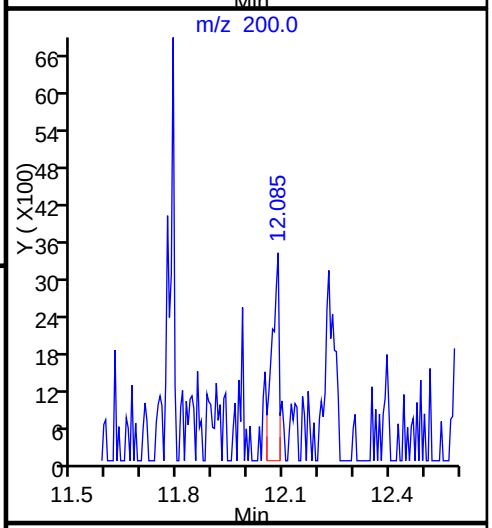
Lims ID:	180-39026-E-4-A	Lab Sample ID:	180-39026-4		
Client ID:	ST-014-111614				
Operator ID:	003200	ALS Bottle#:	18	Worklist Smp#:	19
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

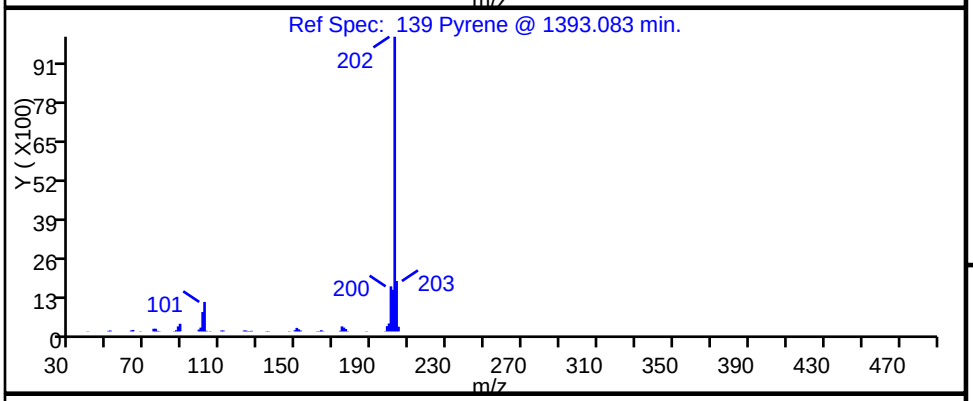
139 Pyrene, CAS: 129-00-0

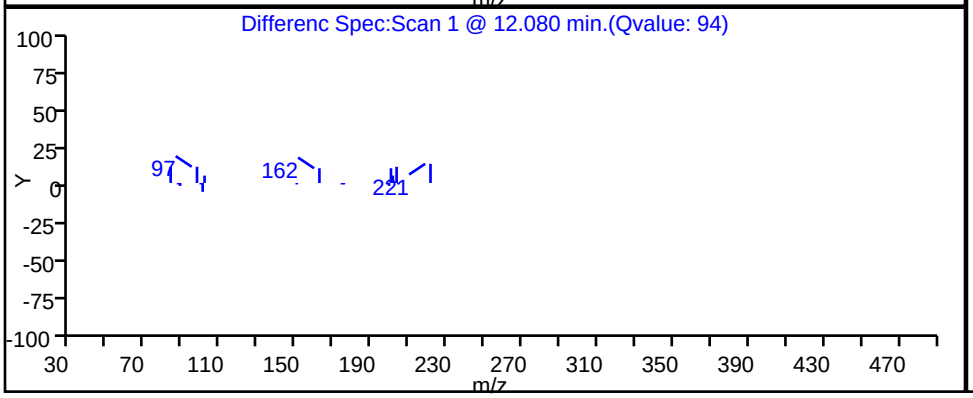


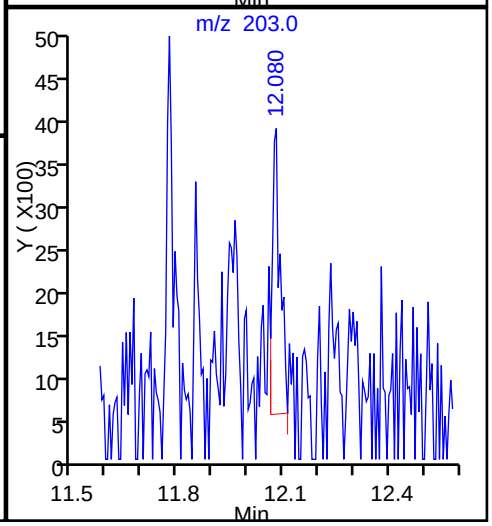












FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 125450

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/18/2014 04:22 Calibration End Date: 11/18/2014 07:43 Calibration ID: 19203

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-125450/3	V1118003.D
Level 2	IC 180-125450/4	V1118004.D
Level 3	IC 180-125450/5	V1118005.D
Level 4	ICIS 180-125450/6	V1118006.D
Level 5	IC 180-125450/7	V1118007.D
Level 6	IC 180-125450/8	V1118008.D
Level 7	IC 180-125450/9	V1118009.D
Level 8	IC 180-125450/10	V1118010.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	+++++ 0.5819	0.5761 0.5794	0.5353 0.5695	0.5748	0.5347	Ave		0.5645			0.0100	3.6		20.0			
N-Nitrosodimethylamine	0.9337 0.8502	0.8272 0.8788	0.8041 0.8306	0.8343	0.7788	Ave		0.8422			0.0100	5.6		20.0			
Pyridine	1.5024 1.5604	1.5197 1.5640	1.5584 1.5086	1.5514	1.4297	Ave		1.5243			0.0100	3.0		20.0			
Methyl methanesulfonate	1.1319 1.1184	1.2381 1.0849	1.0789 1.0245	1.1255	1.0239	Ave		1.1033			0.0100	6.2		20.0			
Benzaldehyde	1.5005 1.2232	1.1484 1.1419	1.0368 1.0281	1.1840	1.1218	Ave		1.1731			0.0100	13.0		20.0			
Phenol	1.5814 1.8871	1.5405 2.0147	1.5851 2.0448	1.6707	1.6058	Ave		1.7413			0.8000	12.0		20.0			
Aniline	2.1210 2.0348	1.8537 2.1623	1.7829 2.1537	1.9557	1.7981	Ave		1.9828			0.0100	8.0		20.0			
Bis(2-chloroethyl)ether	1.3412 1.1919	1.0775 1.1859	1.0682 1.1742	1.1191	1.0105	Ave		1.1461			0.7000	8.9		20.0			
2-Chlorophenol	1.4821 1.3659	1.2573 1.3561	1.1967 1.3479	1.2805	1.1547	Ave		1.3052			0.8000	8.0		20.0			
n-Decane	1.0244 1.0012	0.9515 1.1190	0.8972 1.0996	0.9066	0.8394	Ave		0.9799				10.0		20.0			
1,3-Dichlorobenzene	1.4888 1.5931	1.4091 1.6619	1.4269 1.6919	1.5225	1.4061	Ave		1.5250			0.0100	7.4		20.0			
1,4-Dichlorobenzene	1.4764 1.6312	1.5474 1.6952	1.4971 1.7017	1.5494	1.4259	Ave		1.5656			0.0100	6.5		20.0			
Benzyl alcohol	0.7531 0.8091	0.6763 0.8416	0.7089 0.8257	0.7611	0.6905	Ave		0.7583			0.0100	8.3		20.0			
1,2-Dichlorobenzene	1.4282 1.4840	1.4770 1.5742	1.3723 1.5619	1.4329	1.2899	Ave		1.4525			0.0100	6.5		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 Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 125450

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/18/2014 04:22 Calibration End Date: 11/18/2014 07:43 Calibration ID: 19203

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								
2-Methylphenol	1.0695 1.3198	1.0200 1.4126	1.0780 1.4686	1.1899	1.0377	Ave		1.1995			0.7000	15.0		20.0			
Indene	1.9613 2.3998	2.0678 2.7319	1.8812 +++++	2.0644	1.9211	Ave		2.1468			0.0100	14.0		20.0			
2,2'-oxybis[1-chloropropane]	1.0951 1.0035	0.8269 1.0945	0.8420 1.1402	0.9202	0.8475	Ave		0.9712			0.0100	13.0		20.0			
N-Nitrosopyrrolidine	0.4524 0.4991	0.4757 0.5167	0.4736 0.5085	0.4930	0.4862	Ave		0.4882			0.0100	4.3		20.0			
Methylphenol, 3 & 4	+++++ 1.5087	1.1159 1.6393	1.0663 1.7426	1.2051	1.1741	Ave		1.3503			0.6000	20.0		20.0			
N-Nitrosodi-n-propylamine	1.1856 1.3158	0.9936 1.3313	0.9980 1.3336	1.1032	1.0987	Ave		1.1699			0.5000	12.0		20.0			
Acetophenone	+++++ 2.3108	1.8524 2.4239	1.7157 2.4431	1.9358	1.8604	Ave		2.0774			0.0100	15.0		20.0			
Hexachloroethane	0.7451 0.7633	0.8062 0.7778	0.7228 0.7652	0.7165	0.6501	Ave		0.7434			0.3000	6.4		20.0			
Nitrobenzene	0.5937 0.5396	0.5819 0.5501	0.5202 0.5820	0.5369	0.5142	Ave		0.5523			0.2000	5.5		20.0			
Isophorone	0.9161 0.8296	0.8220 0.8488	0.8083 0.9026	0.8212	0.7784	Ave		0.8409			0.4000	5.6		20.0			
2-Nitrophenol	0.2111 0.1957	0.1916 0.1999	0.1957 0.2138	0.1992	0.1925	Ave		0.1999			0.1000	4.1		20.0			
2,4-Dimethylphenol	0.4693 0.4750	0.4516 0.4783	0.4911 0.5127	0.4579	0.4460	Ave		0.4727			0.2000	4.6		20.0			
Benzoic acid	0.1382 0.2009	0.1593 0.2016	0.1653 0.2189	0.1585	0.1823	Ave		0.1781			0.0100	15.0		20.0			
Bis(2-chloroethoxy)methane	0.4792 0.4222	0.4146 0.4377	0.3887 0.4821	0.3920	0.3733	Ave		0.4237			0.3000	9.6		20.0			
2,4-Dichlorophenol	0.4361 0.3752	0.3677 0.3839	0.3773 0.4106	0.3701	0.3597	Ave		0.3851			0.2000	6.6		20.0			
1,2,4-Trichlorobenzene	0.5402 0.4826	0.4697 0.5013	0.4888 0.5394	0.4636	0.4599	Ave		0.4932			0.0100	6.4		20.0			
Naphthalene	1.1130 1.1693	1.0648 1.2012	1.0879 1.3528	1.0599	1.0545	Ave		1.1379			0.7000	9.0		20.0			
4-Chloroaniline	0.4349 0.4852	0.4470 0.4853	0.4514 0.5433	0.4542	0.4404	Ave		0.4677			0.0100	7.7		20.0			
2,6-Dichlorophenol	0.3908 0.3715	0.3602 0.3792	0.3581 0.4202	0.3732	0.3555	Ave		0.3761			0.0100	5.7		20.0			
Hexachlorobutadiene	0.4970 0.4137	0.3735 0.4188	0.4071 0.4406	0.3897	0.3911	Ave		0.4164			0.0100	9.2		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 Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 125450

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/18/2014 04:22 Calibration End Date: 11/18/2014 07:43 Calibration ID: 19203

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								
Caprolactam	0.1074 0.0875	0.0935 0.0898	0.0921 0.0945	0.0923	0.0885	Ave		0.0932			0.0100	6.7		20.0			
4-Chloro-3-methylphenol	0.3870 0.3931	0.3744 0.3916	0.3755 0.4265	0.3758	0.3812	Ave		0.3882			0.2000	4.4		20.0			
2-Methylnaphthalene	0.8298 0.8452	0.7450 0.8630	0.7845 0.9630	0.7864	0.7680	Ave		0.8231			0.4000	8.4		20.0			
1-Methylnaphthalene	0.7780 0.7602	0.7017 0.7862	0.7256 0.8763	0.7262	0.7105	Ave		0.7581			0.0100	7.5		20.0			
Hexachlorocyclopentadiene	0.5916 0.6863	0.5348 0.6992	0.5532 0.7529	0.6350	0.6573	Ave		0.6388			0.0500	12.0		20.0			
1,2,4,5-Tetrachlorobenzene	0.8534 0.8871	0.8033 0.8964	0.8642 0.9614	0.8763	0.8306	Ave		0.8716			0.0100	5.4		20.0			
2,4,6-Trichlorophenol	0.5240 0.4771	0.5010 0.4839	0.4972 0.5292	0.5080	0.4980	Ave		0.5023			0.2000	3.6		20.0			
2,4,5-Trichlorophenol	0.5506 0.5257	0.5159 0.5180	0.4845 0.5356	0.5249	0.4946	Ave		0.5187			0.2000	4.1		20.0			
1,1'-Biphenyl	1.4547 1.4658	1.3919 1.5248	1.3847 1.6709	1.3781	1.3414	Ave		1.4515			0.0100	7.3		20.0			
2-Chloronaphthalene	1.4268 1.2638	1.2953 1.2912	1.1850 1.4323	1.2870	1.1658	Ave		1.2934			0.8000	7.5		20.0			
2-Nitroaniline	0.3512 0.3845	0.3702 0.3833	0.3871 0.4065	0.3904	0.3790	Ave		0.3815			0.0100	4.2		20.0			
Dimethyl phthalate	1.4909 1.3014	1.3367 1.3025	1.3326 1.3929	1.3422	1.2717	Ave		1.3463			0.0100	5.1		20.0			
1,3-Dinitrobenzene	0.1863 0.2173	0.1936 0.2158	0.1991 0.2149	0.2247	0.2139	Ave		0.2082			0.0100	6.5		20.0			
2,6-Dinitrotoluene	0.2779 0.2903	0.3003 0.2900	0.3011 0.2976	0.2914	0.2923	Ave		0.2926			0.2000	2.5		20.0			
Acenaphthylene	1.9320 1.8110	1.7065 1.8311	1.6456 1.9943	1.7375	1.6656	Ave		1.7905			0.9000	7.0		20.0			
3-Nitroaniline	0.2000 0.2502	0.2023 0.2471	0.2452 0.2606	0.2528	0.2529	Ave		0.2389			0.0100	9.9		20.0			
2,4-Dinitrophenol	+++++ 0.2532	0.1491 0.2684	0.1501 0.3055	0.2393	0.2177	Lin1	-0.843	0.2836			0.0100				0.9900		0.9900
Acenaphthene	1.3886 1.2169	1.1157 1.2662	1.0777 1.4178	1.1606	1.1260	Ave		1.2212			0.9000	10.0		20.0			
4-Nitrophenol	0.2675 0.3280	0.2602 0.3156	0.2788 0.3391	0.3012	0.3167	Ave		0.3009			0.0100	9.7		20.0			
2,4-Dinitrotoluene	0.3522 0.4221	0.3615 0.4245	0.3814 0.4537	0.4051	0.3991	Ave		0.4000			0.2000	8.5		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 Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 125450

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/18/2014 04:22 Calibration End Date: 11/18/2014 07:43 Calibration ID: 19203

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								
Dibenzofuran	2.0583 1.8627	1.8011 1.9018	1.7306 2.0392	1.8343	1.7504	Ave		1.8723			0.8000	6.5		20.0			
2,3,5,6-Tetrachlorophenol	0.6386 0.5593	0.4703 0.5531	0.5093 0.5956	0.5341	0.5137	Ave		0.5467			0.0100	9.7		20.0			
2,3,4,6-Tetrachlorophenol	0.5249 0.5195	0.4881 0.5270	0.4810 0.5385	0.5337	0.4926	Ave		0.5132			0.0100	4.4		20.0			
2-Naphthylamine	1.0820 0.9855	0.9904 0.9656	0.9886 1.0077	1.0722	0.9830	Ave		1.0094			0.0100	4.3		20.0			
Diethyl phthalate	1.7652 1.5011	1.3761 1.5650	1.3182 1.6257	1.4024	1.3693	Ave		1.4904			0.0100	10.0		20.0			
Hexadecane	0.4085 0.4273	0.3440 0.4763	0.3275 +++++	0.3542	0.3604	Ave		0.3855				14.0		20.0			
4-Chlorophenyl phenyl ether	1.0294 0.9125	0.9427 0.9058	0.9057 0.9684	0.9304	0.8664	Ave		0.9327			0.4000	5.3		20.0			
4-Nitroaniline	+++++ 0.2769	0.2352 0.2763	0.2441 0.3165	0.2514	0.2536	Ave		0.2649			0.0100	10.0		20.0			
Fluorene	1.4329 1.3923	1.2979 1.3713	1.2812 1.5264	1.3361	1.2328	Ave		1.3589			0.9000	6.9		20.0			
4,6-Dinitro-2-methylphenol	+++++ 0.1589	0.1176 0.1640	0.1296 0.1632	0.1400	0.1454	Ave		0.1455			0.0100	12.0		20.0			
N-Nitrosodiphenylamine	0.5033 0.5344	0.4743 0.5264	0.5092 0.5413	0.4982	0.4880	Ave		0.5094			0.0100	4.6		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	0.8020 0.8164	0.7775 0.8042	0.7421 0.8182	0.8015	0.7346	Ave		0.7870			0.0100	4.1		20.0			
4-Bromophenyl phenyl ether	0.2725 0.2771	0.2390 0.2812	0.2443 0.2805	0.2549	0.2619	Ave		0.2639			0.1000	6.3		20.0			
Hexachlorobenzene	0.3135 0.2622	0.2450 0.2687	0.2321 0.2716	0.2434	0.2357	Ave		0.2590			0.1000	10.0		20.0			
Atrazine	0.2519 0.2434	0.2616 0.2325	0.2279 0.2034	0.2454	0.2421	Ave		0.2385			0.0100	7.4		20.0			
Pentachlorophenol	0.2575 0.1975	0.1282 0.2059	0.1488 0.2085	0.1680	0.1770	Lin1	-0.065	0.2004			0.0500				0.9940		0.9900
n-Octadecane	1.3800 1.5228	1.2625 1.6958	1.1947 +++++	1.2939	1.2560	Ave		1.3723				13.0		20.0			
Phenanthrene	1.2672 1.1251	1.0964 1.1308	1.0455 1.1210	1.0680	1.0238	Ave		1.1097			0.7000	6.7		20.0			
Anthracene	1.1911 1.1106	1.1485 1.1139	1.0858 1.1366	1.0941	1.0597	Ave		1.1175			0.7000	3.7		20.0			
Carbazole	0.9780 0.9084	0.8947 0.9071	0.8695 0.8846	0.8919	0.8653	Ave		0.8999			0.0100	3.9		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 125450

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/18/2014 04:22 Calibration End Date: 11/18/2014 07:43 Calibration ID: 19203

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								
Di-n-butyl phthalate	1.2096 1.0706	1.0869 1.0680	1.0998 1.0515	1.0765	1.0596	Ave		1.0903			0.0100	4.6		20.0			
Fluoranthene	1.5083 1.3526	1.3258 1.3576	1.3791 1.3326	1.3956	1.3221	Ave		1.3717			0.6000	4.4		20.0			
Benzidine	0.5294 0.4782	0.3395 0.4728	0.4338 0.4305	0.4548	0.4629	Ave		0.4502			0.0100	12.0		20.0			
Pyrene	1.5094 1.3100	1.3280 1.2890	1.3495 1.3061	1.4007	1.3387	Ave		1.3539			0.6000	5.3		20.0			
Butyl benzyl phthalate	0.5427 0.4170	0.4343 0.4218	0.4600 0.4100	0.4598	0.4350	Ave		0.4476			0.0100	9.5		20.0			
3,3'-Dichlorobenzidine	0.4179 0.4207	0.3631 0.4260	0.3940 0.4142	0.4133	0.4127	Ave		0.4077			0.0100	5.0		20.0			
Bis(2-ethylhexyl) phthalate	0.6865 0.5663	0.5607 0.5817	0.5991 0.5769	0.5986	0.5907	Ave		0.5951			0.0100	6.6		20.0			
Benzo[a]anthracene	1.3871 1.1594	1.1777 1.2104	1.1708 1.1810	1.1984	1.1617	Ave		1.2058			0.8000	6.2		20.0			
Chrysene	1.1418 1.0788	1.1243 1.1049	1.1005 1.0967	1.1555	1.0735	Ave		1.1095			0.7000	2.6		20.0			
Di-n-octyl phthalate	1.6241 1.2440	1.3650 1.2299	1.3378 1.1839	1.3676	1.3157	Ave		1.3335			0.0100	10.0		20.0			
7,12-Dimethylbenz(a)anthracene	0.4776 0.5716	0.5381 0.5752	0.5432 0.5741	0.5836	0.5637	Ave		0.5534			0.0100	6.2		20.0			
Benzo[b]fluoranthene	1.6407 1.3949	1.3541 1.4343	1.4610 1.4219	1.4263	1.4469	Ave		1.4475			0.7000	5.9		20.0			
Benzo[k]fluoranthene	1.6288 1.3750	1.3392 1.3882	1.3234 1.3358	1.4015	1.3246	Ave		1.3896			0.7000	7.3		20.0			
Benzo[e]pyrene	1.6367 1.2407	1.1786 1.2939	1.2358 1.2558	1.2704	1.2385	Ave		1.2938			0.0100	11.0		20.0			
Benzo[a]pyrene	1.3939 1.2345	1.1738 1.2859	1.2103 1.2587	1.2879	1.2471	Ave		1.2615			0.7000	5.2		20.0			
Indeno[1,2,3-cd]pyrene	1.4043 1.1462	1.0690 1.1795	1.0575 1.1792	1.0873	1.0859	Ave		1.1511			0.5000	9.8		20.0			
Dibenz(a,h)anthracene	1.0702 0.9569	0.9744 1.0232	0.9547 1.0278	0.9371	0.9215	Ave		0.9832			0.4000	5.3		20.0			
Benzo[g,h,i]perylene	1.1461 0.9366	0.8809 0.9740	0.9387 0.9790	0.9018	0.8852	Ave		0.9553			0.5000	9.0		20.0			
2-Fluorophenol (Surr)	1.4744 1.3322	1.1877 1.3847	1.1583 1.3721	1.2917	1.1474	Ave		1.2936				9.2		20.0			
Phenol-d5 (Surr)	1.6917 1.6341	1.5148 1.6724	1.4556 1.6907	1.5045	1.4330	Ave		1.5746				6.9		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 125450

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/18/2014 04:22 Calibration End Date: 11/18/2014 07:43 Calibration ID: 19203

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								
Nitrobenzene-d5 (Surr)	0.6362 0.5453	0.5403 0.5478	0.5720 0.5718	0.5709	0.5376	Ave		0.5653				5.7		20.0			
2-Fluorobiphenyl	1.7532 1.5329	1.4910 1.5809	1.4424 1.6738	1.4584	1.4176	Ave		1.5438				7.7		20.0			
2,4,6-Tribromophenol (Surr)	0.0875 0.1018	0.0823 0.1110	0.0853 0.1143	0.0947	0.0916	Ave		0.0961			0.0100	12.0		20.0			
Terphenyl-d14 (Surr)	1.0662 0.9319	0.9320 0.9512	0.9044 0.9207	1.0027	0.9087	Ave		0.9522				5.8		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 125450

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/18/2014 04:22 Calibration End Date: 11/18/2014 07:43 Calibration ID: 19203

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-125450/3	V1118003.D
Level 2	IC 180-125450/4	V1118004.D
Level 3	IC 180-125450/5	V1118005.D
Level 4	ICIS 180-125450/6	V1118006.D
Level 5	IC 180-125450/7	V1118007.D
Level 6	IC 180-125450/8	V1118008.D
Level 7	IC 180-125450/9	V1118009.D
Level 8	IC 180-125450/10	V1118010.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			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	+++++ 373605	18968 526176	34679 735759	97869	182753	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosodimethylamine	DCB	Ave	6540 545919	27232 798039	52094 1073202	142053	266189	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pyridine	DCB	Ave	10523 1001912	50031 1420217	100959 1949127	264169	488644	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Methyl methanesulfonate	DCB	Ave	7928 718107	40761 985121	69897 1323709	191648	349968	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzaldehyde	DCB	Ave	10510 785425	37807 1036907	67165 1328292	201611	383425	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenol	DCB	Ave	11076 1211667	50717 1829502	102692 2641879	284476	548829	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Aniline	DCB	Ave	14856 1306535	61026 1963509	115505 2782576	333002	614543	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-chloroethyl)ether	DCB	Ave	9394 765332	35472 1076889	69203 1517094	190548	345368	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Chlorophenol	DCB	Ave	10381 877051	41393 1231452	77525 1741577	218031	394658	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
n-Decane	DCB	Ave	7175 642852	31325 1016096	58121 1420761	154366	286884	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	10428 1022913	46389 1509122	92441 2185950	259246	480572	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	10341 1047395	50943 1539352	96985 2198668	263828	487362	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzyl alcohol	DCB	Ave	5275 519504	22264 764232	45924 1066828	129592	235998	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	10003 952841	48625 1429452	88902 2018021	243987	440880	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Methylphenol	DCB	Ave	7491 847419	33582 1282757	69834 1897456	202609	354678	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

FORM VI

GC/MS SEMI VOA INITIAL CALIBRATION DATA

INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 125450

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/18/2014 04:22 Calibration End Date: 11/18/2014 07:43 Calibration ID: 19203

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			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
Indene	DCB	Ave	13737 1540883	68077 2480774	121869 +++++	351512	656611	0.400 40.0	2.00 60.0	4.00 +++++	10.0	20.0
2,2'-oxybis[1-chloropropane]	DCB	Ave	7670 644360	27222 993887	54548 1473217	156682	289652	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosopyrrolidine	DCB	Ave	3169 320449	15661 469237	30680 656965	83950	166165	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Methylphenol, 3 & 4	DCB	Ave	+++++ 968687	36737 1488546	69079 2251462	205199	401271	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosodi-n-propylamine	DCB	Ave	8304 844835	32710 1208879	64652 1723018	187838	375515	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acetophenone	DCB	Ave	+++++ 1483698	60986 2201050	111147 3156588	329614	635864	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachloroethane	DCB	Ave	5219 490121	26543 706298	46828 988688	122005	222196	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Nitrobenzene	NPT	Ave	13918 1153007	61716 1674499	103708 2304653	299752	543833	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Isophorone	NPT	Ave	21477 1772669	87188 2583747	161147 3574493	458475	823344	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Nitrophenol	NPT	Ave	4950 418265	20320 608485	39012 846773	111223	203559	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dimethylphenol	NPT	Ave	11002 1015086	47894 1455916	97907 2030177	255660	471706	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzoic acid	NPT	Ave	3239 429264	16892 613573	32966 866733	88484	192819	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-chloroethoxy)methane	NPT	Ave	11234 902145	43970 1332221	77491 1909286	218858	394876	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dichlorophenol	NPT	Ave	10224 801770	38998 1168702	75233 1626222	206607	380458	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2,4-Trichlorobenzene	NPT	Ave	12665 1031147	49818 1526067	97454 2136187	258852	486486	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Naphthalene	NPT	Ave	26094 2498582	112937 3656344	216903 5357157	591753	1115355	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chloroaniline	NPT	Ave	10195 1036759	47408 1477278	90005 2151456	253613	465770	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,6-Dichlorophenol	NPT	Ave	9161 793914	38200 1154411	71398 1664114	208341	376039	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorobutadiene	NPT	Ave	11652 883979	39617 1274788	81175 1744778	217576	413694	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Caprolactam	NPT	Ave	2519 186888	9913 273456	18354 374248	51527	93652	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chloro-3-methylphenol	NPT	Ave	9073 840080	39714 1192148	74872 1688868	209809	403220	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

FORM VI

GC/MS SEMI VOA INITIAL CALIBRATION DATA

INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 125450

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/18/2014 04:22 Calibration End Date: 11/18/2014 07:43 Calibration ID: 19203

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			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-Methylnaphthalene	NPT	Ave	19455 1806089	79017 2626901	156418 3813703	439069	812326	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1-Methylnaphthalene	NPT	Ave	18240 1624420	74427 2393030	144674 3470482	405471	751537	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorocyclopentadiene	ANT	Ave	9757 1043957	40891 1509538	82057 2130530	253630	502267	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2,4,5-Tetrachlorobenzene	ANT	Ave	14075 1349385	61418 1935308	128178 2720713	349998	634642	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,6-Trichlorophenol	ANT	Ave	8642 725706	38306 1044790	73749 1497629	202893	380486	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,5-Trichlorophenol	ANT	Ave	9081 799662	39446 1118392	71855 1515791	209674	377887	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,1'-Biphenyl	ANT	Ave	23992 2229594	106424 3292066	205381 4728455	550444	1024977	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Chloronaphthalene	ANT	Ave	23532 1922334	99039 2787663	175769 4053340	514041	890737	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Nitroaniline	ANT	Ave	5792 584820	28305 827467	57423 1150441	155927	289616	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dimethyl phthalate	ANT	Ave	24590 1979482	102198 2812096	197650 3941691	536097	971700	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,3-Dinitrobenzene	ANT	Ave	3073 330559	14805 465907	29527 608073	89770	163401	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,6-Dinitrotoluene	ANT	Ave	4584 441537	22958 626078	44654 842173	116377	223376	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acenaphthylene	ANT	Ave	31865 2754694	130473 3953446	244082 5643820	694007	1272700	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
3-Nitroaniline	ANT	Ave	3298 380544	15471 533446	36371 737436	100956	193274	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dinitrophenol	ANT	Lin1	+++++ 770181	22797 1159046	44534 1728975	191199	332620	+++++ 80.0	4.00 120	8.00 160	20.0	40.0
Acenaphthene	ANT	Ave	22902 1851007	85305 2733760	159842 4012276	463574	860348	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Nitrophenol	ANT	Ave	8824 997770	39793 1362878	82707 1919376	240588	483962	0.800 80.0	4.00 120	8.00 160	20.0	40.0
2,4-Dinitrotoluene	ANT	Ave	5808 642081	27639 916599	56567 1283922	161826	304925	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dibenzofuran	ANT	Ave	33948 2833225	137708 4106059	256691 5770642	732675	1337432	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,3,5,6-Tetrachlorophenol	ANT	Ave	10532 850742	35959 1194104	75538 1685637	213313	392481	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,3,4,6-Tetrachlorophenol	ANT	Ave	8657 790123	37320 1137809	71343 1524048	213180	376394	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

FORM VI

GC/MS SEMI VOA INITIAL CALIBRATION DATA

INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 125450

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/18/2014 04:22 Calibration End Date: 11/18/2014 07:43 Calibration ID: 19203

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			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-Naphthylamine	ANT	Ave	17846 1499021	75721 2084841	146628 2851765	428274	751079	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Diethyl phthalate	ANT	Ave	29114 2283319	105212 3378854	195520 4600669	560170	1046284	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexadecane	NPT	Ave	9577 913150	36489 1449948	65288 +++++	197783	381231	0.400 40.0	2.00 60.0	4.00 +++++	10.0	20.0
4-Chlorophenyl phenyl ether	ANT	Ave	16978 1388014	72077 1955583	134329 2740471	371638	662042	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Nitroaniline	ANT	Ave	+++++ 421237	17981 596441	36210 895717	100425	193767	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Fluorene	ANT	Ave	23632 2117757	99231 2960630	190024 4319721	533690	942005	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4,6-Dinitro-2-methylphenol	PHN	Ave	+++++ 979206	37871 1421383	79649 1915802	236754	464708	+++++ 80.0	4.00 120	8.00 160	20.0	40.0
N-Nitrosodiphenylamine	PHN	Ave	17394 1646741	76387 2281662	156540 3178144	421325	780039	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2-Diphenylhydrazine(as Azobenzene)	PHN	Ave	27714 2515413	125230 3485723	228117 4803655	677854	1174132	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Bromophenyl phenyl ether	PHN	Ave	9418 853756	38490 1218695	75101 1646735	215595	418665	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorobenzene	PHN	Ave	10835 807757	39454 1164727	71337 1594567	205834	376726	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Atrazine	PHN	Ave	8704 749856	42136 1007602	70047 1194422	207574	387036	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pentachlorophenol	PHN	Lin1	17798 1217207	41306 1784877	91481 2448792	284142	565952	0.800 80.0	4.00 120	8.00 160	20.0	40.0
n-Octadecane	DCB	Ave	9666 977739	41565 1539927	77398 +++++	220319	429277	0.400 40.0	2.00 60.0	4.00 +++++	10.0	20.0
Phenanthrene	PHN	Ave	43791 3466802	176597 4901458	321378 6581685	903263	1636441	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Anthracene	PHN	Ave	41163 3421926	184986 4828422	333789 6673192	925267	1693761	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Carbazole	PHN	Ave	33796 2799028	144107 3931874	267299 5193384	754288	1383074	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Di-n-butyl phthalate	PHN	Ave	41800 3298696	175067 4629155	338075 6173662	910420	1693677	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Fluoranthene	PHN	Ave	52124 4167643	213534 5884725	423953 7823717	1180293	2113145	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzidine	CRY	Ave	17466 1543192	55961 2109070	135664 2586744	376464	733177	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pyrene	CRY	Ave	49799 4227100	218875 5750247	422019 7847498	1159528	2120582	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

FORM VI

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SDG No.:

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			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
Butyl benzyl phthalate	CRY	Ave	17905 1345747	71576 1881880	143852 2463595	380621	688998	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
3,3'-Dichlorobenzidine	CRY	Ave	13789 1357667	59842 1900388	123207 2488531	342153	653680	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-ethylhexyl) phthalate	CRY	Ave	22648 1827250	92416 2594900	187357 3465934	495553	935672	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[a]anthracene	CRY	Ave	45763 3741067	194106 5399707	366137 7095604	992089	1840151	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Chrysene	CRY	Ave	37670 3481151	185309 4929012	344143 6589112	956530	1700525	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Di-n-octyl phthalate	PRY	Ave	36829 2998049	153932 4314095	296465 5699986	799395	1497418	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
7,12-Dimethylbenz(a)anthracene	PRY	Ave	10830 1377544	60681 2017795	120367 2764009	341147	641586	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[b]fluoranthene	PRY	Ave	37205 3361602	152698 5031268	323766 6846161	833690	1646715	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[k]fluoranthene	PRY	Ave	36934 3313578	151023 4869485	293262 6431667	819222	1507521	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[e]pyrene	PRY	Ave	37113 2990026	132908 4538659	273853 6046182	742566	1409475	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[a]pyrene	PRY	Ave	31607 2975051	132369 4510772	268213 6060350	752802	1419258	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Indeno[1,2,3-cd]pyrene	PRY	Ave	31844 2762338	120551 4137336	234343 5677410	635574	1235857	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dibenz(a,h)anthracene	PRY	Ave	24267 2306142	109877 3589082	211567 4948414	547775	1048765	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[g,h,i]perylene	PRY	Ave	25990 2257140	99336 3416645	208017 4713525	527106	1007457	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Fluorophenol (Surr)	DCB	Ave	10327 855384	39100 1257384	75042 1772770	219935	392178	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenol-d5 (Surr)	DCB	Ave	11849 1049231	49869 1518626	94298 2184453	256173	489782	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Nitrobenzene-d5 (Surr)	NPT	Ave	14915 1165255	57312 1667491	114044 2264359	318764	568668	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Fluorobiphenyl	ANT	Ave	28916 2331566	113996 3413221	213944 4736680	582540	1083169	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,6-Tribromophenol (Surr)	PHN	Ave	3025 313595	13249 481269	26207 671055	80128	146405	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Terphenyl-d14 (Surr)	CRY	Ave	35177 3007126	153612 4243416	282829 5531806	830068	1439351	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

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Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 125450

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/18/2014 04:22 Calibration End Date: 11/18/2014 07:43 Calibration ID: 19203

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

TestAmerica Laboratories
Initial Calibration %Drift Report

Method: \\PITCHROM\ChromData\CH731\20141118-4448.b\BNA_CH731.m
Instrument: CH731 Lims Location: 180
Lock State: Unlocked Cpnd Order: Compound Type
Integrator: RTE Last Modified: 18-Nov-2014 08:40:04
No.Compounds:209

Initial Calibration Batches

Ical Batch: \\PITCHROM\ChromData\CH731\20141111-4314.b
Inj Date : 11-Nov-2014 03:50:30, Sublist: chrom-BNA_CH731*sub3

Ical Batch: \\PITCHROM\ChromData\CH731\20141118-4448.b
Inj Date : 18-Nov-2014 04:22:30, Sublist: chrom-BNA_CH731*sub4

Limit Group: BNA 8270D ICAL

Detector 1: MS SCAN

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
* 1 1,4-Dichlorobenzene-d4	180592	165364	159846	175730	144492	148850	112823	131726
* 2 Naphthalene-d8	605744	547929	514431	557286	445228	435913	353470	409281
* 3 Acenaphthene-d10	442552	368509	336309	387145	310215	304946	239588	271068
* 4 Phenanthrene-d10	802943	735436	670708	761912	607133	588691	480027	518666
* 5 Chrysene-d12	743578	680215	621744	724526	557323	559298	439398	478459
* 6 Perylene-d12	494639	480801	425560	496565	378668	368087	274905	287883
$ 7 2-Fluorophenol	14.0	-8.2	-10.5	-0.1	-11.3	3.0	7.0	6.1
$ 8 Phenol-d5	7.4	-3.8	-7.6	-4.5	-9.0	3.8	6.2	7.4
$ 9 Nitrobenzene-d5	12.5	-4.4	1.2	1.0	-4.9	-3.5	-3.1	1.2
$ 10 2-Fluorobiphenyl	13.6	-3.4	-6.6	-5.5	-8.2	-0.7	2.4	8.4
$ 11 2,4,6-Tribromophenol	-8.9	-14.4	-11.3	-1.4	-4.6	5.9	15.6	19.0
$ 12 Terphenyl-d14	12.0	-2.1	-5.0	5.3	-4.6	-2.1	-0.1	-3.3
13 1,4-Dioxane	Disabled	2.1	-5.2	1.8	-5.3	3.1	2.6	0.9
14 N-Nitrosodimethylamine	10.9	-1.8	-4.5	-0.9	-7.5	1.0	4.3	-1.4
15 Pyridine	-1.4	-0.3	2.2	1.8	-6.2	2.4	2.6	-1.0
22 Methyl methanesulfonat	2.6	12.2	-2.2	2.0	-7.2	1.4	-1.7	-7.1
26 Benzaldehyde	27.9	-2.1	-11.6	0.9	-4.4	4.3	-2.7	-12.4
27 Phenol	-9.2	-11.5	-9.0	-4.1	-7.8	8.4	15.7	17.4
28 Aniline	7.0	-6.5	-10.1	-1.4	-9.3	2.6	9.1	8.6
29 Bis(2-chloroethyl)ethe	17.0	-6.0	-6.8	-2.4	-11.8	4.0	3.5	2.5
31 2-Chlorophenol	13.6	-3.7	-8.3	-1.9	-11.5	4.7	3.9	3.3
32 n-Decane	4.5	-2.9	-8.4	-7.5	-14.3	2.2	14.2	12.2
33 1,3-Dichlorobenzene	-2.4	-7.6	-6.4	-0.2	-7.8	4.5	9.0	10.9
34 1,4-Dichlorobenzene	-5.7	-1.2	-4.4	-1.0	-8.9	4.2	8.3	8.7
36 Benzyl alcohol	-0.7	-10.8	-6.5	0.4	-8.9	6.7	11.0	8.9
37 1,2-Dichlorobenzene	-1.7	1.7	-5.5	-1.4	-11.2	2.2	8.4	7.5
38 2-Methylphenol	-10.8	-15.0	-10.1	-0.8	-13.5	10.0	17.8	22.4
39 Indene	-8.6	-3.7	-12.4	-3.8	-10.5	11.8	27.3	Disabled
40 2,2'-oxybis[1-chloropr	12.8	-14.9	-13.3	-5.3	-12.7	3.3	12.7	17.4
41 N-Nitrosopyrrolidine	-7.3	-2.6	-3.0	1.0	-0.4	2.2	5.9	4.2
44 N-Nitrosodi-n-propylam	1.3	-15.1	-14.7	-5.7	-6.1	12.5	13.8	14.0
43 Acetophenone	Disabled	-10.8	-17.4	-6.8	-10.4	11.2	16.7	17.6
45 4-Methylphenol	Disabled	-17.4	-21.0	-10.7	-13.1	11.7	21.4	29.1
47 Hexachloroethane	0.2	8.5	-2.8	-3.6	-12.5	2.7	4.6	2.9
48 Nitrobenzene	7.5	5.4	-5.8	-2.8	-6.9	-2.3	-0.4	5.4
50 Isophorone	8.9	-2.2	-3.9	-2.3	-7.4	-1.3	0.9	7.3
51 2-Nitrophenol	5.6	-4.2	-2.1	-0.4	-3.7	-2.1	0.0	6.9
52 2,4-Dimethylphenol	-0.7	-4.5	3.9	-3.1	-5.7	0.5	1.2	8.4
56 Benzoic acid	-22.4	-10.6	-7.2	-11.0	2.4	12.8	13.2	22.9
55 Bis(2-chloroethoxy)met	13.1	-2.2	-8.3	-7.5	-11.9	-0.4	3.3	13.8

Method: \\PITCHROM\ChromData\CH731\20141118-4448.b\BNA_CH731.m

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
57 2,4-Dichlorophenol	13.2	-4.5	-2.0	-3.9	-6.6	-2.6	-0.3	6.6
59 1,2,4-Trichlorobenzene	9.5	-4.8	-0.9	-6.0	-6.7	-2.2	1.7	9.4
60 Naphthalene	-2.2	-6.4	-4.4	-6.9	-7.3	2.8	5.6	18.9
62 4-Chloroaniline	-7.0	-4.4	-3.5	-2.9	-5.8	3.7	3.8	16.2
63 2,6-Dichlorophenol	3.9	-4.2	-4.8	-0.8	-5.5	-1.2	0.8	11.7
64 Hexachlorobutadiene	19.3	-10.3	-2.2	-6.4	-6.1	-0.7	0.6	5.8
67 Caprolactam	15.3	0.3	-1.2	-1.0	-5.0	-6.2	-3.6	1.4
70 4-Chloro-3-methylpheno	-0.3	-3.5	-3.3	-3.2	-1.8	1.3	0.9	9.9
72 2-Methylnaphthalene	0.8	-9.5	-4.7	-4.5	-6.7	2.7	4.8	17.0
75 1-Methylnaphthalene	2.6	-7.4	-4.3	-4.2	-6.3	0.3	3.7	15.6
76 Hexachlorocyclopentadi	-7.4	-16.3	-13.4	-0.6	2.9	7.4	9.5	17.9
77 1,2,4,5-Tetrachloroben	-2.1	-7.8	-0.8	0.5	-4.7	1.8	2.8	10.3
78 2,4,6-Trichlorophenol	4.3	-0.3	-1.0	1.1	-0.9	-5.0	-3.7	5.4
79 2,4,5-Trichlorophenol	6.1	-0.5	-6.6	1.2	-4.7	1.3	-0.1	3.3
80 1,1'-Biphenyl	0.2	-4.1	-4.6	-5.1	-7.6	1.0	5.0	15.1
81 2-Chloronaphthalene	10.3	0.2	-8.4	-0.5	-9.9	-2.3	-0.2	10.7
82 2-Nitroaniline	-8.0	-3.0	1.5	2.3	-0.7	0.8	0.5	6.6
86 Dimethyl phthalate	10.7	-0.7	-1.0	-0.3	-5.5	-3.3	-3.3	3.5
87 1,3-Dinitrobenzene	-10.5	-7.0	-4.4	7.9	2.7	4.4	3.6	3.2
88 2,6-Dinitrotoluene	-5.0	2.6	2.9	-0.4	-0.1	-0.8	-0.9	1.7
89 Acenaphthylene	7.9	-4.7	-8.1	-3.0	-7.0	1.1	2.3	11.4
90 3-Nitroaniline	-16.3	-15.3	2.7	5.8	5.9	4.7	3.4	9.1
92 2,4-Dinitrophenol	Disabled	26.9	-9.9	-0.8	-15.8	-7.0	-2.9	9.6
91 Acenaphthene	13.7	-8.6	-11.8	-5.0	-7.8	-0.3	3.7	16.1
93 4-Nitrophenol	-11.1	-13.5	-7.3	0.1	5.3	9.0	4.9	12.7
94 2,4-Dinitrotoluene	-12.0	-9.6	-4.6	1.3	-0.2	5.5	6.1	13.4
95 Dibenzofuran	9.9	-3.8	-7.6	-2.0	-6.5	-0.5	1.6	8.9
97 2,3,5,6-Tetrachlorophe	16.8	-14.0	-6.9	-2.3	-6.1	2.3	1.2	8.9
99 2,3,4,6-Tetrachlorophe	2.3	-4.9	-6.3	4.0	-4.0	1.2	2.7	4.9
100 2-Naphthylamine	7.2	-1.9	-2.1	6.2	-2.6	-2.4	-4.3	-0.2
101 Diethyl phthalate	18.4	-7.7	-11.6	-5.9	-8.1	0.7	5.0	9.1
102 Hexadecane	6.0	-10.8	-15.0	-8.1	-6.5	10.9	23.6	Disabled
104 4-Chlorophenyl phenyl	10.4	1.1	-2.9	-0.2	-7.1	-2.2	-2.9	3.8
105 4-Nitroaniline	Disabled	-11.2	-7.8	-5.1	-4.3	4.6	4.3	19.5
106 Fluorene	5.4	-4.5	-5.7	-1.7	-9.3	2.5	0.9	12.3
108 4,6-Dinitro-2-methylph	Disabled	-19.2	-11.0	-3.8	-0.1	9.2	12.7	12.1
109 N-Nitrosodiphenylamine	-1.2	-6.9	0.0	-2.2	-4.2	4.9	3.3	6.3
111 1,2-Diphenylhydrazine	1.9	-1.2	-5.7	1.8	-6.7	3.7	2.2	4.0
116 4-Bromophenyl phenyl e	3.3	-9.5	-7.4	-3.4	-0.8	5.0	6.5	6.3
118 Hexachlorobenzene	21.1	-5.4	-10.4	-6.0	-9.0	1.2	3.7	4.9
119 Atrazine	5.6	9.7	-4.5	2.9	1.5	2.0	-2.5	-14.7
122 Pentachlorophenol RB	* 68.9	-27.9	-21.7	-14.6	-10.9	-1.0	3.0	4.3
121 n-Octadecane	0.6	-8.0	-12.9	-5.7	-8.5	11.0	23.6	Disabled
126 Phenanthrene	14.2	-1.2	-5.8	-3.8	-7.7	1.4	1.9	1.0
128 Anthracene	6.6	2.8	-2.8	-2.1	-5.2	-0.6	-0.3	1.7
130 Carbazole	8.7	-0.6	-3.4	-0.9	-3.8	0.9	0.8	-1.7
132 Di-n-butyl phthalate	10.9	-0.3	0.9	-1.3	-2.8	-1.8	-2.0	-3.6
137 Fluoranthene	10.0	-3.3	0.5	1.7	-3.6	-1.4	-1.0	-2.9
138 Benzidine	17.6	-24.6	-3.6	1.0	2.8	6.2	5.0	-4.4
139 Pyrene	11.5	-1.9	-0.3	3.5	-1.1	-3.2	-4.8	-3.5
144 Butyl benzyl phthalate	21.3	-3.0	2.8	2.7	-2.8	-6.8	-5.8	-8.4
149 3,3'-Dichlorobenzidine	2.5	-11.0	-3.4	1.4	1.2	3.2	4.5	1.6
151 Bis(2-ethylhexyl) phth	15.4	-5.8	0.7	0.6	-0.7	-4.8	-2.2	-3.1
152 Benzo[a]anthracene	15.0	-2.3	-2.9	-0.6	-3.7	-3.9	0.4	-2.1
153 Chrysene	2.9	1.3	-0.8	4.1	-3.2	-2.8	-0.4	-1.2
156 Di-n-octyl phthalate	21.8	2.4	0.3	2.6	-1.3	-6.7	-7.8	-11.2
157 7,12-Dimethylbenz(a)an	-13.7	-2.8	-1.8	5.5	1.9	3.3	3.9	3.7
158 Benzo[b]fluoranthene	13.3	-6.5	0.9	-1.5	0.0	-3.6	-0.9	-1.8
159 Benzo[k]fluoranthene	17.2	-3.6	-4.8	0.9	-4.7	-1.1	-0.1	-3.9

Method: \\PITCHROM\ChromData\CH731\20141118-4448.b\BNA_CH731.m

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
176 Benzo[e]pyrene	26.5	-8.9	-4.5	-1.8	-4.3	-4.1	0.0	-2.9
160 Benzo[a]pyrene	10.5	-7.0	-4.1	2.1	-1.1	-2.1	1.9	-0.2
163 Indeno[1,2,3-cd]pyrene	22.0	-7.1	-8.1	-5.5	-5.7	-0.4	2.5	2.4
164 Dibenz(a,h)anthracene	8.8	-0.9	-2.9	-4.7	-6.3	-2.7	4.1	4.5
165 Benzo[g,h,i]perylene	20.0	-7.8	-1.7	-5.6	-7.3	-2.0	2.0	2.5

ICalib Error Legend

RB, Low Point Test Fails

Report Date: 18-Nov-2014 08:45:53 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118003.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 18-Nov-2014 04:22:30 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004448-003
Misc. Info.: IC
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub4

Method: \\PITCHROM\ChromData\CH731\20141118-4448.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 18-Nov-2014 08:45:53 Calib Date: 18-Nov-2014 07:43:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: piccolinov Date: 18-Nov-2014 07:21:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.286	6.284	0.002	90	140082	8.00	8.00	
* 2 Naphthalene-d8	136	7.499	7.497	0.002	98	468893	8.00	8.00	
* 3 Acenaphthene-d10	164	9.118	9.115	0.003	93	329858	8.00	8.00	
* 4 Phenanthrene-d10	188	10.496	10.488	0.008	96	691150	8.00	8.00	
* 5 Chrysene-d12	240	14.032	14.019	0.013	95	659858	8.00	8.00	
* 6 Perylene-d12	264	16.981	16.963	0.018	98	453519	8.00	8.00	
$ 7 2-Fluorophenol	112	4.940	4.938	0.002	91	10327	0.4000	0.4559	
$ 8 Phenol-d5	99	5.928	5.926	0.002	82	11849	0.4000	0.4298	
$ 9 Nitrobenzene-d5	82	6.810	6.813	-0.003	84	14915	0.4000	0.4502	
$ 10 2-Fluorobiphenyl	172	8.476	8.474	0.002	98	28916	0.4000	0.4543	
$ 11 2,4,6-Tribromophenol	330	9.839	9.836	0.003	81	3025	0.4000	0.3645	
$ 12 Terphenyl-d14	244	12.269	12.262	0.007	98	35177	0.4000	0.4479	
13 1,4-Dioxane	88	1.852	1.850	0.002	46	5984	0.4000	0.6054	M
14 N-Nitrosodimethylamine	74	2.520	2.507	0.013	50	6540	0.4000	0.4435	M
15 Pyridine	79	2.616	2.576	0.040	67	10523	0.4000	0.3942	M
22 Methyl methanesulfonate	80	4.705	4.708	-0.003	85	7928	0.4000	0.4104	
26 Benzaldehyde	77	5.848	5.846	0.002	81	10510	0.4000	0.5117	
27 Phenol	94	5.944	5.942	0.002	85	11076	0.4000	0.3633	
28 Aniline	93	5.960	5.958	0.002	95	14856	0.4000	0.4279	
29 Bis(2-chloroethyl)ether	93	6.030	6.022	0.008	94	9394	0.4000	0.4681	
31 2-Chlorophenol	128	6.078	6.081	-0.003	85	10381	0.4000	0.4542	
32 n-Decane	43	6.142	6.140	0.002	81	7175	0.4000	0.4182	
33 1,3-Dichlorobenzene	146	6.233	6.231	0.003	90	10428	0.4000	0.3905	
34 1,4-Dichlorobenzene	146	6.302	6.305	-0.003	86	10341	0.4000	0.3772	
36 Benzyl alcohol	108	6.414	6.412	0.002	82	5275	0.4000	0.3973	
37 1,2-Dichlorobenzene	146	6.452	6.455	-0.003	84	10003	0.4000	0.3933	
38 2-Methylphenol	108	6.521	6.524	-0.003	85	7491	0.4000	0.3566	
39 Indene	116	6.537	6.535	0.002	83	13737	0.4000	0.3654	
40 2,2'-oxybis[1-chloropropan	45	6.553	6.551	0.002	69	7670	0.4000	0.4510	
41 N-Nitrosopyrrolidine	100	6.633	6.637	-0.003	51	3169	0.4000	0.3707	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
45 4-Methylphenol	108	6.660	6.663	-0.003	51	10500	0.4000	0.4441	
44 N-Nitrosodi-n-propylamine	70	6.660	6.663	-0.003	59	8304	0.4000	0.4053	
43 Acetophenone	105	6.665	6.663	0.002	75	18574	0.4000	0.5106	
47 Hexachloroethane	117	6.783	6.781	0.002	79	5219	0.4000	0.4009	
48 Nitrobenzene	77	6.831	6.829	0.002	84	13918	0.4000	0.4300	
50 Isophorone	82	7.050	7.048	0.002	97	21477	0.4000	0.4358	
51 2-Nitrophenol	139	7.136	7.133	0.003	78	4950	0.4000	0.4224	
52 2,4-Dimethylphenol	107	7.157	7.160	-0.003	90	11002	0.4000	0.3971	
56 Benzoic acid	122	7.184	7.208	-0.024	84	3239	0.4000	0.3103	
55 Bis(2-chloroethoxy)methane	93	7.248	7.240	0.008	93	11234	0.4000	0.4524	
57 2,4-Dichlorophenol	162	7.355	7.352	0.003	91	10224	0.4000	0.4530	
61 Azobenzene	77		7.410				ND	ND	
59 1,2,4-Trichlorobenzene	180	7.440	7.438	0.002	89	12665	0.4000	0.4381	
60 Naphthalene	128	7.515	7.513	0.002	96	26094	0.4000	0.3912	
62 4-Chloroaniline	127	7.552	7.550	0.002	93	10195	0.4000	0.3719	
63 2,6-Dichlorophenol	162	7.568	7.566	0.002	86	9161	0.4000	0.4156	
64 Hexachlorobutadiene	225	7.627	7.630	-0.003	88	11652	0.4000	0.4774	
67 Caprolactam	113	7.825	7.833	-0.008	67	2519	0.4000	0.4611	
70 4-Chloro-3-methylphenol	107	7.974	7.977	-0.003	83	9073	0.4000	0.3988	
72 2-Methylnaphthalene	142	8.151	8.148	0.003	84	19455	0.4000	0.4033	
75 1-Methylnaphthalene	142	8.247	8.239	0.008	90	18240	0.4000	0.4105	
76 Hexachlorocyclopentadiene	237	8.306	8.298	0.008	77	9757	0.4000	0.3704	
77 1,2,4,5-Tetrachlorobenzene	216	8.306	8.303	0.003	94	14075	0.4000	0.3917	
78 2,4,6-Trichlorophenol	196	8.407	8.399	0.008	89	8642	0.4000	0.4173	
79 2,4,5-Trichlorophenol	196	8.434	8.431	0.003	85	9081	0.4000	0.4246	
80 1,1'-Biphenyl	154	8.573	8.570	0.003	95	23992	0.4000	0.4009	
81 2-Chloronaphthalene	162	8.605	8.597	0.008	94	23532	0.4000	0.4413	
82 2-Nitroaniline	65	8.679	8.672	0.007	73	5792	0.4000	0.3682	
86 Dimethyl phthalate	163	8.824	8.821	0.003	94	24590	0.4000	0.4430	
87 1,3-Dinitrobenzene	168	8.861	8.859	0.002	72	3073	0.4000	0.3580	
88 2,6-Dinitrotoluene	165	8.888	8.886	0.002	78	4584	0.4000	0.3800	
89 Acenaphthylene	152	8.989	8.982	0.007	96	31865	0.4000	0.4316	
90 3-Nitroaniline	138	9.053	9.046	0.007	53	3298	0.4000	0.3348	
92 2,4-Dinitrophenol	184	9.155	9.142	0.013	60	2755	0.8000	3.21	M
91 Acenaphthene	153	9.150	9.142	0.008	90	22902	0.4000	0.4548	
93 4-Nitrophenol	109	9.176	9.174	0.002	83	8824	0.8000	0.7112	
94 2,4-Dinitrotoluene	165	9.262	9.259	0.003	47	5808	0.4000	0.3522	
95 Dibenzofuran	168	9.304	9.297	0.007	93	33948	0.4000	0.4397	
97 2,3,5,6-Tetrachlorophenol	232	9.374	9.366	0.008	82	10532	0.4000	0.4672	
99 2,3,4,6-Tetrachlorophenol	232	9.411	9.404	0.007	69	8657	0.4000	0.4091	
100 2-Naphthylamine	143	9.438	9.436	0.002	89	17846	0.4000	0.4288	
101 Diethyl phthalate	149	9.470	9.462	0.008	97	29114	0.4000	0.4738	
102 Hexadecane	57	9.475	9.468	0.007	64	9577	0.4000	0.4239	
104 4-Chlorophenyl phenyl ethe	204	9.604	9.596	0.008	89	16978	0.4000	0.4415	
105 4-Nitroaniline	138	9.609	9.607	0.002	46	2754	0.4000	0.2522	
106 Fluorene	166	9.620	9.617	0.003	89	23632	0.4000	0.4218	
108 4,6-Dinitro-2-methylphenol	198	9.641	9.639	0.002	84	5757	0.8000	0.4580	
109 N-Nitrosodiphenylamine	169	9.700	9.698	0.002	65	17394	0.4000	0.3952	
111 1,2-Diphenylhydrazine	77	9.748	9.740	0.008	97	27714	0.4000	0.4076	
116 4-Bromophenyl phenyl ether	248	10.058	10.050	0.008	65	9418	0.4000	0.4130	
118 Hexachlorobenzene	284	10.143	10.136	0.007	90	10835	0.4000	0.4842	
119 Atrazine	200	10.165	10.162	0.003	86	8704	0.4000	0.4224	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
122 Pentachlorophenol	266	10.309	10.301	0.008	84	17798	0.8000	1.35	
121 n-Octadecane	57	10.314	10.307	0.007	76	9666	0.4000	0.4023	
126 Phenanthrene	178	10.512	10.510	0.002	96	43791	0.4000	0.4568	
128 Anthracene	178	10.565	10.563	0.002	95	41163	0.4000	0.4263	
130 Carbazole	167	10.704	10.702	0.002	95	33796	0.4000	0.4347	
132 Di-n-butyl phthalate	149	11.003	10.996	0.007	98	41800	0.4000	0.4438	
137 Fluoranthene	202	11.815	11.808	0.007	93	52124	0.4000	0.4398	
138 Benzidine	184	11.933	11.931	0.002	96	17466	0.4000	0.4703	
139 Pyrene	202	12.120	12.107	0.013	96	49799	0.4000	0.4459	
144 Butyl benzyl phthalate	149	12.969	12.956	0.013	90	17905	0.4000	0.4850	
149 3,3'-Dichlorobenzidine	252	13.931	13.923	0.008	68	13789	0.4000	0.4100	
151 Bis(2-ethylhexyl) phthalat	149	13.968	13.961	0.007	89	22648	0.4000	0.4614	
152 Benzo[a]anthracene	228	14.011	14.003	0.008	96	45763	0.4000	0.4601	
153 Chrysene	228	14.086	14.073	0.013	94	37670	0.4000	0.4116	
156 Di-n-octyl phthalate	149	15.293	15.269	0.024	96	36829	0.4000	0.4872	M
157 7,12-Dimethylbenz(a)anthra	256	16.153	16.146	0.008	61	10830	0.4000	0.3452	M
158 Benzo[b]fluoranthene	252	16.169	16.156	0.013	73	37205	0.4000	0.4534	M
159 Benzo[k]fluoranthene	252	16.228	16.210	0.018	93	36934	0.4000	0.4689	
176 Benzo[e]pyrene	252	16.757	16.738	0.019	0	37113	0.4000	0.5060	M
160 Benzo[a]pyrene	252	16.858	16.845	0.013	65	31607	0.4000	0.4420	M
163 Indeno[1,2,3-cd]pyrene	276	19.214	19.196	0.018	40	31844	0.4000	0.4880	
164 Dibenz(a,h)anthracene	278	19.241	19.228	0.013	1	24267	0.4000	0.4354	M
165 Benzo[g,h,i]perylene	276	19.812	19.800	0.012	83	25990	0.4000	0.4799	M
S 206 Total Cresols	108				0		0.8000	0.8007	
S 208 Methyl Phenols,Total	108				0		0.8000	0.8007	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD0.4i_00007 Amount Added: 1.00 Units: mL

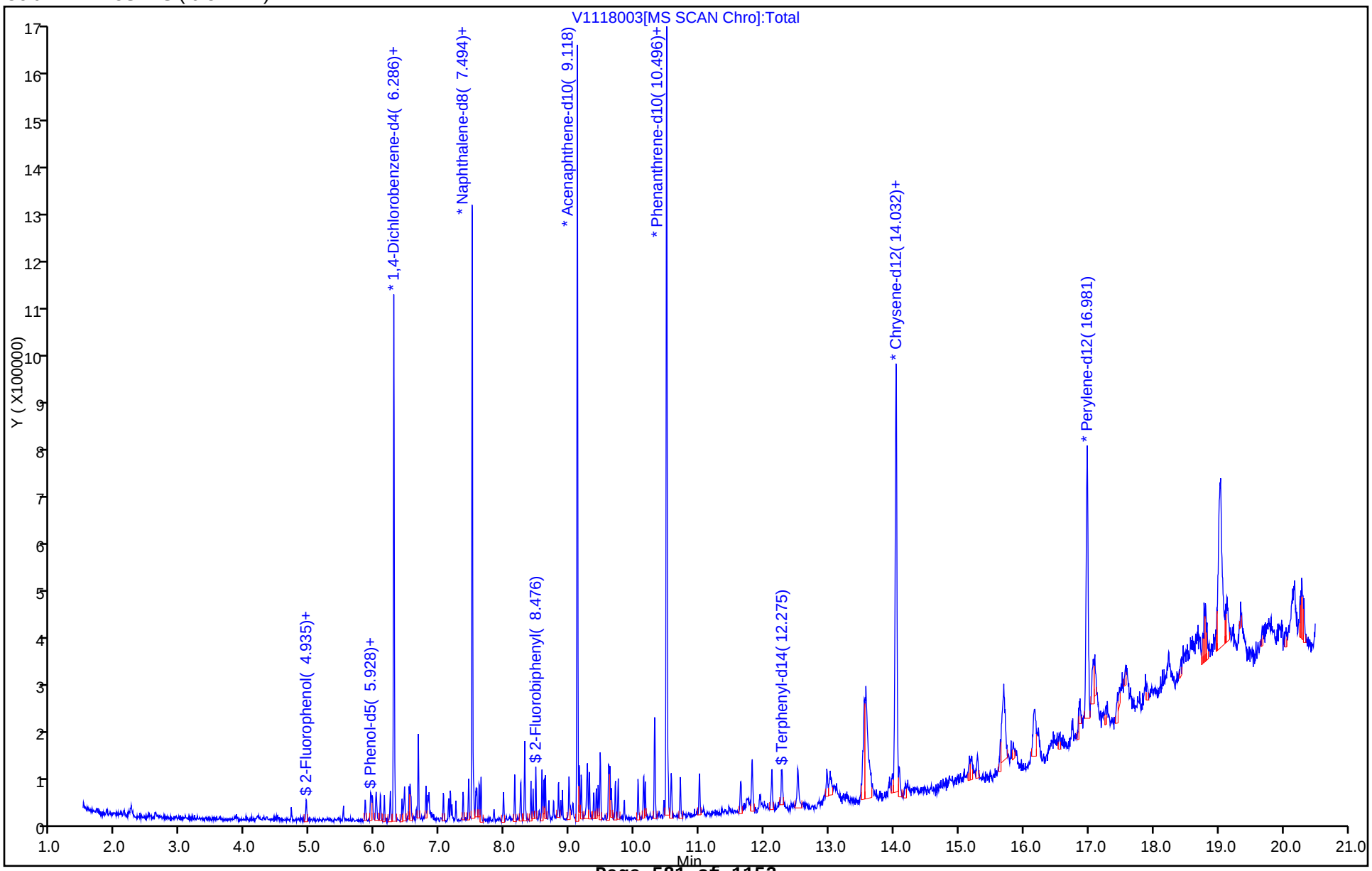
Report Date: 18-Nov-2014 08:45:53 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118003.D

Injection Date:	18-Nov-2014 04:22:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	3
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

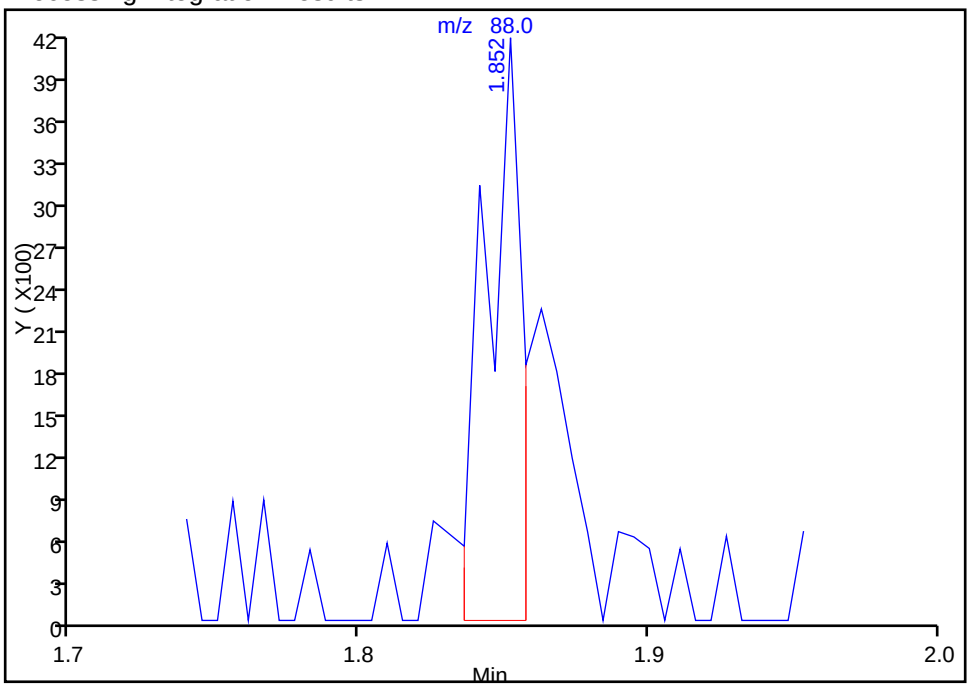
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141118-4448.b\V1118003.D				
Injection Date:	18-Nov-2014 04:22:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

13 1,4-Dioxane, CAS: 123-91-1

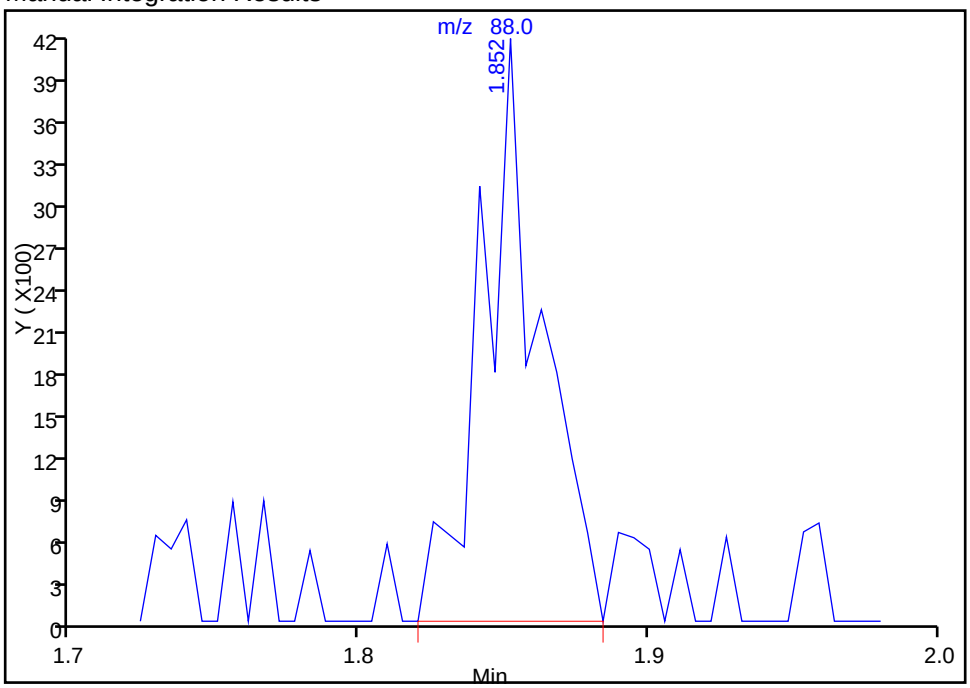
Processing Integration Results

RT: 1.85
Response: 3683
Amount: 0.387001



Manual Integration Results

RT: 1.85
Response: 5984
Amount: 0.605358



Reviewer: piccolinov, 18-Nov-2014 07:26:11
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

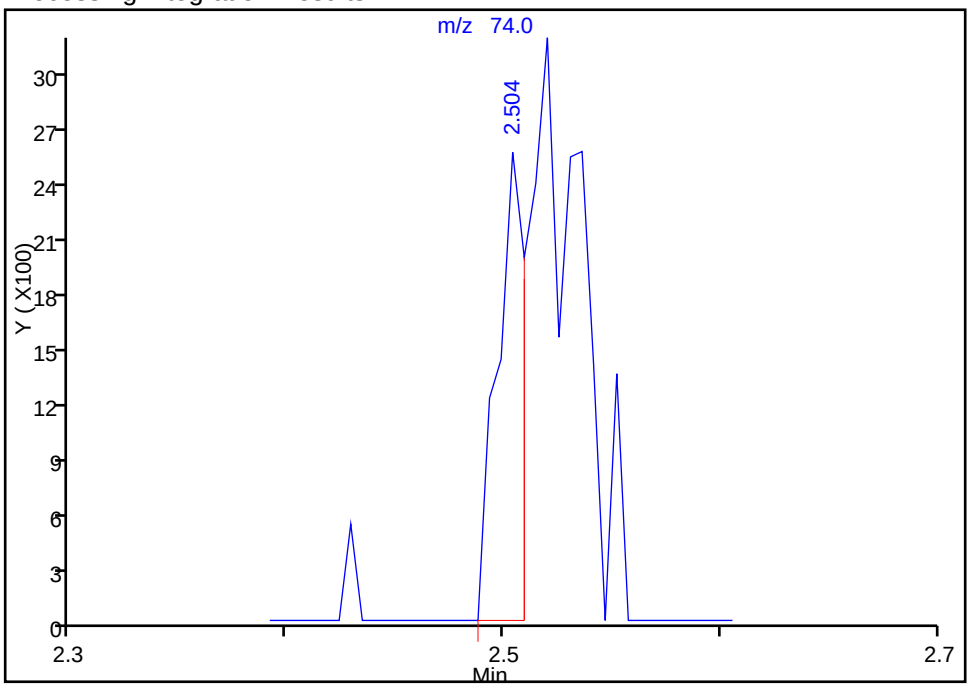
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141118-4448.b\V1118003.D				
Injection Date:	18-Nov-2014 04:22:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

14 N-Nitrosodimethylamine, CAS: 62-75-9

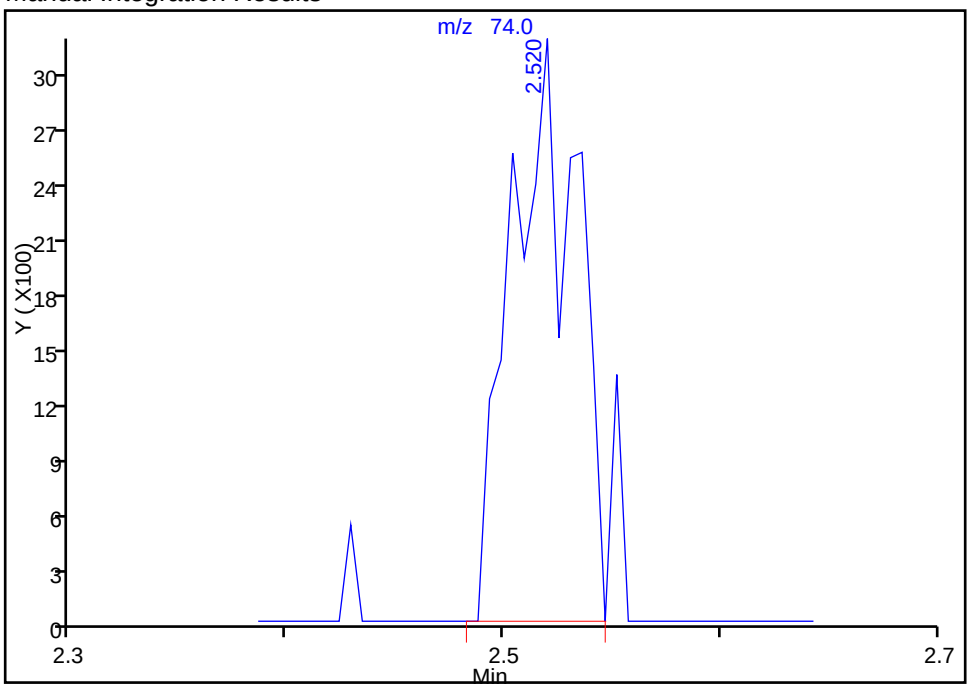
Processing Integration Results

RT: 2.50
Response: 2260
Amount: 0.394202



Manual Integration Results

RT: 2.52
Response: 6540
Amount: 0.443462



Reviewer: piccolinov, 18-Nov-2014 07:26:11
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

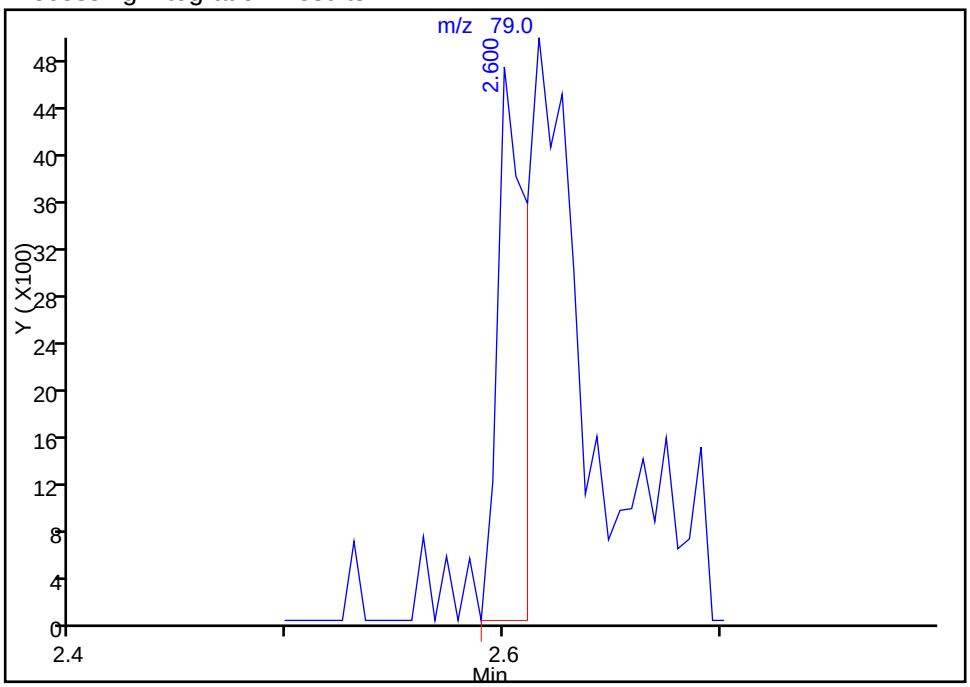
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141118-4448.b\V1118003.D				
Injection Date:	18-Nov-2014 04:22:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

15 Pyridine, CAS: 110-86-1

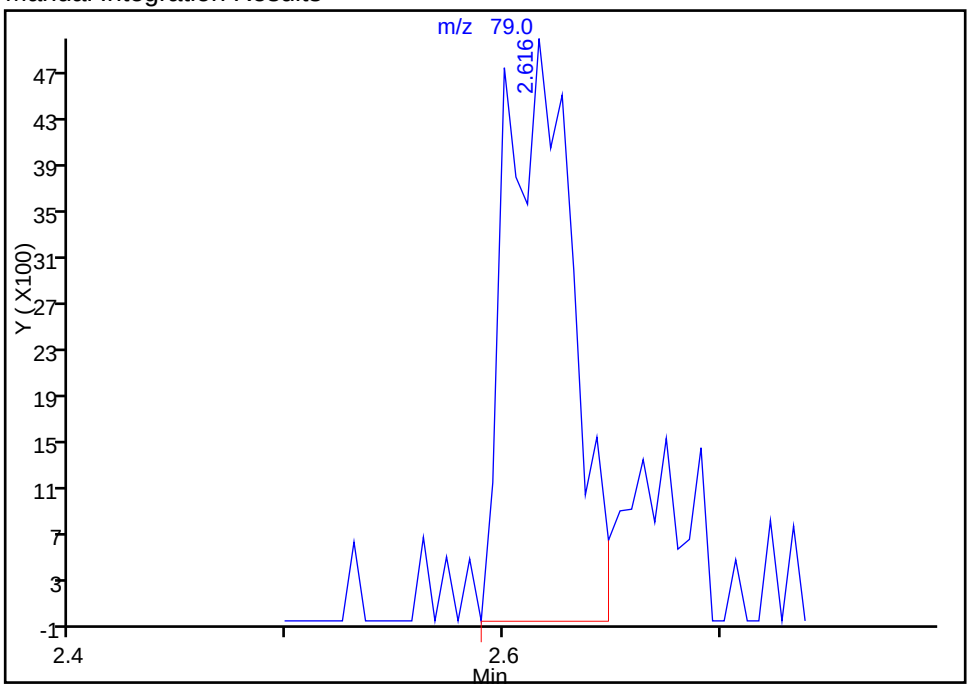
Processing Integration Results

RT: 2.60
Response: 4213
Amount: 0.244613



Manual Integration Results

RT: 2.62
Response: 10523
Amount: 0.394248



Reviewer: piccolinov, 18-Nov-2014 07:26:11
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

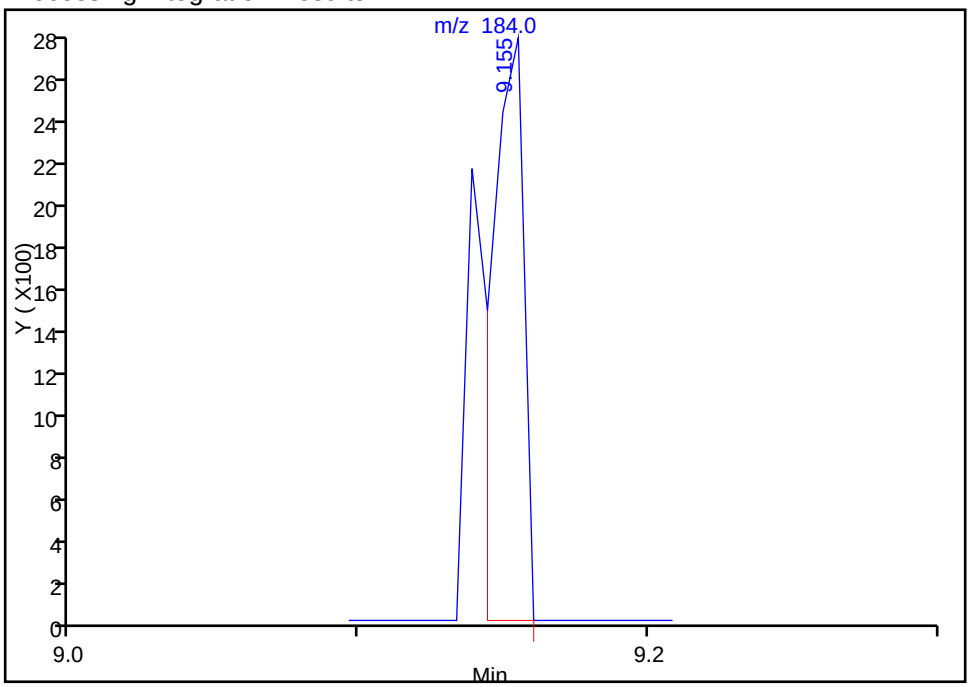
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141118-4448.b\V1118003.D				
Injection Date:	18-Nov-2014 04:22:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

92 2,4-Dinitrophenol, CAS: 51-28-5

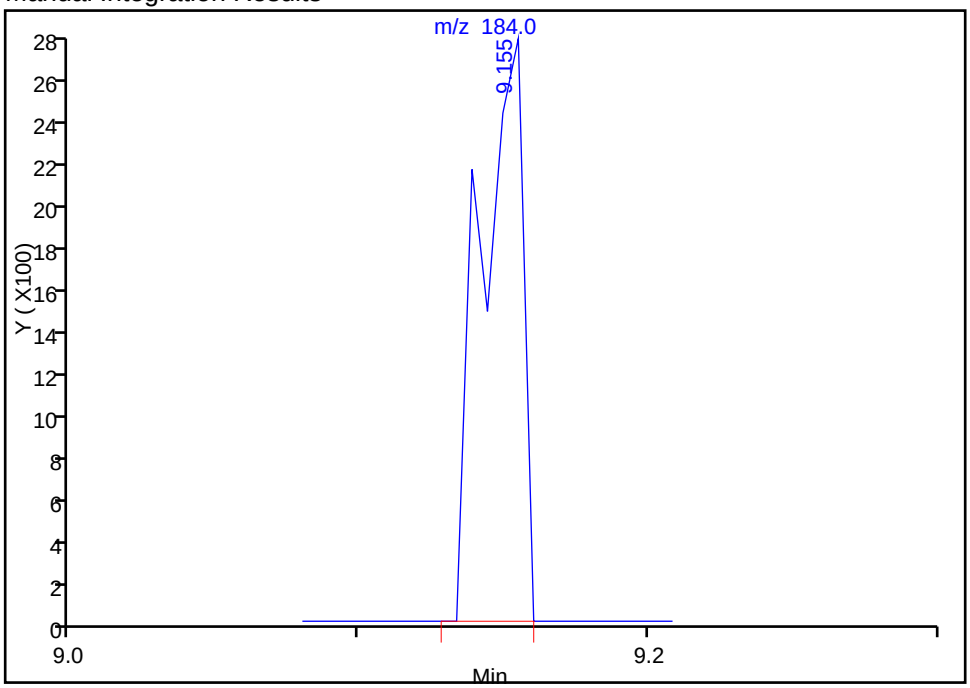
Processing Integration Results

RT: 9.15
Response: 2082
Amount: 0.267092



Manual Integration Results

RT: 9.15
Response: 2755
Amount: 3.207816



Reviewer: piccolinov, 18-Nov-2014 07:26:11
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

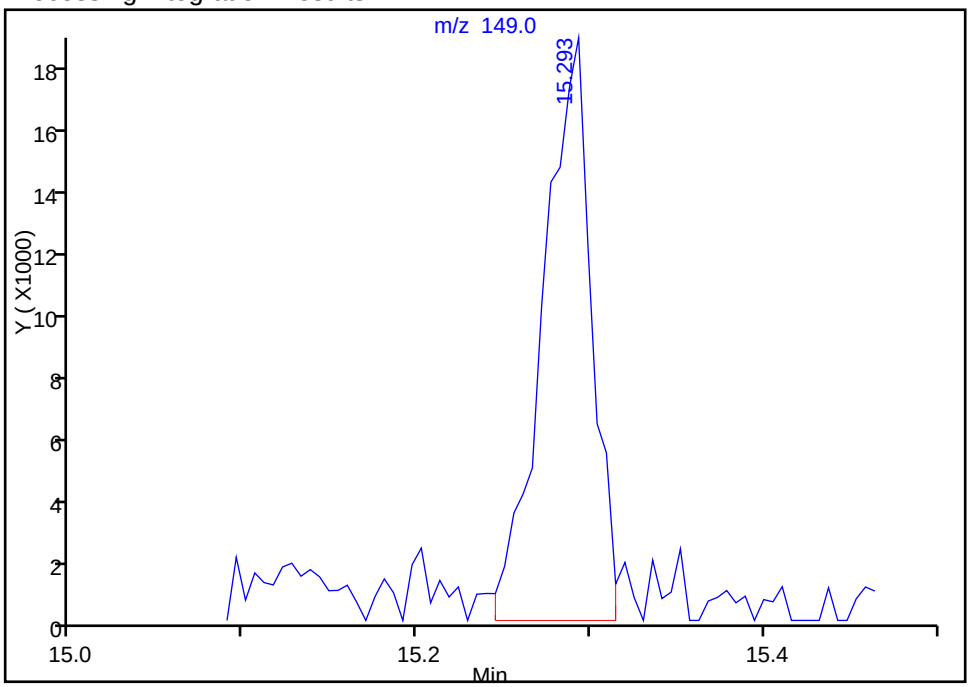
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141118-4448.b\V1118003.D				
Injection Date:	18-Nov-2014 04:22:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

156 Di-n-octyl phthalate, CAS: 117-84-0

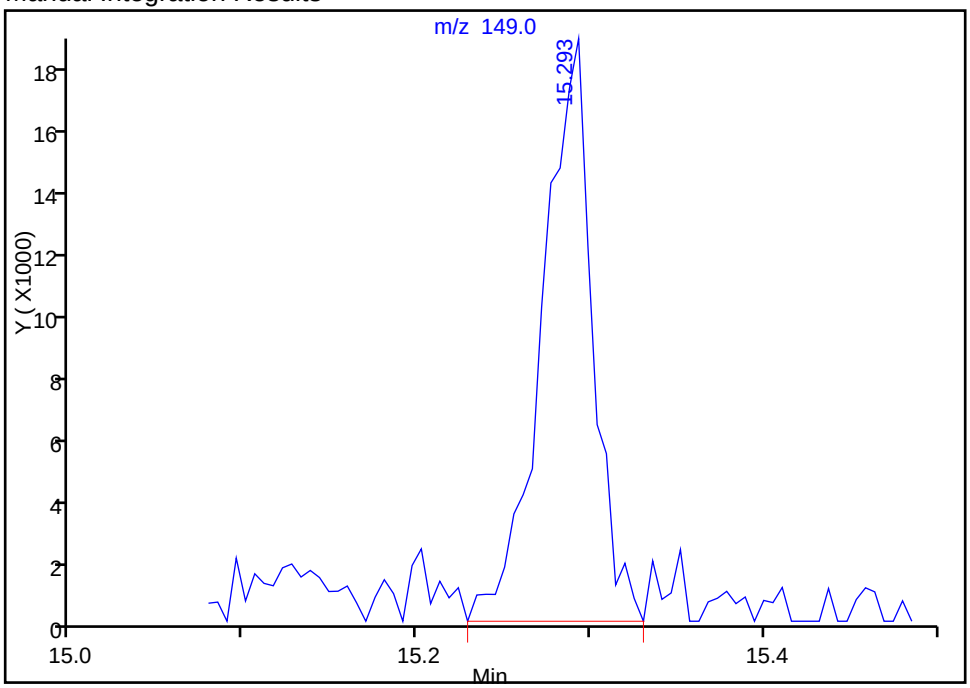
Processing Integration Results

RT: 15.29
Response: 35496
Amount: 0.465001



Manual Integration Results

RT: 15.29
Response: 36829
Amount: 0.487179



Reviewer: piccolinov, 18-Nov-2014 07:26:11
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

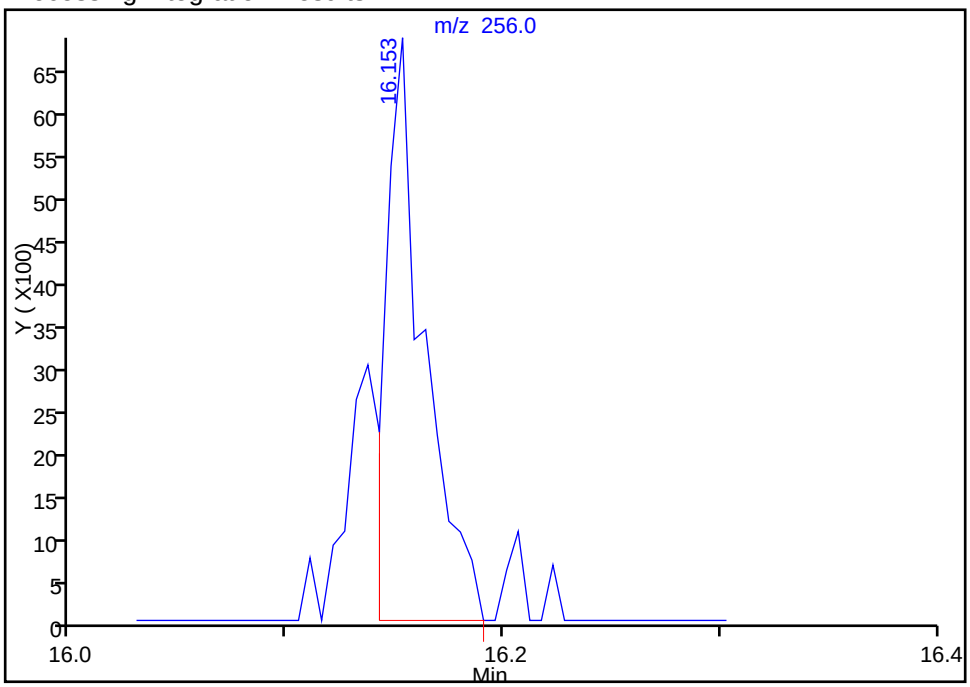
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141118-4448.b\V1118003.D				
Injection Date:	18-Nov-2014 04:22:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

157 7,12-Dimethylbenz(a)anthracene, CAS: 57-97-6

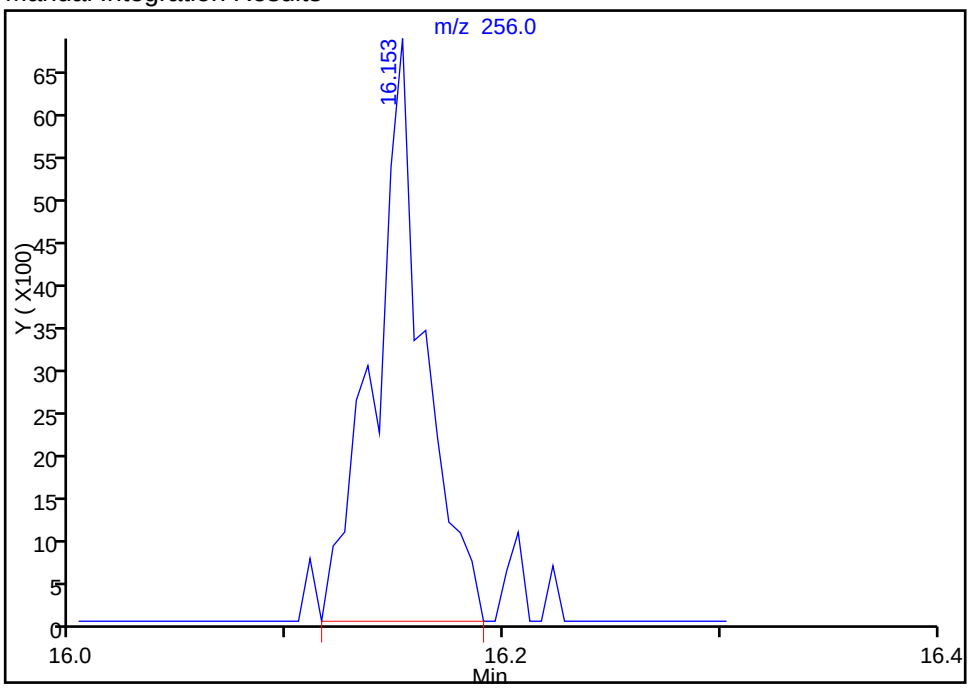
Processing Integration Results

RT: 16.15
Response: 8413
Amount: 0.270175



Manual Integration Results

RT: 16.15
Response: 10830
Amount: 0.345214



Reviewer: piccolinov, 18-Nov-2014 07:26:11
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

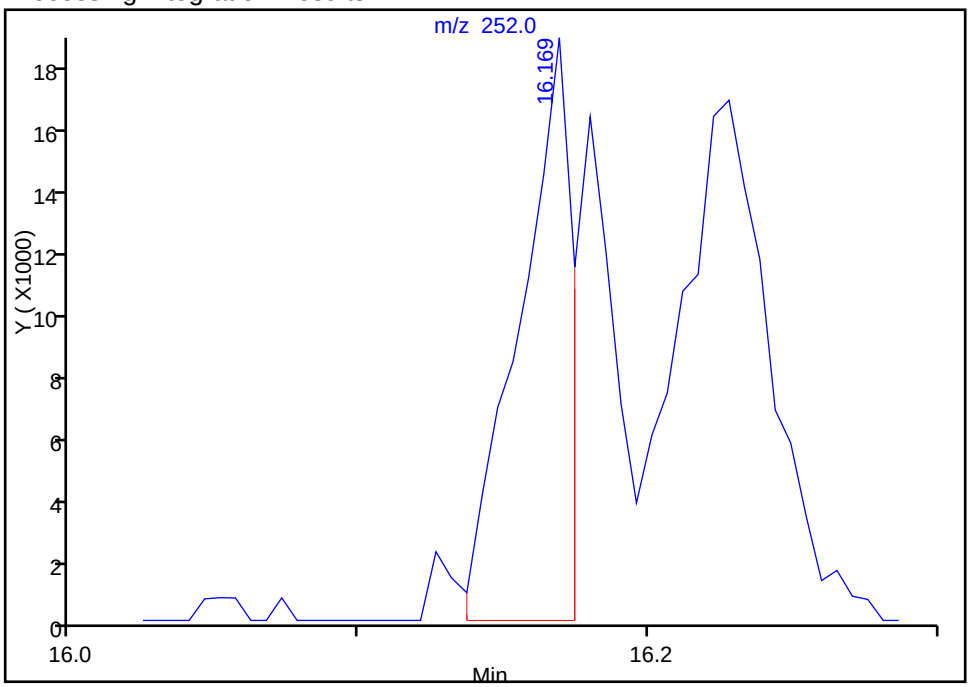
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141118-4448.b\V1118003.D				
Injection Date:	18-Nov-2014 04:22:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

158 Benzo[b]fluoranthene, CAS: 205-99-2

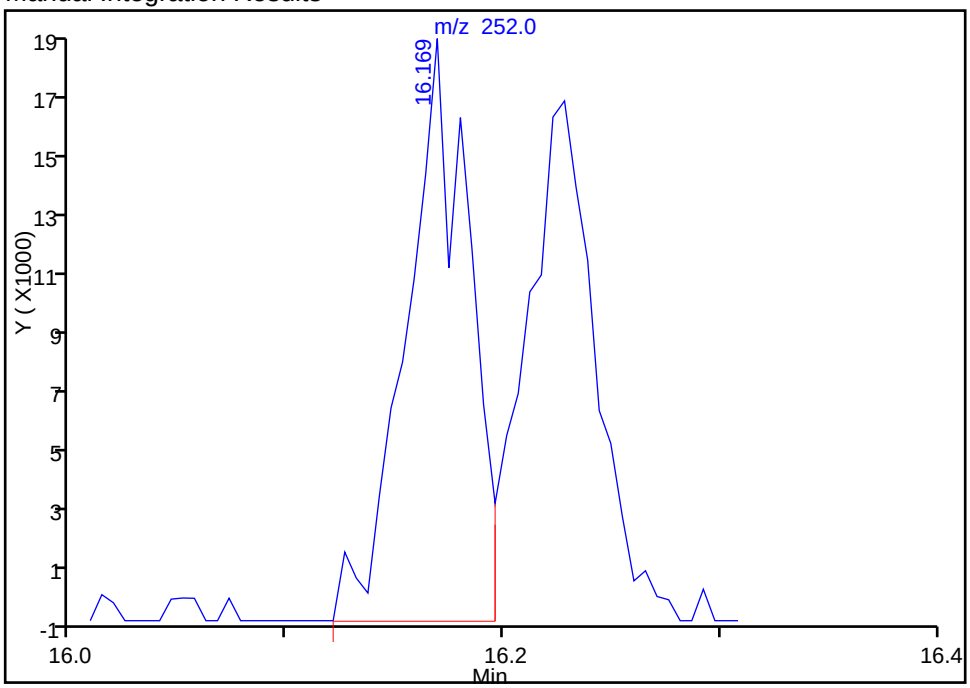
Processing Integration Results

RT: 16.17
Response: 23761
Amount: 0.311114



Manual Integration Results

RT: 16.17
Response: 37205
Amount: 0.453390



Reviewer: piccolinov, 18-Nov-2014 07:26:11
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

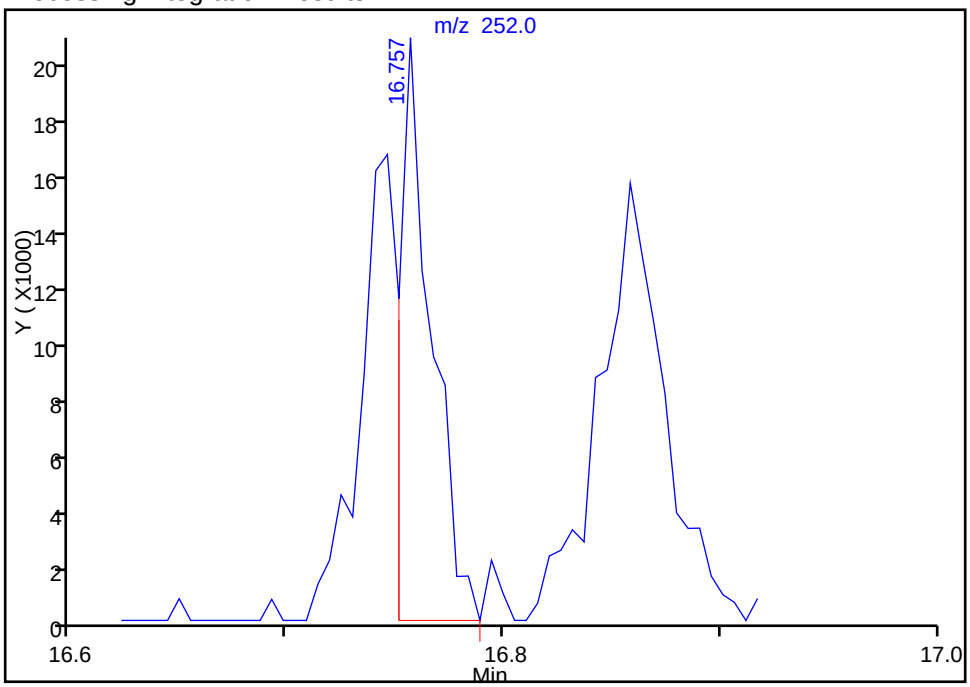
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141118-4448.b\V1118003.D				
Injection Date:	18-Nov-2014 04:22:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

176 Benzo[e]pyrene, CAS: 192-97-2

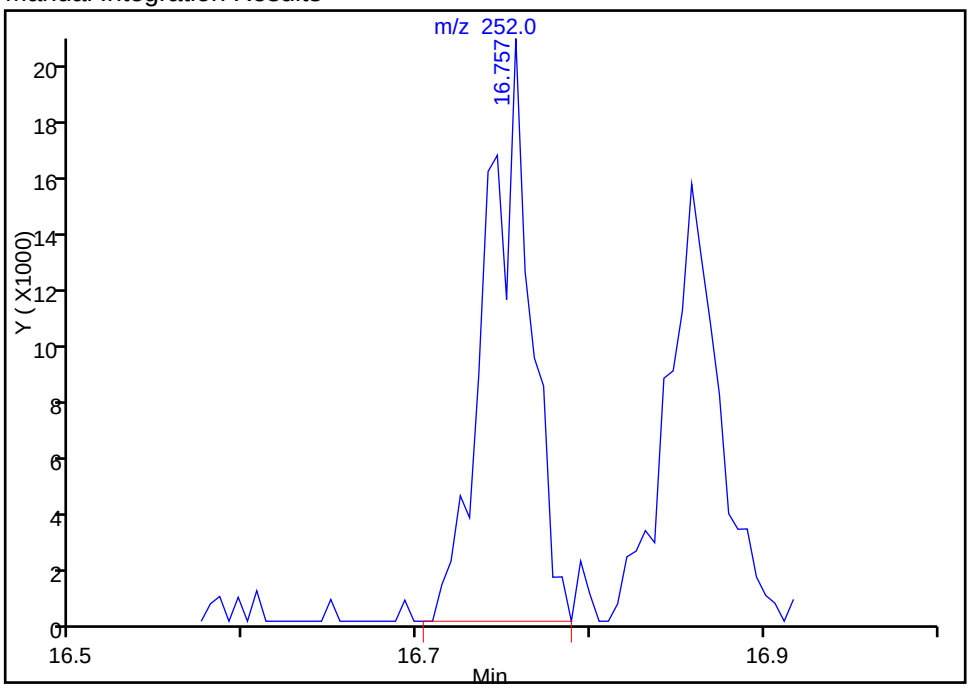
Processing Integration Results

RT: 16.76
Response: 20526
Amount: 0.310614



Manual Integration Results

RT: 16.76
Response: 37113
Amount: 0.506012



Reviewer: piccolinov, 18-Nov-2014 07:26:11
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

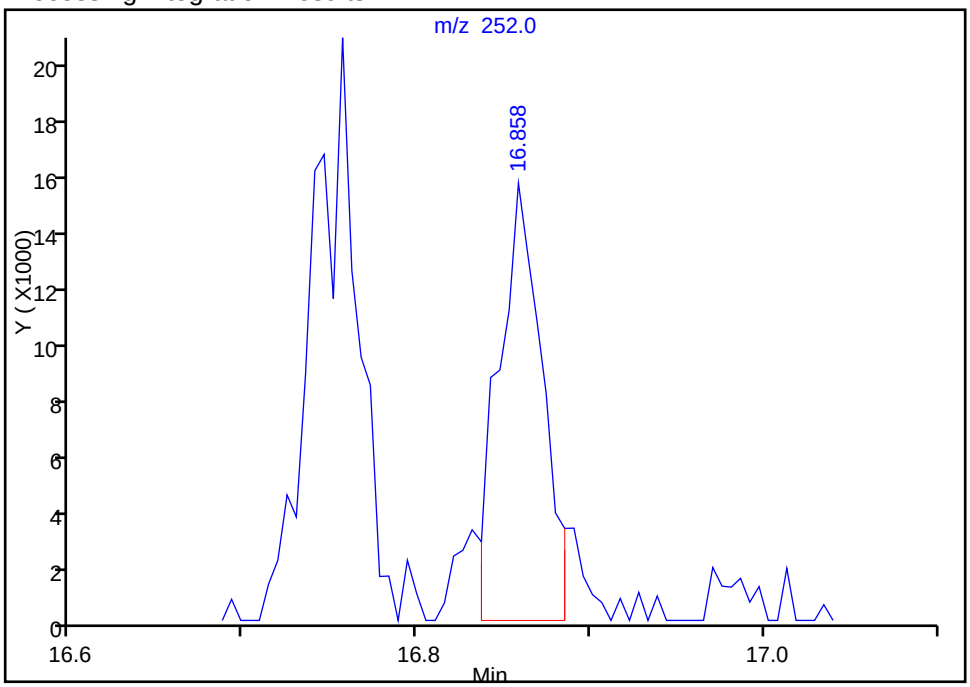
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141118-4448.b\V1118003.D				
Injection Date:	18-Nov-2014 04:22:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

160 Benzo[a]pyrene, CAS: 50-32-8

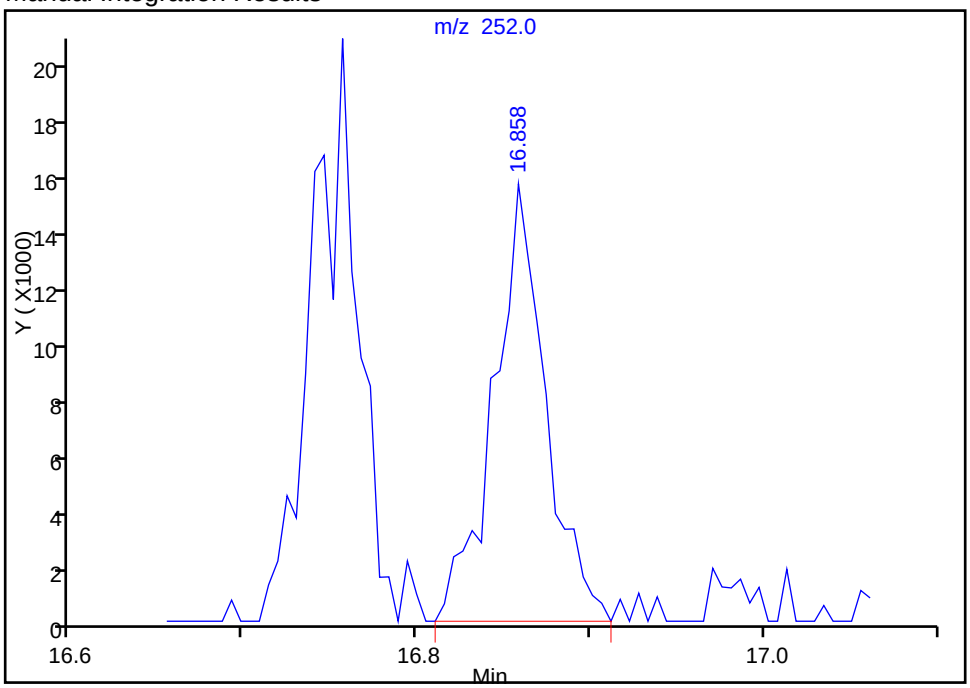
Processing Integration Results

RT: 16.86
Response: 26894
Amount: 0.388533



Manual Integration Results

RT: 16.86
Response: 31607
Amount: 0.441965



Reviewer: piccolinov, 18-Nov-2014 07:26:11
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

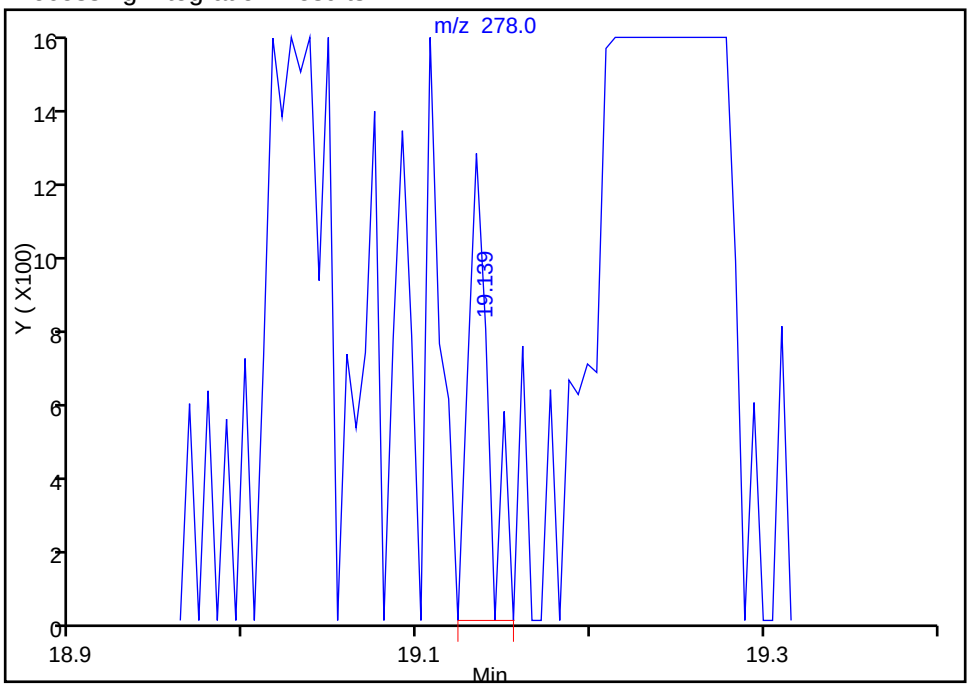
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141118-4448.b\V1118003.D				
Injection Date:	18-Nov-2014 04:22:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

164 Dibenz(a,h)anthracene, CAS: 53-70-3

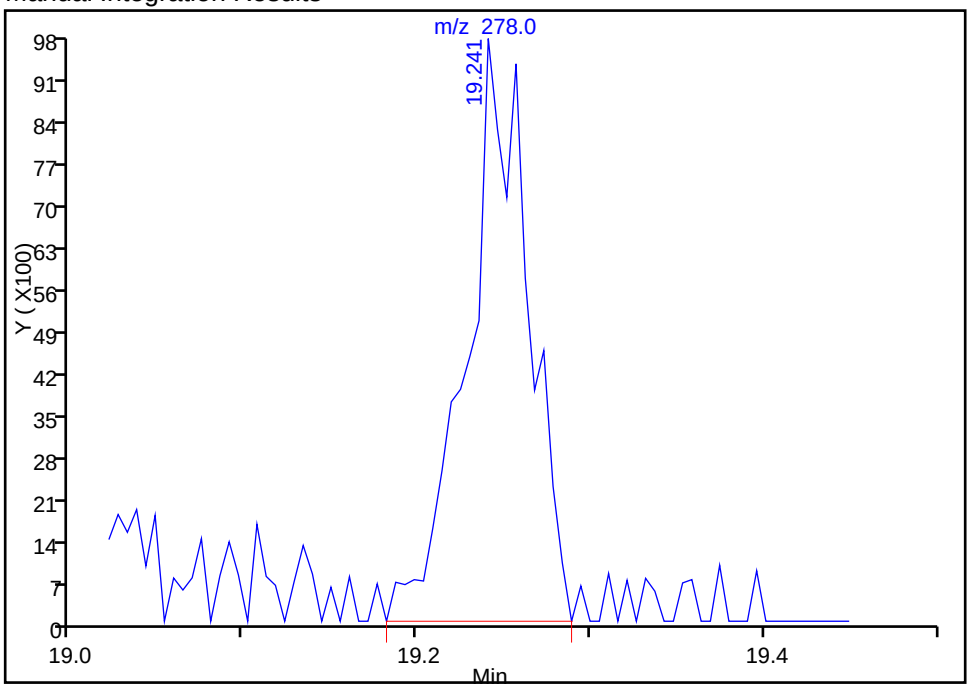
Processing Integration Results

RT: 19.14
Response: 1053
Amount: 0.025803



Manual Integration Results

RT: 19.24
Response: 24267
Amount: 0.435372



Reviewer: piccolinov, 18-Nov-2014 07:26:11
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

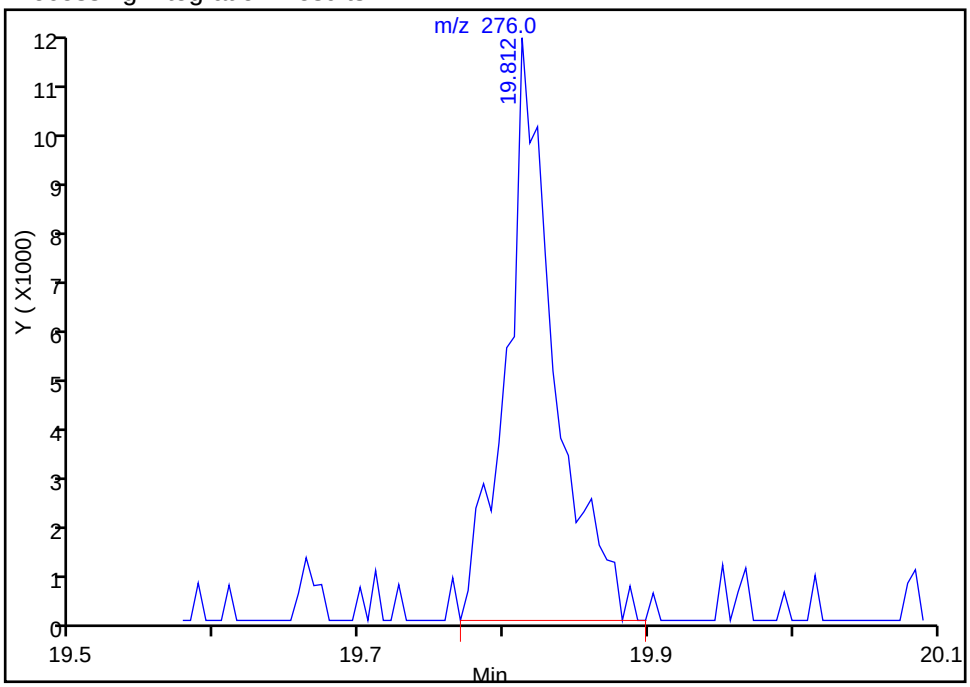
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141118-4448.b\V1118003.D				
Injection Date:	18-Nov-2014 04:22:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

165 Benzo[g,h,i]perylene, CAS: 191-24-2

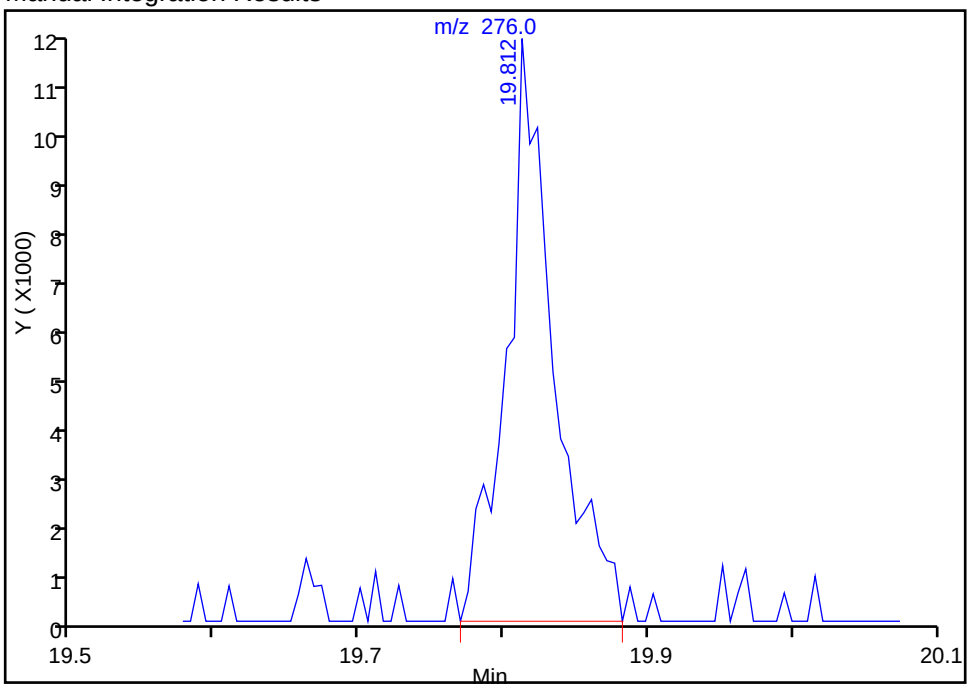
Processing Integration Results

RT: 19.81
Response: 26202
Amount: 0.485294



Manual Integration Results

RT: 19.81
Response: 25990
Amount: 0.479918



Reviewer: piccolinov, 18-Nov-2014 07:26:11
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118004.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 18-Nov-2014 04:50:30 ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004448-004
Misc. Info.: IC
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub4

Method: \\PITCHROM\ChromData\CH731\20141118-4448.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 18-Nov-2014 08:45:55 Calib Date: 18-Nov-2014 07:43:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: piccolinov Date: 18-Nov-2014 07:27:20

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.286	6.284	0.002	89	131688	8.00	8.00	
* 2 Naphthalene-d8	136	7.493	7.497	-0.004	97	424263	8.00	8.00	
* 3 Acenaphthene-d10	164	9.117	9.115	0.002	92	305830	8.00	8.00	
* 4 Phenanthrene-d10	188	10.495	10.488	0.007	96	644260	8.00	8.00	
* 5 Chrysene-d12	240	14.032	14.019	0.013	95	659286	8.00	8.00	
* 6 Perylene-d12	264	16.975	16.963	0.012	98	451076	8.00	8.00	
$ 7 2-Fluorophenol	112	4.940	4.938	0.002	91	39100	2.00	1.84	
$ 8 Phenol-d5	99	5.928	5.926	0.002	84	49869	2.00	1.92	
$ 9 Nitrobenzene-d5	82	6.809	6.813	-0.004	92	57312	2.00	1.91	
$ 10 2-Fluorobiphenyl	172	8.476	8.474	0.002	98	113996	2.00	1.93	
$ 11 2,4,6-Tribromophenol	330	9.844	9.836	0.008	80	13249	2.00	1.71	
$ 12 Terphenyl-d14	244	12.269	12.262	0.007	98	153612	2.00	1.96	
13 1,4-Dioxane	88	1.862	1.850	0.012	87	18968	2.00	2.04	M
14 N-Nitrosodimethylamine	74	2.520	2.507	0.013	84	27232	2.00	1.96	M
15 Pyridine	79	2.589	2.576	0.013	76	50031	2.00	1.99	M
22 Methyl methanesulfonate	80	4.710	4.708	0.002	90	40761	2.00	2.24	
26 Benzaldehyde	77	5.848	5.846	0.002	89	37807	2.00	1.96	
27 Phenol	94	5.939	5.942	-0.003	97	50717	2.00	1.77	
28 Aniline	93	5.955	5.958	-0.003	95	61026	2.00	1.87	
29 Bis(2-chloroethyl)ether	93	6.024	6.022	0.002	94	35472	2.00	1.88	
31 2-Chlorophenol	128	6.077	6.081	-0.004	93	41393	2.00	1.93	
32 n-Decane	43	6.142	6.140	0.002	79	31325	2.00	1.94	
33 1,3-Dichlorobenzene	146	6.232	6.231	0.002	86	46389	2.00	1.85	
34 1,4-Dichlorobenzene	146	6.302	6.305	-0.003	87	50943	2.00	1.98	
36 Benzyl alcohol	108	6.414	6.412	0.002	82	22264	2.00	1.78	
37 1,2-Dichlorobenzene	146	6.451	6.455	-0.004	89	48625	2.00	2.03	
38 2-Methylphenol	108	6.521	6.524	-0.003	86	33582	2.00	1.70	
39 Indene	116	6.537	6.535	0.002	90	68077	2.00	1.93	
40 2,2'-oxybis[1-chloropropan	45	6.548	6.551	-0.003	64	27222	2.00	1.70	
41 N-Nitrosopyrrolidine	100	6.633	6.637	-0.003	70	15661	2.00	1.95	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
43 Acetophenone	105	6.665	6.663	0.002	74	60986	2.00	1.78	
45 4-Methylphenol	108	6.665	6.663	0.002	51	36737	2.00	1.65	
44 N-Nitrosodi-n-propylamine	70	6.665	6.663	0.002	62	32710	2.00	1.70	
47 Hexachloroethane	117	6.783	6.781	0.002	83	26543	2.00	2.17	
48 Nitrobenzene	77	6.831	6.829	0.002	84	61716	2.00	2.11	
50 Isophorone	82	7.050	7.048	0.002	97	87188	2.00	1.96	
51 2-Nitrophenol	139	7.130	7.133	-0.003	75	20320	2.00	1.92	
52 2,4-Dimethylphenol	107	7.162	7.160	0.002	93	47894	2.00	1.91	
56 Benzoic acid	122	7.189	7.208	-0.019	85	16892	2.00	1.79	
55 Bis(2-chloroethoxy)methane	93	7.242	7.240	0.002	96	43970	2.00	1.96	
57 2,4-Dichlorophenol	162	7.354	7.352	0.002	92	38998	2.00	1.91	
61 Azobenzene	77		7.410				ND	ND	
59 1,2,4-Trichlorobenzene	180	7.440	7.438	0.002	90	49818	2.00	1.90	
60 Naphthalene	128	7.514	7.513	0.001	97	112937	2.00	1.87	
62 4-Chloroaniline	127	7.552	7.550	0.002	90	47408	2.00	1.91	
63 2,6-Dichlorophenol	162	7.568	7.566	0.002	90	38200	2.00	1.92	
64 Hexachlorobutadiene	225	7.632	7.630	0.002	94	39617	2.00	1.79	
67 Caprolactam	113	7.830	7.833	-0.003	80	9913	2.00	2.01	
70 4-Chloro-3-methylphenol	107	7.979	7.977	0.002	89	39714	2.00	1.93	
72 2-Methylnaphthalene	142	8.150	8.148	0.002	89	79017	2.00	1.81	
75 1-Methylnaphthalene	142	8.246	8.239	0.007	88	74427	2.00	1.85	
76 Hexachlorocyclopentadiene	237	8.305	8.298	0.007	91	40891	2.00	1.67	
77 1,2,4,5-Tetrachlorobenzene	216	8.310	8.303	0.007	95	61418	2.00	1.84	
78 2,4,6-Trichlorophenol	196	8.401	8.399	0.002	93	38306	2.00	1.99	
79 2,4,5-Trichlorophenol	196	8.433	8.431	0.002	86	39446	2.00	1.99	
80 1,1'-Biphenyl	154	8.572	8.570	0.002	97	106424	2.00	1.92	
81 2-Chloronaphthalene	162	8.604	8.597	0.007	97	99039	2.00	2.00	
82 2-Nitroaniline	65	8.679	8.672	0.007	70	28305	2.00	1.94	
86 Dimethyl phthalate	163	8.829	8.821	0.008	94	102198	2.00	1.99	
87 1,3-Dinitrobenzene	168	8.861	8.859	0.002	79	14805	2.00	1.86	
88 2,6-Dinitrotoluene	165	8.887	8.886	0.001	88	22958	2.00	2.05	
89 Acenaphthylene	152	8.989	8.982	0.007	97	130473	2.00	1.91	
90 3-Nitroaniline	138	9.053	9.046	0.007	80	15471	2.00	1.69	
92 2,4-Dinitrophenol	184	9.144	9.142	0.002	64	22797	4.00	5.07	
91 Acenaphthene	153	9.149	9.142	0.007	89	85305	2.00	1.83	
93 4-Nitrophenol	109	9.181	9.174	0.007	79	39793	4.00	3.46	
94 2,4-Dinitrotoluene	165	9.261	9.259	0.002	81	27639	2.00	1.81	
95 Dibenzofuran	168	9.304	9.297	0.007	95	137708	2.00	1.92	
97 2,3,5,6-Tetrachlorophenol	232	9.374	9.366	0.008	90	35959	2.00	1.72	
99 2,3,4,6-Tetrachlorophenol	232	9.411	9.404	0.007	70	37320	2.00	1.90	
100 2-Naphthylamine	143	9.443	9.436	0.007	91	75721	2.00	1.96	
101 Diethyl phthalate	149	9.470	9.462	0.008	97	105212	2.00	1.85	
102 Hexadecane	57	9.475	9.468	0.007	83	36489	2.00	1.78	
104 4-Chlorophenyl phenyl ethe	204	9.603	9.596	0.007	91	72077	2.00	2.02	
105 4-Nitroaniline	138	9.614	9.607	0.007	70	17981	2.00	1.78	
106 Fluorene	166	9.619	9.617	0.002	94	99231	2.00	1.91	
108 4,6-Dinitro-2-methylphenol	198	9.641	9.639	0.002	86	37871	4.00	3.23	
109 N-Nitrosodiphenylamine	169	9.705	9.698	0.007	67	76387	2.00	1.86	
111 1,2-Diphenylhydrazine	77	9.747	9.740	0.007	99	125230	2.00	1.98	
116 4-Bromophenyl phenyl ether	248	10.052	10.050	0.002	68	38490	2.00	1.81	
118 Hexachlorobenzene	284	10.137	10.136	0.001	89	39454	2.00	1.89	
119 Atrazine	200	10.164	10.162	0.002	90	42136	2.00	2.19	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
122 Pentachlorophenol	266	10.308	10.301	0.007	85	41306	4.00	2.88	
121 n-Octadecane	57	10.314	10.307	0.007	82	41565	2.00	1.84	
126 Phenanthrene	178	10.517	10.510	0.007	94	176597	2.00	1.98	
128 Anthracene	178	10.565	10.563	0.002	96	184986	2.00	2.06	
130 Carbazole	167	10.709	10.702	0.007	97	144107	2.00	1.99	
132 Di-n-butyl phthalate	149	11.003	10.996	0.007	99	175067	2.00	1.99	
137 Fluoranthene	202	11.815	11.808	0.007	95	213534	2.00	1.93	
138 Benzidine	184	11.938	11.931	0.007	97	55961	2.00	1.51	
139 Pyrene	202	12.114	12.107	0.007	98	218875	2.00	1.96	
144 Butyl benzyl phthalate	149	12.963	12.956	0.007	93	71576	2.00	1.94	
149 3,3'-Dichlorobenzidine	252	13.930	13.923	0.007	72	59842	2.00	1.78	
151 Bis(2-ethylhexyl) phthalat	149	13.968	13.961	0.007	95	92416	2.00	1.88	
152 Benzo[a]anthracene	228	14.011	14.003	0.007	96	194106	2.00	1.95	
153 Chrysene	228	14.085	14.073	0.012	95	185309	2.00	2.03	
156 Di-n-octyl phthalate	149	15.282	15.269	0.013	100	153932	2.00	2.05	
157 7,12-Dimethylbenz(a)anthra	256	16.153	16.146	0.008	73	60681	2.00	1.94	M
158 Benzo[b]fluoranthene	252	16.163	16.156	0.007	92	152698	2.00	1.87	
159 Benzo[k]fluoranthene	252	16.222	16.210	0.012	96	151023	2.00	1.93	
176 Benzo[e]pyrene	252	16.746	16.738	0.008	0	132908	2.00	1.82	
160 Benzo[a]pyrene	252	16.863	16.845	0.018	73	132369	2.00	1.86	
163 Indeno[1,2,3-cd]pyrene	276	19.214	19.196	0.018	96	120551	2.00	1.86	
164 Dibenz(a,h)anthracene	278	19.246	19.228	0.018	90	109877	2.00	1.98	
165 Benzo[g,h,i]perylene	276	19.823	19.800	0.023	94	99336	2.00	1.84	
S 206 Total Cresols	108				0		4.00	3.35	
S 208 Methyl Phenols,Total	108				0		4.00	3.35	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD2.0i_00005 Amount Added: 1.00 Units: mL

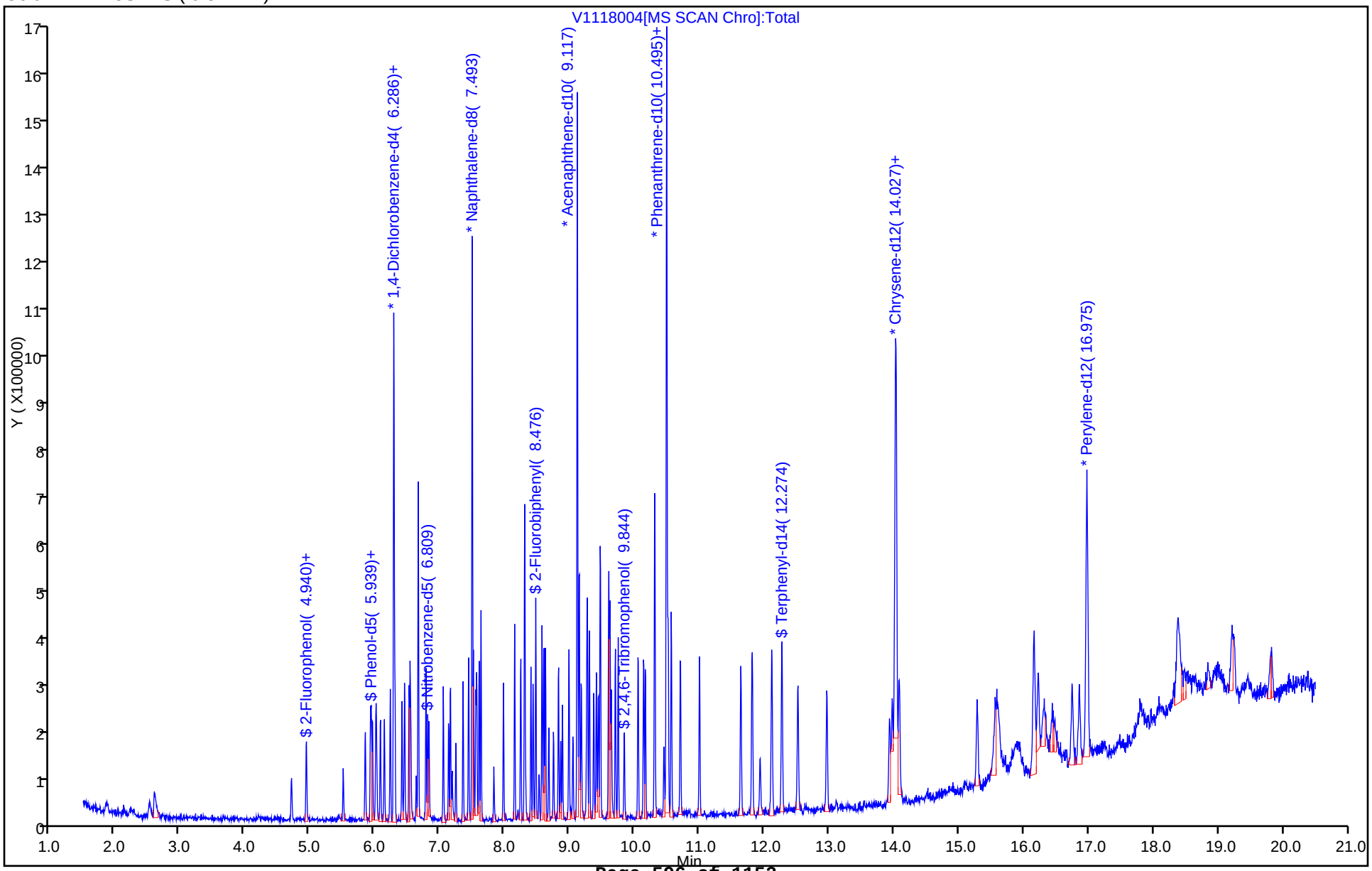
Report Date: 18-Nov-2014 08:45:56 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118004.D

Injection Date:	18-Nov-2014 04:50:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	4
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

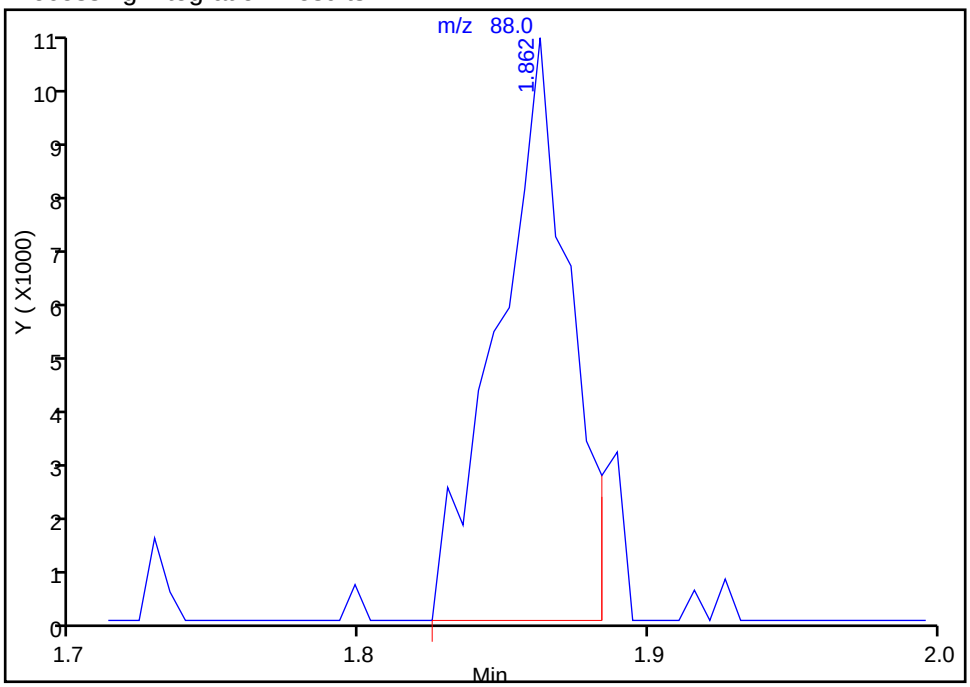
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141118-4448.b\V1118004.D				
Injection Date:	18-Nov-2014 04:50:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	3	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

13 1,4-Dioxane, CAS: 123-91-1

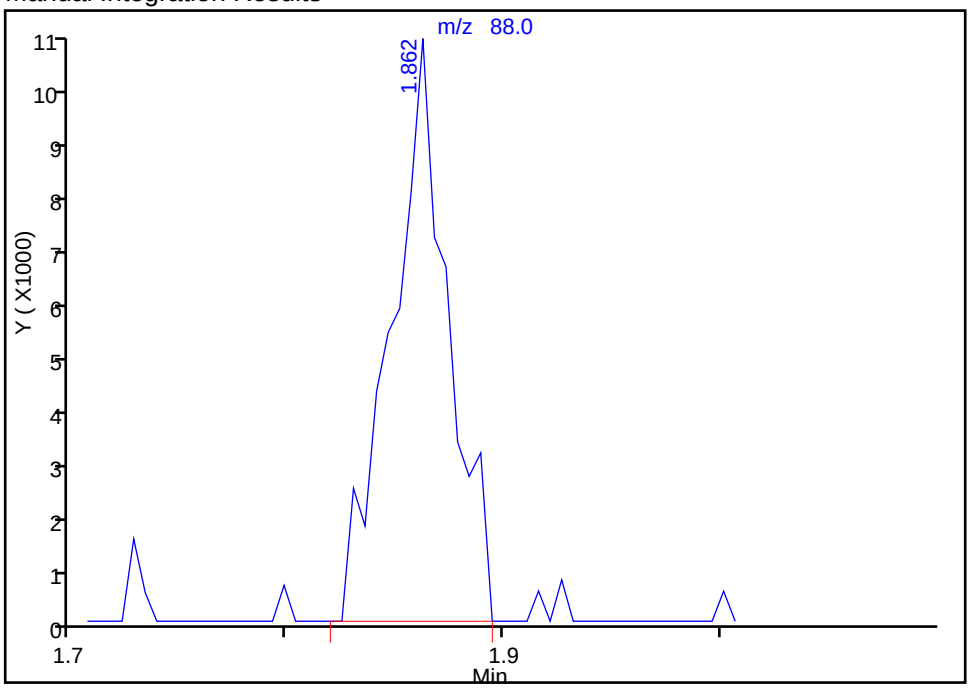
Processing Integration Results

RT: 1.86
Response: 18004
Amount: 1.850708



Manual Integration Results

RT: 1.86
Response: 18968
Amount: 2.041167



Reviewer: piccolinov, 18-Nov-2014 07:27:20
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

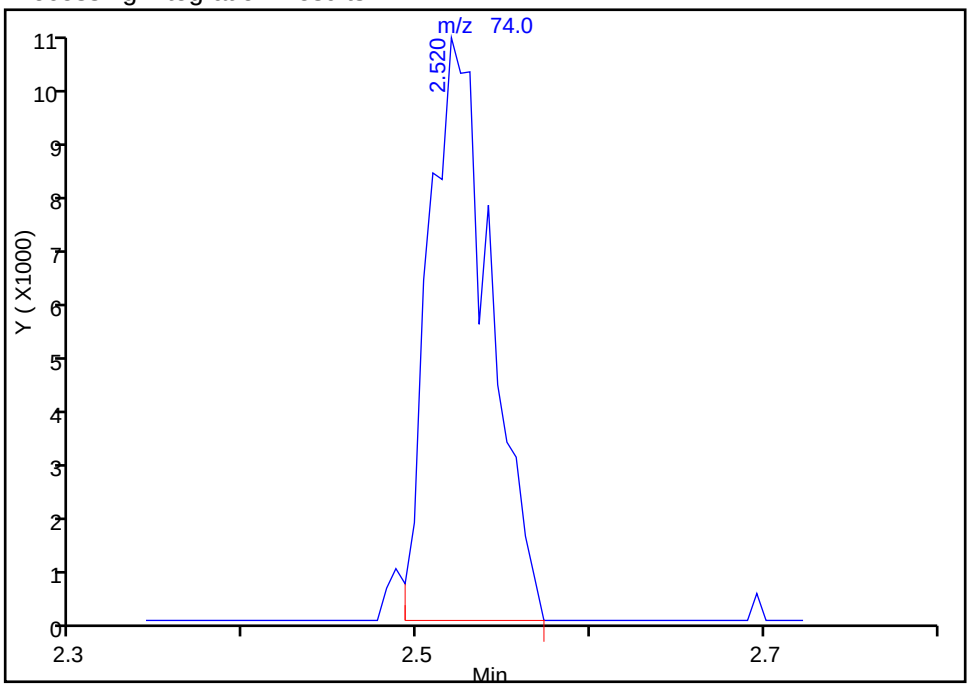
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141118-4448.b\V1118004.D				
Injection Date:	18-Nov-2014 04:50:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	3	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

14 N-Nitrosodimethylamine, CAS: 62-75-9

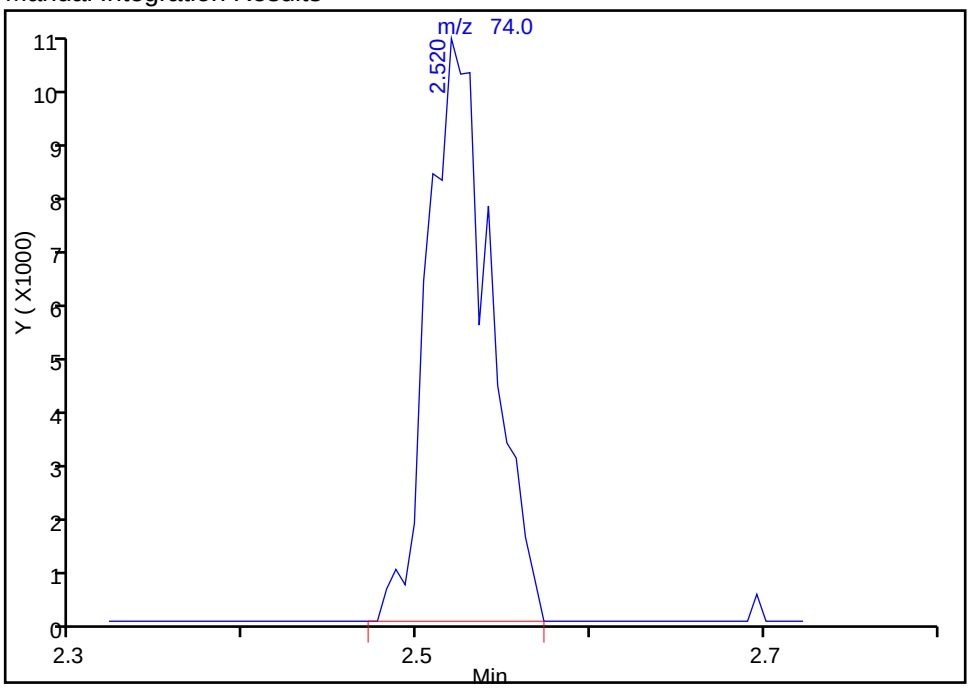
Processing Integration Results

RT: 2.52
Response: 26728
Amount: 1.950268



Manual Integration Results

RT: 2.52
Response: 27232
Amount: 1.964238



Reviewer: piccolinov, 18-Nov-2014 07:27:20
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

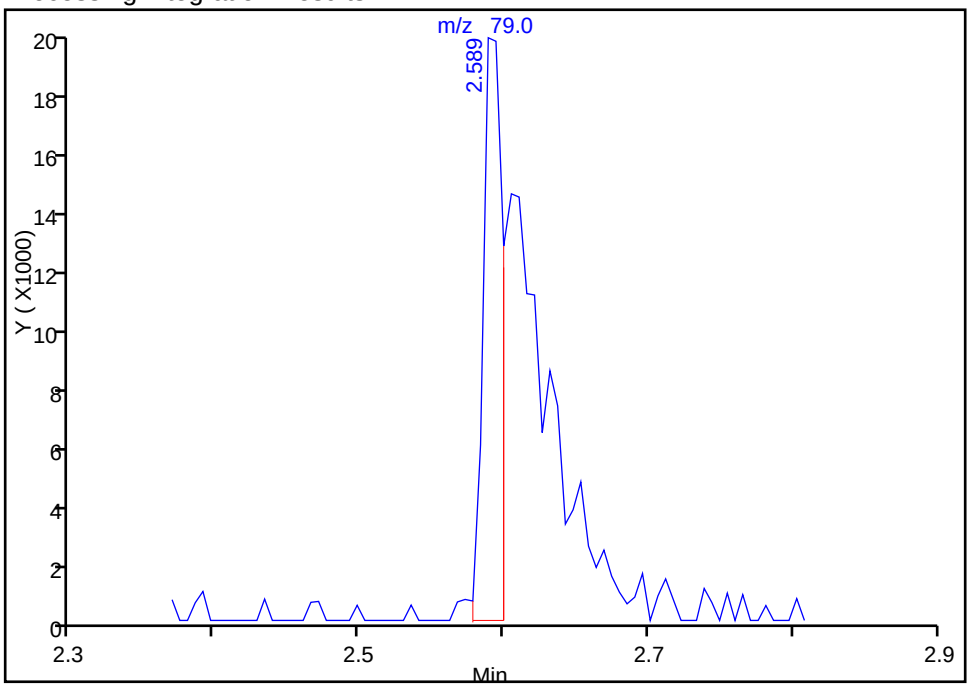
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141118-4448.b\V1118004.D				
Injection Date:	18-Nov-2014 04:50:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	3	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

15 Pyridine, CAS: 110-86-1

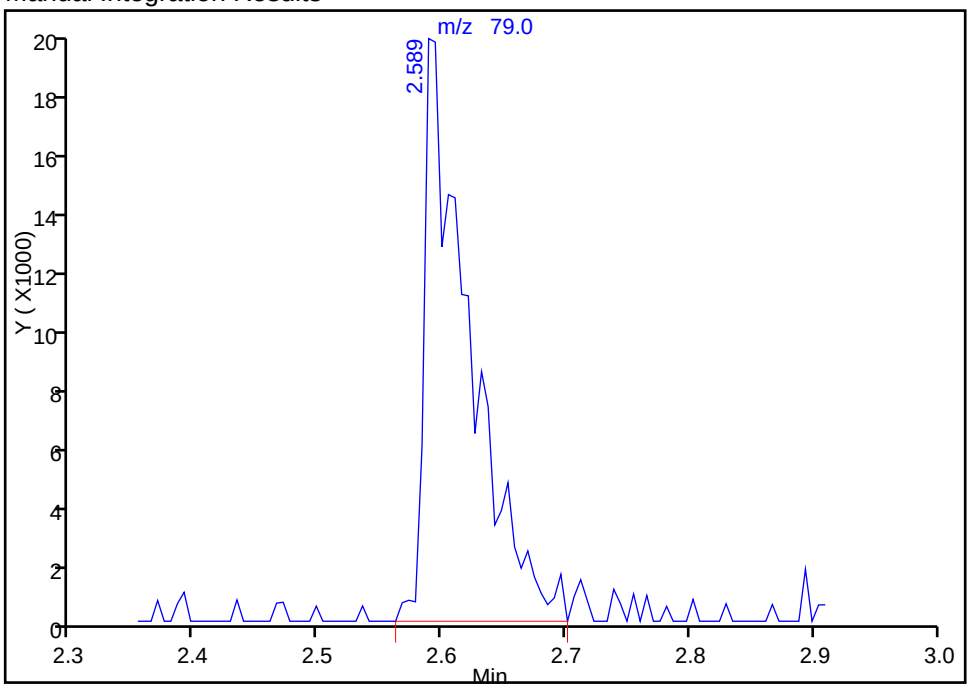
Processing Integration Results

RT: 2.59
Response: 18715
Amount: 0.976925



Manual Integration Results

RT: 2.59
Response: 50031
Amount: 1.993907



Reviewer: piccolinov, 18-Nov-2014 07:27:20
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

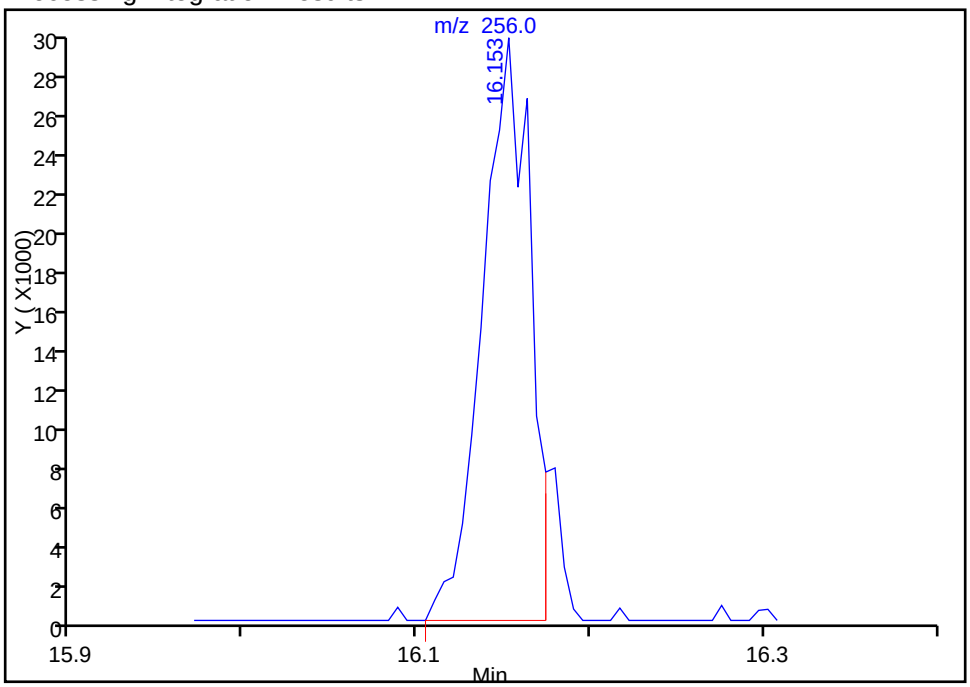
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141118-4448.b\V1118004.D				
Injection Date:	18-Nov-2014 04:50:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	3	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

157 7,12-Dimethylbenz(a)anthracene, CAS: 57-97-6

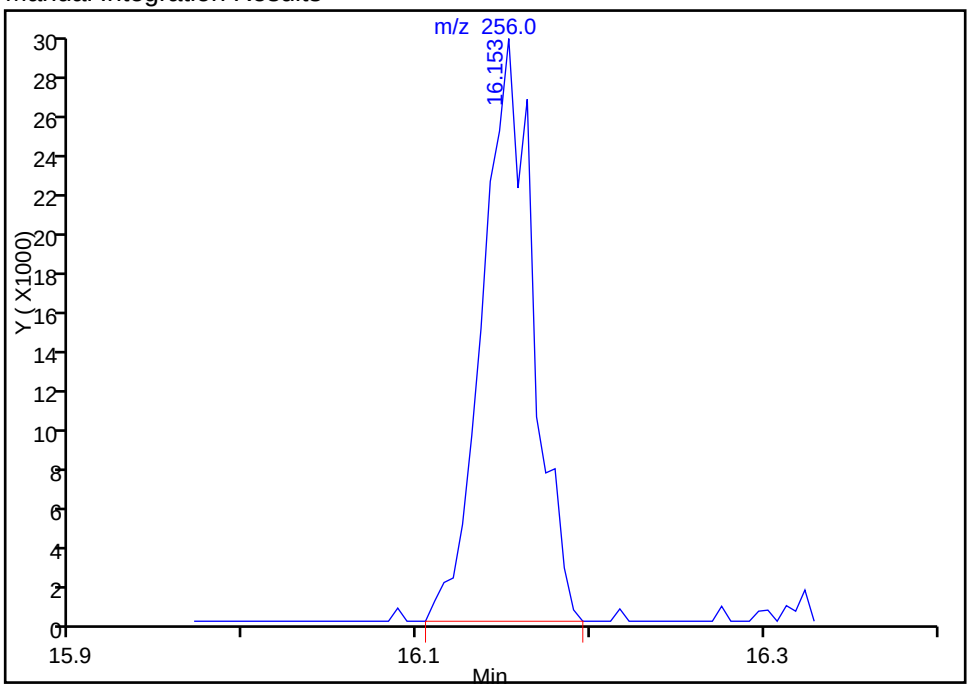
Processing Integration Results

RT: 16.15
Response: 57131
Amount: 1.844640



Manual Integration Results

RT: 16.15
Response: 60681
Amount: 1.944727



Reviewer: piccolinov, 18-Nov-2014 07:27:20
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118005.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 18-Nov-2014 05:19:30 ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004448-005
Misc. Info.: IC
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub4

Method: \\PITCHROM\ChromData\CH731\20141118-4448.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 18-Nov-2014 08:45:57 Calib Date: 18-Nov-2014 07:43:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: piccolinov Date: 18-Nov-2014 07:28:32

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.287	6.284	0.003	89	129568	8.00	8.00	
* 2 Naphthalene-d8	136	7.495	7.497	-0.002	97	398750	8.00	8.00	
* 3 Acenaphthene-d10	164	9.113	9.115	-0.002	91	296645	8.00	8.00	
* 4 Phenanthrene-d10	188	10.492	10.488	0.004	96	614812	8.00	8.00	
* 5 Chrysene-d12	240	14.023	14.019	0.004	95	625437	8.00	8.00	
* 6 Perylene-d12	264	16.966	16.963	0.003	97	443207	8.00	8.00	
$ 7 2-Fluorophenol	112	4.936	4.938	-0.002	90	75042	4.00	3.58	
$ 8 Phenol-d5	99	5.924	5.926	-0.002	87	94298	4.00	3.70	
$ 9 Nitrobenzene-d5	82	6.806	6.813	-0.007	90	114044	4.00	4.05	
$ 10 2-Fluorobiphenyl	172	8.472	8.474	-0.002	98	213944	4.00	3.74	
$ 11 2,4,6-Tribromophenol	330	9.840	9.836	0.004	82	26207	4.00	3.55	
$ 12 Terphenyl-d14	244	12.265	12.262	0.003	98	282829	4.00	3.80	
13 1,4-Dioxane	88	1.859	1.850	0.009	92	34679	4.00	3.79	
14 N-Nitrosodimethylamine	74	2.521	2.507	0.014	86	52094	4.00	3.82	
15 Pyridine	79	2.591	2.576	0.015	88	100959	4.00	4.09	M
22 Methyl methanesulfonate	80	4.706	4.708	-0.002	92	69897	4.00	3.91	
26 Benzaldehyde	77	5.844	5.846	-0.002	86	67165	4.00	3.54	
27 Phenol	94	5.940	5.942	-0.002	96	102692	4.00	3.64	
28 Aniline	93	5.956	5.958	-0.002	97	115505	4.00	3.60	
29 Bis(2-chloroethyl)ether	93	6.020	6.022	-0.002	97	69203	4.00	3.73	
31 2-Chlorophenol	128	6.079	6.081	-0.002	92	77525	4.00	3.67	
32 n-Decane	43	6.138	6.140	-0.002	75	58121	4.00	3.66	
33 1,3-Dichlorobenzene	146	6.229	6.231	-0.001	88	92441	4.00	3.74	
34 1,4-Dichlorobenzene	146	6.298	6.305	-0.007	85	96985	4.00	3.82	
36 Benzyl alcohol	108	6.410	6.412	-0.002	82	45924	4.00	3.74	
37 1,2-Dichlorobenzene	146	6.453	6.455	-0.002	87	88902	4.00	3.78	
38 2-Methylphenol	108	6.517	6.524	-0.007	90	69834	4.00	3.59	
39 Indene	116	6.533	6.535	-0.002	86	121869	4.00	3.51	
40 2,2'-oxybis[1-chloropropan	45	6.544	6.551	-0.007	65	54548	4.00	3.47	
41 N-Nitrosopyrrolidine	100	6.629	6.637	-0.007	72	30680	4.00	3.88	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
44 N-Nitrosodi-n-propylamine	70	6.661	6.663	-0.002	64	64652	4.00	3.41	
43 Acetophenone	105	6.661	6.663	-0.002	70	111147	4.00	3.30	
45 4-Methylphenol	108	6.661	6.663	-0.002	52	69079	4.00	3.16	
47 Hexachloroethane	117	6.779	6.781	-0.002	83	46828	4.00	3.89	
48 Nitrobenzene	77	6.827	6.829	-0.002	90	103708	4.00	3.77	
50 Isophorone	82	7.051	7.048	0.003	97	161147	4.00	3.84	
51 2-Nitrophenol	139	7.132	7.133	-0.001	78	39012	4.00	3.91	
52 2,4-Dimethylphenol	107	7.158	7.160	-0.002	93	97907	4.00	4.16	
56 Benzoic acid	122	7.190	7.208	-0.018	85	32966	4.00	3.71	
55 Bis(2-chloroethoxy)methane	93	7.238	7.240	-0.002	97	77491	4.00	3.67	
57 2,4-Dichlorophenol	162	7.351	7.352	-0.001	93	75233	4.00	3.92	
61 Azobenzene	77		7.410				ND	ND	
59 1,2,4-Trichlorobenzene	180	7.436	7.438	-0.002	90	97454	4.00	3.96	
60 Naphthalene	128	7.511	7.513	-0.002	97	216903	4.00	3.82	
62 4-Chloroaniline	127	7.548	7.550	-0.002	92	90005	4.00	3.86	
63 2,6-Dichlorophenol	162	7.564	7.566	-0.002	88	71398	4.00	3.81	
64 Hexachlorobutadiene	225	7.628	7.630	-0.002	95	81175	4.00	3.91	
67 Caprolactam	113	7.826	7.833	-0.007	78	18354	4.00	3.95	
70 4-Chloro-3-methylphenol	107	7.976	7.977	-0.001	89	74872	4.00	3.87	
72 2-Methylnaphthalene	142	8.147	8.148	-0.001	88	156418	4.00	3.81	
75 1-Methylnaphthalene	142	8.243	8.239	0.004	87	144674	4.00	3.83	
76 Hexachlorocyclopentadiene	237	8.301	8.298	0.003	96	82057	4.00	3.46	
77 1,2,4,5-Tetrachlorobenzene	216	8.307	8.303	0.004	96	128178	4.00	3.97	
78 2,4,6-Trichlorophenol	196	8.398	8.399	-0.001	92	73749	4.00	3.96	
79 2,4,5-Trichlorophenol	196	8.430	8.431	-0.001	89	71855	4.00	3.74	
80 1,1'-Biphenyl	154	8.569	8.570	-0.001	97	205381	4.00	3.82	
81 2-Chloronaphthalene	162	8.601	8.597	0.004	98	175769	4.00	3.66	
82 2-Nitroaniline	65	8.670	8.672	-0.002	71	57423	4.00	4.06	
86 Dimethyl phthalate	163	8.825	8.821	0.004	95	197650	4.00	3.96	
87 1,3-Dinitrobenzene	168	8.857	8.859	-0.002	83	29527	4.00	3.82	
88 2,6-Dinitrotoluene	165	8.884	8.886	-0.002	85	44654	4.00	4.12	
89 Acenaphthylene	152	8.985	8.982	0.003	96	244082	4.00	3.68	
90 3-Nitroaniline	138	9.044	9.046	-0.002	82	36371	4.00	4.11	
92 2,4-Dinitrophenol	184	9.140	9.142	-0.002	80	44534	8.00	7.21	
91 Acenaphthene	153	9.146	9.142	0.004	92	159842	4.00	3.53	
93 4-Nitrophenol	109	9.172	9.174	-0.002	79	82707	8.00	7.41	
94 2,4-Dinitrotoluene	165	9.258	9.259	-0.001	83	56567	4.00	3.81	
95 Dibenzofuran	168	9.300	9.297	0.003	95	256691	4.00	3.70	
97 2,3,5,6-Tetrachlorophenol	232	9.370	9.366	0.004	90	75538	4.00	3.73	
99 2,3,4,6-Tetrachlorophenol	232	9.407	9.404	0.003	73	71343	4.00	3.75	
100 2-Naphthylamine	143	9.434	9.436	-0.002	92	146628	4.00	3.92	
101 Diethyl phthalate	149	9.461	9.462	-0.001	96	195520	4.00	3.54	
102 Hexadecane	57	9.471	9.468	0.003	87	65288	4.00	3.40	
104 4-Chlorophenyl phenyl ethe	204	9.594	9.596	-0.002	91	134329	4.00	3.88	
105 4-Nitroaniline	138	9.610	9.607	0.003	72	36210	4.00	3.69	
106 Fluorene	166	9.616	9.617	-0.001	94	190024	4.00	3.77	
108 4,6-Dinitro-2-methylphenol	198	9.637	9.639	-0.002	87	79649	8.00	7.12	
109 N-Nitrosodiphenylamine	169	9.701	9.698	0.003	64	156540	4.00	4.00	
111 1,2-Diphenylhydrazine	77	9.744	9.740	0.004	99	228117	4.00	3.77	
116 4-Bromophenyl phenyl ether	248	10.048	10.050	-0.002	65	75101	4.00	3.70	
118 Hexachlorobenzene	284	10.139	10.136	0.003	87	71337	4.00	3.58	
119 Atrazine	200	10.161	10.162	-0.002	92	70047	4.00	3.82	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
122 Pentachlorophenol	266	10.305	10.301	0.004	87	91481	8.00	6.26	
121 n-Octadecane	57	10.310	10.307	0.003	87	77398	4.00	3.48	
126 Phenanthrene	178	10.513	10.510	0.003	97	321378	4.00	3.77	
128 Anthracene	178	10.561	10.563	-0.002	97	333789	4.00	3.89	
130 Carbazole	167	10.700	10.702	-0.002	96	267299	4.00	3.86	
132 Di-n-butyl phthalate	149	10.994	10.996	-0.002	99	338075	4.00	4.03	
137 Fluoranthene	202	11.806	11.808	-0.002	96	423953	4.00	4.02	
138 Benzidine	184	11.929	11.931	-0.002	98	135664	4.00	3.85	
139 Pyrene	202	12.105	12.107	-0.002	98	422019	4.00	3.99	
144 Butyl benzyl phthalate	149	12.960	12.956	0.004	96	143852	4.00	4.11	
149 3,3'-Dichlorobenzidine	252	13.927	13.923	0.004	73	123207	4.00	3.87	
151 Bis(2-ethylhexyl) phthalat	149	13.964	13.961	0.003	94	187357	4.00	4.03	
152 Benzo[a]anthracene	228	14.002	14.003	-0.001	95	366137	4.00	3.88	
153 Chrysene	228	14.071	14.073	-0.002	95	344143	4.00	3.97	
156 Di-n-octyl phthalate	149	15.278	15.269	0.009	99	296465	4.00	4.01	
157 7,12-Dimethylbenz(a)anthra	256	16.138	16.146	-0.007	89	120367	4.00	3.93	
158 Benzo[b]fluoranthene	252	16.160	16.156	0.004	94	323766	4.00	4.04	
159 Benzo[k]fluoranthene	252	16.213	16.210	0.003	96	293262	4.00	3.81	
176 Benzo[e]pyrene	252	16.742	16.738	0.004	0	273853	4.00	3.82	
160 Benzo[a]pyrene	252	16.844	16.845	-0.001	73	268213	4.00	3.84	
163 Indeno[1,2,3-cd]pyrene	276	19.199	19.196	0.003	96	234343	4.00	3.67	
164 Dibenz(a,h)anthracene	278	19.226	19.228	-0.002	0	211567	4.00	3.88	M
165 Benzo[g,h,i]perylene	276	19.798	19.800	-0.002	96	208017	4.00	3.93	
S 206 Total Cresols	108				0		8.00	6.75	
S 208 Methyl Phenols,Total	108				0		8.00	6.75	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD4.0i_00006 Amount Added: 1.00 Units: mL

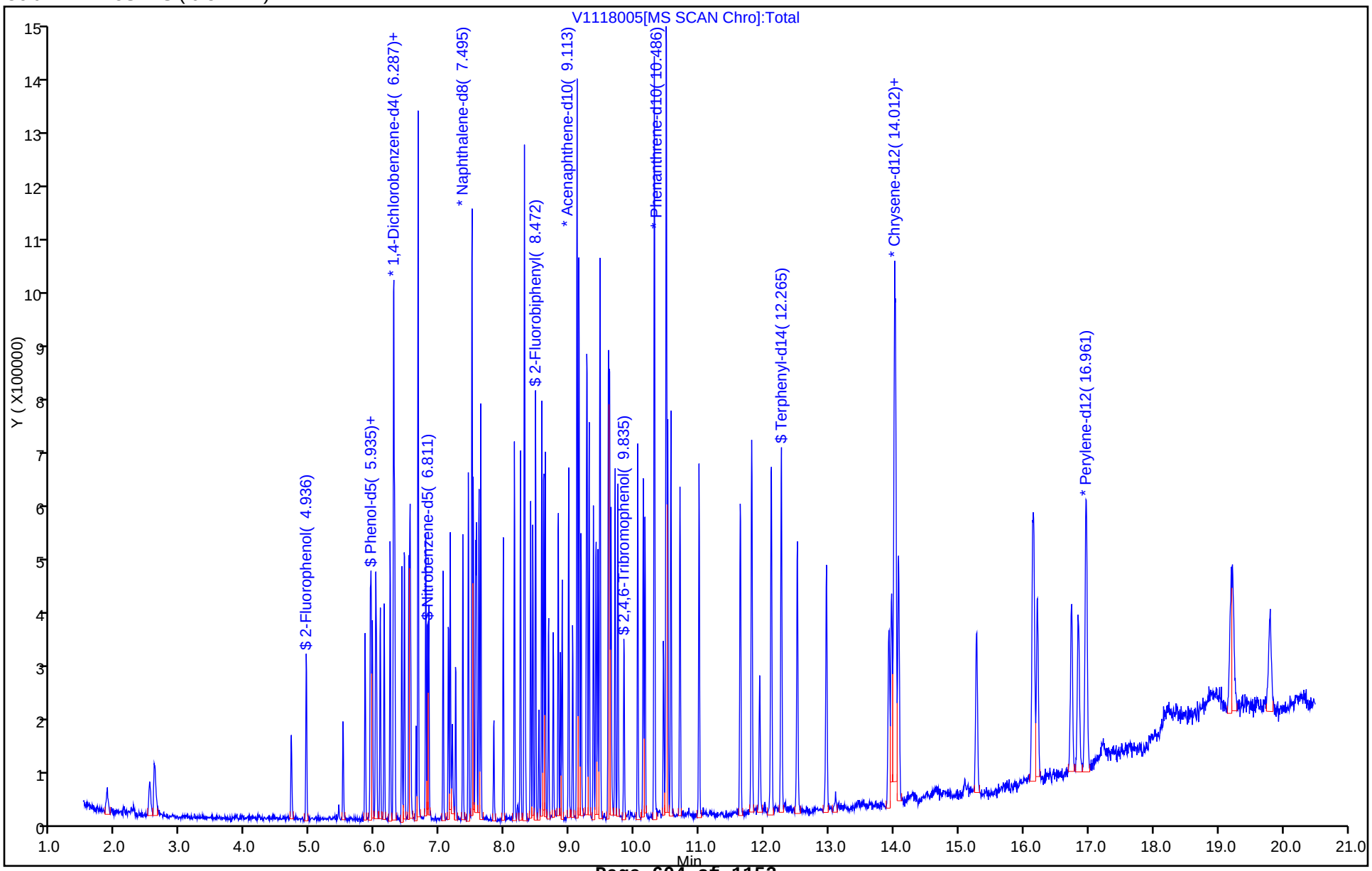
Report Date: 18-Nov-2014 08:45:58 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118005.D

Injection Date:	18-Nov-2014 05:19:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	5
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

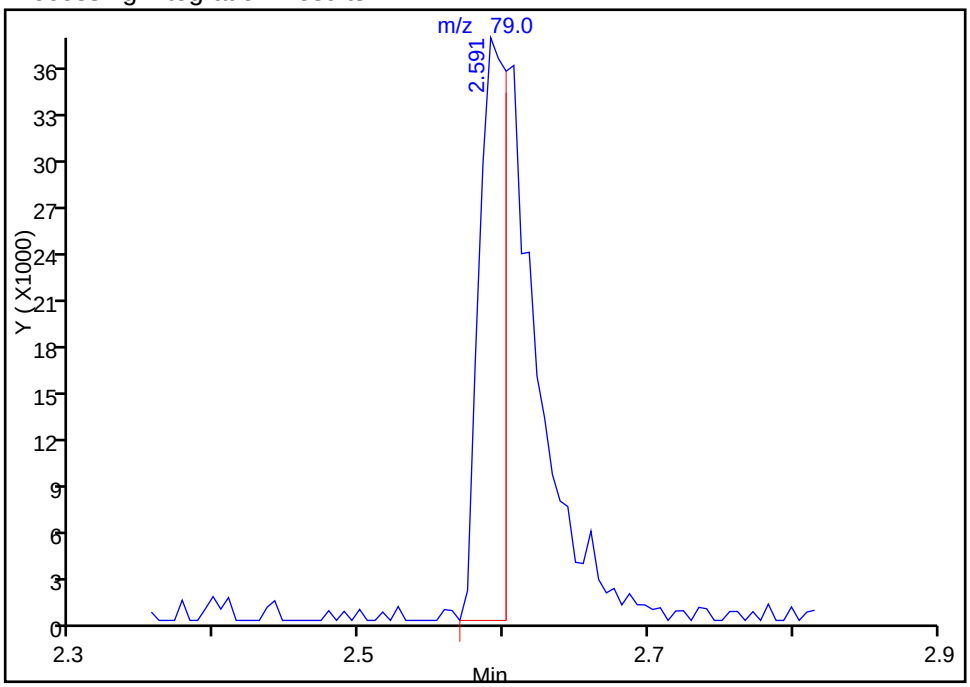
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141118-4448.b\V1118005.D				
Injection Date:	18-Nov-2014 05:19:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

15 Pyridine, CAS: 110-86-1

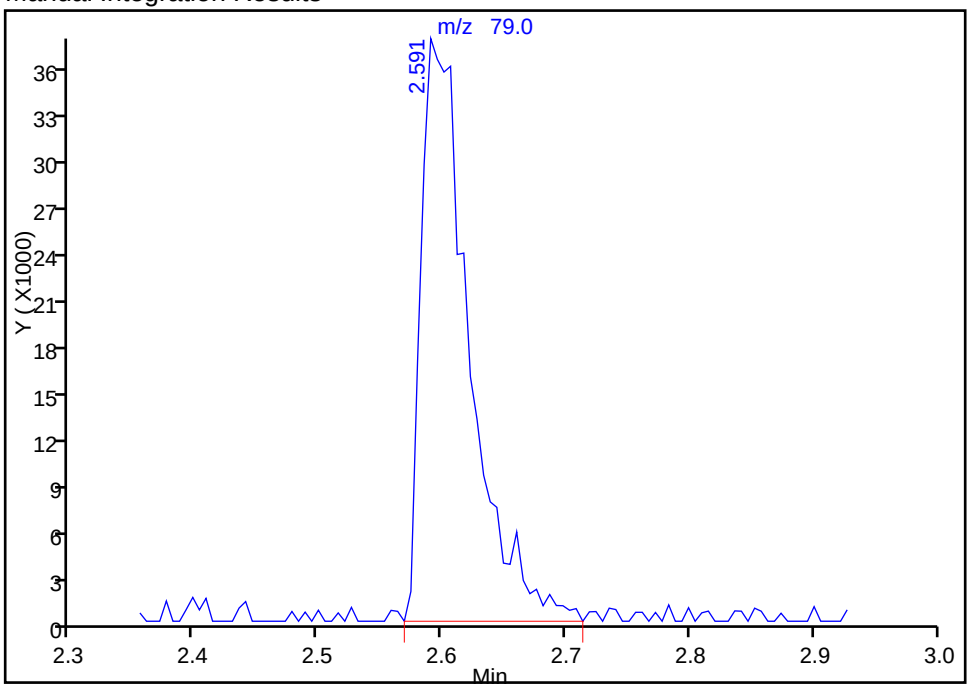
Processing Integration Results

RT: 2.59
Response: 49684
Amount: 2.265590



Manual Integration Results

RT: 2.59
Response: 100959
Amount: 4.089397



Reviewer: piccolinov, 18-Nov-2014 07:28:32
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

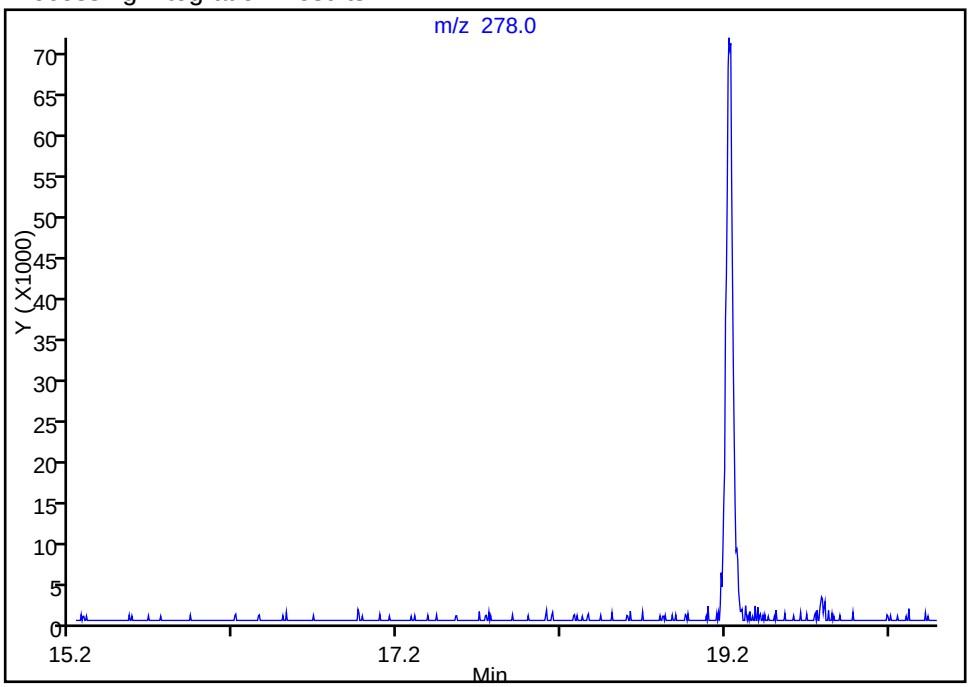
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141118-4448.b\V1118005.D				
Injection Date:	18-Nov-2014 05:19:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

164 Dibenz(a,h)anthracene, CAS: 53-70-3

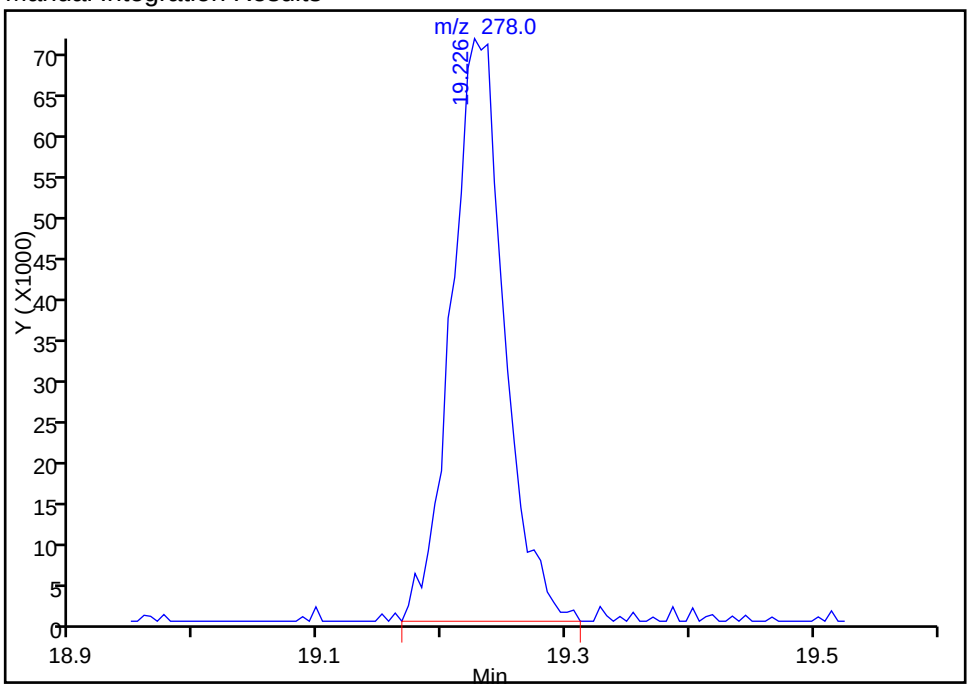
Not Detected
Expected RT: 19.23

Processing Integration Results



Manual Integration Results

RT: 19.23
Response: 211567
Amount: 3.884019



Reviewer: piccolinov, 18-Nov-2014 07:28:32
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118006.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 18-Nov-2014 05:47:30 ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004448-006
Misc. Info.: ICIS
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub4

Method: \\PITCHROM\ChromData\CH731\20141118-4448.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 18-Nov-2014 08:46:00 Calib Date: 18-Nov-2014 07:43:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: piccolinov Date: 18-Nov-2014 07:22:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.284	6.284	0.000	88	136219	8.00	8.00	
* 2 Naphthalene-d8	136	7.497	7.497	0.000	98	446656	8.00	8.00	
* 3 Acenaphthene-d10	164	9.115	9.115	0.000	92	319540	8.00	8.00	
* 4 Phenanthrene-d10	188	10.488	10.488	0.000	96	676576	8.00	8.00	
* 5 Chrysene-d12	240	14.019	14.019	0.000	95	662251	8.00	8.00	
* 6 Perylene-d12	264	16.963	16.963	0.000	97	467626	8.00	8.00	
$ 7 2-Fluorophenol	112	4.938	4.938	0.000	91	219935	10.0	9.99	
$ 8 Phenol-d5	99	5.926	5.926	0.000	87	256173	10.0	9.55	
$ 9 Nitrobenzene-d5	82	6.813	6.813	0.000	89	318764	10.0	10.1	
$ 10 2-Fluorobiphenyl	172	8.474	8.474	0.000	99	582540	10.0	9.45	
$ 11 2,4,6-Tribromophenol	330	9.836	9.836	0.000	82	80128	10.0	9.86	
$ 12 Terphenyl-d14	244	12.262	12.262	0.000	98	830068	10.0	10.5	
13 1,4-Dioxane	88	1.850	1.850	0.000	88	97869	10.0	10.2	
14 N-Nitrosodimethylamine	74	2.507	2.507	0.000	85	142053	10.0	9.91	
15 Pyridine	79	2.576	2.576	0.000	93	264169	10.0	10.2	
22 Methyl methanesulfonate	80	4.708	4.708	0.000	92	191648	10.0	10.2	
26 Benzaldehyde	77	5.846	5.846	0.000	86	201611	10.0	10.1	
27 Phenol	94	5.942	5.942	0.000	97	284476	10.0	9.59	
28 Aniline	93	5.958	5.958	0.000	97	333002	10.0	9.86	
29 Bis(2-chloroethyl)ether	93	6.022	6.022	0.000	97	190548	10.0	9.76	
31 2-Chlorophenol	128	6.081	6.081	0.000	91	218031	10.0	9.81	
32 n-Decane	43	6.140	6.140	0.000	75	154366	10.0	9.25	
33 1,3-Dichlorobenzene	146	6.231	6.231	0.000	89	259246	10.0	9.98	
34 1,4-Dichlorobenzene	146	6.305	6.305	0.000	87	263828	10.0	9.90	
36 Benzyl alcohol	108	6.412	6.412	0.000	83	129592	10.0	10.0	
37 1,2-Dichlorobenzene	146	6.455	6.455	0.000	87	243987	10.0	9.86	
38 2-Methylphenol	108	6.524	6.524	0.000	92	202609	10.0	9.92	
39 Indene	116	6.535	6.535	0.000	89	351512	10.0	9.62	
40 2,2'-oxybis[1-chloropropan	45	6.551	6.551	0.000	68	156682	10.0	9.47	
41 N-Nitrosopyrrolidine	100	6.637	6.637	0.000	73	83950	10.0	10.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
45 4-Methylphenol	108	6.663	6.663	0.000	54	205199	10.0	8.93	
44 N-Nitrosodi-n-propylamine	70	6.663	6.663	0.000	64	187838	10.0	9.43	
43 Acetophenone	105	6.663	6.663	0.000	74	329614	10.0	9.32	
47 Hexachloroethane	117	6.781	6.781	0.000	80	122005	10.0	9.64	
48 Nitrobenzene	77	6.829	6.829	0.000	87	299752	10.0	9.72	
50 Isophorone	82	7.048	7.048	0.000	97	458475	10.0	9.77	
51 2-Nitrophenol	139	7.133	7.133	0.000	78	111223	10.0	9.96	
52 2,4-Dimethylphenol	107	7.160	7.160	0.000	93	255660	10.0	9.69	
56 Benzoic acid	122	7.208	7.208	0.000	87	88484	10.0	8.90	
55 Bis(2-chloroethoxy)methane	93	7.240	7.240	0.000	96	218858	10.0	9.25	
57 2,4-Dichlorophenol	162	7.352	7.352	0.000	93	206607	10.0	9.61	
61 Azobenzene	77		7.410				ND	ND	
59 1,2,4-Trichlorobenzene	180	7.438	7.438	0.000	91	258852	10.0	9.40	
60 Naphthalene	128	7.513	7.513	0.000	97	591753	10.0	9.31	
62 4-Chloroaniline	127	7.550	7.550	0.000	92	253613	10.0	9.71	
63 2,6-Dichlorophenol	162	7.566	7.566	0.000	91	208341	10.0	9.92	
64 Hexachlorobutadiene	225	7.630	7.630	0.000	94	217576	10.0	9.36	
67 Caprolactam	113	7.833	7.833	0.000	79	51527	10.0	9.90	
70 4-Chloro-3-methylphenol	107	7.977	7.977	0.000	89	209809	10.0	9.68	
72 2-Methylnaphthalene	142	8.148	8.148	0.000	89	439069	10.0	9.55	
75 1-Methylnaphthalene	142	8.239	8.239	0.000	88	405471	10.0	9.58	
76 Hexachlorocyclopentadiene	237	8.298	8.298	0.000	96	253630	10.0	9.94	
77 1,2,4,5-Tetrachlorobenzene	216	8.303	8.303	0.000	98	349998	10.0	10.1	
78 2,4,6-Trichlorophenol	196	8.399	8.399	0.000	93	202893	10.0	10.1	
79 2,4,5-Trichlorophenol	196	8.431	8.431	0.000	91	209674	10.0	10.1	
80 1,1'-Biphenyl	154	8.570	8.570	0.000	96	550444	10.0	9.49	
81 2-Chloronaphthalene	162	8.597	8.597	0.000	97	514041	10.0	9.95	
82 2-Nitroaniline	65	8.672	8.672	0.000	72	155927	10.0	10.2	
86 Dimethyl phthalate	163	8.821	8.821	0.000	95	536097	10.0	9.97	
87 1,3-Dinitrobenzene	168	8.859	8.859	0.000	84	89770	10.0	10.8	
88 2,6-Dinitrotoluene	165	8.886	8.886	0.000	83	116377	10.0	9.96	
89 Acenaphthylene	152	8.982	8.982	0.000	97	694007	10.0	9.70	
90 3-Nitroaniline	138	9.046	9.046	0.000	84	100956	10.0	10.6	
92 2,4-Dinitrophenol	184	9.142	9.142	0.000	74	191199	20.0	19.8	
91 Acenaphthene	153	9.142	9.142	0.000	85	463574	10.0	9.50	
93 4-Nitrophenol	109	9.174	9.174	0.000	82	240588	20.0	20.0	
94 2,4-Dinitrotoluene	165	9.259	9.259	0.000	83	161826	10.0	10.1	
95 Dibenzofuran	168	9.297	9.297	0.000	94	732675	10.0	9.80	
97 2,3,5,6-Tetrachlorophenol	232	9.366	9.366	0.000	92	213313	10.0	9.77	
99 2,3,4,6-Tetrachlorophenol	232	9.404	9.404	0.000	71	213180	10.0	10.4	
100 2-Naphthylamine	143	9.436	9.436	0.000	92	428274	10.0	10.6	
101 Diethyl phthalate	149	9.462	9.462	0.000	95	560170	10.0	9.41	
102 Hexadecane	57	9.468	9.468	0.000	83	197783	10.0	9.19	
104 4-Chlorophenyl phenyl ethe	204	9.596	9.596	0.000	91	371638	10.0	9.98	
105 4-Nitroaniline	138	9.607	9.607	0.000	72	100425	10.0	9.49	
106 Fluorene	166	9.617	9.617	0.000	96	533690	10.0	9.83	
108 4,6-Dinitro-2-methylphenol	198	9.639	9.639	0.000	85	236754	20.0	19.2	
109 N-Nitrosodiphenylamine	169	9.698	9.698	0.000	64	421325	10.0	9.78	
111 1,2-Diphenylhydrazine	77	9.740	9.740	0.000	99	677854	10.0	10.2	
116 4-Bromophenyl phenyl ether	248	10.050	10.050	0.000	68	215595	10.0	9.66	
118 Hexachlorobenzene	284	10.136	10.136	0.000	92	205834	10.0	9.40	
119 Atrazine	200	10.162	10.162	0.000	92	207574	10.0	10.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
122 Pentachlorophenol	266	10.301	10.301	0.000	88	284142	20.0	17.1	
121 n-Octadecane	57	10.307	10.307	0.000	86	220319	10.0	9.43	
126 Phenanthrene	178	10.510	10.510	0.000	97	903263	10.0	9.62	
128 Anthracene	178	10.563	10.563	0.000	97	925267	10.0	9.79	
130 Carbazole	167	10.702	10.702	0.000	97	754288	10.0	9.91	
132 Di-n-butyl phthalate	149	10.996	10.996	0.000	99	910420	10.0	9.87	
137 Fluoranthene	202	11.808	11.808	0.000	95	1180293	10.0	10.2	
138 Benzidine	184	11.931	11.931	0.000	98	376464	10.0	10.1	
139 Pyrene	202	12.107	12.107	0.000	98	1159528	10.0	10.3	
144 Butyl benzyl phthalate	149	12.956	12.956	0.000	95	380621	10.0	10.3	
149 3,3'-Dichlorobenzidine	252	13.923	13.923	0.000	73	342153	10.0	10.1	
151 Bis(2-ethylhexyl) phthalat	149	13.961	13.961	0.000	94	495553	10.0	10.1	
152 Benzo[a]anthracene	228	14.003	14.003	0.000	94	992089	10.0	9.94	
153 Chrysene	228	14.073	14.073	0.000	94	956530	10.0	10.4	
156 Di-n-octyl phthalate	149	15.269	15.269	0.000	99	799395	10.0	10.3	
157 7,12-Dimethylbenz(a)anthra	256	16.146	16.146	0.000	90	341147	10.0	10.5	
158 Benzo[b]fluoranthene	252	16.156	16.156	0.000	94	833690	10.0	9.85	
159 Benzo[k]fluoranthene	252	16.210	16.210	0.000	95	819222	10.0	10.1	
176 Benzo[e]pyrene	252	16.738	16.738	0.000	0	742566	10.0	9.82	
160 Benzo[a]pyrene	252	16.845	16.845	0.000	73	752802	10.0	10.2	
163 Indeno[1,2,3-cd]pyrene	276	19.196	19.196	0.000	97	635574	10.0	9.45	
164 Dibenz(a,h)anthracene	278	19.228	19.228	0.000	86	547775	10.0	9.53	
165 Benzo[g,h,i]perylene	276	19.800	19.800	0.000	96	527106	10.0	9.44	
S 206 Total Cresols	108				0		20.0	18.8	
S 208 Methyl Phenols,Total	108				0		20.0	18.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

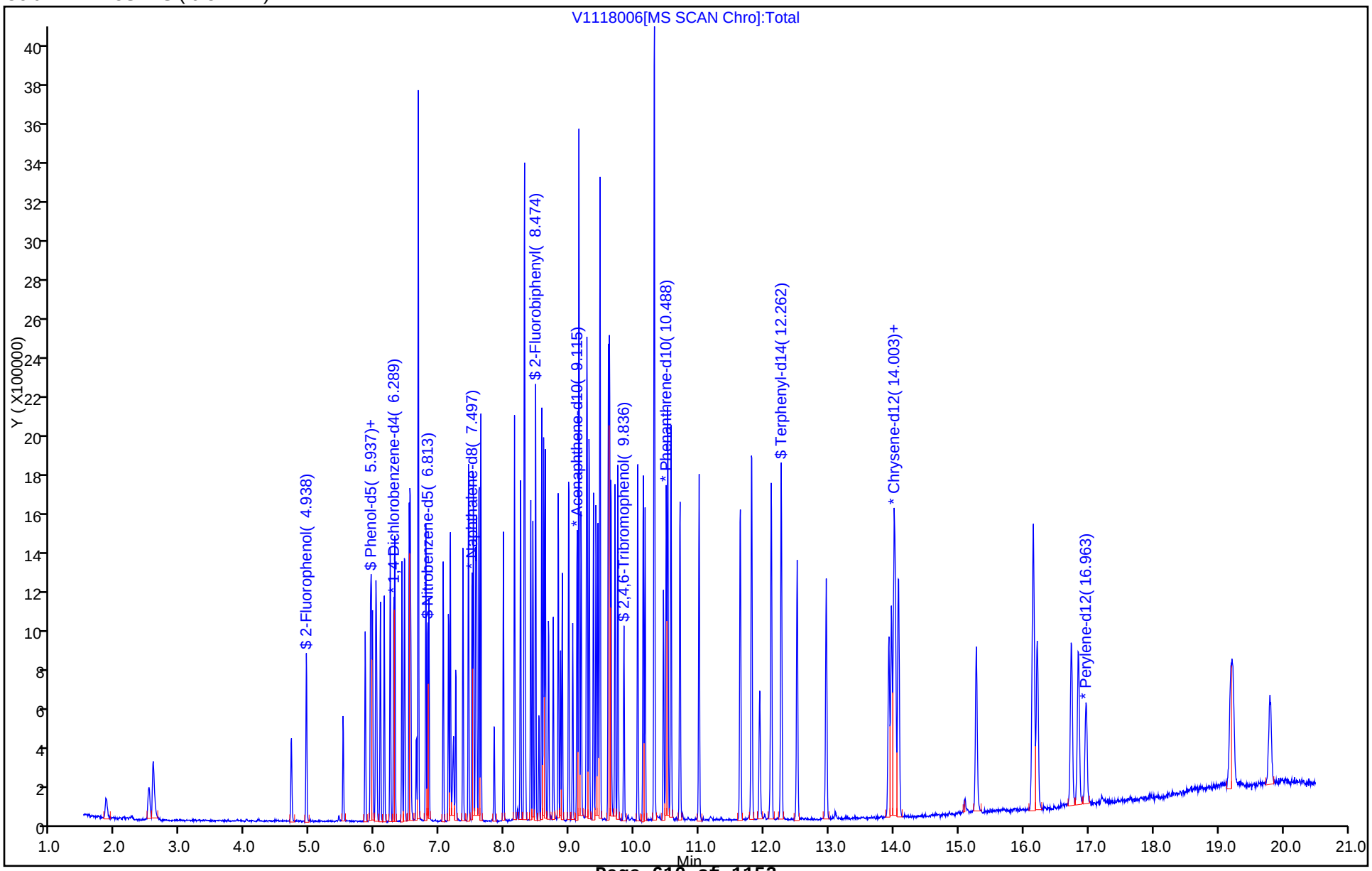
SVTAPSTD10i_00079 Amount Added: 1.00 Units: mL

Report Date: 18-Nov-2014 08:46:02 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141118-4448.b\V1118006.D				
Injection Date:	18-Nov-2014 05:47:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	ICIS			Worklist Smp#:	6
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Report Date: 18-Nov-2014 08:46:04 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118007.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 18-Nov-2014 06:17:30 ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004448-007
Misc. Info.: IC
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub4

Method: \\PITCHROM\ChromData\CH731\20141118-4448.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 18-Nov-2014 08:46:03 Calib Date: 18-Nov-2014 07:43:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: piccolinov Date: 18-Nov-2014 07:29:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.281	6.284	-0.003	90	136713	8.00	8.00	
* 2 Naphthalene-d8	136	7.494	7.497	-0.003	97	423087	8.00	8.00	
* 3 Acenaphthene-d10	164	9.112	9.115	-0.003	90	305635	8.00	8.00	
* 4 Phenanthrene-d10	188	10.485	10.488	-0.003	97	639352	8.00	8.00	
* 5 Chrysene-d12	240	14.016	14.019	-0.003	95	633614	8.00	8.00	
* 6 Perylene-d12	264	16.955	16.963	-0.008	97	455230	8.00	8.00	
$ 7 2-Fluorophenol	112	4.935	4.938	-0.003	91	392178	20.0	17.7	
$ 8 Phenol-d5	99	5.928	5.926	0.002	88	489782	20.0	18.2	
$ 9 Nitrobenzene-d5	82	6.810	6.813	-0.003	90	568668	20.0	19.0	
$ 10 2-Fluorobiphenyl	172	8.471	8.474	-0.003	99	1083169	20.0	18.4	
$ 11 2,4,6-Tribromophenol	330	9.839	9.836	0.003	89	146405	20.0	19.1	
$ 12 Terphenyl-d14	244	12.259	12.262	-0.003	98	1439351	20.0	19.1	
13 1,4-Dioxane	88	1.842	1.850	-0.008	87	182753	20.0	18.9	
14 N-Nitrosodimethylamine	74	2.493	2.507	-0.014	86	266189	20.0	18.5	
15 Pyridine	79	2.558	2.576	-0.018	92	488644	20.0	18.8	
22 Methyl methanesulfonate	80	4.700	4.708	-0.008	91	349968	20.0	18.6	
26 Benzaldehyde	77	5.843	5.846	-0.003	87	383425	20.0	19.1	
27 Phenol	94	5.939	5.942	-0.003	98	548829	20.0	18.4	
28 Aniline	93	5.955	5.958	-0.003	95	614543	20.0	18.1	
29 Bis(2-chloroethyl)ether	93	6.019	6.022	-0.003	94	345368	20.0	17.6	
31 2-Chlorophenol	128	6.078	6.081	-0.003	91	394658	20.0	17.7	
32 n-Decane	43	6.137	6.140	-0.003	74	286884	20.0	17.1	
33 1,3-Dichlorobenzene	146	6.228	6.231	-0.002	89	480572	20.0	18.4	
34 1,4-Dichlorobenzene	146	6.302	6.305	-0.003	87	487362	20.0	18.2	
36 Benzyl alcohol	108	6.409	6.412	-0.003	82	235998	20.0	18.2	
37 1,2-Dichlorobenzene	146	6.452	6.455	-0.003	86	440880	20.0	17.8	
38 2-Methylphenol	108	6.521	6.524	-0.003	92	354678	20.0	17.3	
39 Indene	116	6.532	6.535	-0.003	87	656611	20.0	17.9	
40 2,2'-oxybis[1-chloropropan	45	6.548	6.551	-0.003	66	289652	20.0	17.5	
41 N-Nitrosopyrrolidine	100	6.634	6.637	-0.002	74	166165	20.0	19.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
43 Acetophenone	105	6.666	6.663	0.003	79	635864	20.0	17.9	
45 4-Methylphenol	108	6.660	6.663	-0.003	58	401271	20.0	17.4	
44 N-Nitrosodi-n-propylamine	70	6.660	6.663	-0.003	64	375515	20.0	18.8	
47 Hexachloroethane	117	6.778	6.781	-0.003	83	222196	20.0	17.5	
48 Nitrobenzene	77	6.826	6.829	-0.003	86	543833	20.0	18.6	
50 Isophorone	82	7.045	7.048	-0.003	97	823344	20.0	18.5	
51 2-Nitrophenol	139	7.130	7.133	-0.003	76	203559	20.0	19.3	
52 2,4-Dimethylphenol	107	7.157	7.160	-0.003	95	471706	20.0	18.9	
56 Benzoic acid	122	7.216	7.208	0.008	87	192819	20.0	20.5	
55 Bis(2-chloroethoxy)methane	93	7.243	7.240	0.003	96	394876	20.0	17.6	
57 2,4-Dichlorophenol	162	7.355	7.352	0.003	95	380458	20.0	18.7	
61 Azobenzene	77		7.410				ND	ND	
59 1,2,4-Trichlorobenzene	180	7.435	7.438	-0.003	91	486486	20.0	18.7	
60 Naphthalene	128	7.510	7.513	-0.003	97	1115355	20.0	18.5	
62 4-Chloroaniline	127	7.547	7.550	-0.003	91	465770	20.0	18.8	
63 2,6-Dichlorophenol	162	7.563	7.566	-0.003	91	376039	20.0	18.9	
64 Hexachlorobutadiene	225	7.627	7.630	-0.003	94	413694	20.0	18.8	
67 Caprolactam	113	7.841	7.833	0.008	77	93652	20.0	19.0	
70 4-Chloro-3-methylphenol	107	7.974	7.977	-0.003	88	403220	20.0	19.6	
72 2-Methylnaphthalene	142	8.145	8.148	-0.003	88	812326	20.0	18.7	
75 1-Methylnaphthalene	142	8.242	8.239	0.003	89	751537	20.0	18.7	
76 Hexachlorocyclopentadiene	237	8.300	8.298	0.002	95	502267	20.0	20.6	
77 1,2,4,5-Tetrachlorobenzene	216	8.306	8.303	0.003	98	634642	20.0	19.1	
78 2,4,6-Trichlorophenol	196	8.396	8.399	-0.003	93	380486	20.0	19.8	
79 2,4,5-Trichlorophenol	196	8.434	8.431	0.003	91	377887	20.0	19.1	
80 1,1'-Biphenyl	154	8.567	8.570	-0.003	96	1024977	20.0	18.5	
81 2-Chloronaphthalene	162	8.599	8.597	0.002	98	890737	20.0	18.0	
82 2-Nitroaniline	65	8.674	8.672	0.002	70	289616	20.0	19.9	
86 Dimethyl phthalate	163	8.824	8.821	0.003	95	971700	20.0	18.9	
87 1,3-Dinitrobenzene	168	8.856	8.859	-0.003	82	163401	20.0	20.5	
88 2,6-Dinitrotoluene	165	8.888	8.886	0.002	83	223376	20.0	20.0	
89 Acenaphthylene	152	8.984	8.982	0.002	97	1272700	20.0	18.6	
90 3-Nitroaniline	138	9.048	9.046	0.002	85	193274	20.0	21.2	
92 2,4-Dinitrophenol	184	9.139	9.142	-0.003	77	332620	40.0	33.7	
91 Acenaphthene	153	9.144	9.142	0.002	94	860348	20.0	18.4	
93 4-Nitrophenol	109	9.176	9.174	0.002	80	483962	40.0	42.1	
94 2,4-Dinitrotoluene	165	9.262	9.259	0.003	84	304925	20.0	20.0	
95 Dibenzofuran	168	9.299	9.297	0.002	94	1337432	20.0	18.7	
97 2,3,5,6-Tetrachlorophenol	232	9.363	9.366	-0.003	90	392481	20.0	18.8	
99 2,3,4,6-Tetrachlorophenol	232	9.406	9.404	0.002	72	376394	20.0	19.2	
100 2-Naphthylamine	143	9.433	9.436	-0.003	91	751079	20.0	19.5	
101 Diethyl phthalate	149	9.465	9.462	0.003	96	1046284	20.0	18.4	
102 Hexadecane	57	9.470	9.468	0.002	84	381231	20.0	18.7	
104 4-Chlorophenyl phenyl ethe	204	9.593	9.596	-0.003	93	662042	20.0	18.6	
105 4-Nitroaniline	138	9.609	9.607	0.002	74	193767	20.0	19.1	
106 Fluorene	166	9.614	9.617	-0.003	93	942005	20.0	18.1	
108 4,6-Dinitro-2-methylphenol	198	9.636	9.639	-0.003	85	464708	40.0	40.0	
109 N-Nitrosodiphenylamine	169	9.700	9.698	0.002	65	780039	20.0	19.2	
111 1,2-Diphenylhydrazine	77	9.743	9.740	0.003	99	1174132	20.0	18.7	
116 4-Bromophenyl phenyl ether	248	10.047	10.050	-0.003	67	418665	20.0	19.8	
118 Hexachlorobenzene	284	10.133	10.136	-0.003	91	376726	20.0	18.2	
119 Atrazine	200	10.159	10.162	-0.003	92	387036	20.0	20.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
122 Pentachlorophenol	266	10.304	10.301	0.003	87	565952	40.0	35.7	
121 n-Octadecane	57	10.304	10.307	-0.003	89	429277	20.0	18.3	
126 Phenanthrene	178	10.512	10.510	0.002	97	1636441	20.0	18.5	
128 Anthracene	178	10.560	10.563	-0.003	96	1693761	20.0	19.0	
130 Carbazole	167	10.699	10.702	-0.003	97	1383074	20.0	19.2	
132 Di-n-butyl phthalate	149	10.993	10.996	-0.003	99	1693677	20.0	19.4	
137 Fluoranthene	202	11.805	11.808	-0.003	95	2113145	20.0	19.3	
138 Benzidine	184	11.928	11.931	-0.003	98	733177	20.0	20.6	
139 Pyrene	202	12.104	12.107	-0.003	98	2120582	20.0	19.8	
144 Butyl benzyl phthalate	149	12.948	12.956	-0.008	95	688998	20.0	19.4	
149 3,3'-Dichlorobenzidine	252	13.915	13.923	-0.008	73	653680	20.0	20.2	
151 Bis(2-ethylhexyl) phthalat	149	13.958	13.961	-0.003	95	935672	20.0	19.9	
152 Benzo[a]anthracene	228	13.995	14.003	-0.008	95	1840151	20.0	19.3	
153 Chrysene	228	14.064	14.073	-0.009	95	1700525	20.0	19.4	
156 Di-n-octyl phthalate	149	15.266	15.269	-0.003	99	1497418	20.0	19.7	
157 7,12-Dimethylbenz(a)anthra	256	16.137	16.146	-0.008	89	641586	20.0	20.4	
158 Benzo[b]fluoranthene	252	16.148	16.156	-0.008	94	1646715	20.0	20.0	
159 Benzo[k]fluoranthene	252	16.207	16.210	-0.003	96	1507521	20.0	19.1	
176 Benzo[e]pyrene	252	16.730	16.738	-0.008	0	1409475	20.0	19.1	
160 Benzo[a]pyrene	252	16.837	16.845	-0.008	74	1419258	20.0	19.8	
163 Indeno[1,2,3-cd]pyrene	276	19.188	19.196	-0.008	97	1235857	20.0	18.9	
164 Dibenz(a,h)anthracene	278	19.225	19.228	-0.003	89	1048765	20.0	18.7	
165 Benzo[g,h,i]perylene	276	19.786	19.800	-0.014	96	1007457	20.0	18.5	
S 206 Total Cresols	108				0		40.0	34.7	
S 208 Methyl Phenols,Total	108				0		40.0	34.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

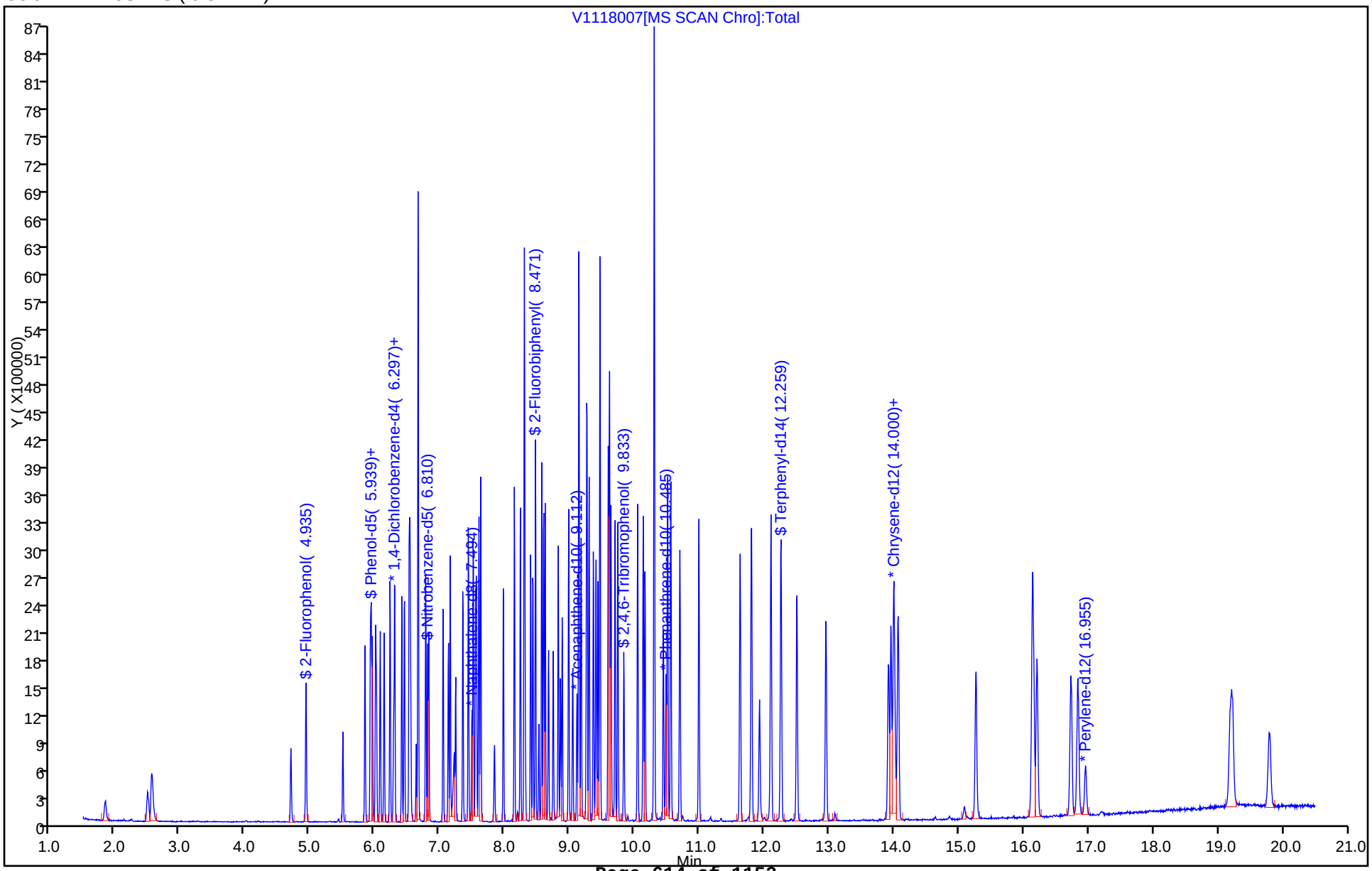
SVTAPSTD20i_00005 Amount Added: 1.00 Units: mL

Report Date: 18-Nov-2014 08:46:04 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141118-4448.b\V1118007.D				
Injection Date:	18-Nov-2014 06:17:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	7
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118008.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 18-Nov-2014 06:45:30 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004448-008
Misc. Info.: IC
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub4

Method: \\PITCHROM\ChromData\CH731\20141118-4448.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 18-Nov-2014 08:46:05 Calib Date: 18-Nov-2014 07:43:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: piccolinov Date: 18-Nov-2014 07:30:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.286	6.284	0.002	88	128417	8.00	8.00	
* 2 Naphthalene-d8	136	7.493	7.497	-0.004	97	427366	8.00	8.00	
* 3 Acenaphthene-d10	164	9.112	9.115	-0.003	92	304213	8.00	8.00	
* 4 Phenanthrene-d10	188	10.485	10.488	-0.003	96	616239	8.00	8.00	
* 5 Chrysene-d12	240	14.010	14.019	-0.009	95	645371	8.00	8.00	
* 6 Perylene-d12	264	16.949	16.963	-0.015	97	481990	8.00	8.00	
$ 7 2-Fluorophenol	112	4.939	4.938	0.001	92	855384	40.0	41.2	
$ 8 Phenol-d5	99	5.928	5.926	0.002	88	1049231	40.0	41.5	
$ 9 Nitrobenzene-d5	82	6.809	6.813	-0.004	89	1165255	40.0	38.6	
$ 10 2-Fluorobiphenyl	172	8.471	8.474	-0.003	99	2331566	40.0	39.7	
$ 11 2,4,6-Tribromophenol	330	9.833	9.836	-0.003	84	313595	40.0	42.4	
$ 12 Terphenyl-d14	244	12.258	12.262	-0.004	98	3007126	40.0	39.1	
13 1,4-Dioxane	88	1.857	1.850	0.007	88	373605	40.0	41.2	
14 N-Nitrosodimethylamine	74	2.519	2.507	0.012	88	545919	40.0	40.4	
15 Pyridine	79	2.578	2.576	0.002	93	1001912	40.0	40.9	
22 Methyl methanesulfonate	80	4.710	4.708	0.002	91	718107	40.0	40.5	
26 Benzaldehyde	77	5.842	5.846	-0.004	88	785425	40.0	41.7	
27 Phenol	94	5.944	5.942	0.002	97	1211667	40.0	43.3	
28 Aniline	93	5.960	5.958	0.002	96	1306535	40.0	41.1	
29 Bis(2-chloroethyl)ether	93	6.024	6.022	0.002	97	765332	40.0	41.6	
31 2-Chlorophenol	128	6.077	6.081	-0.004	92	877051	40.0	41.9	
32 n-Decane	43	6.136	6.140	-0.004	75	642852	40.0	40.9	
33 1,3-Dichlorobenzene	146	6.232	6.231	0.002	90	1022913	40.0	41.8	
34 1,4-Dichlorobenzene	146	6.302	6.305	-0.003	86	1047395	40.0	41.7	
36 Benzyl alcohol	108	6.414	6.412	0.002	84	519504	40.0	42.7	
37 1,2-Dichlorobenzene	146	6.451	6.455	-0.004	88	952841	40.0	40.9	
38 2-Methylphenol	108	6.526	6.524	0.002	93	847419	40.0	44.0	
39 Indene	116	6.537	6.535	0.002	89	1540883	40.0	44.7	
40 2,2'-oxybis[1-chloropropan	45	6.547	6.551	-0.004	69	644360	40.0	41.3	
41 N-Nitrosopyrrolidine	100	6.638	6.637	0.002	73	320449	40.0	40.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
44 N-Nitrosodi-n-propylamine	70	6.665	6.663	0.002	64	844835	40.0	45.0	
43 Acetophenone	105	6.665	6.663	0.002	78	1483698	40.0	44.5	
45 4-Methylphenol	108	6.665	6.663	0.002	60	968687	40.0	44.7	
47 Hexachloroethane	117	6.777	6.781	-0.004	83	490121	40.0	41.1	
48 Nitrobenzene	77	6.825	6.829	-0.004	86	1153007	40.0	39.1	
50 Isophorone	82	7.050	7.048	0.002	97	1772669	40.0	39.5	
51 2-Nitrophenol	139	7.130	7.133	-0.003	73	418265	40.0	39.2	
52 2,4-Dimethylphenol	107	7.156	7.160	-0.004	95	1015086	40.0	40.2	
56 Benzoic acid	122	7.242	7.208	0.034	44	429264	40.0	45.1	
55 Bis(2-chloroethoxy)methane	93	7.242	7.240	0.002	97	902145	40.0	39.9	
57 2,4-Dichlorophenol	162	7.354	7.352	0.002	95	801770	40.0	39.0	
61 Azobenzene	77		7.410				ND	ND	
59 1,2,4-Trichlorobenzene	180	7.434	7.438	-0.004	91	1031147	40.0	39.1	
60 Naphthalene	128	7.509	7.513	-0.004	98	2498582	40.0	41.1	
62 4-Chloroaniline	127	7.546	7.550	-0.004	92	1036759	40.0	41.5	
63 2,6-Dichlorophenol	162	7.562	7.566	-0.004	91	793914	40.0	39.5	
64 Hexachlorobutadiene	225	7.626	7.630	-0.004	94	883979	40.0	39.7	
67 Caprolactam	113	7.851	7.833	0.018	77	186888	40.0	37.5	
70 4-Chloro-3-methylphenol	107	7.979	7.977	0.002	89	840080	40.0	40.5	
72 2-Methylnaphthalene	142	8.145	8.148	-0.003	90	1806089	40.0	41.1	
75 1-Methylnaphthalene	142	8.241	8.239	0.002	90	1624420	40.0	40.1	
76 Hexachlorocyclopentadiene	237	8.294	8.298	-0.004	97	1043957	40.0	43.0	
77 1,2,4,5-Tetrachlorobenzene	216	8.300	8.303	-0.003	98	1349385	40.0	40.7	
78 2,4,6-Trichlorophenol	196	8.396	8.399	-0.003	94	725706	40.0	38.0	
79 2,4,5-Trichlorophenol	196	8.433	8.431	0.002	91	799662	40.0	40.5	
80 1,1'-Biphenyl	154	8.567	8.570	-0.003	96	2229594	40.0	40.4	
81 2-Chloronaphthalene	162	8.593	8.597	-0.004	98	1922334	40.0	39.1	
82 2-Nitroaniline	65	8.674	8.672	0.002	71	584820	40.0	40.3	
86 Dimethyl phthalate	163	8.823	8.821	0.002	94	1979482	40.0	38.7	
87 1,3-Dinitrobenzene	168	8.855	8.859	-0.004	82	330559	40.0	41.8	
88 2,6-Dinitrotoluene	165	8.882	8.886	-0.004	81	441537	40.0	39.7	
89 Acenaphthylene	152	8.983	8.982	0.001	97	2754694	40.0	40.5	
90 3-Nitroaniline	138	9.047	9.046	0.001	86	380544	40.0	41.9	
92 2,4-Dinitrophenol	184	9.138	9.142	-0.004	74	770181	80.0	74.4	
91 Acenaphthene	153	9.138	9.142	-0.004	84	1851007	40.0	39.9	
93 4-Nitrophenol	109	9.176	9.174	0.002	81	997770	80.0	87.2	
94 2,4-Dinitrotoluene	165	9.256	9.259	-0.003	86	642081	40.0	42.2	
95 Dibenzofuran	168	9.299	9.297	0.002	95	2833225	40.0	39.8	
97 2,3,5,6-Tetrachlorophenol	232	9.363	9.366	-0.003	91	850742	40.0	40.9	
99 2,3,4,6-Tetrachlorophenol	232	9.405	9.404	0.001	72	790123	40.0	40.5	
100 2-Naphthylamine	143	9.432	9.436	-0.004	92	1499021	40.0	39.1	
101 Diethyl phthalate	149	9.464	9.462	0.002	96	2283319	40.0	40.3	
102 Hexadecane	57	9.464	9.468	-0.004	86	913150	40.0	44.3	
104 4-Chlorophenyl phenyl ethe	204	9.592	9.596	-0.004	91	1388014	40.0	39.1	
105 4-Nitroaniline	138	9.608	9.607	0.001	74	421237	40.0	41.8	
106 Fluorene	166	9.614	9.617	-0.003	96	2117757	40.0	41.0	
108 4,6-Dinitro-2-methylphenol	198	9.635	9.639	-0.004	84	979206	80.0	87.4	
109 N-Nitrosodiphenylamine	169	9.694	9.698	-0.004	63	1646741	40.0	42.0	
111 1,2-Diphenylhydrazine	77	9.737	9.740	-0.003	99	2515413	40.0	41.5	
116 4-Bromophenyl phenyl ether	248	10.046	10.050	-0.004	66	853756	40.0	42.0	
118 Hexachlorobenzene	284	10.132	10.136	-0.004	93	807757	40.0	40.5	
119 Atrazine	200	10.159	10.162	-0.003	92	749856	40.0	40.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
122 Pentachlorophenol	266	10.298	10.301	-0.003	88	1217207	80.0	79.2	
121 n-Octadecane	57	10.303	10.307	-0.004	87	977739	40.0	44.4	
126 Phenanthrene	178	10.506	10.510	-0.004	97	3466802	40.0	40.6	
128 Anthracene	178	10.559	10.563	-0.004	97	3421926	40.0	39.8	
130 Carbazole	167	10.698	10.702	-0.004	97	2799028	40.0	40.4	
132 Di-n-butyl phthalate	149	10.987	10.996	-0.009	99	3298696	40.0	39.3	
137 Fluoranthene	202	11.799	11.808	-0.009	95	4167643	40.0	39.4	
138 Benzidine	184	11.922	11.931	-0.009	98	1543192	40.0	42.5	
139 Pyrene	202	12.103	12.107	-0.004	98	4227100	40.0	38.7	
144 Butyl benzyl phthalate	149	12.947	12.956	-0.009	95	1345747	40.0	37.3	
149 3,3'-Dichlorobenzidine	252	13.914	13.923	-0.009	73	1357667	40.0	41.3	
151 Bis(2-ethylhexyl) phthalat	149	13.946	13.961	-0.015	94	1827250	40.0	38.1	
152 Benzo[a]anthracene	228	13.989	14.003	-0.014	95	3741067	40.0	38.5	
153 Chrysene	228	14.064	14.073	-0.009	95	3481151	40.0	38.9	
156 Di-n-octyl phthalate	149	15.260	15.269	-0.009	99	2998049	40.0	37.3	
157 7,12-Dimethylbenz(a)anthra	256	16.131	16.146	-0.014	86	1377544	40.0	41.3	
158 Benzo[b]fluoranthene	252	16.147	16.156	-0.009	94	3361602	40.0	38.5	
159 Benzo[k]fluoranthene	252	16.206	16.210	-0.004	95	3313578	40.0	39.6	
176 Benzo[e]pyrene	252	16.724	16.738	-0.014	0	2990026	40.0	38.4	
160 Benzo[a]pyrene	252	16.836	16.845	-0.009	73	2975051	40.0	39.1	
163 Indeno[1,2,3-cd]pyrene	276	19.187	19.196	-0.009	96	2762338	40.0	39.8	
164 Dibenz(a,h)anthracene	278	19.214	19.228	-0.014	88	2306142	40.0	38.9	
165 Benzo[g,h,i]perylene	276	19.791	19.800	-0.009	95	2257140	40.0	39.2	
S 206 Total Cresols	108				0		80.0	88.7	
S 208 Methyl Phenols,Total	108				0		80.0	88.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SVTAPSTD40i_00005 Amount Added: 1.00 Units: mL

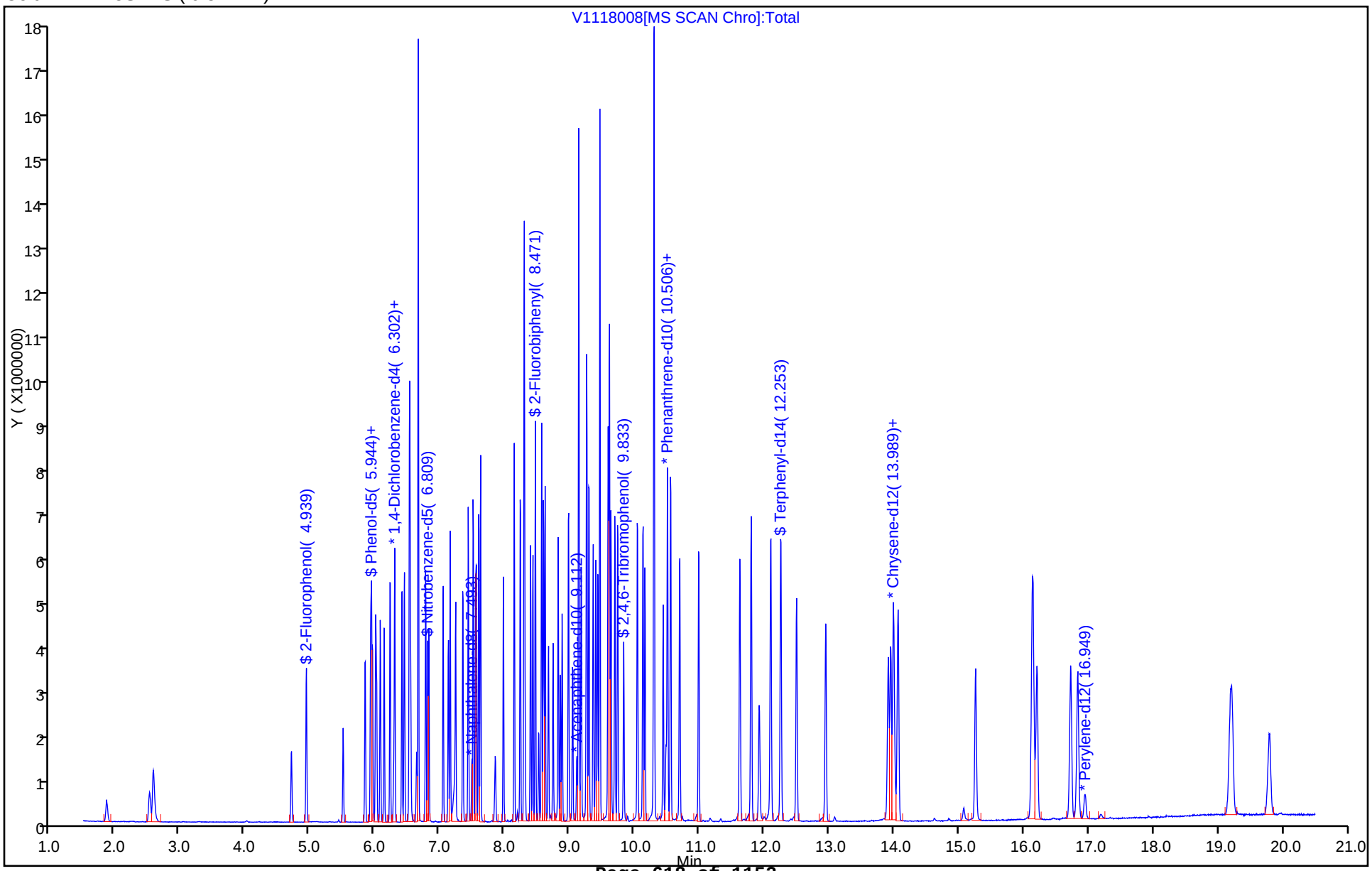
Report Date: 18-Nov-2014 08:46:06 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118008.D

Injection Date:	18-Nov-2014 06:45:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	8
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118009.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 18-Nov-2014 07:14:30 ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004448-009
Misc. Info.: IC
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub4

Method: \\PITCHROM\ChromData\CH731\20141118-4448.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 18-Nov-2014 08:46:07 Calib Date: 18-Nov-2014 07:43:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: piccolinov Date: 18-Nov-2014 07:58:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.285	6.284	0.001	90	121075	8.00	8.00	
* 2 Naphthalene-d8	136	7.492	7.497	-0.005	98	405859	8.00	8.00	
* 3 Acenaphthene-d10	164	9.105	9.115	-0.010	90	287869	8.00	8.00	
* 4 Phenanthrene-d10	188	10.484	10.488	-0.004	96	577936	8.00	8.00	
* 5 Chrysene-d12	240	14.010	14.019	-0.009	95	594813	8.00	8.00	
* 6 Perylene-d12	264	16.942	16.963	-0.021	97	467704	8.00	8.00	
$ 7 2-Fluorophenol	112	4.939	4.938	0.001	91	1257384	60.0	64.2	
$ 8 Phenol-d5	99	5.932	5.926	0.006	89	1518626	60.0	63.7	
$ 9 Nitrobenzene-d5	82	6.808	6.813	-0.005	90	1667491	60.0	58.1	
$ 10 2-Fluorobiphenyl	172	8.470	8.474	-0.004	100	3413221	60.0	61.4	
$ 11 2,4,6-Tribromophenol	330	9.832	9.836	-0.004	86	481269	60.0	69.4	
$ 12 Terphenyl-d14	244	12.252	12.262	-0.010	98	4243416	60.0	59.9	
13 1,4-Dioxane	88	1.856	1.850	0.006	87	526176	60.0	61.6	
14 N-Nitrosodimethylamine	74	2.524	2.507	0.017	89	798039	60.0	62.6	
15 Pyridine	79	2.572	2.576	-0.004	94	1420217	60.0	61.6	
22 Methyl methanesulfonate	80	4.709	4.708	0.001	92	985121	60.0	59.0	
26 Benzaldehyde	77	5.847	5.846	0.001	88	1036907	60.0	58.4	
27 Phenol	94	5.943	5.942	0.001	98	1829502	60.0	69.4	
28 Aniline	93	5.959	5.958	0.001	97	1963509	60.0	65.4	
29 Bis(2-chloroethyl)ether	93	6.023	6.022	0.001	95	1076889	60.0	62.1	
31 2-Chlorophenol	128	6.082	6.081	0.001	93	1231452	60.0	62.3	
32 n-Decane	43	6.141	6.140	0.001	77	1016096	60.0	68.5	
33 1,3-Dichlorobenzene	146	6.231	6.231	0.001	90	1509122	60.0	65.4	
34 1,4-Dichlorobenzene	146	6.301	6.305	-0.004	86	1539352	60.0	65.0	
36 Benzyl alcohol	108	6.413	6.412	0.001	84	764232	60.0	66.6	
37 1,2-Dichlorobenzene	146	6.450	6.455	-0.005	89	1429452	60.0	65.0	
38 2-Methylphenol	108	6.531	6.524	0.007	92	1282757	60.0	70.7	
39 Indene	116	6.536	6.535	0.001	89	2480774	60.0	76.4	
40 2,2'-oxybis[1-chloropropan	45	6.547	6.551	-0.004	73	993887	60.0	67.6	
41 N-Nitrosopyrrolidine	100	6.643	6.637	0.007	73	469237	60.0	63.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
45 4-Methylphenol	108	6.664	6.663	0.001	84	1488546	60.0	72.8	
44 N-Nitrosodi-n-propylamine	70	6.664	6.663	0.001	73	1208879	60.0	68.3	
43 Acetophenone	105	6.664	6.663	0.001	87	2201050	60.0	70.0	
47 Hexachloroethane	117	6.776	6.781	-0.005	86	706298	60.0	62.8	
48 Nitrobenzene	77	6.830	6.829	0.001	86	1674499	60.0	59.8	
50 Isophorone	82	7.049	7.048	0.001	98	2583747	60.0	60.6	
51 2-Nitrophenol	139	7.129	7.133	-0.004	79	608485	60.0	60.0	
52 2,4-Dimethylphenol	107	7.156	7.160	-0.004	96	1455916	60.0	60.7	
56 Benzoic acid	122	7.246	7.208	0.038	87	613573	60.0	67.9	
55 Bis(2-chloroethoxy)methane	93	7.241	7.240	0.001	98	1332221	60.0	62.0	
57 2,4-Dichlorophenol	162	7.353	7.352	0.001	96	1168702	60.0	59.8	
61 Azobenzene	77		7.410				ND	ND	
59 1,2,4-Trichlorobenzene	180	7.433	7.438	-0.005	91	1526067	60.0	61.0	
60 Naphthalene	128	7.513	7.513	0.000	98	3656344	60.0	63.3	
62 4-Chloroaniline	127	7.546	7.550	-0.004	92	1477278	60.0	62.3	
63 2,6-Dichlorophenol	162	7.562	7.566	-0.004	94	1154411	60.0	60.5	
64 Hexachlorobutadiene	225	7.626	7.630	-0.004	94	1274788	60.0	60.3	
67 Caprolactam	113	7.861	7.833	0.028	80	273456	60.0	57.8	
70 4-Chloro-3-methylphenol	107	7.978	7.977	0.001	90	1192148	60.0	60.5	
72 2-Methylnaphthalene	142	8.144	8.148	-0.004	89	2626901	60.0	62.9	
75 1-Methylnaphthalene	142	8.235	8.239	-0.004	90	2393030	60.0	62.2	
76 Hexachlorocyclopentadiene	237	8.293	8.298	-0.005	97	1509538	60.0	65.7	
77 1,2,4,5-Tetrachlorobenzene	216	8.299	8.303	-0.004	98	1935308	60.0	61.7	
78 2,4,6-Trichlorophenol	196	8.395	8.399	-0.004	94	1044790	60.0	57.8	
79 2,4,5-Trichlorophenol	196	8.432	8.431	0.001	92	1118392	60.0	59.9	
80 1,1'-Biphenyl	154	8.566	8.570	-0.004	95	3292066	60.0	63.0	
81 2-Chloronaphthalene	162	8.598	8.597	0.001	98	2787663	60.0	59.9	
82 2-Nitroaniline	65	8.673	8.672	0.001	72	827467	60.0	60.3	
86 Dimethyl phthalate	163	8.822	8.821	0.001	95	2812096	60.0	58.0	
87 1,3-Dinitrobenzene	168	8.854	8.859	-0.005	82	465907	60.0	62.2	
88 2,6-Dinitrotoluene	165	8.886	8.886	0.000	85	626078	60.0	59.5	
89 Acenaphthylene	152	8.983	8.982	0.001	97	3953446	60.0	61.4	
90 3-Nitroaniline	138	9.047	9.046	0.001	86	533446	60.0	62.1	
92 2,4-Dinitrophenol	184	9.137	9.142	-0.005	73	1159046	120.0	116.5	
91 Acenaphthene	153	9.137	9.142	-0.005	84	2733760	60.0	62.2	
93 4-Nitrophenol	109	9.180	9.174	0.006	81	1362878	120.0	125.9	
94 2,4-Dinitrotoluene	165	9.260	9.259	0.001	83	916599	60.0	63.7	
95 Dibenzofuran	168	9.298	9.297	0.001	95	4106059	60.0	60.9	
97 2,3,5,6-Tetrachlorophenol	232	9.362	9.366	-0.004	91	1194104	60.0	60.7	
99 2,3,4,6-Tetrachlorophenol	232	9.399	9.404	-0.005	72	1137809	60.0	61.6	
100 2-Naphthylamine	143	9.431	9.436	-0.005	93	2084841	60.0	57.4	
101 Diethyl phthalate	149	9.463	9.462	0.001	96	3378854	60.0	63.0	
102 Hexadecane	57	9.463	9.468	-0.005	75	1449948	60.0	74.1	
104 4-Chlorophenyl phenyl ethe	204	9.592	9.596	-0.004	91	1955583	60.0	58.3	
105 4-Nitroaniline	138	9.613	9.607	0.006	70	596441	60.0	62.6	
106 Fluorene	166	9.613	9.617	-0.004	94	2960630	60.0	60.5	
108 4,6-Dinitro-2-methylphenol	198	9.640	9.639	0.001	90	1421383	120.0	135.2	
109 N-Nitrosodiphenylamine	169	9.693	9.698	-0.005	64	2281662	60.0	62.0	
111 1,2-Diphenylhydrazine	77	9.736	9.740	-0.004	99	3485723	60.0	61.3	
116 4-Bromophenyl phenyl ether	248	10.046	10.050	-0.004	67	1218695	60.0	63.9	
118 Hexachlorobenzene	284	10.131	10.136	-0.005	93	1164727	60.0	62.2	
119 Atrazine	200	10.163	10.162	0.001	93	1007602	60.0	58.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
122 Pentachlorophenol	266	10.297	10.301	-0.004	90	1784877	120.0	123.6	
121 n-Octadecane	57	10.302	10.307	-0.005	89	1539927	60.0	74.1	
126 Phenanthrene	178	10.505	10.510	-0.005	97	4901458	60.0	61.1	
128 Anthracene	178	10.553	10.563	-0.010	97	4828422	60.0	59.8	
130 Carbazole	167	10.692	10.702	-0.010	97	3931874	60.0	60.5	
132 Di-n-butyl phthalate	149	10.986	10.996	-0.010	99	4629155	60.0	58.8	
137 Fluoranthene	202	11.798	11.808	-0.010	95	5884725	60.0	59.4	
138 Benzidine	184	11.921	11.931	-0.010	98	2109070	60.0	63.0	
139 Pyrene	202	12.097	12.107	-0.010	98	5750247	60.0	57.1	
144 Butyl benzyl phthalate	149	12.941	12.956	-0.015	92	1881880	60.0	56.5	
149 3,3'-Dichlorobenzidine	252	13.913	13.923	-0.010	67	1900388	60.0	62.7	
151 Bis(2-ethylhexyl) phthalat	149	13.945	13.961	-0.016	92	2594900	60.0	58.7	
152 Benzo[a]anthracene	228	13.993	14.003	-0.010	92	5399707	60.0	60.2	
153 Chrysene	228	14.058	14.073	-0.015	93	4929012	60.0	59.8	
156 Di-n-octyl phthalate	149	15.249	15.269	-0.020	99	4314095	60.0	55.3	
157 7,12-Dimethylbenz(a)anthra	256	16.130	16.146	-0.015	69	2017795	60.0	62.4	
158 Benzo[b]fluoranthene	252	16.146	16.156	-0.010	92	5031268	60.0	59.5	
159 Benzo[k]fluoranthene	252	16.200	16.210	-0.010	87	4869485	60.0	59.9	
176 Benzo[e]pyrene	252	16.723	16.738	-0.015	0	4538659	60.0	60.0	
160 Benzo[a]pyrene	252	16.836	16.845	-0.009	67	4510772	60.0	61.2	
163 Indeno[1,2,3-cd]pyrene	276	19.181	19.196	-0.015	92	4137336	60.0	61.5	
164 Dibenz(a,h)anthracene	278	19.213	19.228	-0.015	64	3589082	60.0	62.4	
165 Benzo[g,h,i]perylene	276	19.790	19.800	-0.010	89	3416645	60.0	61.2	
S 206 Total Cresols	108				0		120.0	143.5	
S 208 Methyl Phenols,Total	108				0		120.0	143.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SVTAPSTD60i_00005 Amount Added: 1.00 Units: mL

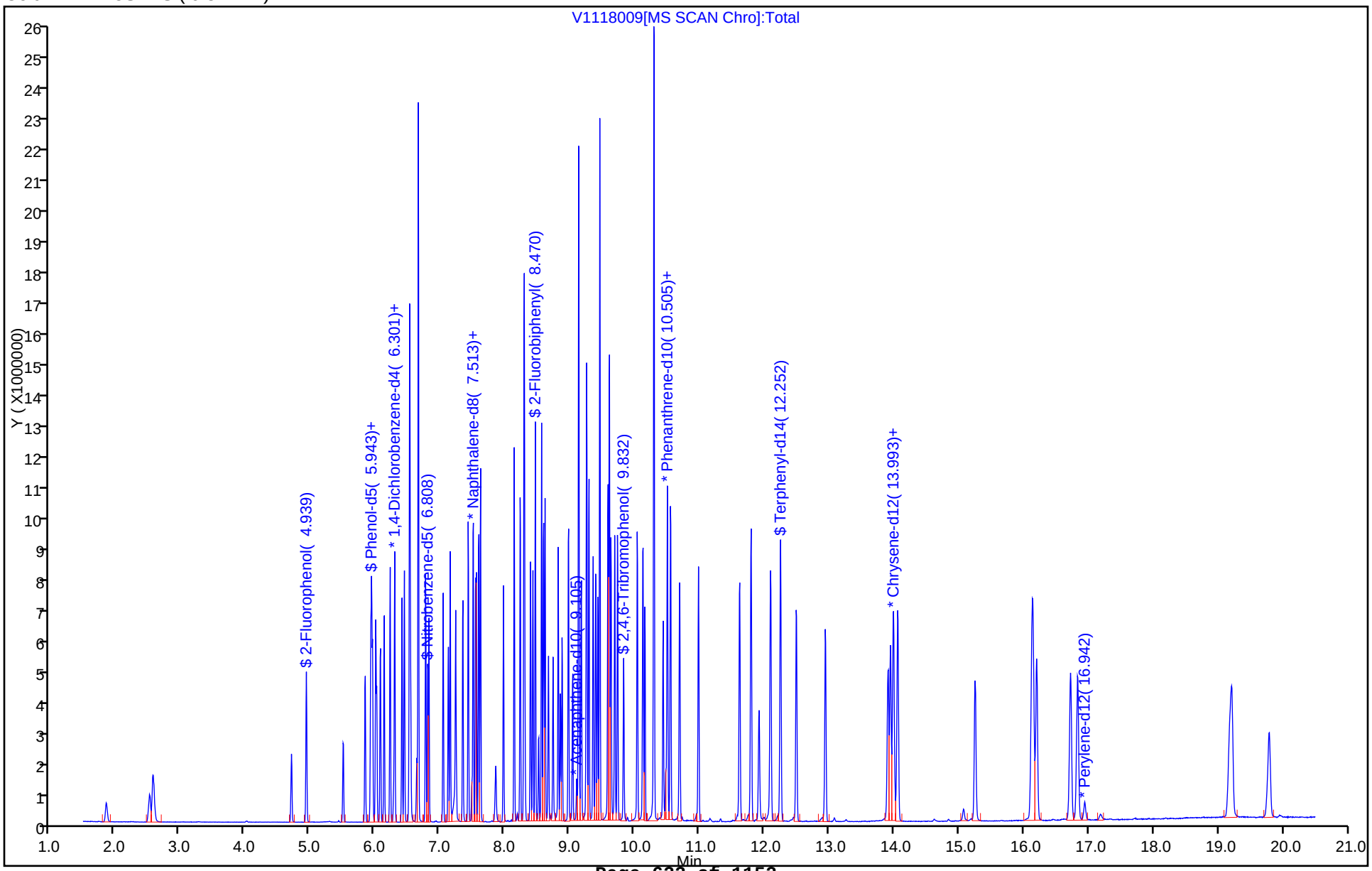
Report Date: 18-Nov-2014 08:46:09 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118009.D

Injection Date:	18-Nov-2014 07:14:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	9
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118010.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 18-Nov-2014 07:43:30 ALS Bottle#: 9 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004448-010
Misc. Info.: IC
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub4

Method: \\PITCHROM\ChromData\CH731\20141118-4448.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 18-Nov-2014 08:46:09 Calib Date: 18-Nov-2014 07:43:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: piccolinov Date: 18-Nov-2014 08:25:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.286	6.284	0.002	89	129202	8.00	8.00	
* 2 Naphthalene-d8	136	7.493	7.497	-0.004	98	396016	8.00	8.00	
* 3 Acenaphthene-d10	164	9.106	9.115	-0.009	91	282992	8.00	8.00	
* 4 Phenanthrene-d10	188	10.479	10.488	-0.009	96	587121	8.00	8.00	
* 5 Chrysene-d12	240	14.010	14.019	-0.009	95	600816	8.00	8.00	
* 6 Perylene-d12	264	16.938	16.963	-0.025	98	481470	8.00	8.00	
$ 7 2-Fluorophenol	112	4.939	4.938	0.001	91	1772770	80.0	84.9	
$ 8 Phenol-d5	99	5.933	5.926	0.007	91	2184453	80.0	85.9	
$ 9 Nitrobenzene-d5	82	6.814	6.813	0.001	90	2264359	80.0	80.9	
$ 10 2-Fluorobiphenyl	172	8.470	8.474	-0.004	99	4736680	80.0	86.7	
$ 11 2,4,6-Tribromophenol	330	9.833	9.836	-0.003	87	671055	80.0	95.2	
$ 12 Terphenyl-d14	244	12.247	12.262	-0.015	98	5531806	80.0	77.4	
13 1,4-Dioxane	88	1.862	1.850	0.012	88	735759	80.0	80.7	
14 N-Nitrosodimethylamine	74	2.541	2.507	0.034	89	1073202	80.0	78.9	
15 Pyridine	79	2.583	2.576	0.007	93	1949127	80.0	79.2	
22 Methyl methanesulfonate	80	4.715	4.708	0.007	91	1323709	80.0	74.3	
26 Benzaldehyde	77	5.847	5.846	0.001	88	1328292	80.0	70.1	
27 Phenol	94	5.949	5.942	0.007	97	2641879	80.0	93.9	
28 Aniline	93	5.960	5.958	0.002	98	2782576	80.0	86.9	
29 Bis(2-chloroethyl)ether	93	6.029	6.022	0.007	96	1517094	80.0	82.0	
31 2-Chlorophenol	128	6.083	6.081	0.001	94	1741577	80.0	82.6	
32 n-Decane	43	6.136	6.140	-0.004	79	1420761	80.0	89.8	
33 1,3-Dichlorobenzene	146	6.232	6.231	0.002	93	2185950	80.0	88.8	
34 1,4-Dichlorobenzene	146	6.302	6.305	-0.003	89	2198668	80.0	87.0	
36 Benzyl alcohol	108	6.414	6.412	0.002	85	1066828	80.0	87.1	
37 1,2-Dichlorobenzene	146	6.451	6.455	-0.004	90	2018021	80.0	86.0	
38 2-Methylphenol	108	6.531	6.524	0.007	95	1897456	80.0	97.9	
39 Indene	116	6.537	6.535	0.002	91	3773828	80.0	108.8	
40 2,2'-oxybis[1-chloropropan	45	6.547	6.551	-0.004	73	1473217	80.0	93.9	
41 N-Nitrosopyrrolidine	100	6.649	6.637	0.013	79	656965	80.0	83.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
43 Acetophenone	105	6.670	6.663	0.007	80	3156588	80.0	94.1	
45 4-Methylphenol	108	6.665	6.663	0.002	68	2251462	80.0	103.2	
44 N-Nitrosodi-n-propylamine	70	6.670	6.663	0.007	66	1723018	80.0	91.2	
47 Hexachloroethane	117	6.777	6.781	-0.004	86	988688	80.0	82.3	
48 Nitrobenzene	77	6.830	6.829	0.001	86	2304653	80.0	84.3	
50 Isophorone	82	7.049	7.048	0.001	98	3574493	80.0	85.9	
51 2-Nitrophenol	139	7.130	7.133	-0.003	83	846773	80.0	85.6	
52 2,4-Dimethylphenol	107	7.156	7.160	-0.004	97	2030177	80.0	86.8	
56 Benzoic acid	122	7.263	7.208	0.055	54	866733	80.0	98.3	M
55 Bis(2-chloroethoxy)methane	93	7.242	7.240	0.002	98	1909286	80.0	91.0	
57 2,4-Dichlorophenol	162	7.354	7.352	0.002	96	1626222	80.0	85.3	
61 Azobenzene	77		7.410				ND	ND	
59 1,2,4-Trichlorobenzene	180	7.434	7.438	-0.004	92	2136187	80.0	87.5	
60 Naphthalene	128	7.509	7.513	-0.004	98	5357157	80.0	95.1	
62 4-Chloroaniline	127	7.546	7.550	-0.004	92	2151456	80.0	92.9	
63 2,6-Dichlorophenol	162	7.562	7.566	-0.004	93	1664114	80.0	89.4	
64 Hexachlorobutadiene	225	7.626	7.630	-0.004	93	1744778	80.0	84.6	
67 Caprolactam	113	7.872	7.833	0.039	79	374248	80.0	81.1	
70 4-Chloro-3-methylphenol	107	7.979	7.977	0.002	89	1688868	80.0	87.9	
72 2-Methylnaphthalene	142	8.145	8.148	-0.003	90	3813703	80.0	93.6	
75 1-Methylnaphthalene	142	8.235	8.239	-0.004	91	3470482	80.0	92.5	
76 Hexachlorocyclopentadiene	237	8.294	8.298	-0.004	96	2130530	80.0	94.3	
77 1,2,4,5-Tetrachlorobenzene	216	8.299	8.303	-0.004	98	2720713	80.0	88.2	
78 2,4,6-Trichlorophenol	196	8.396	8.399	-0.003	94	1497629	80.0	84.3	
79 2,4,5-Trichlorophenol	196	8.433	8.431	0.002	91	1515791	80.0	82.6	
80 1,1'-Biphenyl	154	8.567	8.570	-0.003	95	4728455	80.0	92.1	
81 2-Chloronaphthalene	162	8.599	8.597	0.002	98	4053340	80.0	88.6	
82 2-Nitroaniline	65	8.673	8.672	0.001	72	1150441	80.0	85.2	
86 Dimethyl phthalate	163	8.823	8.821	0.002	95	3941691	80.0	82.8	
87 1,3-Dinitrobenzene	168	8.860	8.859	0.001	83	608073	80.0	82.6	
88 2,6-Dinitrotoluene	165	8.887	8.886	0.001	83	842173	80.0	81.4	
89 Acenaphthylene	152	8.978	8.982	-0.004	97	5643820	80.0	89.1	
90 3-Nitroaniline	138	9.047	9.046	0.001	85	737436	80.0	87.3	
92 2,4-Dinitrophenol	184	9.138	9.142	-0.004	72	1728975	160.0	175.3	
91 Acenaphthene	153	9.138	9.142	-0.004	85	4012276	80.0	92.9	
93 4-Nitrophenol	109	9.181	9.174	0.007	82	1919376	160.0	180.3	
94 2,4-Dinitrotoluene	165	9.261	9.259	0.002	84	1283922	80.0	90.8	
95 Dibenzofuran	168	9.298	9.297	0.001	95	5770642	80.0	87.1	
97 2,3,5,6-Tetrachlorophenol	232	9.363	9.366	-0.003	91	1685637	80.0	87.2	
99 2,3,4,6-Tetrachlorophenol	232	9.405	9.404	0.001	71	1524048	80.0	84.0	
100 2-Naphthylamine	143	9.437	9.436	0.001	93	2851765	80.0	79.9	
101 Diethyl phthalate	149	9.464	9.462	0.002	97	4600669	80.0	87.3	
102 Hexadecane	57	9.464	9.468	-0.004	75	2149507	80.0	112.6	
104 4-Chlorophenyl phenyl ethe	204	9.592	9.596	-0.004	90	2740471	80.0	83.1	
105 4-Nitroaniline	138	9.614	9.607	0.007	59	895717	80.0	95.6	
106 Fluorene	166	9.614	9.617	-0.003	94	4319721	80.0	89.9	
108 4,6-Dinitro-2-methylphenol	198	9.640	9.639	0.001	86	1915802	160.0	179.4	
109 N-Nitrosodiphenylamine	169	9.699	9.698	0.001	63	3178144	80.0	85.0	
111 1,2-Diphenylhydrazine	77	9.737	9.740	-0.003	100	4803655	80.0	83.2	
116 4-Bromophenyl phenyl ether	248	10.041	10.050	-0.009	67	1646735	80.0	85.0	
118 Hexachlorobenzene	284	10.132	10.136	-0.004	94	1594567	80.0	83.9	
119 Atrazine	200	10.164	10.162	0.002	92	1194422	80.0	68.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
122 Pentachlorophenol	266	10.297	10.301	-0.004	90	2448792	160.0	166.8	
121 n-Octadecane	57	10.297	10.307	-0.010	92	2341089	80.0	105.6	
126 Phenanthrene	178	10.506	10.510	-0.004	97	6581685	80.0	80.8	
128 Anthracene	178	10.554	10.563	-0.009	97	6673192	80.0	81.4	
130 Carbazole	167	10.693	10.702	-0.009	96	5193384	80.0	78.6	
132 Di-n-butyl phthalate	149	10.987	10.996	-0.009	99	6173662	80.0	77.2	
137 Fluoranthene	202	11.799	11.808	-0.009	95	7823717	80.0	77.7	
138 Benzidine	184	11.921	11.931	-0.010	98	2586744	80.0	76.5	
139 Pyrene	202	12.098	12.107	-0.009	98	7847498	80.0	77.2	
144 Butyl benzyl phthalate	149	12.942	12.956	-0.014	95	2463595	80.0	73.3	
149 3,3'-Dichlorobenzidine	252	13.903	13.923	-0.020	72	2488531	80.0	81.3	
151 Bis(2-ethylhexyl) phthalat	149	13.941	13.961	-0.020	92	3465934	80.0	77.6	
152 Benzo[a]anthracene	228	13.989	14.003	-0.014	81	7095604	80.0	78.4	
153 Chrysene	228	14.058	14.073	-0.015	92	6589112	80.0	79.1	
156 Di-n-octyl phthalate	149	15.250	15.269	-0.019	99	5699986	80.0	71.0	
157 7,12-Dimethylbenz(a)anthra	256	16.131	16.146	-0.014	73	2764009	80.0	83.0	
158 Benzo[b]fluoranthene	252	16.152	16.156	-0.004	92	6846161	80.0	78.6	
159 Benzo[k]fluoranthene	252	16.201	16.210	-0.009	96	6431667	80.0	76.9	
176 Benzo[e]pyrene	252	16.724	16.738	-0.014	0	6046182	80.0	77.7	
160 Benzo[a]pyrene	252	16.831	16.845	-0.014	71	6060350	80.0	79.8	
163 Indeno[1,2,3-cd]pyrene	276	19.181	19.196	-0.015	95	5677410	80.0	82.0	
164 Dibenz(a,h)anthracene	278	19.208	19.228	-0.020	64	4948414	80.0	83.6	
165 Benzo[g,h,i]perylene	276	19.785	19.800	-0.015	89	4713525	80.0	82.0	
S 206 Total Cresols	108				0		160.0	201.2	
S 208 Methyl Phenols,Total	108				0		160.0	201.2	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

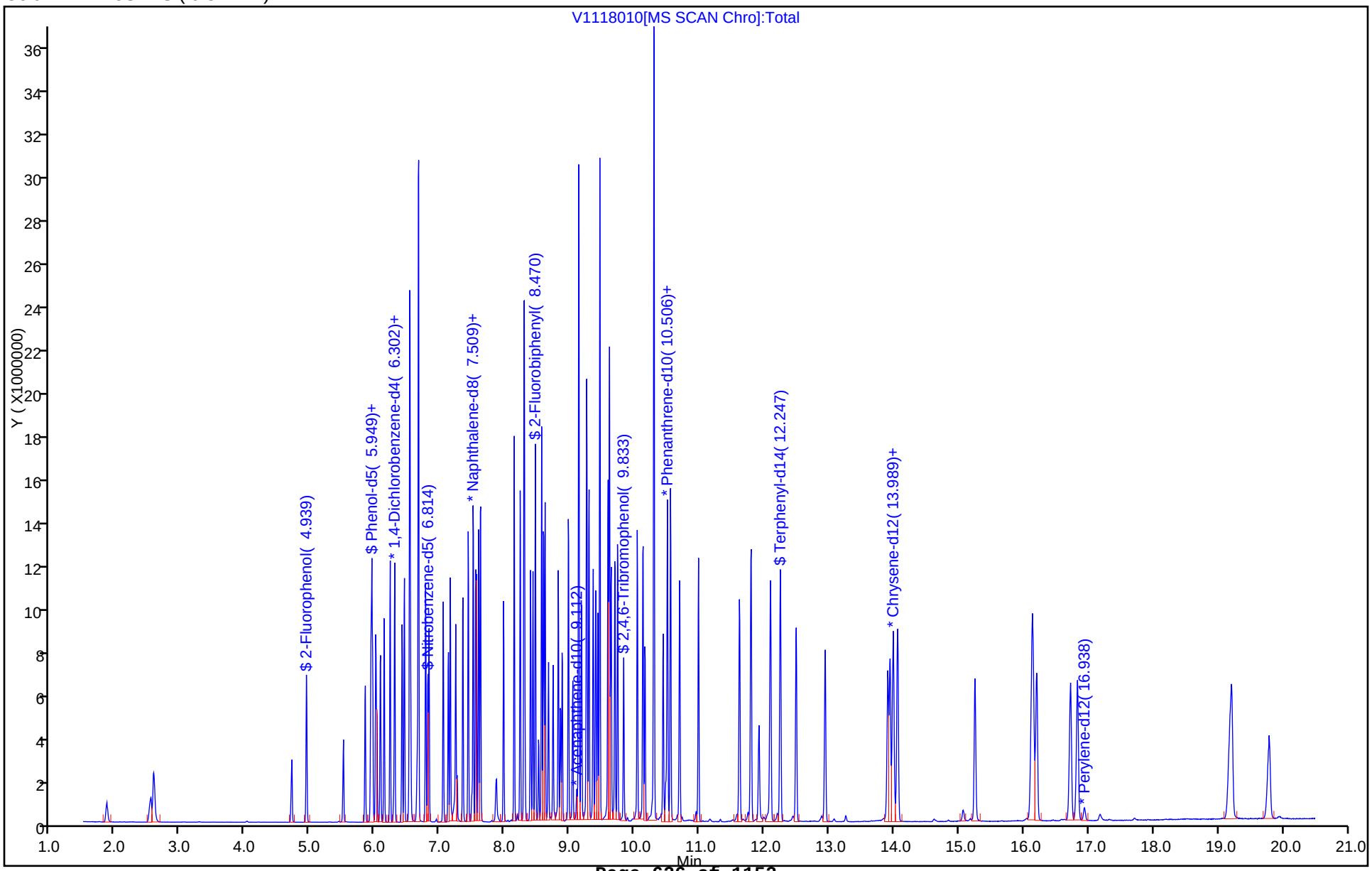
SVTAPSTD80i_00005 Amount Added: 1.00 Units: mL

Report Date: 18-Nov-2014 08:46:10 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141118-4448.b\V1118010.D				
Injection Date:	18-Nov-2014 07:43:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	10
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

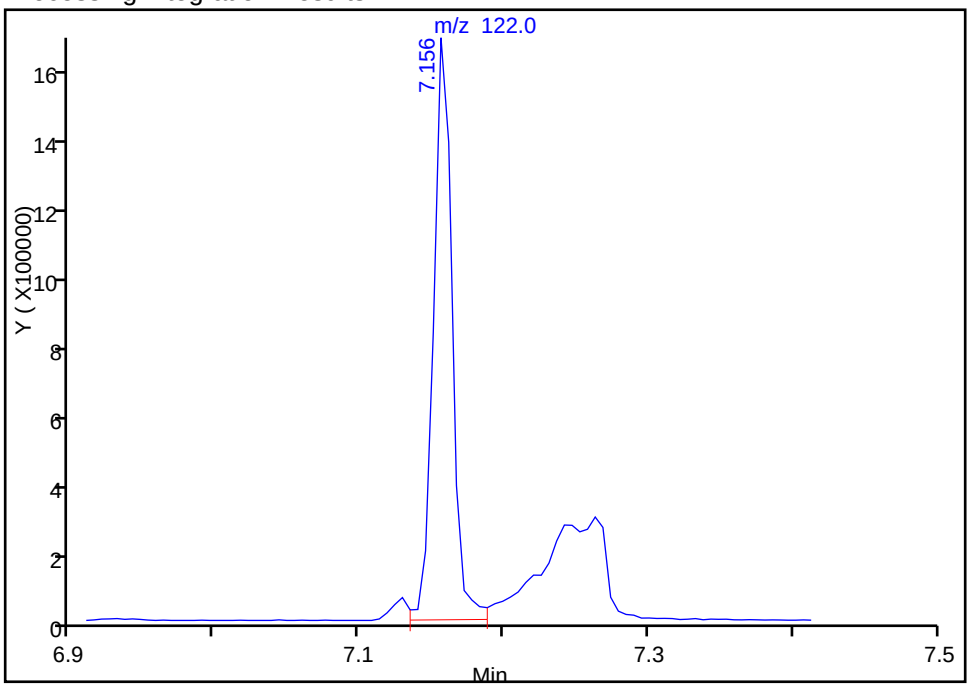
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141118-4448.b\V1118010.D				
Injection Date:	18-Nov-2014 07:43:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	9	Worklist Smp#:	10
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

56 Benzoic acid, CAS: 65-85-0

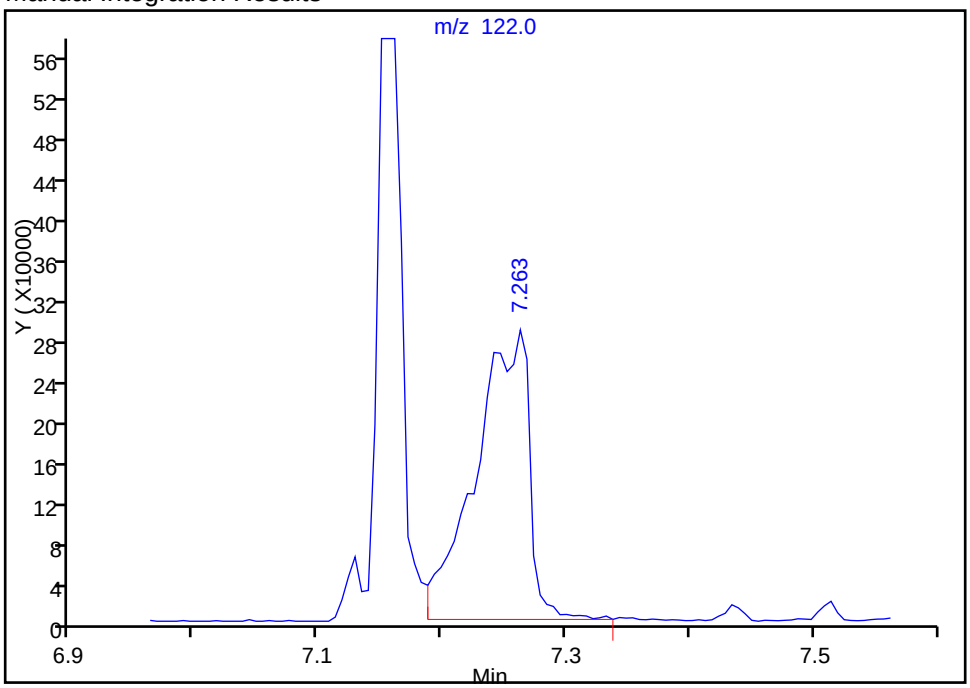
Processing Integration Results

RT: 7.16
Response: 1466417
Amount: 138.9814



Manual Integration Results

RT: 7.26
Response: 866733
Amount: 98.305761



Reviewer: piccolinov, 18-Nov-2014 08:25:54
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 124766

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/12/2014 10:20 Calibration End Date: 11/12/2014 13:29 Calibration ID: 19137

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-124766/3	D1112003.D
Level 2	IC 180-124766/4	D1112004.D
Level 3	IC 180-124766/5	D1112005.D
Level 4	ICIS 180-124766/6	D1112006.D
Level 5	IC 180-124766/7	D1112007.D
Level 6	IC 180-124766/8	D1112008.D
Level 7	IC 180-124766/9	D1112009.D
Level 8	IC 180-124766/10	D1112010.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	0.2379 0.2347	0.2650 0.2374	0.2673 0.2361	0.2457	0.2365	Ave		0.2451			0.0100	5.5		20.0			
N-Nitrosodimethylamine	0.3109 0.3308	0.3430 0.3376	0.3319 0.3405	0.3354	0.3362	Ave		0.3333			0.0100	3.0		20.0			
Pyridine	0.5649 0.6046	0.6038 0.6015	0.6175 0.5956	0.6192	0.6158	Ave		0.6029			0.0100	2.9		20.0			
Methyl methanesulfonate	0.5238 0.4592	0.4981 0.4394	0.4930 0.4280	0.4901	0.4708	Ave		0.4753			0.0100	6.8		20.0			
Benzaldehyde	0.9355 0.7945	0.8483 0.7215	0.8262 0.6823	0.8288	0.8353	Ave		0.8090			0.0100	9.7		20.0			
Phenol	1.9183 1.5141	1.7475 1.4519	1.7105 1.4092	1.7168	1.6259	Ave		1.6368			0.8000	10.0		20.0			
Aniline	2.1615 1.7951	1.9871 1.7349	1.9555 1.6768	1.9600	1.8829	Ave		1.8942			0.0100	8.2		20.0			
Bis(2-chloroethyl)ether	1.3439 1.0834	1.2554 1.0571	1.2290 1.0304	1.1850	1.1291	Ave		1.1642			0.7000	9.3		20.0			
2-Chlorophenol	1.3917 1.3007	1.3876 1.2755	1.3782 1.2671	1.3693	1.3170	Ave		1.3359			0.8000	3.9		20.0			
n-Decane	1.6099 1.1999	1.4181 1.1365	1.3969 1.0844	1.3604	1.3025	Ave		1.3136				13.0		20.0			
1,3-Dichlorobenzene	1.8631 1.4648	1.6842 1.4300	1.6183 1.4163	1.5759	1.5145	Ave		1.5709			0.0100	9.6		20.0			
1,4-Dichlorobenzene	1.7329 1.4851	1.6652 1.4507	1.6464 1.4144	1.6005	1.5344	Ave		1.5662			0.0100	7.2		20.0			
Benzyl alcohol	0.9025 0.8414	0.8639 0.8165	0.9041 0.8014	0.9002	0.8718	Ave		0.8627			0.0100	4.6		20.0			
1,2-Dichlorobenzene	1.7766 1.4454	1.6372 1.4273	1.5940 1.3856	1.5578	1.5025	Ave		1.5408			0.0100	8.3		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 Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 124766

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/12/2014 10:20 Calibration End Date: 11/12/2014 13:29 Calibration ID: 19137

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								
2-Methylphenol	1.3409 1.1288	1.3414 1.0425	1.3173 0.9913	1.2789	1.2178	Ave		1.2074			0.7000	11.0		20.0			
Indene	2.6037 1.9968	2.4142 1.8235	2.3421 1.7356	2.2824	2.1611	Ave		2.1699			0.0100	14.0		20.0			
2,2'-oxybis[1-chloropropane]	2.4992 1.9164	2.3222 1.7653	2.2281 1.7051	2.1468	2.0555	Ave		2.0799			0.0100	13.0		20.0			
N-Nitrosopyrrolidine	0.6935 0.6045	0.6459 0.5967	0.6310 0.5882	0.6396	0.6194	Ave		0.6273			0.0100	5.4		20.0			
Methylphenol, 3 & 4	1.5051 1.0750	1.3731 0.9602	1.3863 +++++	1.3184	1.2335	Ave		1.2645			0.6000	15.0		20.0			
N-Nitrosodi-n-propylamine	0.9046 0.6615	0.8815 0.6044	0.8701 +++++	0.8403	0.7737	Ave		0.7909			0.5000	15.0		20.0			
Acetophenone	+++++ 1.4471	1.9660 1.3156	1.8808 1.2260	1.7843	1.6542	Ave		1.6106			0.0100	18.0		20.0			
Hexachloroethane	0.6589 0.5934	0.6315 0.5795	0.6267 0.5696	0.6261	0.6009	Ave		0.6108			0.3000	4.9		20.0			
Nitrobenzene	0.3235 0.2837	0.2927 0.2823	0.2944 0.2791	0.2981	0.2835	Ave		0.2922			0.2000	4.9		20.0			
Isophorone	0.6220 0.5300	0.5508 0.5132	0.5580 0.5058	0.5629	0.5312	Ave		0.5467			0.4000	6.7		20.0			
2-Nitrophenol	0.1529 0.1770	0.1475 0.1792	0.1594 0.1789	0.1749	0.1718	Ave		0.1677			0.1000	7.5		20.0			
2,4-Dimethylphenol	0.3307 0.2870	0.3053 0.2787	0.3043 0.2712	0.3141	0.2919	Ave		0.2979			0.2000	6.6		20.0			
Benzoic acid	+++++ 0.1716	+++++ 0.1853	0.1078 0.1823	0.1259	0.1402	Lin1	-0.441	0.1856			0.0100				0.9950		0.9900
Bis(2-chloroethoxy)methane	0.4253 0.3424	0.3828 0.3302	0.3680 0.3292	0.3746	0.3575	Ave		0.3638			0.3000	8.8		20.0			
2,4-Dichlorophenol	0.2837 0.2657	0.2680 0.2630	0.2700 0.2591	0.2825	0.2716	Ave		0.2705			0.2000	3.2		20.0			
1,2,4-Trichlorobenzene	0.3622 0.3039	0.3221 0.2966	0.3135 0.2957	0.3210	0.3010	Ave		0.3145			0.0100	7.0		20.0			
Naphthalene	1.1953 0.9886	1.0830 0.9533	1.0479 0.9351	1.0631	1.0028	Ave		1.0336			0.7000	8.1		20.0			
4-Chloroaniline	0.4864 0.4136	0.4478 0.4035	0.4365 0.3947	0.4527	0.4238	Ave		0.4324			0.0100	6.9		20.0			
2,6-Dichlorophenol	0.3001 0.2628	0.2770 0.2553	0.2776 0.2496	0.2842	0.2632	Ave		0.2712			0.0100	6.1		20.0			
Hexachlorobutadiene	0.1818 0.1577	0.1681 0.1560	0.1657 0.1539	0.1679	0.1591	Ave		0.1638			0.0100	5.6		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 Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 124766

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/12/2014 10:20 Calibration End Date: 11/12/2014 13:29 Calibration ID: 19137

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								
Caprolactam	0.0929 0.0926	0.0907 0.0944	0.0954 0.0941	0.0968	0.0908	Ave		0.0935			0.0100	2.3		20.0			
4-Chloro-3-methylphenol	0.2805 0.2553	0.2615 0.2532	0.2664 0.2449	0.2806	0.2577	Ave		0.2625			0.2000	4.9		20.0			
2-Methylnaphthalene	0.8226 0.6697	0.7216 0.6520	0.7201 0.6355	0.7217	0.6698	Ave		0.7016			0.4000	8.5		20.0			
1-Methylnaphthalene	0.7715 0.6349	0.6914 0.6111	0.6818 0.5988	0.6838	0.6380	Ave		0.6639			0.0100	8.4		20.0			
Hexachlorocyclopentadiene	0.2585 0.3150	0.2650 0.3041	0.2827 0.2985	0.3072	0.3097	Ave		0.2926			0.0500	7.3		20.0			
1,2,4,5-Tetrachlorobenzene	0.5964 0.4693	0.5243 0.4477	0.5123 0.4299	0.5115	0.4857	Ave		0.4971			0.0100	10.0		20.0			
2,4,6-Trichlorophenol	0.3162 0.3385	0.3327 0.3442	0.3314 0.3335	0.3484	0.3344	Ave		0.3349			0.2000	2.9		20.0			
2,4,5-Trichlorophenol	0.3414 0.3612	0.3429 0.3581	0.3575 0.3537	0.3560	0.3541	Ave		0.3531			0.2000	2.0		20.0			
1,1'-Biphenyl	1.6113 1.4216	1.5017 1.3924	1.5279 1.3527	1.5048	1.4436	Ave		1.4695			0.0100	5.7		20.0			
2-Chloronaphthalene	1.3324 1.1362	1.1785 1.1130	1.2335 1.1680	1.1853	1.1669	Ave		1.1892			0.8000	5.7		20.0			
2-Nitroaniline	0.2526 0.3026	0.2731 0.2986	0.2935 0.2898	0.3063	0.2956	Ave		0.2890			0.0100	6.2		20.0			
Dimethyl phthalate	1.3198 1.1416	1.1688 1.1259	1.1920 1.1018	1.2031	1.1490	Ave		1.1753			0.0100	5.7		20.0			
1,3-Dinitrobenzene	+++++ 0.1836	0.1284 0.1898	0.1482 0.1866	0.1719	0.1695	Ave		0.1683			0.0100	13.0		20.0			
2,6-Dinitrotoluene	+++++ 0.2632	0.2258 0.2635	0.2539 0.2628	0.2648	0.2584	Ave		0.2561			0.2000	5.4		20.0			
Acenaphthylene	1.9052 1.8387	1.8450 1.8125	1.8627 1.7697	1.9052	1.8492	Ave		1.8485			0.9000	2.4		20.0			
3-Nitroaniline	0.2608 0.3360	0.3061 0.3376	0.3212 0.3292	0.3342	0.3319	Ave		0.3196			0.0100	8.1		20.0			
Acenaphthene	1.3430 1.0804	1.1972 1.0109	1.2022 0.9563	1.1867	1.1271	Ave		1.1380			0.9000	11.0		20.0			
2,4-Dinitrophenol	+++++ 0.1452	0.0520 0.1464	0.0722 0.1430	0.1262	0.1304	Lin2	-0.409	0.1444			0.0100				0.9930		0.9900
4-Nitrophenol	0.0898 0.1346	0.1114 0.1329	0.1210 0.1308	0.1318	0.1340	Ave		0.1233			0.0100	13.0		20.0			
2,4-Dinitrotoluene	0.2098 0.3251	0.2903 0.3195	0.3219 0.3083	0.3378	0.3297	Ave		0.3053			0.2000	13.0		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 Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 124766

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/12/2014 10:20 Calibration End Date: 11/12/2014 13:29 Calibration ID: 19137

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								
Dibenzofuran	1.8757 1.5431	1.6740 1.5250	1.6356 1.4890	1.6267	1.5767	Ave		1.6182			0.8000	7.5		20.0			
2,3,4,6-Tetrachlorophenol	0.2328 0.2948	0.2638 0.2960	0.2800 0.2933	0.2940	0.2906	Ave		0.2807			0.0100	7.9		20.0			
2,3,5,6-Tetrachlorophenol	0.2590 0.2900	0.2808 0.2924	0.3015 0.2852	0.2912	0.2889	Ave		0.2861			0.0100	4.4		20.0			
2-Naphthylamine	1.2337 1.1630	1.2563 1.1172	1.2570 1.0983	1.2308	1.1971	Ave		1.1942			0.0100	5.2		20.0			
Diethyl phthalate	+++++ 1.0542	1.2338 0.9878	1.2288 0.9199	1.1894	1.1312	Ave		1.1065			0.0100	11.0		20.0			
Hexadecane	0.5912 0.4384	0.5426 0.3827	0.5447 +++++	0.5386	0.5007	Ave		0.5056				14.0		20.0			
4-Chlorophenyl phenyl ether	0.6251 0.5665	0.5767 0.5582	0.5933 0.5506	0.5907	0.5640	Ave		0.5781			0.4000	4.2		20.0			
4-Nitroaniline	0.2520 0.3079	0.2997 0.3003	0.3096 0.2882	0.3237	0.3203	Ave		0.3002			0.0100	7.5		20.0			
Fluorene	1.3700 1.1801	1.2905 1.1348	1.2779 1.0973	1.2874	1.2259	Ave		1.2330			0.9000	7.4		20.0			
4,6-Dinitro-2-methylphenol	+++++ 0.1319	0.0622 0.1349	0.0822 0.1367	0.1091	0.1170	Lin2	-0.304	0.1313			0.0100				0.9950		0.9900
N-Nitrosodiphenylamine	0.6102 0.5735	0.5518 0.5734	0.5647 0.5638	0.5751	0.5619	Ave		0.5718			0.0100	3.0		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	0.8580 0.8001	0.7945 0.7994	0.8140 0.7732	0.8317	0.8083	Ave		0.8099			0.0100	3.2		20.0			
4-Bromophenyl phenyl ether	0.2127 0.2047	0.1975 0.2044	0.1976 0.2027	0.2077	0.1965	Ave		0.2030			0.1000	2.8		20.0			
Hexachlorobenzene	0.2117 0.2014	0.2032 0.2011	0.1997 0.1996	0.2044	0.1950	Ave		0.2020			0.1000	2.4		20.0			
Atrazine	0.1940 0.1962	0.1906 0.1861	0.1890 0.1685	0.1979	0.1921	Ave		0.1893			0.0100	4.9		20.0			
Pentachlorophenol	0.1661 0.1365	0.0979 0.1339	0.1130 0.1292	0.1273	0.1306	Ave		0.1293			0.0500	15.0		20.0			
n-Octadecane	2.5434 1.9453	2.5116 1.7017	2.5015 +++++	2.4247	2.2605	Ave		2.2698				14.0		20.0			
Phenanthrene	1.2641 1.1271	1.1365 1.1422	1.1436 1.1165	1.1408	1.1229	Ave		1.1492			0.7000	4.1		20.0			
Anthracene	1.2183 1.1683	1.1380 1.1790	1.1679 1.1740	1.1965	1.1626	Ave		1.1756			0.7000	2.0		20.0			
Carbazole	1.0475 1.0341	1.0172 1.0199	1.0230 1.0368	1.0420	1.0294	Ave		1.0312			0.0100	1.0		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 Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 124766

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/12/2014 10:20 Calibration End Date: 11/12/2014 13:29 Calibration ID: 19137

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								
Di-n-butyl phthalate	1.2252 1.2969	1.1657 1.3146	1.1835 1.2895	1.2550	1.2533	Ave		1.2479			0.0100	4.3		20.0			
Fluoranthene	1.1608 1.0936	1.0652 1.1134	1.0527 1.1077	1.0968	1.0751	Ave		1.0957			0.6000	3.1		20.0			
Benzidine	+++++ 0.7052	0.5194 0.6761	0.5763 0.6442	0.6414	0.6972	Ave		0.6371			0.0100	11.0		20.0			
Pyrene	1.4448 1.3391	1.3101 1.3354	1.3482 1.3181	1.3679	1.3106	Ave		1.3468			0.6000	3.3		20.0			
Butyl benzyl phthalate	0.6488 0.5983	0.5224 0.6051	0.5332 0.5965	0.5866	0.5659	Ave		0.5821			0.0100	7.0		20.0			
3,3'-Dichlorobenzidine	0.3826 0.3919	0.3143 0.4030	0.3347 0.4160	0.3672	0.3615	Ave		0.3714			0.0100	9.2		20.0			
Bis(2-ethylhexyl) phthalate	0.7748 0.8220	0.6978 0.8390	0.7193 0.8173	0.8045	0.7846	Ave		0.7824			0.0100	6.4		20.0			
Benzo[a]anthracene	1.2212 1.1023	1.0893 1.1298	1.1017 1.1220	1.1285	1.0854	Ave		1.1225			0.8000	3.9		20.0			
Chrysene	1.1773 1.0743	1.0180 1.0757	1.0650 1.0888	1.0689	1.0409	Ave		1.0761			0.7000	4.3		20.0			
Di-n-octyl phthalate	1.2787 1.7886	1.3249 1.7992	1.4069 1.7082	1.5629	1.6117	Ave		1.5601			0.0100	13.0		20.0			
7,12-Dimethylbenz(a)anthracene	0.3931 0.5750	0.4435 0.5779	0.4703 0.5621	0.5411	0.5226	Ave		0.5107			0.0100	13.0		20.0			
Benzo[b]fluoranthene	1.2606 1.2999	1.1293 1.3021	1.1958 1.3313	1.2625	1.2648	Ave		1.2558			0.7000	5.2		20.0			
Benzo[k]fluoranthene	1.2111 1.3821	1.2589 1.3631	1.2545 1.2940	1.3589	1.3242	Ave		1.3058			0.7000	4.7		20.0			
Benzo[e]pyrene	1.1732 1.2217	1.0819 1.2066	1.1179 1.2191	1.1640	1.1310	Ave		1.1644			0.0100	4.4		20.0			
Benzo[a]pyrene	1.1006 1.1864	1.0525 1.2078	1.0854 1.2214	1.1682	1.1249	Ave		1.1434			0.7000	5.4		20.0			
Indeno[1,2,3-cd]pyrene	1.0087 1.2423	0.9947 1.2986	0.9971 1.3730	1.1150	1.1302	Ave		1.1450			0.5000	13.0		20.0			
Dibenz(a,h)anthracene	0.8408 1.0485	0.8352 1.0972	0.8443 1.1618	0.9260	0.9316	Ave		0.9607			0.4000	13.0		20.0			
Benzo[g,h,i]perylene	0.7098 1.0396	0.8746 1.1032	0.8796 1.1832	0.9477	0.9549	Ave		0.9616			0.5000	15.0		20.0			
2-Fluorophenol (Surr)	1.0243 0.9464	1.0016 0.9411	0.9774 0.9347	0.9781	0.9661	Ave		0.9712				3.2		20.0			
Phenol-d5 (Surr)	1.6415 1.3614	1.4871 1.3297	1.4974 1.3026	1.5087	1.4279	Ave		1.4445				7.8		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 124766

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/12/2014 10:20 Calibration End Date: 11/12/2014 13:29 Calibration ID: 19137

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								
Nitrobenzene-d5 (Surr)	0.3125 0.2852	0.2852 0.2813	0.2880 0.2814	0.2988	0.2858	Ave		0.2898				3.7		20.0			
2-Fluorobiphenyl	1.4332 1.2306	1.3063 1.1971	1.3164 1.1910	1.3060	1.2364	Ave		1.2771				6.3		20.0			
2,4,6-Tribromophenol (Surr)	0.0568 0.0868	0.0709 0.0889	0.0764 0.0892	0.0847	0.0839	Ave		0.0797			0.0100	14.0		20.0			
Terphenyl-d14 (Surr)	0.9353 0.8637	0.8433 0.8895	0.8718 0.8633	0.8905	0.8486	Ave		0.8757				3.4		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 RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 124766

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/12/2014 10:20 Calibration End Date: 11/12/2014 13:29 Calibration ID: 19137

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-124766/3	D1112003.D
Level 2	IC 180-124766/4	D1112004.D
Level 3	IC 180-124766/5	D1112005.D
Level 4	ICIS 180-124766/6	D1112006.D
Level 5	IC 180-124766/7	D1112007.D
Level 6	IC 180-124766/8	D1112008.D
Level 7	IC 180-124766/9	D1112009.D
Level 8	IC 180-124766/10	D1112010.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			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	1712 165250	9308 233018	18823 275701	47894	80842	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosodimethylamine	DCB	Ave	2237 232944	12045 331371	23369 397626	65378	114935	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pyridine	DCB	Ave	4065 425701	21203 590404	43479 695543	120700	210539	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Methyl methanesulfonate	DCB	Ave	3769 323325	17492 431258	34712 499770	95541	160967	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzaldehyde	DCB	Ave	6731 559454	29790 708200	58175 796756	161548	285579	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenol	DCB	Ave	13803 1066154	61370 1425092	120435 1645516	334653	555876	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Aniline	DCB	Ave	15553 1264021	69783 1702849	137688 1958003	382059	643766	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-chloroethyl)ether	DCB	Ave	9670 762883	44089 1037548	86538 1203191	230995	386032	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Chlorophenol	DCB	Ave	10014 915885	48729 1251993	97043 1479625	266915	450282	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
n-Decane	DCB	Ave	11584 844937	49802 1115557	98354 1266295	265183	445305	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	13406 1031463	59146 1403595	113945 1653848	307192	517815	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	12469 1045711	58480 1423962	115924 1651627	311970	524613	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzyl alcohol	DCB	Ave	6494 592500	30338 801396	63656 935815	175464	298070	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	12783 1017740	57495 1400946	112234 1617961	303652	513707	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Methylphenol	DCB	Ave	9648 794862	47108 1023288	92754 1157595	249286	416378	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

FORM VI

GC/MS SEMI VOA INITIAL CALIBRATION DATA

INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 124766

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/12/2014 10:20 Calibration End Date: 11/12/2014 13:29 Calibration ID: 19137

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			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
Indene	DCB	Ave	18735 1406050	84781 1789861	164909 2026655	444899	738881	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,2'-oxybis[1-chloropropane]	DCB	Ave	17983 1349431	81551 1732756	156886 1991125	418467	702785	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosopyrrolidine	DCB	Ave	4990 425678	22683 585702	44428 686795	124683	211755	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Methylphenol, 3 & 4	DCB	Ave	10830 756941	48220 942507	97614 +++++	256988	421721	0.400 40.0	2.00 60.0	4.00 +++++	10.0	20.0
N-Nitrosodi-n-propylamine	DCB	Ave	6509 465811	30955 593267	61268 +++++	163800	264525	0.400 40.0	2.00 60.0	4.00 +++++	10.0	20.0
Acetophenone	DCB	Ave	+++++ 1019002	69044 1291321	132426 1431577	347806	565558	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachloroethane	DCB	Ave	4741 417840	22176 568786	44127 665116	122051	205463	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Nitrobenzene	NPT	Ave	10630 878730	47819 1207314	95855 1407860	258276	438332	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Isophorone	NPT	Ave	20436 1641641	89972 2194899	181711 2551468	487624	821271	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Nitrophenol	NPT	Ave	5024 548308	24087 766406	51918 902349	151543	265639	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dimethylphenol	NPT	Ave	10865 888963	49864 1192076	99097 1368246	272119	451267	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzoic acid	NPT	Lin1	+++++ 531632	+++++ 792632	35115 919688	109052	216757	+++++ 40.0	+++++ 60.0	4.00 80.0	10.0	20.0
Bis(2-chloroethoxy)methane	NPT	Ave	13975 1060620	62528 1411948	119846 1660583	324556	552741	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dichlorophenol	NPT	Ave	9322 822988	43777 1124759	87935 1307015	244710	419903	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2,4-Trichlorobenzene	NPT	Ave	11902 941402	52609 1268395	102075 1491754	278106	465304	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Naphthalene	NPT	Ave	39272 3062043	176919 4076863	341243 4717085	920996	1550316	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chloroaniline	NPT	Ave	15980 1281104	73150 1725546	142143 1991213	392174	655128	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,6-Dichlorophenol	NPT	Ave	9859 814162	45256 1091680	90400 1259239	246231	406906	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorobutadiene	NPT	Ave	5973 488466	27460 667230	53955 776339	145460	245923	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Caprolactam	NPT	Ave	3052 286731	14811 403707	31081 474960	83876	140332	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chloro-3-methylphenol	NPT	Ave	9217 790699	42712 1082841	86765 1235374	243105	398389	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

FORM VI

GC/MS SEMI VOA INITIAL CALIBRATION DATA

INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 124766

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/12/2014 10:20 Calibration End Date: 11/12/2014 13:29 Calibration ID: 19137

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			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-Methylnaphthalene	NPT	Ave	27027 2074316	117877 2788225	234481 3205820	625206	1035503	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1-Methylnaphthalene	NPT	Ave	25349 1966589	112942 2613390	222026 3020591	592360	986348	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorocyclopentadiene	ANT	Ave	5050 544225	25182 723946	52582 845888	153020	267612	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2,4,5-Tetrachlorobenzene	ANT	Ave	11653 810825	49815 1065757	95278 1218014	254754	419697	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,6-Trichlorophenol	ANT	Ave	6178 584859	31607 819174	61630 945064	173542	289002	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,5-Trichlorophenol	ANT	Ave	6670 624027	32578 852419	66487 1002144	177337	306031	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,1'-Biphenyl	ANT	Ave	31480 2456034	142677 3314307	284142 3832723	749516	1247567	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Chloronaphthalene	ANT	Ave	26032 1963047	111967 2649252	229385 3309343	590351	1008429	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Nitroaniline	ANT	Ave	4935 522788	25951 710699	54579 821073	152540	255442	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dimethyl phthalate	ANT	Ave	25785 1972253	111048 2679904	221684 3121938	599220	992963	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,3-Dinitrobenzene	ANT	Ave	+++++ 317128	12199 451895	27563 528775	85630	146510	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,6-Dinitrotoluene	ANT	Ave	+++++ 454793	21455 627086	47218 744528	131895	223321	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acenaphthylene	ANT	Ave	37223 3176630	175289 4314337	346398 5014210	948962	1598013	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
3-Nitroaniline	ANT	Ave	5096 580518	29087 803598	59727 932697	166481	286845	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acenaphthene	ANT	Ave	26239 1866537	113746 2406150	223573 2709652	591053	973978	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dinitrophenol	ANT	Lin2	+++++ 501599	9875 697046	26860 810371	125740	225363	+++++ 80.0	4.00 120	8.00 160	20.0	40.0
4-Nitrophenol	ANT	Ave	3509 465212	21162 632900	45015 741227	131250	231663	0.800 80.0	4.00 120	8.00 160	20.0	40.0
2,4-Dinitrotoluene	ANT	Ave	4098 561642	27582 760523	59868 873525	168259	284936	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dibenzofuran	ANT	Ave	36646 2666010	159049 3629834	304171 4218895	810242	1362530	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,3,4,6-Tetrachlorophenol	ANT	Ave	4548 509237	25068 704511	52070 831020	146455	251130	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,3,5,6-Tetrachlorophenol	ANT	Ave	5061 500953	26680 695918	56075 808112	145058	249668	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 124766

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/12/2014 10:20 Calibration End Date: 11/12/2014 13:29 Calibration ID: 19137

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			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-Naphthylamine	ANT	Ave	24103 2009322	119365 2659320	233773 3111753	613058	1034501	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Diethyl phthalate	ANT	Ave	+++++ 1821343	117222 2351314	228529 2606535	592404	977562	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexadecane	NPT	Ave	19424 1357937	88643 1636708	177384 +++++	466565	774113	0.400 40.0	2.00 60.0	4.00 +++++	10.0	20.0
4-Chlorophenyl phenyl ether	ANT	Ave	12213 978669	54794 1328744	110343 1560164	294201	487370	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Nitroaniline	ANT	Ave	4923 531943	28470 714766	57584 816464	161211	276790	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Fluorene	ANT	Ave	26766 2038751	122607 2701108	237658 3109029	641236	1059421	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4,6-Dinitro-2-methylphenol	PHN	Lin2	+++++ 699736	19393 975882	49734 1171005	172487	318067	+++++ 80.0	4.00 120	8.00 160	20.0	40.0
N-Nitrosodiphenylamine	PHN	Ave	19189 1521355	86046 2074431	170886 2415116	454765	763722	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2-Diphenylhydrazine(as Azobenzene)	PHN	Ave	26981 2122230	123885 2892162	246331 3312255	657733	1098671	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Bromophenyl phenyl ether	PHN	Ave	6688 542921	30799 739534	59811 868225	164263	267109	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorobenzene	PHN	Ave	6657 534313	31687 727607	60440 855096	161618	265041	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Atrazine	PHN	Ave	6102 520552	29719 673312	57197 721915	156524	261092	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pentachlorophenol	PHN	Ave	10450 724273	30541 968848	68406 1107024	201328	355135	0.800 80.0	4.00 120	8.00 160	20.0	40.0
n-Octadecane	DCB	Ave	18301 1369767	88202 1670331	176133 +++++	472634	772860	0.400 40.0	2.00 60.0	4.00 +++++	10.0	20.0
Phenanthrene	PHN	Ave	39754 2989669	177203 4132443	346076 4782784	902184	1526141	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Anthracene	PHN	Ave	38312 3098959	177441 4265327	353446 5029312	946207	1580099	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Carbazole	PHN	Ave	32942 2742865	158606 3689813	309577 4441249	824006	1399050	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Di-n-butyl phthalate	PHN	Ave	38528 3440022	181761 4755967	358147 5523943	992475	1703391	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Fluoranthene	PHN	Ave	36504 2900792	166088 4028131	318571 4745049	867384	1461298	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzidine	CRY	Ave	+++++ 1598255	68139 2105247	142676 2424762	419304	803944	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pyrene	CRY	Ave	36693 3035014	171869 4158251	333779 4961454	894199	1511359	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 124766

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/12/2014 10:20 Calibration End Date: 11/12/2014 13:29 Calibration ID: 19137

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			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
Butyl benzyl phthalate	CRY	Ave	16477 1356001	68534 1884156	132012 2245235	383421	652524	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
3,3'-Dichlorobenzidine	CRY	Ave	9717 888313	41235 1254690	82857 1565926	240007	416855	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-ethylhexyl) phthalate	CRY	Ave	19678 1863026	91549 2612409	178092 3076198	525918	904772	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[a]anthracene	CRY	Ave	31014 2498188	142909 3517791	272746 4223407	737673	1251693	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Chrysene	CRY	Ave	29900 2434886	133549 3349341	263673 4098178	698705	1200310	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Di-n-octyl phthalate	PRY	Ave	25944 3059360	131826 4424064	261398 5398338	771581	1375520	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
7,12-Dimethylbenz(a)anthracene	PRY	Ave	7976 983533	44124 1420975	87384 1776406	267133	445989	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[b]fluoranthene	PRY	Ave	25577 2223457	112365 3201783	222178 4207282	623245	1079436	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[k]fluoranthene	PRY	Ave	24573 2363951	125256 3351697	233086 4089288	670846	1130146	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[e]pyrene	PRY	Ave	23804 2089718	107645 2967003	207695 3852640	574641	965300	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[a]pyrene	PRY	Ave	22332 2029309	104727 2969992	201661 3859891	576733	960030	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Indeno[1,2,3-cd]pyrene	PRY	Ave	20466 2124859	98977 3193268	185254 4339115	550429	964591	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dibenz(a,h)anthracene	PRY	Ave	17059 1793430	83101 2698018	156860 3671649	457128	795096	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[g,h,i]perylene	PRY	Ave	14402 1778133	87020 2712801	163422 3739161	467863	814984	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Fluorophenol (Surr)	DCB	Ave	7370 666402	35176 923761	68820 1091479	190658	330296	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenol-d5 (Surr)	DCB	Ave	11811 958614	52224 1305146	105431 1521053	294089	488196	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Nitrobenzene-d5 (Surr)	NPT	Ave	10268 883538	46586 1202946	93799 1419667	258862	441844	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Fluorobiphenyl	ANT	Ave	28002 2126066	124115 2849461	244810 3374413	650499	1068433	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,6-Tribromophenol (Surr)	PHN	Ave	1785 230277	11052 321578	23126 382286	67004	114020	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Terphenyl-d14 (Surr)	CRY	Ave	23753 1957507	110628 2769550	215833 3249667	582100	978534	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 124766

SDG No.:

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/12/2014 10:20 Calibration End Date: 11/12/2014 13:29 Calibration ID: 19137

Curve Type Legend:

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

TestAmerica Laboratories
Initial Calibration %Drift Report

Method: \\PITCHROM\ChromData\CH732\20141112-4340.b\BNA_CH732.m
Instrument: CH732 Lims Location: 180
Lock State: Initial Calib Locked Cpnd Order: Compound Type
Integrator: RTE Last Modified: 12-Nov-2014 15:42:29
No.Compounds:209

Initial Calibration Batches

Ical Batch: \\PITCHROM\ChromData\CH732\20141112-4340.b
Inj Date : 12-Nov-2014 10:20:30, Sublist: chrom-BNA_CH732*sub4

Limit Group: BNA 8270D ICAL

Detector 1: MS SCAN

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
* 1 1,4-Dichlorobenzene-d4	143908	140473	140822	155940	136759	140829	130872	116772
* 2 Naphthalene-d8	657128	653411	651288	693042	618399	619488	570220	504472
* 3 Acenaphthene-d10	390750	380038	371940	398462	345673	345534	317370	283337
* 4 Phenanthrene-d10	628950	623707	605251	632646	543663	530508	482375	428378
* 5 Chrysene-d12	507926	524760	495149	522949	461269	453287	415168	376403
* 6 Perylene-d12	405799	397998	371588	394943	341387	342088	327859	316025
$ 7 2-Fluorophenol	5.5	3.1	0.6	0.7	-0.5	-2.6	-3.1	-3.8
$ 8 Phenol-d5	13.6	2.9	3.7	4.4	-1.2	-5.8	-7.9	-9.8
$ 9 Nitrobenzene-d5	7.8	-1.6	-0.6	3.1	-1.4	-1.6	-2.9	-2.9
$ 10 2-Fluorobiphenyl	12.2	2.3	3.1	2.3	-3.2	-3.6	-6.3	-6.7
$ 11 2,4,6-Tribromophenol	-28.8	-11.1	-4.1	6.3	5.3	8.9	11.5	12.0
$ 12 Terphenyl-d14	6.8	-3.7	-0.5	1.7	-3.1	-1.4	1.6	-1.4
13 1,4-Dioxane	-2.9	8.1	9.1	0.3	-3.5	-4.2	-3.1	-3.7
14 N-Nitrosodimethylamine	-6.7	2.9	-0.4	0.6	0.9	-0.7	1.3	2.2
15 Pyridine	-6.3	0.1	2.4	2.7	2.1	0.3	-0.2	-1.2
21 Methyl methanesulfonat	10.2	4.8	3.7	3.1	-0.9	-3.4	-7.6	-10.0
25 Benzaldehyde	15.6	4.8	2.1	2.4	3.2	-1.8	-10.8	-15.7
26 Phenol	17.2	6.8	4.5	4.9	-0.7	-7.5	-11.3	-13.9
27 Aniline	14.1	4.9	3.2	3.5	-0.6	-5.2	-8.4	-11.5
29 Bis(2-chloroethyl)ethe	15.4	7.8	5.6	1.8	-3.0	-6.9	-9.2	-11.5
30 2-Chlorophenol	4.2	3.9	3.2	2.5	-1.4	-2.6	-4.5	-5.1
31 n-Decane	22.6	8.0	6.3	3.6	-0.8	-8.7	-13.5	-17.4
32 1,3-Dichlorobenzene	18.6	7.2	3.0	0.3	-3.6	-6.8	-9.0	-9.8
33 1,4-Dichlorobenzene	10.6	6.3	5.1	2.2	-2.0	-5.2	-7.4	-9.7
34 Benzyl alcohol	4.6	0.1	4.8	4.3	1.1	-2.5	-5.4	-7.1
35 1,2-Dichlorobenzene	15.3	6.3	3.5	1.1	-2.5	-6.2	-7.4	-10.1
36 2-Methylphenol	11.1	11.1	9.1	5.9	0.9	-6.5	-13.7	-17.9
37 Indene	20.0	11.3	7.9	5.2	-0.4	-8.0	-16.0	-20.0
38 2,2'-oxybis[1-chloropr	20.2	11.7	7.1	3.2	-1.2	-7.9	-15.1	-18.0
39 N-Nitrosopyrrolidine	10.5	3.0	0.6	2.0	-1.3	-3.6	-4.9	-6.2
42 4-Methylphenol	19.0	8.6	9.6	4.3	-2.5	-15.0	-24.1	Disabled
41 N-Nitrosodi-n-propylam	14.4	11.5	10.0	6.3	-2.2	-16.4	-23.6	Disabled
40 Acetophenone	Disabled	22.1	16.8	10.8	2.7	-10.1	-18.3	-23.9
45 Hexachloroethane	7.9	3.4	2.6	2.5	-1.6	-2.9	-5.1	-6.8
46 Nitrobenzene	10.7	0.2	0.7	2.0	-3.0	-2.9	-3.4	-4.5
48 Isophorone	13.8	0.7	2.1	3.0	-2.8	-3.1	-6.1	-7.5
49 2-Nitrophenol	-8.8	-12.1	-4.9	4.3	2.5	5.6	6.9	6.7
50 2,4-Dimethylphenol	11.0	2.5	2.2	5.4	-2.0	-3.7	-6.4	-9.0
52 Benzoic acid	Disabled	Disabled	17.5	-8.4	-12.6	-1.6	3.8	1.2
53 Bis(2-chloroethoxy)met	16.9	5.2	1.2	3.0	-1.7	-5.9	-9.2	-9.5
54 2,4-Dichlorophenol	4.9	-0.9	-0.2	4.4	0.4	-1.8	-2.8	-4.2
56 1,2,4-Trichlorobenzene	15.2	2.4	-0.3	2.1	-4.3	-3.4	-5.7	-6.0
58 Naphthalene	15.6	4.8	1.4	2.9	-3.0	-4.4	-7.8	-9.5

Method: \\PITCHROM\ChromData\CH732\20141112-4340.b\BNA_CH732.m

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
59 4-Chloroaniline	12.5	3.6	1.0	4.7	-2.0	-4.3	-6.7	-8.7
60 2,6-Dichlorophenol	10.6	2.1	2.3	4.8	-3.0	-3.1	-5.9	-8.0
62 Hexachlorobutadiene	11.0	2.6	1.2	2.5	-2.9	-3.7	-4.7	-6.0
64 Caprolactam	-0.6	-3.0	2.1	3.6	-2.9	-1.0	1.0	0.7
67 4-Chloro-3-methylpheno	6.9	-0.4	1.5	6.9	-1.8	-2.8	-3.5	-6.7
69 2-Methylnaphthalene	17.2	2.9	2.6	2.9	-4.5	-4.5	-7.1	-9.4
71 1-Methylnaphthalene	16.2	4.1	2.7	3.0	-3.9	-4.4	-8.0	-9.8
72 Hexachlorocyclopentadi	-11.7	-9.4	-3.4	5.0	5.8	7.7	3.9	2.0
73 1,2,4,5-Tetrachloroben	20.0	5.5	3.1	2.9	-2.3	-5.6	-9.9	-13.5
74 2,4,6-Trichlorophenol	-5.6	-0.7	-1.1	4.0	-0.1	1.1	2.8	-0.4
75 2,4,5-Trichlorophenol	-3.3	-2.9	1.2	0.8	0.3	2.3	1.4	0.2
76 1,1'-Biphenyl	9.6	2.2	4.0	2.4	-1.8	-3.3	-5.2	-7.9
77 2-Chloronaphthalene	12.0	-0.9	3.7	-0.3	-1.9	-4.5	-6.4	-1.8
79 2-Nitroaniline	-12.6	-5.5	1.6	6.0	2.3	4.7	3.3	0.3
82 Dimethyl phthalate	12.3	-0.5	1.4	2.4	-2.2	-2.9	-4.2	-6.2
83 1,3-Dinitrobenzene	Disabled	-23.7	-11.9	2.2	0.7	9.1	12.8	10.9
84 2,6-Dinitrotoluene	Disabled	-11.8	-0.8	3.4	0.9	2.8	2.9	2.6
85 Acenaphthylene	3.1	-0.2	0.8	3.1	0.0	-0.5	-1.9	-4.3
86 3-Nitroaniline	-18.4	-4.2	0.5	4.6	3.8	5.1	5.6	3.0
87 2,4-Dinitrophenol	Disabled	6.9	-14.5	1.6	-2.6	4.1	3.8	0.8
88 Acenaphthene	18.0	5.2	5.6	4.3	-1.0	-5.1	-11.2	-16.0
89 4-Nitrophenol	-27.2	-9.7	-1.8	6.9	8.7	9.2	7.8	6.1
91 2,4-Dinitrotoluene	* -31.3	-4.9	5.4	10.7	8.0	6.5	4.7	1.0
93 Dibenzofuran	15.9	3.4	1.1	0.5	-2.6	-4.6	-5.8	-8.0
96 2,3,4,6-Tetrachlorophe	-17.1	-6.0	-0.2	4.8	3.5	5.0	5.5	4.5
95 2,3,5,6-Tetrachlorophe	-9.5	-1.9	5.4	1.8	1.0	1.3	2.2	-0.3
97 2-Naphthylamine	3.3	5.2	5.3	3.1	0.2	-2.6	-6.4	-8.0
98 Diethyl phthalate	Disabled	11.5	11.1	7.5	2.2	-4.7	-10.7	-16.9
99 Hexadecane	16.9	7.3	7.7	6.5	-1.0	-13.3	-24.3	Disabled
100 4-Chlorophenyl phenyl	8.1	-0.2	2.6	2.2	-2.5	-2.0	-3.4	-4.8
101 4-Nitroaniline	-16.1	-0.2	3.1	7.8	6.7	2.6	0.0	-4.0
103 Fluorene	11.1	4.7	3.6	4.4	-0.6	-4.3	-8.0	-11.0
104 4,6-Dinitro-2-methylph	Disabled	5.3	-8.4	-5.3	-5.1	3.4	4.6	5.5
105 N-Nitrosodiphenylamine	6.7	-3.5	-1.2	0.6	-1.7	0.3	0.3	-1.4
90 1,2-Diphenylhydrazine	5.9	-1.9	0.5	2.7	-0.2	-1.2	-1.3	-4.5
110 4-Bromophenyl phenyl e	4.8	-2.7	-2.6	2.3	-3.2	0.8	0.7	-0.1
112 Hexachlorobenzene	4.8	0.6	-1.1	1.2	-3.5	-0.3	-0.4	-1.2
113 Atrazine	2.5	0.7	-0.2	4.5	1.5	3.7	-1.7	-11.0
116 Pentachlorophenol	28.5	-24.3	-12.6	-1.6	1.0	5.6	3.5	-0.1
115 n-Octadecane	12.1	10.7	10.2	6.8	-0.4	-14.3	-25.0	Disabled
121 Phenanthrene	10.0	-1.1	-0.5	-0.7	-2.3	-1.9	-0.6	-2.8
122 Anthracene	3.6	-3.2	-0.6	1.8	-1.1	-0.6	0.3	-0.1
124 Carbazole	1.6	-1.4	-0.8	1.0	-0.2	0.3	-1.1	0.5
126 Di-n-butyl phthalate	-1.8	-6.6	-5.2	0.6	0.4	3.9	5.3	3.3
131 Fluoranthene	5.9	-2.8	-3.9	0.1	-1.9	-0.2	1.6	1.1
132 Benzidine	Disabled	-18.5	-9.5	0.7	9.4	10.7	6.1	1.1
133 Pyrene	7.3	-2.7	0.1	1.6	-2.7	-0.6	-0.8	-2.1
138 Butyl benzyl phthalate	11.5	-10.3	-8.4	0.8	-2.8	2.8	4.0	2.5
144 3,3'-Dichlorobenzidine	3.0	-15.4	-9.9	-1.1	-2.7	5.5	8.5	12.0
145 Bis(2-ethylhexyl) phth	-1.0	-10.8	-8.1	2.8	0.3	5.1	7.2	4.5
146 Benzo[a]anthracene	8.8	-3.0	-1.9	0.5	-3.3	-1.8	0.6	0.0
147 Chrysene	9.4	-5.4	-1.0	-0.7	-3.3	-0.2	0.0	1.2
150 Di-n-octyl phthalate	-18.0	-15.1	-9.8	0.2	3.3	14.6	15.3	9.5
151 7,12-Dimethylbenz(a)an	-23.0	-13.2	-7.9	6.0	2.3	12.6	13.2	10.1
152 Benzo[b]fluoranthene	0.4	-10.1	-4.8	0.5	0.7	3.5	3.7	6.0
153 Benzo[k]fluoranthene	-7.3	-3.6	-3.9	4.1	1.4	5.8	4.4	-0.9
219 Benzo[e]pyrene	0.8	-7.1	-4.0	0.0	-2.9	4.9	3.6	4.7
154 Benzo[a]pyrene	-3.7	-7.9	-5.1	2.2	-1.6	3.8	5.6	6.8
157 Indeno[1,2,3-cd]pyrene	-11.9	-13.1	-12.9	-2.6	-1.3	8.5	13.4	19.9
158 Dibenz(a,h)anthracene	-12.5	-13.1	-12.1	-3.6	-3.0	9.1	14.2	20.9

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
159 Benzo[g,h,i]perylene	-26.2	-9.0	-8.5	-1.4	-0.7	8.1	14.7	23.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112003.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 12-Nov-2014 10:20:30 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004340-003
Misc. Info.: ic
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\PITCHROM\ChromData\CH732\20141112-4340.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 12-Nov-2014 14:12:17 Calib Date: 12-Nov-2014 13:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: piccolinov Date: 12-Nov-2014 11:06:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.271	6.271	0.000	94	143908	8.00	8.00	
* 2 Naphthalene-d8	136	7.580	7.580	0.000	99	657128	8.00	8.00	
* 3 Acenaphthene-d10	164	9.316	9.316	0.000	92	390750	8.00	8.00	
* 4 Phenanthrene-d10	188	10.796	10.796	0.000	97	628950	8.00	8.00	
* 5 Chrysene-d12	240	14.679	14.679	0.000	96	507926	8.00	8.00	
* 6 Perylene-d12	264	17.623	17.623	0.000	95	405799	8.00	8.00	
$ 7 2-Fluorophenol	112	4.786	4.786	0.000	88	7370	0.4000	0.4218	
$ 8 Phenol-d5	99	5.875	5.875	0.000	96	11811	0.4000	0.4545	
$ 9 Nitrobenzene-d5	82	6.842	6.842	0.000	89	10268	0.4000	0.4314	
$ 10 2-Fluorobiphenyl	172	8.637	8.637	0.000	99	28002	0.4000	0.4489	
$ 11 2,4,6-Tribromophenol	330	10.085	10.085	0.000	85	1785	0.4000	0.2849	
$ 12 Terphenyl-d14	244	12.799	12.799	0.000	97	23753	0.4000	0.4272	
13 1,4-Dioxane	88	1.644	1.644	0.000	17	1712	0.4000	0.3883	
14 N-Nitrosodimethylamine	74	2.243	2.243	0.000	90	2237	0.4000	0.3731	
15 Pyridine	79	2.339	2.339	0.000	88	4065	0.4000	0.3748	M
21 Methyl methanesulfonate	80	4.540	4.540	0.000	80	3769	0.4000	0.4408	
25 Benzaldehyde	77	5.790	5.790	0.000	96	6731	0.4000	0.4625	
26 Phenol	94	5.886	5.886	0.000	92	13803	0.4000	0.4688	
27 Aniline	93	5.913	5.913	0.000	97	15553	0.4000	0.4564	
29 Bis(2-chloroethyl)ether	93	5.982	5.982	0.000	94	9670	0.4000	0.4618	
30 2-Chlorophenol	128	6.041	6.041	0.000	94	10014	0.4000	0.4167	
31 n-Decane	43	6.110	6.110	0.000	89	11584	0.4000	0.4902	
32 1,3-Dichlorobenzene	146	6.212	6.212	0.000	98	13406	0.4000	0.4744	
33 1,4-Dichlorobenzene	146	6.287	6.287	0.000	96	12469	0.4000	0.4426	
34 Benzyl alcohol	108	6.404	6.404	0.000	94	6494	0.4000	0.4185	
35 1,2-Dichlorobenzene	146	6.452	6.452	0.000	97	12783	0.4000	0.4612	
36 2-Methylphenol	108	6.527	6.527	0.000	91	9648	0.4000	0.4442	
37 Indene	116	6.543	6.543	0.000	90	18735	0.4000	0.4800	
38 2,2'-oxybis[1-chloropropan	45	6.559	6.559	0.000	94	17983	0.4000	0.4807	
39 N-Nitrosopyrrolidine	100	6.650	6.650	0.000	92	4990	0.4000	0.4422	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 4-Methylphenol	108	6.682	6.682	0.000	66	10830	0.4000	0.4761	
40 Acetophenone	105	6.682	6.682	0.000	84	16820	0.4000	0.5806	
41 N-Nitrosodi-n-propylamine	70	6.682	6.682	0.000	67	6509	0.4000	0.4575	
45 Hexachloroethane	117	6.810	6.810	0.000	95	4741	0.4000	0.4315	
46 Nitrobenzene	77	6.858	6.858	0.000	87	10630	0.4000	0.4429	
48 Isophorone	82	7.104	7.104	0.000	98	20436	0.4000	0.4551	
49 2-Nitrophenol	139	7.190	7.190	0.000	87	5024	0.4000	0.3647	
50 2,4-Dimethylphenol	107	7.222	7.222	0.000	92	10865	0.4000	0.4440	
52 Benzoic acid	122	7.248	7.248	0.000	83	4443	0.4000	2.67	
53 Bis(2-chloroethoxy)methane	93	7.312	7.312	0.000	98	13975	0.4000	0.4677	
54 2,4-Dichlorophenol	162	7.430	7.430	0.000	89	9322	0.4000	0.4196	
56 1,2,4-Trichlorobenzene	180	7.521	7.521	0.000	93	11902	0.4000	0.4607	
58 Naphthalene	128	7.601	7.601	0.000	97	39272	0.4000	0.4625	
59 4-Chloroaniline	127	7.644	7.644	0.000	97	15980	0.4000	0.4500	
60 2,6-Dichlorophenol	162	7.660	7.660	0.000	96	9859	0.4000	0.4425	
62 Hexachlorobutadiene	225	7.729	7.729	0.000	95	5973	0.4000	0.4440	
64 Caprolactam	113	7.943	7.943	0.000	77	3052	0.4000	0.3975	
67 4-Chloro-3-methylphenol	107	8.103	8.103	0.000	95	9217	0.4000	0.4274	
69 2-Methylnaphthalene	142	8.290	8.290	0.000	93	27027	0.4000	0.4690	
71 1-Methylnaphthalene	142	8.386	8.386	0.000	94	25349	0.4000	0.4648	
72 Hexachlorocyclopentadiene	237	8.450	8.450	0.000	92	5050	0.4000	0.3533	
73 1,2,4,5-Tetrachlorobenzene	216	8.456	8.456	0.000	97	11653	0.4000	0.4799	
74 2,4,6-Trichlorophenol	196	8.557	8.557	0.000	90	6178	0.4000	0.3777	
75 2,4,5-Trichlorophenol	196	8.589	8.589	0.000	94	6670	0.4000	0.3867	
76 1,1'-Biphenyl	154	8.739	8.739	0.000	96	31480	0.4000	0.4386	
77 2-Chloronaphthalene	162	8.766	8.766	0.000	97	26032	0.4000	0.4482	
79 2-Nitroaniline	65	8.851	8.851	0.000	86	4935	0.4000	0.3496	
82 Dimethyl phthalate	163	9.011	9.011	0.000	99	25785	0.4000	0.4492	
83 1,3-Dinitrobenzene	168	9.049	9.049	0.000	86	2120	0.4000	0.2579	
84 2,6-Dinitrotoluene	165	9.075	9.075	0.000	91	3756	0.4000	0.3003	
85 Acenaphthylene	152	9.182	9.182	0.000	98	37223	0.4000	0.4123	
86 3-Nitroaniline	138	9.246	9.246	0.000	95	5096	0.4000	0.3264	
87 2,4-Dinitrophenol	184	9.348	9.348	0.000	58	1185	0.8000	3.00	
88 Acenaphthene	153	9.348	9.348	0.000	95	26239	0.4000	0.4721	
89 4-Nitrophenol	109	9.380	9.380	0.000	83	3509	0.8000	0.5827	
91 2,4-Dinitrotoluene	165	9.471	9.471	0.000	91	4098	0.4000	0.2748	
93 Dibenzofuran	168	9.513	9.513	0.000	97	36646	0.4000	0.4636	
96 2,3,4,6-Tetrachlorophenol	232	9.588	9.588	0.000	67	4548	0.4000	0.3318	
95 2,3,5,6-Tetrachlorophenol	232	9.631	9.631	0.000	86	5061	0.4000	0.3621	
97 2-Naphthylamine	143	9.658	9.658	0.000	97	24103	0.4000	0.4132	
98 Diethyl phthalate	149	9.690	9.690	0.000	98	29354	0.4000	0.5432	
99 Hexadecane	57	9.700	9.700	0.000	91	19424	0.4000	0.4677	
100 4-Chlorophenyl phenyl ethe	204	9.829	9.829	0.000	92	12213	0.4000	0.4325	
101 4-Nitroaniline	138	9.839	9.839	0.000	83	4923	0.4000	0.3357	
103 Fluorene	166	9.850	9.850	0.000	94	26766	0.4000	0.4444	
104 4,6-Dinitro-2-methylphenol	198	9.871	9.871	0.000	84	2357	0.8000	2.55	
105 N-Nitrosodiphenylamine	169	9.941	9.941	0.000	61	19189	0.4000	0.4269	
90 1,2-Diphenylhydrazine	77	9.984	9.984	0.000	99	26981	0.4000	0.4237	
57 Azobenzene	77		9.989					ND	
110 4-Bromophenyl phenyl ether	248	10.309	10.309	0.000	68	6688	0.4000	0.4191	
112 Hexachlorobenzene	284	10.395	10.395	0.000	83	6657	0.4000	0.4191	
113 Atrazine	200	10.432	10.432	0.000	89	6102	0.4000	0.4100	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
116 Pentachlorophenol	266	10.587	10.587	0.000	90	10450	0.8000	1.03	
115 n-Octadecane	57	10.598	10.598	0.000	96	18301	0.4000	0.4482	
121 Phenanthrene	178	10.822	10.822	0.000	95	39754	0.4000	0.4400	
122 Anthracene	178	10.876	10.876	0.000	98	38312	0.4000	0.4145	
124 Carbazole	167	11.036	11.036	0.000	95	32942	0.4000	0.4063	
126 Di-n-butyl phthalate	149	11.373	11.373	0.000	99	38528	0.4000	0.3927	
131 Fluoranthene	202	12.281	12.281	0.000	98	36504	0.4000	0.4238	
132 Benzidine	184	12.420	12.420	0.000	99	26520	0.4000	0.6556	
133 Pyrene	202	12.617	12.617	0.000	97	36693	0.4000	0.4291	
138 Butyl benzyl phthalate	149	13.563	13.563	0.000	97	16477	0.4000	0.4458	
144 3,3'-Dichlorobenzidine	252	14.583	14.583	0.000	72	9717	0.4000	0.4121	
145 Bis(2-ethylhexyl) phthalat	149	14.637	14.637	0.000	79	19678	0.4000	0.3961	
146 Benzo[a]anthracene	228	14.663	14.663	0.000	98	31014	0.4000	0.4352	
147 Chrysene	228	14.733	14.733	0.000	97	29900	0.4000	0.4376	M
150 Di-n-octyl phthalate	149	15.972	15.972	0.000	43	25944	0.4000	0.3278	M
151 7,12-Dimethylbenz(a)anthra	256	16.822	16.822	0.000	65	7976	0.4000	0.3079	
152 Benzo[b]fluoranthene	252	16.838	16.838	0.000	97	25577	0.4000	0.4015	M
153 Benzo[k]fluoranthene	252	16.891	16.891	0.000	96	24573	0.4000	0.3710	
219 Benzo[e]pyrene	252	17.399	17.399	0.000	0	23804	0.4000	0.4030	M
154 Benzo[a]pyrene	252	17.511	17.511	0.000	82	22332	0.4000	0.3850	
157 Indeno[1,2,3-cd]pyrene	276	20.129	20.129	0.000	47	20466	0.4000	0.3524	M
158 Dibenz(a,h)anthracene	278	20.161	20.161	0.000	83	17059	0.4000	0.3501	M
159 Benzo[g,h,i]perylene	276	20.855	20.855	0.000	90	14402	0.4000	0.2953	
S 199 Total Cresols	108				0		0.8000	0.9203	
S 197 Methyl Phenols,Total	108				0		0.8000	0.9203	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD0.4i_00007 Amount Added: 1.00 Units: mL

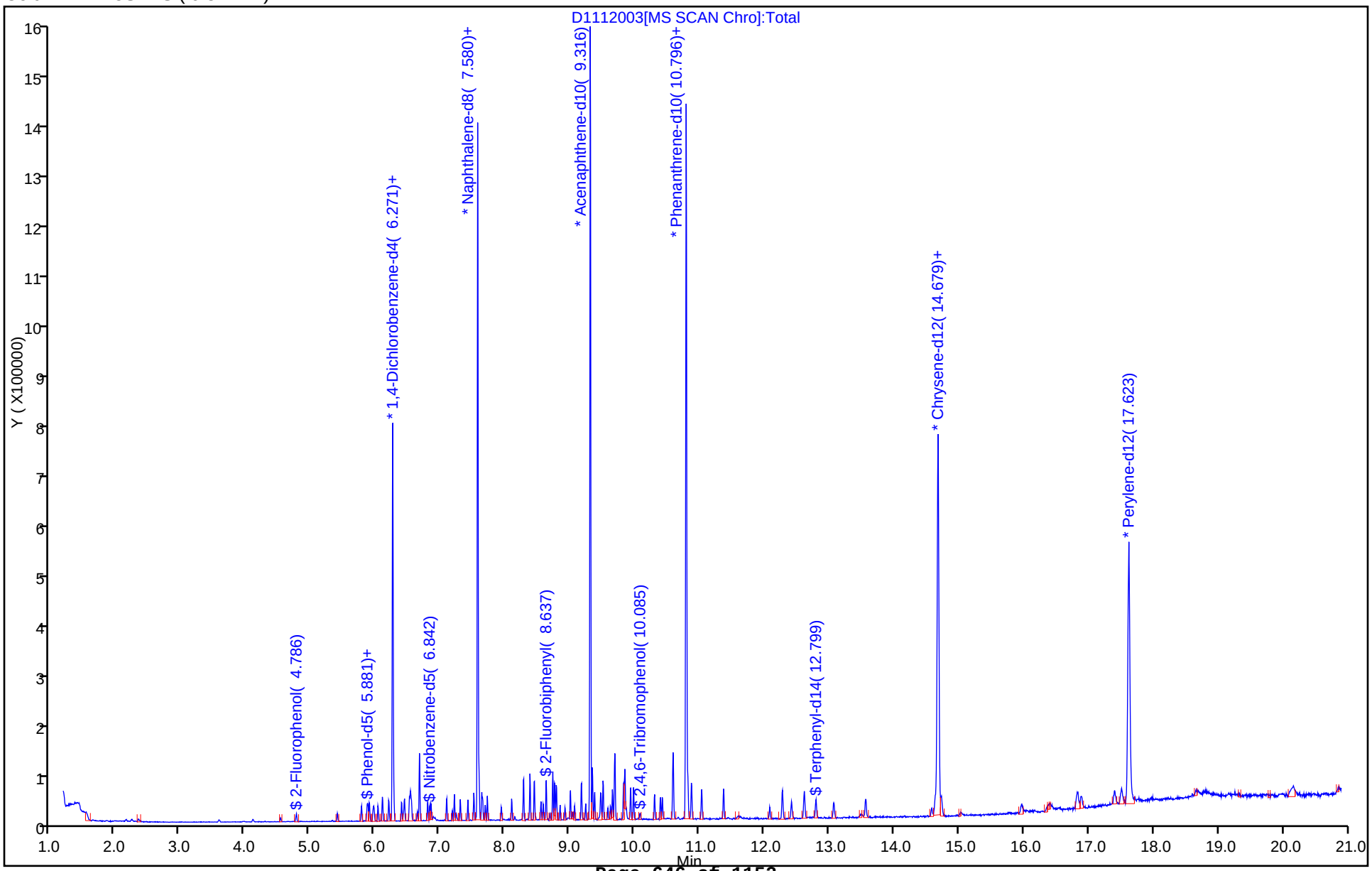
Report Date: 12-Nov-2014 14:12:17 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112003.D

Injection Date:	12-Nov-2014 10:20:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	3
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

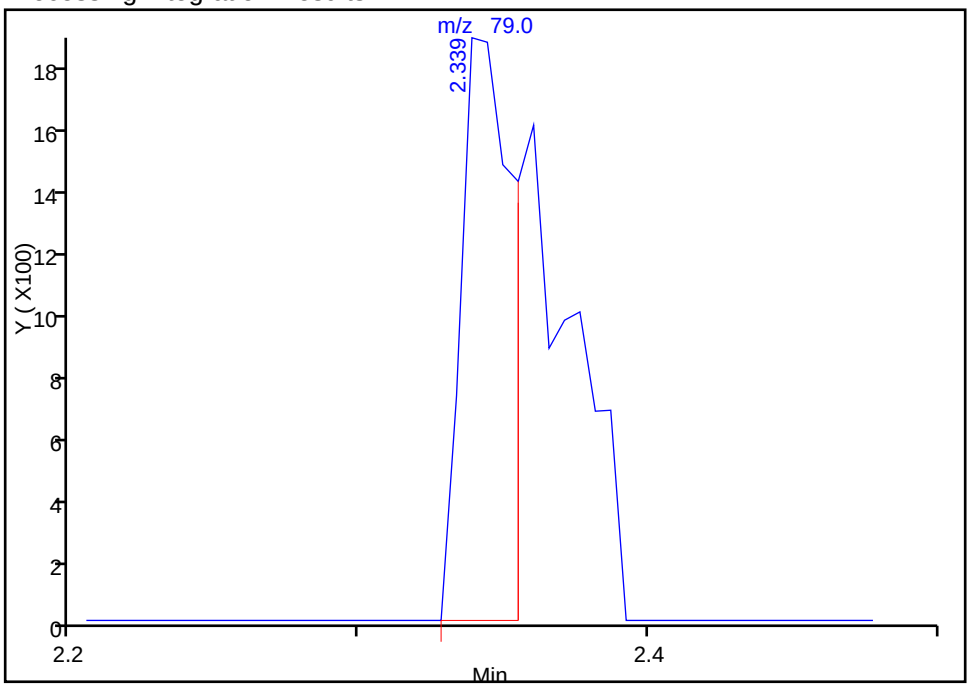
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH732\20141112-4340.b\D1112003.D				
Injection Date:	12-Nov-2014 10:20:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

15 Pyridine, CAS: 110-86-1

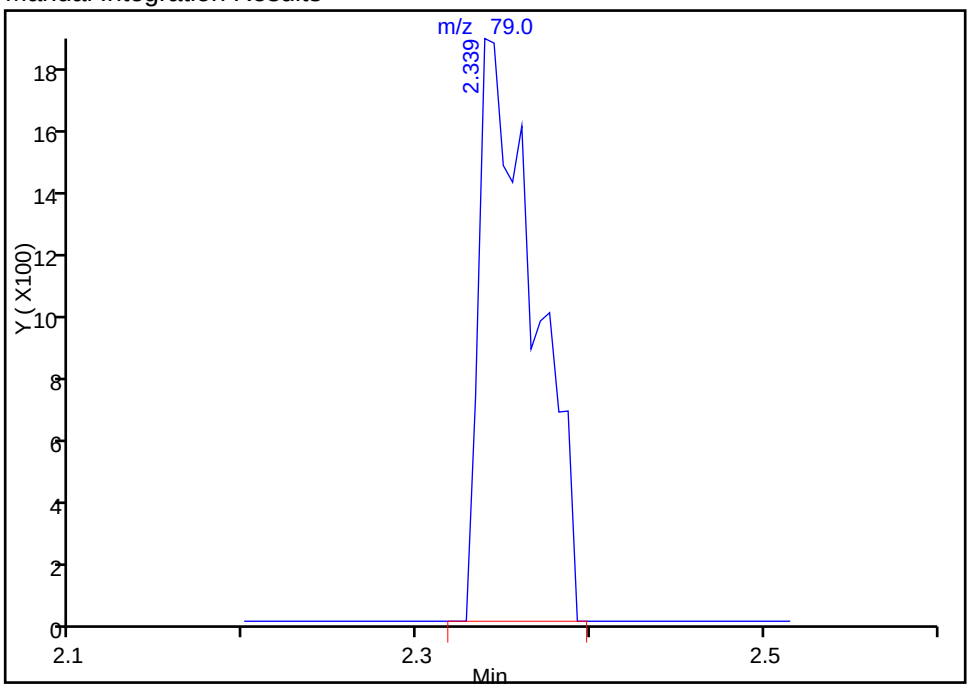
Processing Integration Results

RT: 2.34
Response: 2275
Amount: 0.227501



Manual Integration Results

RT: 2.34
Response: 4065
Amount: 0.374839



Reviewer: piccolinov, 12-Nov-2014 11:06:57
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

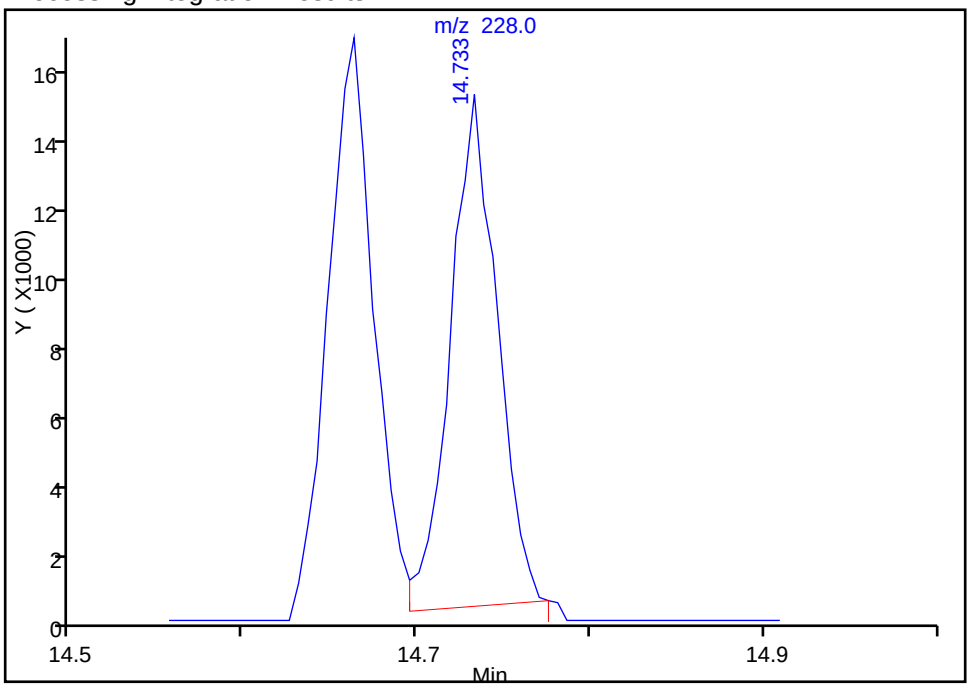
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH732\20141112-4340.b\D1112003.D				
Injection Date:	12-Nov-2014 10:20:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

147 Chrysene, CAS: 218-01-9

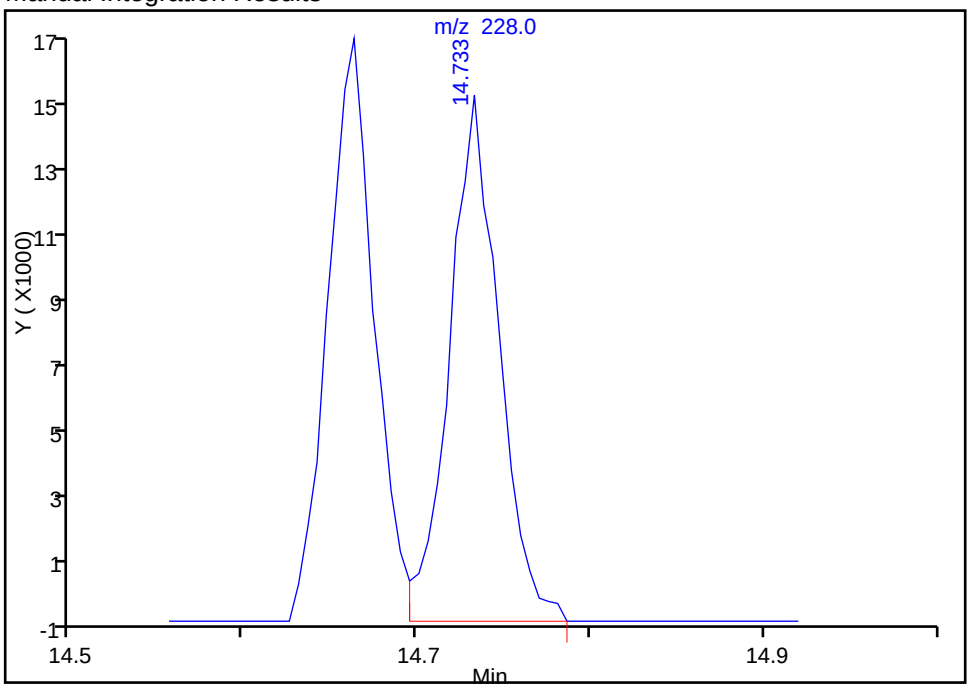
Processing Integration Results

RT: 14.73
Response: 27603
Amount: 0.405082



Manual Integration Results

RT: 14.73
Response: 29900
Amount: 0.437629



Reviewer: piccolinov, 12-Nov-2014 11:06:57
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

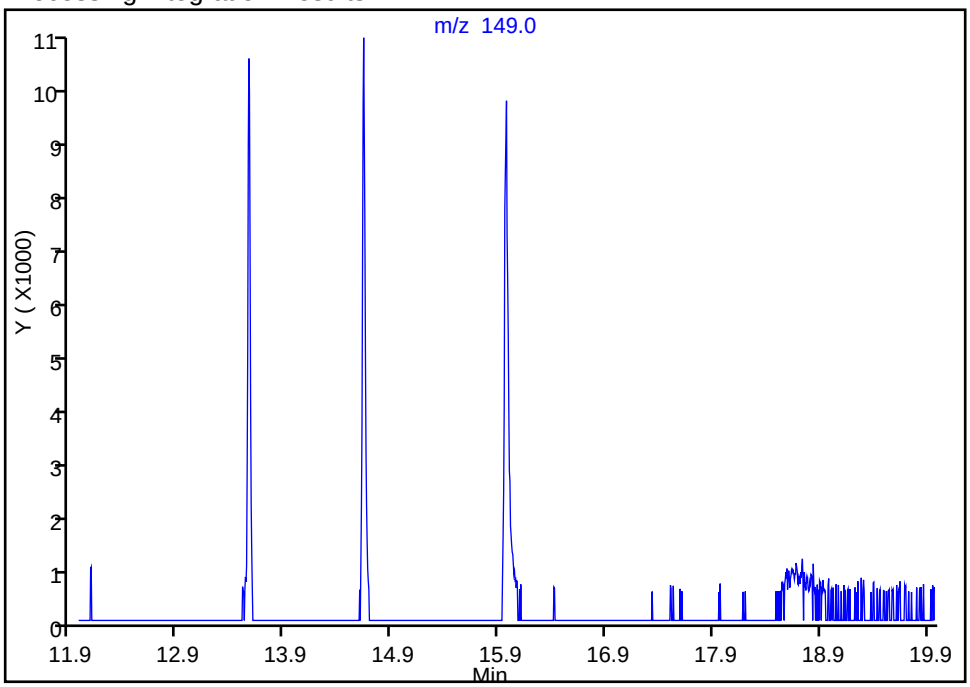
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH732\20141112-4340.b\D1112003.D				
Injection Date:	12-Nov-2014 10:20:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

150 Di-n-octyl phthalate, CAS: 117-84-0

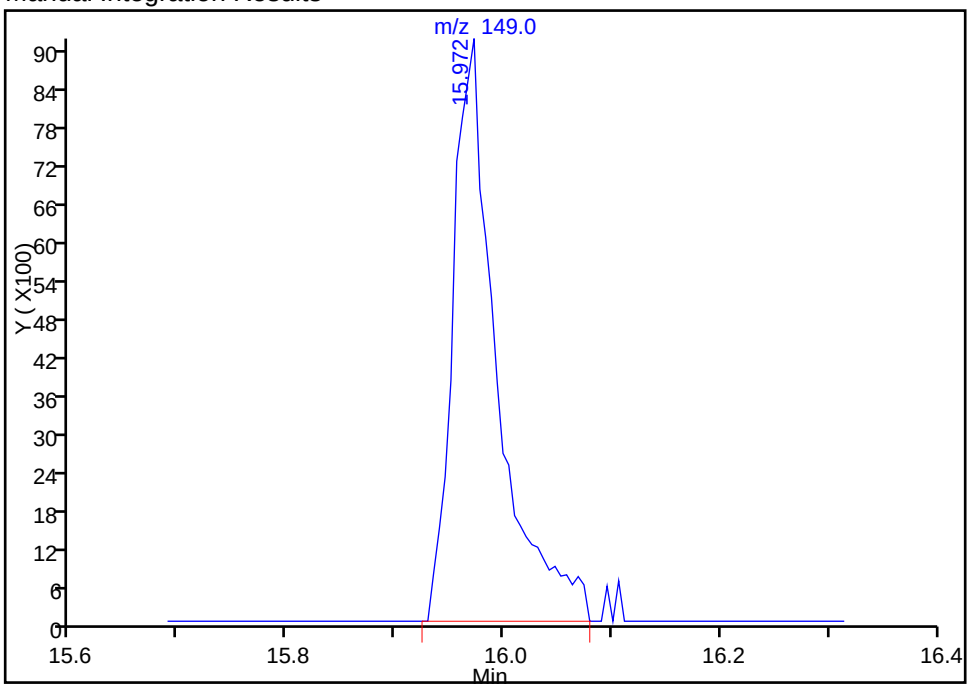
Not Detected
Expected RT: 15.97

Processing Integration Results



Manual Integration Results

RT: 15.97
Response: 25944
Amount: 0.327833



Reviewer: piccolinov, 12-Nov-2014 11:06:57
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

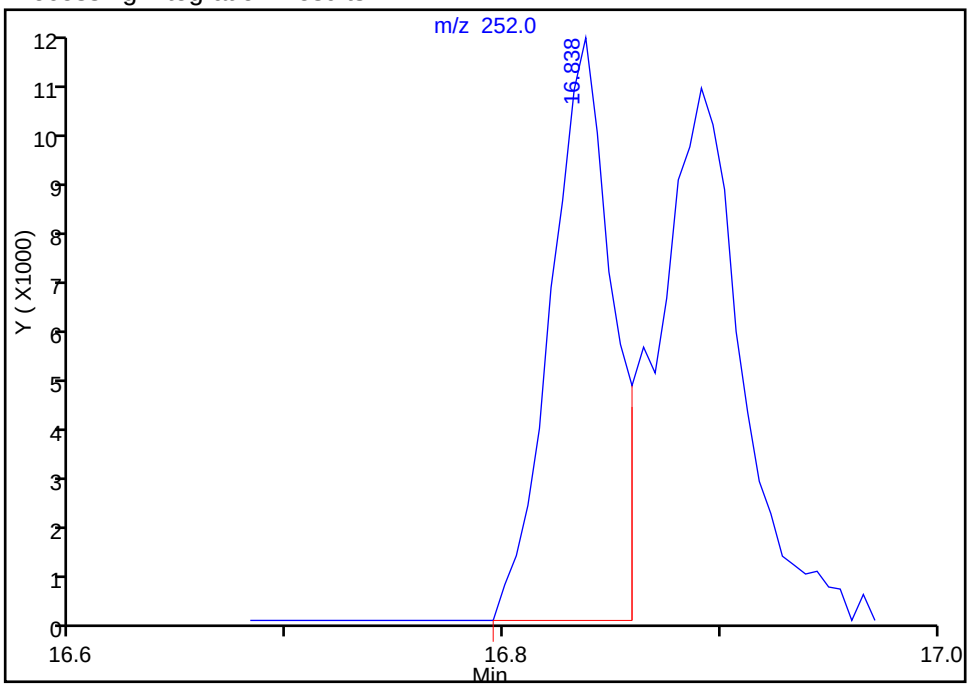
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH732\20141112-4340.b\D1112003.D				
Injection Date:	12-Nov-2014 10:20:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

152 Benzo[b]fluoranthene, CAS: 205-99-2

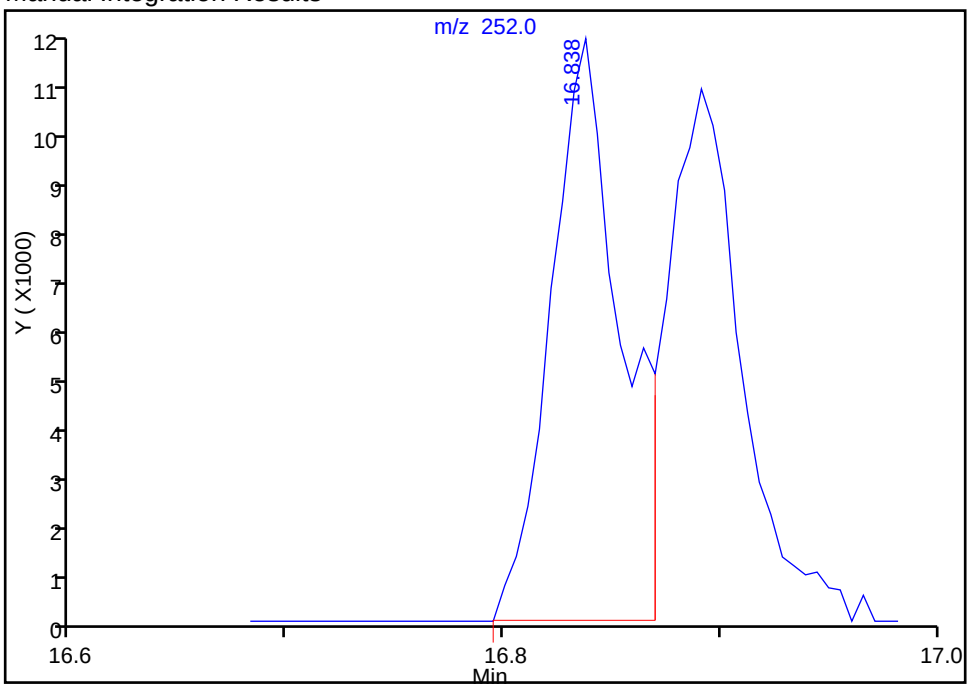
Processing Integration Results

RT: 16.84
Response: 22438
Amount: 0.347149



Manual Integration Results

RT: 16.84
Response: 25577
Amount: 0.401526



Reviewer: piccolinov, 12-Nov-2014 11:06:57
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

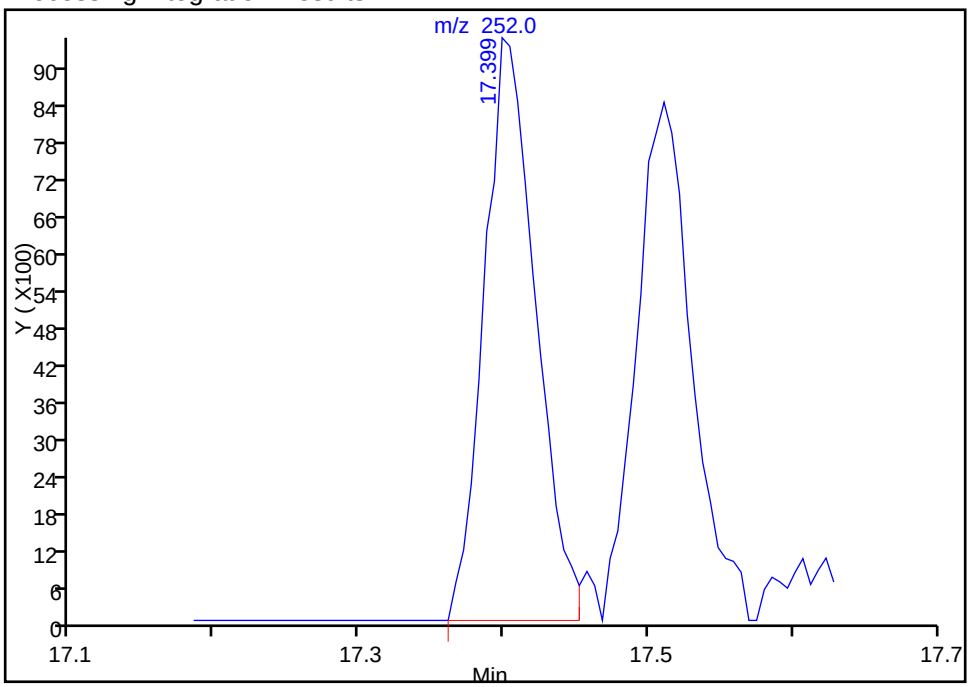
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH732\20141112-4340.b\D1112003.D				
Injection Date:	12-Nov-2014 10:20:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

219 Benzo[e]pyrene, CAS: 192-97-2

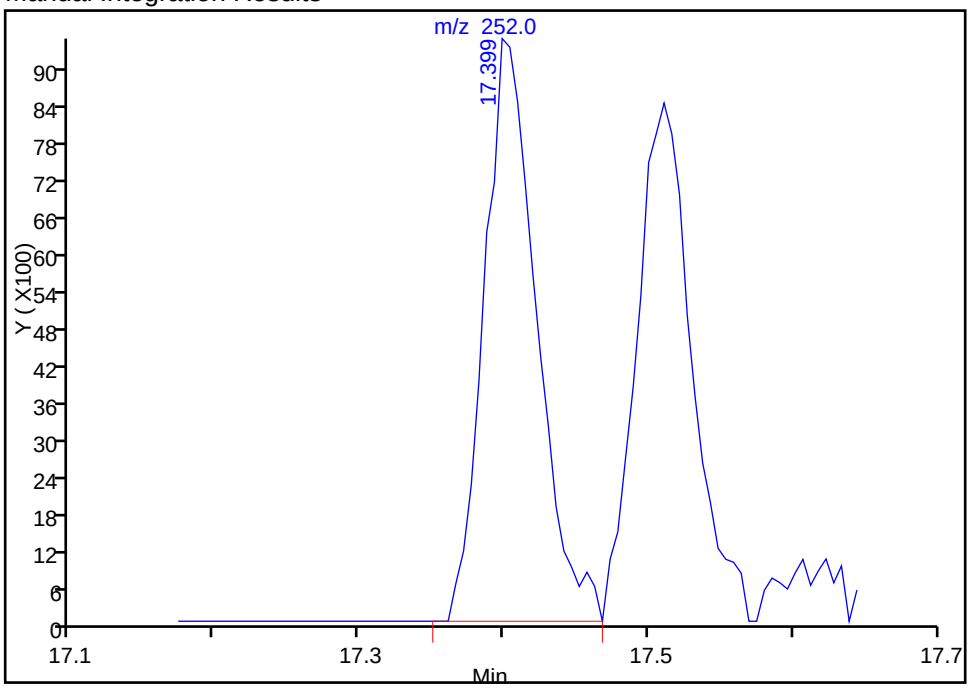
Processing Integration Results

RT: 17.40
Response: 23368
Amount: 0.396956



Manual Integration Results

RT: 17.40
Response: 23804
Amount: 0.403011



Reviewer: piccolinov, 12-Nov-2014 11:06:57
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

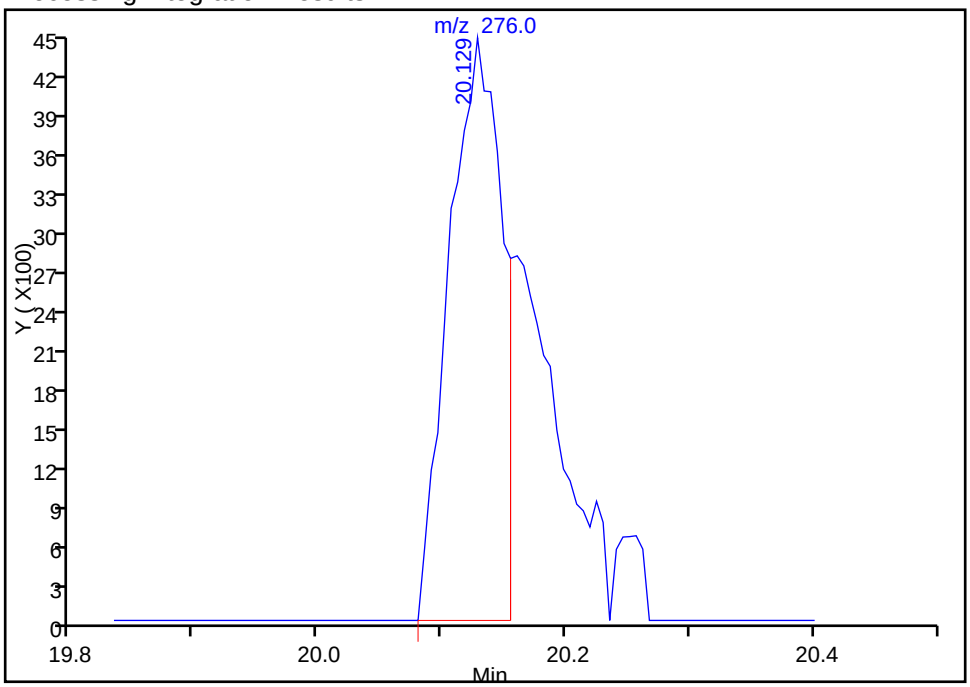
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH732\20141112-4340.b\D1112003.D				
Injection Date:	12-Nov-2014 10:20:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

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

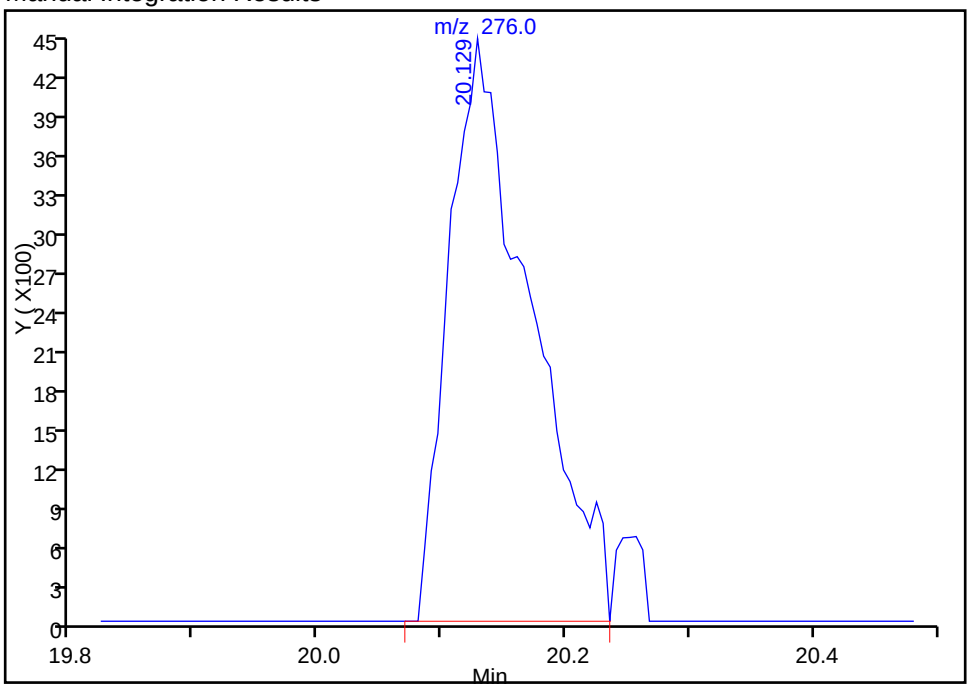
Processing Integration Results

RT: 20.13
Response: 13365
Amount: 0.254425



Manual Integration Results

RT: 20.13
Response: 20466
Amount: 0.352390



Reviewer: piccolinov, 12-Nov-2014 11:06:57
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

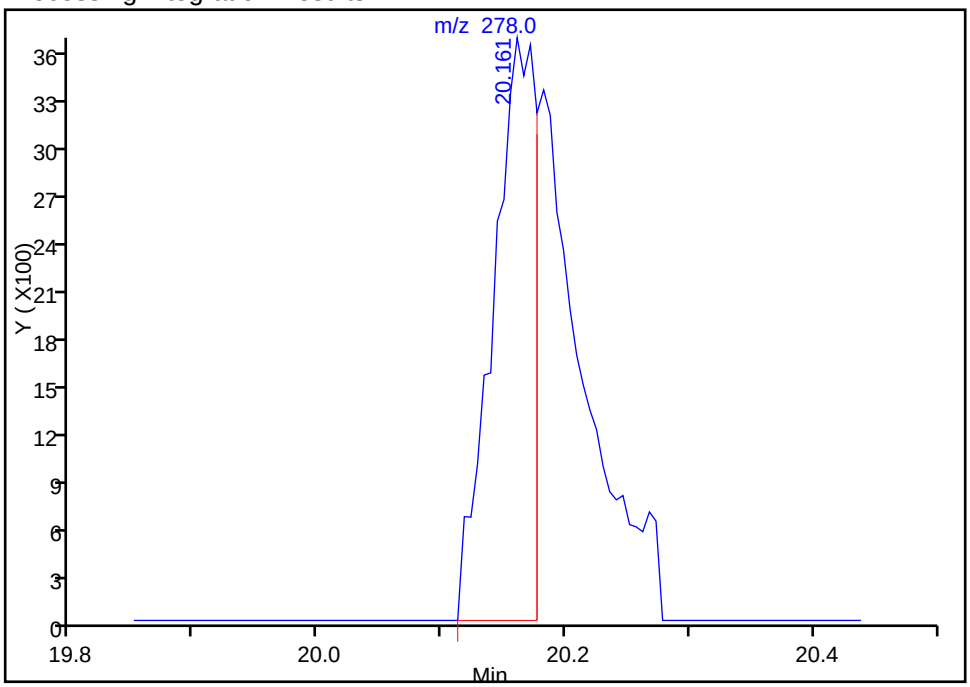
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH732\20141112-4340.b\D1112003.D				
Injection Date:	12-Nov-2014 10:20:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

158 Dibenz(a,h)anthracene, CAS: 53-70-3

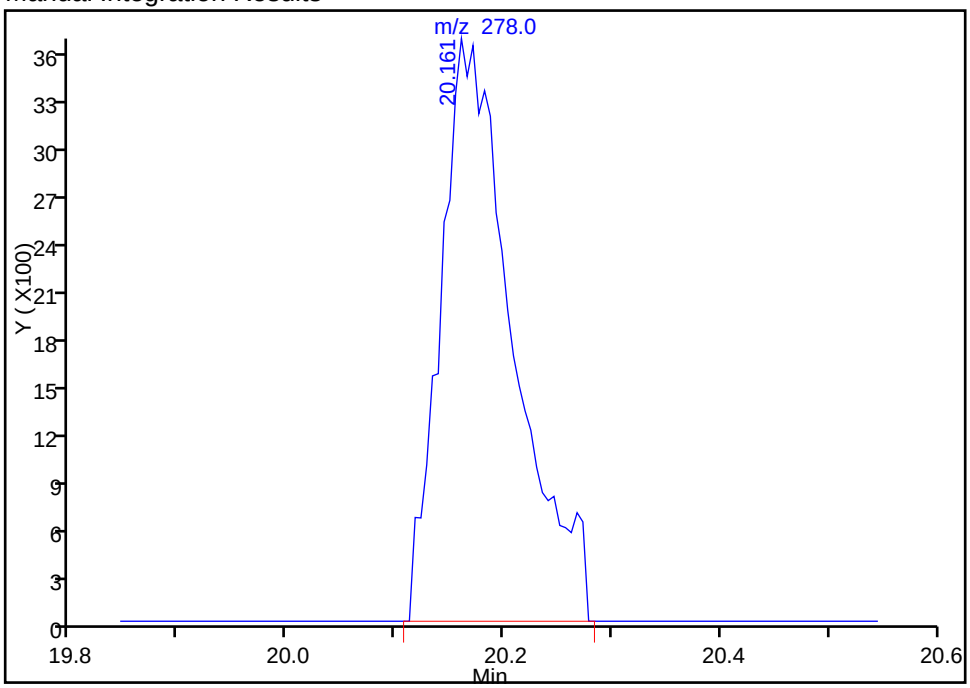
Processing Integration Results

RT: 20.16
Response: 8904
Amount: 0.404261



Manual Integration Results

RT: 20.16
Response: 17059
Amount: 0.350073



Reviewer: piccolinov, 12-Nov-2014 11:06:57
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112004.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 12-Nov-2014 10:46:30 ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004340-004
Misc. Info.: ic
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\PITCHROM\ChromData\CH732\20141112-4340.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 12-Nov-2014 14:12:19 Calib Date: 12-Nov-2014 13:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: piccolinov Date: 12-Nov-2014 11:38:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.271	6.271	0.000	93	140473	8.00	8.00	
* 2 Naphthalene-d8	136	7.580	7.580	0.000	99	653411	8.00	8.00	
* 3 Acenaphthene-d10	164	9.321	9.316	0.005	92	380038	8.00	8.00	
* 4 Phenanthrene-d10	188	10.801	10.796	0.005	97	623707	8.00	8.00	
* 5 Chrysene-d12	240	14.690	14.679	0.011	97	524760	8.00	8.00	
* 6 Perylene-d12	264	17.639	17.623	0.016	96	397998	8.00	8.00	
$ 7 2-Fluorophenol	112	4.780	4.786	-0.006	90	35176	2.00	2.06	
$ 8 Phenol-d5	99	5.876	5.875	0.001	96	52224	2.00	2.06	
$ 9 Nitrobenzene-d5	82	6.843	6.842	0.001	87	46586	2.00	1.97	
$ 10 2-Fluorobiphenyl	172	8.638	8.637	0.001	100	124115	2.00	2.05	
$ 11 2,4,6-Tribromophenol	330	10.091	10.085	0.006	89	11052	2.00	1.78	
$ 12 Terphenyl-d14	244	12.799	12.799	0.000	98	110628	2.00	1.93	
13 1,4-Dioxane	88	1.639	1.644	-0.005	91	9308	2.00	2.16	
14 N-Nitrosodimethylamine	74	2.238	2.243	-0.005	93	12045	2.00	2.06	
15 Pyridine	79	2.318	2.339	-0.021	97	21203	2.00	2.00	M
21 Methyl methanesulfonate	80	4.535	4.540	-0.005	85	17492	2.00	2.10	
25 Benzaldehyde	77	5.790	5.790	0.000	95	29790	2.00	2.10	
26 Phenol	94	5.886	5.886	0.000	94	61370	2.00	2.14	
27 Aniline	93	5.908	5.913	-0.005	98	69783	2.00	2.10	
29 Bis(2-chloroethyl)ether	93	5.982	5.982	0.000	95	44089	2.00	2.16	
30 2-Chlorophenol	128	6.041	6.041	0.000	95	48729	2.00	2.08	
31 n-Decane	43	6.111	6.110	0.001	92	49802	2.00	2.16	
32 1,3-Dichlorobenzene	146	6.212	6.212	0.000	98	59146	2.00	2.14	
33 1,4-Dichlorobenzene	146	6.287	6.287	0.000	96	58480	2.00	2.13	
34 Benzyl alcohol	108	6.410	6.404	0.006	95	30338	2.00	2.00	
35 1,2-Dichlorobenzene	146	6.453	6.452	0.001	98	57495	2.00	2.13	
36 2-Methylphenol	108	6.527	6.527	0.000	90	47108	2.00	2.22	
37 Indene	116	6.543	6.543	0.000	91	84781	2.00	2.23	
38 2,2'-oxybis[1-chloropropan	45	6.559	6.559	0.000	95	81551	2.00	2.23	
39 N-Nitrosopyrrolidine	100	6.650	6.650	0.000	96	22683	2.00	2.06	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 4-Methylphenol	108	6.682	6.682	0.000	69	48220	2.00	2.17	
40 Acetophenone	105	6.682	6.682	0.000	86	69044	2.00	2.44	
41 N-Nitrosodi-n-propylamine	70	6.682	6.682	0.000	70	30955	2.00	2.23	
45 Hexachloroethane	117	6.811	6.810	0.001	97	22176	2.00	2.07	
46 Nitrobenzene	77	6.859	6.858	0.001	87	47819	2.00	2.00	
48 Isophorone	82	7.099	7.104	-0.005	99	89972	2.00	2.01	
49 2-Nitrophenol	139	7.190	7.190	0.000	89	24087	2.00	1.76	
50 2,4-Dimethylphenol	107	7.222	7.222	0.000	92	49864	2.00	2.05	
52 Benzoic acid	122	7.254	7.248	0.006	84	16801	2.00	3.48	M
53 Bis(2-chloroethoxy)methane	93	7.313	7.312	0.001	98	62528	2.00	2.10	
54 2,4-Dichlorophenol	162	7.430	7.430	0.000	92	43777	2.00	1.98	
56 1,2,4-Trichlorobenzene	180	7.521	7.521	0.000	94	52609	2.00	2.05	
58 Naphthalene	128	7.601	7.601	0.000	97	176919	2.00	2.10	
59 4-Chloroaniline	127	7.644	7.644	0.000	97	73150	2.00	2.07	
60 2,6-Dichlorophenol	162	7.660	7.660	0.000	98	45256	2.00	2.04	
62 Hexachlorobutadiene	225	7.729	7.729	0.000	97	27460	2.00	2.05	
64 Caprolactam	113	7.943	7.943	0.000	78	14811	2.00	1.94	
67 4-Chloro-3-methylphenol	107	8.109	8.103	0.006	95	42712	2.00	1.99	
69 2-Methylnaphthalene	142	8.290	8.290	0.000	93	117877	2.00	2.06	
71 1-Methylnaphthalene	142	8.392	8.386	0.006	94	112942	2.00	2.08	
72 Hexachlorocyclopentadiene	237	8.451	8.450	0.001	95	25182	2.00	1.81	
73 1,2,4,5-Tetrachlorobenzene	216	8.456	8.456	0.000	98	49815	2.00	2.11	
74 2,4,6-Trichlorophenol	196	8.557	8.557	0.000	92	31607	2.00	1.99	
75 2,4,5-Trichlorophenol	196	8.595	8.589	0.006	96	32578	2.00	1.94	
76 1,1'-Biphenyl	154	8.739	8.739	0.000	95	142677	2.00	2.04	
77 2-Chloronaphthalene	162	8.771	8.766	0.005	96	111967	2.00	1.98	
79 2-Nitroaniline	65	8.851	8.851	0.000	88	25951	2.00	1.89	
82 Dimethyl phthalate	163	9.012	9.011	0.001	99	111048	2.00	1.99	
83 1,3-Dinitrobenzene	168	9.049	9.049	0.000	84	12199	2.00	1.53	
84 2,6-Dinitrotoluene	165	9.081	9.075	0.006	95	21455	2.00	1.76	
85 Acenaphthylene	152	9.182	9.182	0.000	98	175289	2.00	2.00	
86 3-Nitroaniline	138	9.247	9.246	0.001	97	29087	2.00	1.92	
87 2,4-Dinitrophenol	184	9.353	9.348	0.005	57	9875	4.00	4.27	
88 Acenaphthene	153	9.353	9.348	0.005	94	113746	2.00	2.10	
89 4-Nitrophenol	109	9.385	9.380	0.005	88	21162	4.00	3.61	
91 2,4-Dinitrotoluene	165	9.476	9.471	0.005	95	27582	2.00	1.90	
93 Dibenzofuran	168	9.519	9.513	0.006	97	159049	2.00	2.07	
96 2,3,4,6-Tetrachlorophenol	232	9.589	9.588	0.000	71	25068	2.00	1.88	
95 2,3,5,6-Tetrachlorophenol	232	9.631	9.631	0.000	92	26680	2.00	1.96	
97 2-Naphthylamine	143	9.663	9.658	0.005	98	119365	2.00	2.10	
98 Diethyl phthalate	149	9.695	9.690	0.005	99	117222	2.00	2.23	
99 Hexadecane	57	9.701	9.700	0.001	91	88643	2.00	2.15	
100 4-Chlorophenyl phenyl ethe	204	9.834	9.829	0.005	92	54794	2.00	2.00	
101 4-Nitroaniline	138	9.845	9.839	0.006	89	28470	2.00	2.00	
103 Fluorene	166	9.856	9.850	0.006	95	122607	2.00	2.09	
104 4,6-Dinitro-2-methylphenol	198	9.877	9.871	0.006	86	19393	4.00	4.21	
105 N-Nitrosodiphenylamine	169	9.941	9.941	0.000	62	86046	2.00	1.93	
90 1,2-Diphenylhydrazine	77	9.989	9.984	0.005	98	123885	2.00	1.96	
57 Azobenzene	77		9.989					ND	
110 4-Bromophenyl phenyl ether	248	10.315	10.309	0.006	68	30799	2.00	1.95	
112 Hexachlorobenzene	284	10.401	10.395	0.006	93	31687	2.00	2.01	
113 Atrazine	200	10.433	10.432	0.001	90	29719	2.00	2.01	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
116 Pentachlorophenol	266	10.593	10.587	0.006	92	30541	4.00	3.03	
115 n-Octadecane	57	10.598	10.598	0.000	93	88202	2.00	2.21	
121 Phenanthrene	178	10.823	10.822	0.001	97	177203	2.00	1.98	
122 Anthracene	178	10.881	10.876	0.005	97	177441	2.00	1.94	
124 Carbazole	167	11.036	11.036	0.000	96	158606	2.00	1.97	
126 Di-n-butyl phthalate	149	11.373	11.373	0.000	100	181761	2.00	1.87	
131 Fluoranthene	202	12.281	12.281	0.000	99	166088	2.00	1.94	
132 Benzidine	184	12.425	12.420	0.005	99	68139	2.00	1.63	
133 Pyrene	202	12.618	12.617	0.001	97	171869	2.00	1.95	
138 Butyl benzyl phthalate	149	13.568	13.563	0.005	98	68534	2.00	1.79	
144 3,3'-Dichlorobenzidine	252	14.589	14.583	0.006	75	41235	2.00	1.69	
145 Bis(2-ethylhexyl) phthalat	149	14.642	14.637	0.005	97	91549	2.00	1.78	
146 Benzo[a]anthracene	228	14.669	14.663	0.006	99	142909	2.00	1.94	
147 Chrysene	228	14.744	14.733	0.011	97	133549	2.00	1.89	
150 Di-n-octyl phthalate	149	15.978	15.972	0.006	99	131826	2.00	1.70	
151 7,12-Dimethylbenz(a)anthra	256	16.827	16.822	0.005	92	44124	2.00	1.74	
152 Benzo[b]fluoranthene	252	16.843	16.838	0.005	98	112365	2.00	1.80	
153 Benzo[k]fluoranthene	252	16.902	16.891	0.011	99	125256	2.00	1.93	
219 Benzo[e]pyrene	252	17.415	17.399	0.016	0	107645	2.00	1.86	
154 Benzo[a]pyrene	252	17.522	17.511	0.011	80	104727	2.00	1.84	
157 Indeno[1,2,3-cd]pyrene	276	20.150	20.129	0.021	96	98977	2.00	1.74	
158 Dibenz(a,h)anthracene	278	20.198	20.161	0.037	91	83101	2.00	1.74	M
159 Benzo[g,h,i]perylene	276	20.887	20.855	0.032	96	87020	2.00	1.82	
S 199 Total Cresols	108				0		4.00	4.39	
S 197 Methyl Phenols,Total	108				0		4.00	4.39	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD2.0i_00005 Amount Added: 1.00 Units: mL

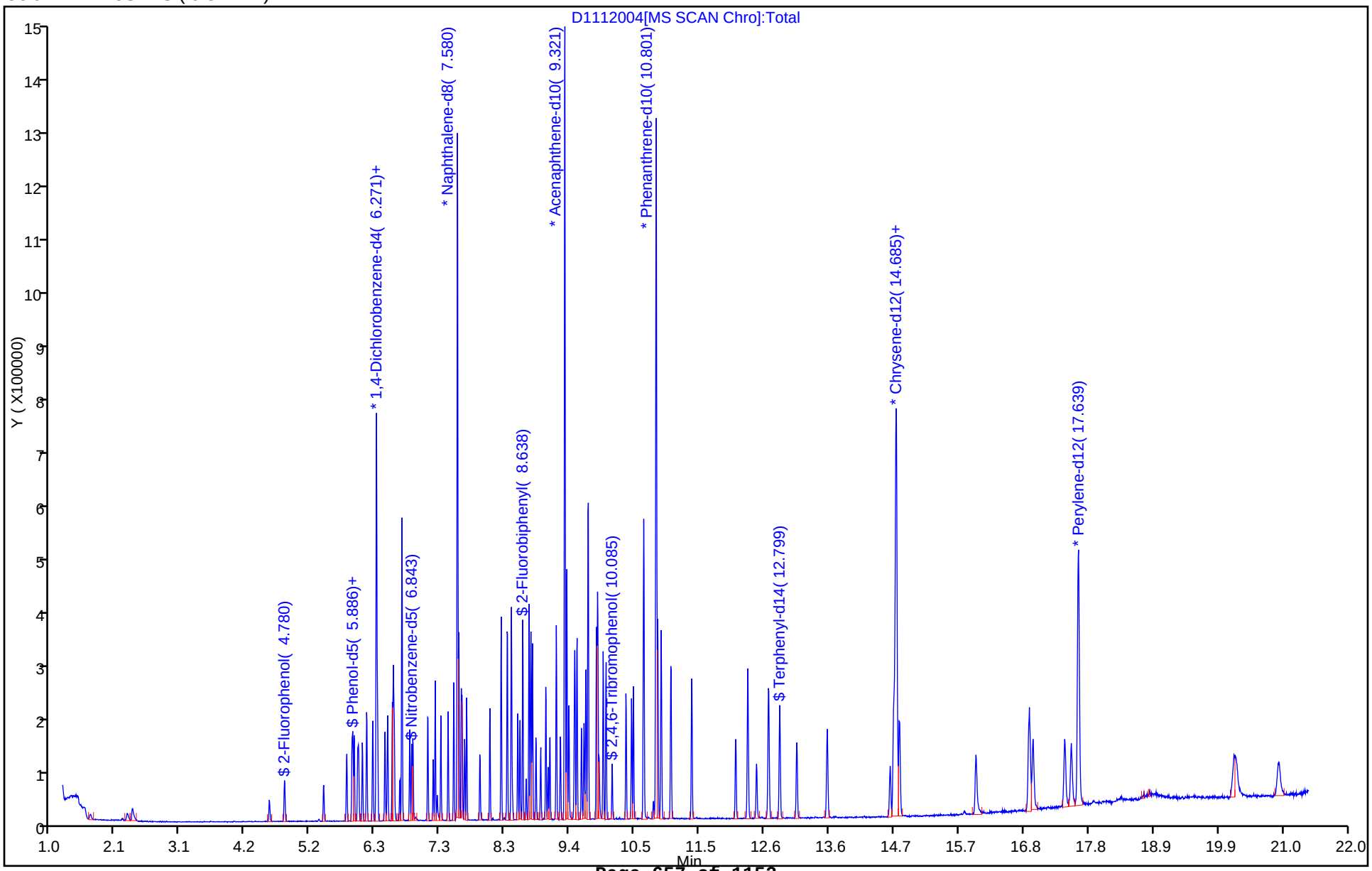
Report Date: 12-Nov-2014 14:12:19 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112004.D

Injection Date:	12-Nov-2014 10:46:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	4
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

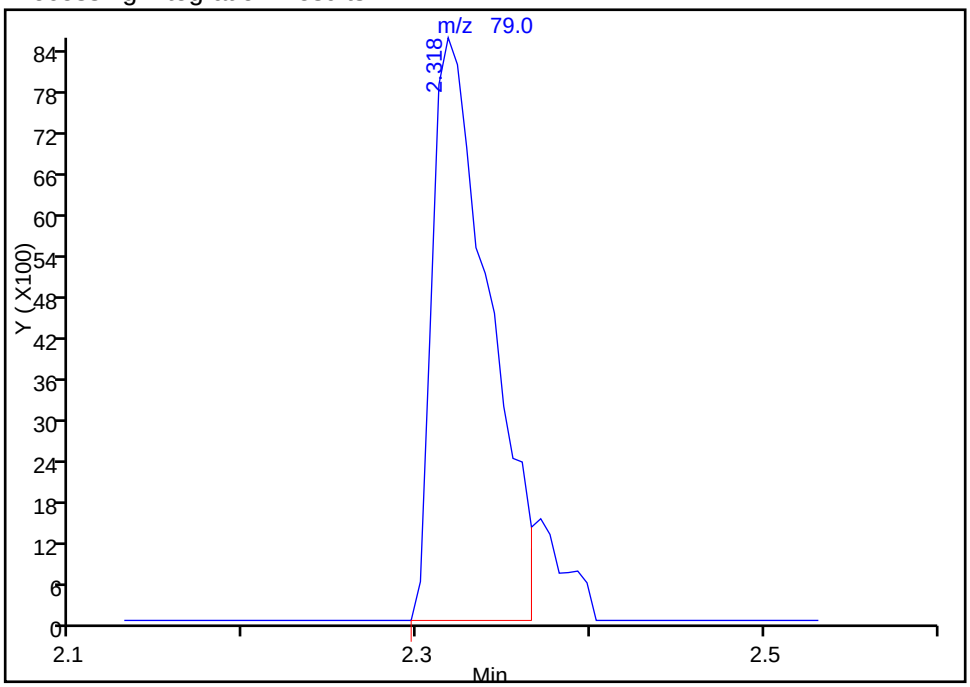
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH732\20141112-4340.b\D1112004.D				
Injection Date:	12-Nov-2014 10:46:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	3	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

15 Pyridine, CAS: 110-86-1

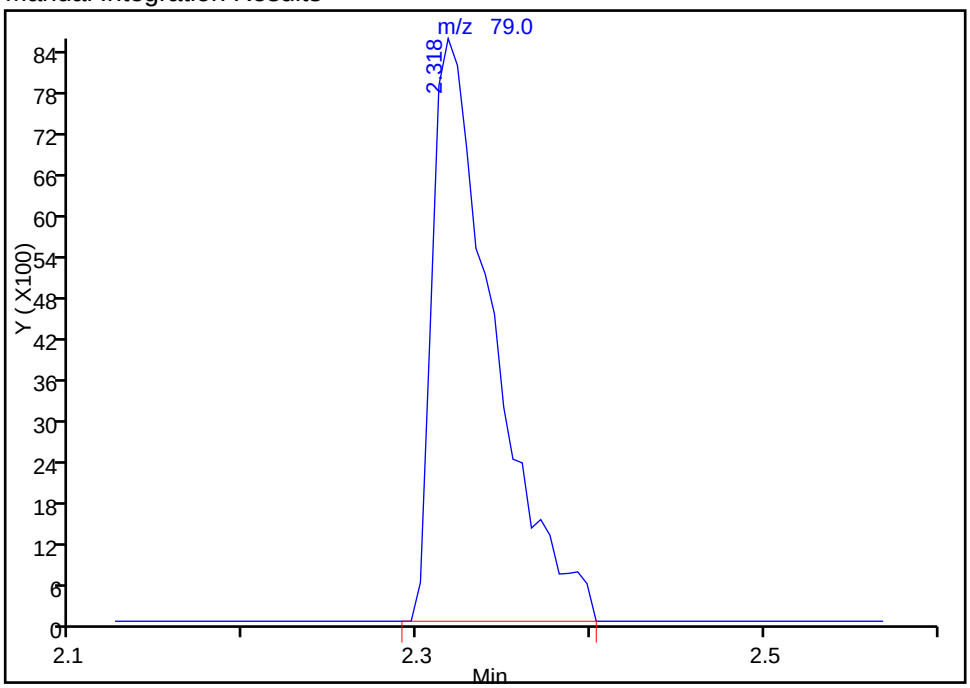
Processing Integration Results

RT: 2.32
Response: 19458
Amount: 1.894005



Manual Integration Results

RT: 2.32
Response: 21203
Amount: 2.002966



Reviewer: piccolinov, 12-Nov-2014 11:38:31
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

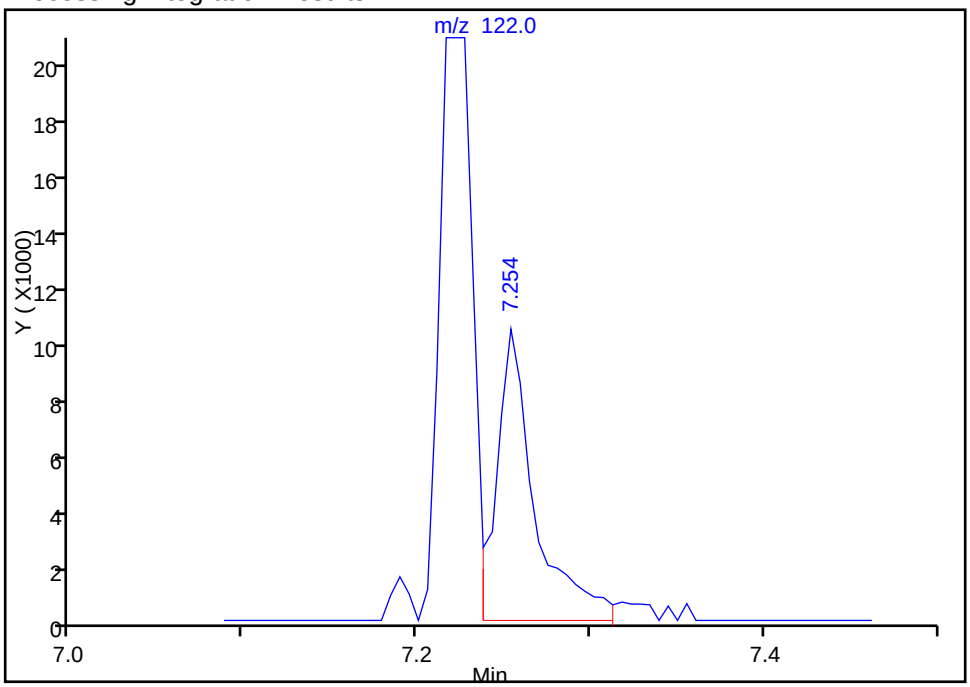
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH732\20141112-4340.b\D1112004.D				
Injection Date:	12-Nov-2014 10:46:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	3	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

52 Benzoic acid, CAS: 65-85-0

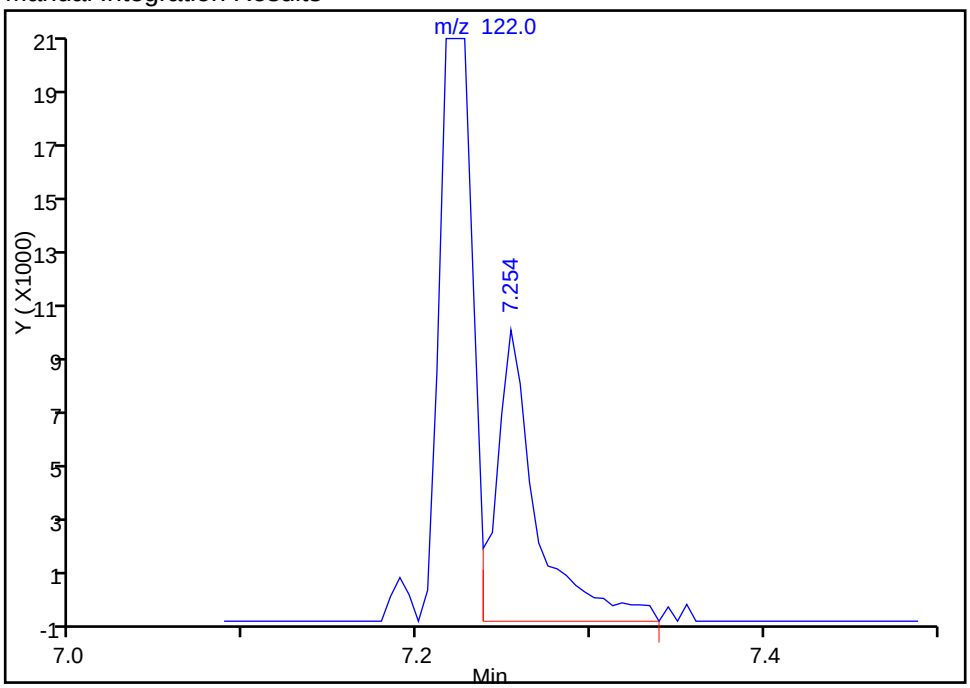
Processing Integration Results

RT: 7.25
Response: 16028
Amount: 1.232602



Manual Integration Results

RT: 7.25
Response: 16801
Amount: 3.483235



Reviewer: piccolinov, 12-Nov-2014 11:38:31
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

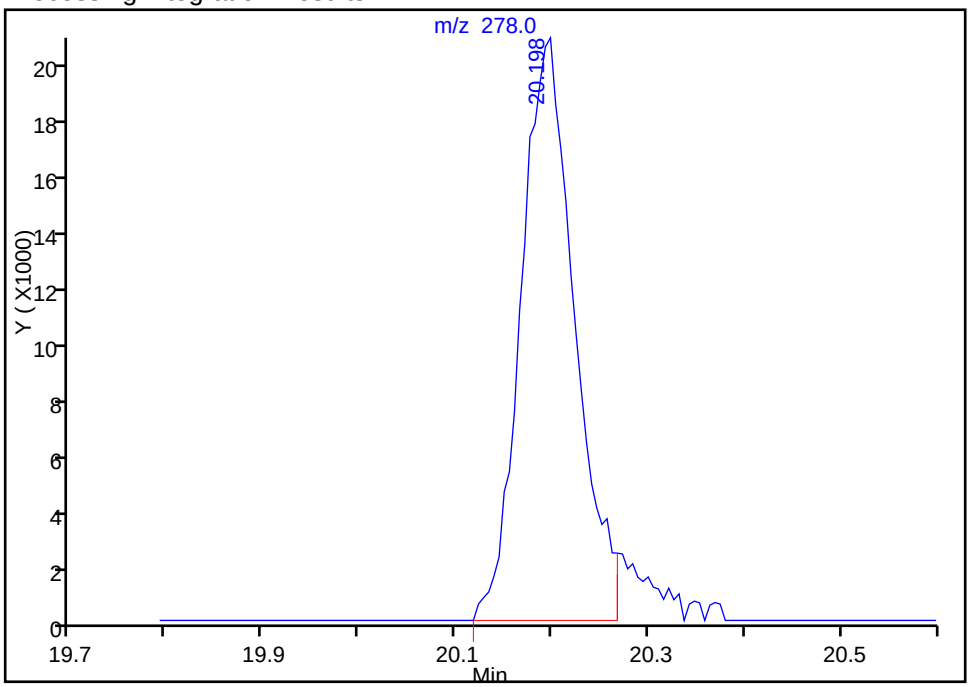
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH732\20141112-4340.b\D1112004.D				
Injection Date:	12-Nov-2014 10:46:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	3	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

158 Dibenz(a,h)anthracene, CAS: 53-70-3

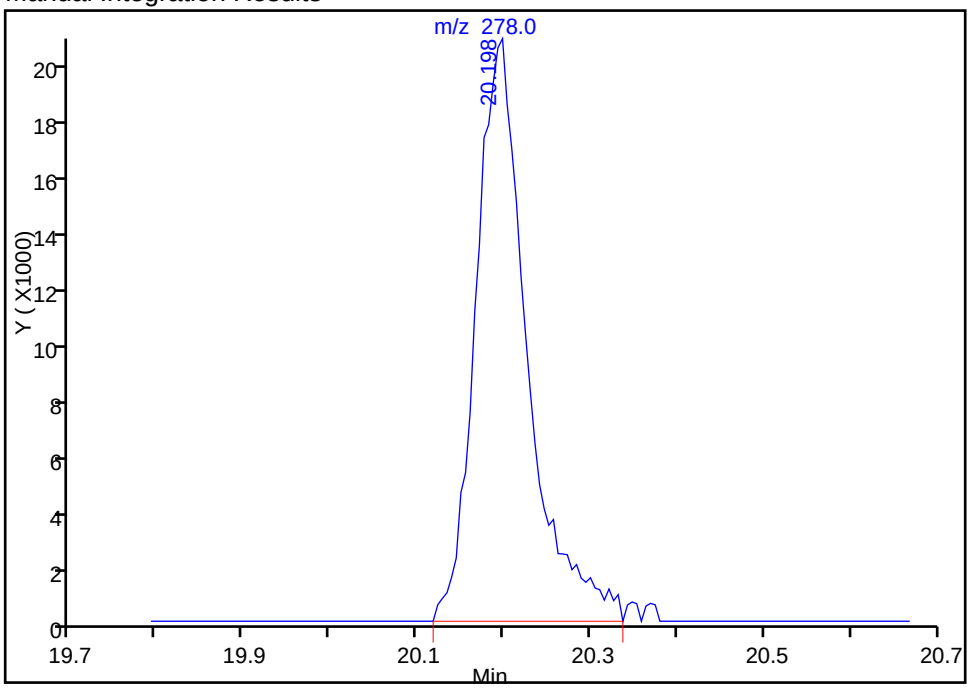
Processing Integration Results

RT: 20.20
Response: 77956
Amount: 1.743709



Manual Integration Results

RT: 20.20
Response: 83101
Amount: 1.738766



Reviewer: piccolinov, 12-Nov-2014 11:38:31
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112005.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 12-Nov-2014 11:13:30 ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004340-005
Misc. Info.: ic
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\PITCHROM\ChromData\CH732\20141112-4340.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 12-Nov-2014 14:12:21 Calib Date: 12-Nov-2014 13:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: piccolinov Date: 12-Nov-2014 14:08:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.260	6.271	-0.011	94	140822	8.00	8.00	
* 2 Naphthalene-d8	136	7.580	7.580	0.000	99	651288	8.00	8.00	
* 3 Acenaphthene-d10	164	9.316	9.316	0.000	92	371940	8.00	8.00	
* 4 Phenanthrene-d10	188	10.796	10.796	0.000	97	605251	8.00	8.00	
* 5 Chrysene-d12	240	14.685	14.679	0.006	97	495149	8.00	8.00	
* 6 Perylene-d12	264	17.628	17.623	0.005	96	371588	8.00	8.00	
$ 7 2-Fluorophenol	112	4.770	4.786	-0.016	89	68820	4.00	4.03	
$ 8 Phenol-d5	99	5.865	5.875	-0.010	97	105431	4.00	4.15	
$ 9 Nitrobenzene-d5	82	6.837	6.842	-0.005	87	93799	4.00	3.98	
$ 10 2-Fluorobiphenyl	172	8.637	8.637	0.000	100	244810	4.00	4.12	
$ 11 2,4,6-Tribromophenol	330	10.085	10.085	0.000	89	23126	4.00	3.84	
$ 12 Terphenyl-d14	244	12.799	12.799	0.000	98	215833	4.00	3.98	
13 1,4-Dioxane	88	1.623	1.644	-0.021	91	18823	4.00	4.36	
14 N-Nitrosodimethylamine	74	2.216	2.243	-0.027	94	23369	4.00	3.98	
15 Pyridine	79	2.296	2.339	-0.043	95	43479	4.00	4.10	
21 Methyl methanesulfonate	80	4.519	4.540	-0.021	87	34712	4.00	4.15	
25 Benzaldehyde	77	5.779	5.790	-0.011	94	58175	4.00	4.08	
26 Phenol	94	5.881	5.886	-0.005	97	120435	4.00	4.18	
27 Aniline	93	5.902	5.913	-0.011	95	137688	4.00	4.13	
29 Bis(2-chloroethyl)ether	93	5.972	5.982	-0.010	95	86538	4.00	4.22	
30 2-Chlorophenol	128	6.036	6.041	-0.005	95	97043	4.00	4.13	
31 n-Decane	43	6.105	6.110	-0.005	92	98354	4.00	4.25	
32 1,3-Dichlorobenzene	146	6.201	6.212	-0.011	99	113945	4.00	4.12	
33 1,4-Dichlorobenzene	146	6.282	6.287	-0.005	97	115924	4.00	4.20	
34 Benzyl alcohol	108	6.399	6.404	-0.005	95	63656	4.00	4.19	
35 1,2-Dichlorobenzene	146	6.442	6.452	-0.010	99	112234	4.00	4.14	
36 2-Methylphenol	108	6.522	6.527	-0.005	91	92754	4.00	4.36	
37 Indene	116	6.538	6.543	-0.005	89	164909	4.00	4.32	
38 2,2'-oxybis[1-chloropropan	45	6.554	6.559	-0.005	95	156886	4.00	4.29	
39 N-Nitrosopyrrolidine	100	6.645	6.650	-0.005	95	44428	4.00	4.02	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 4-Methylphenol	108	6.677	6.682	-0.005	71	97614	4.00	4.39	
40 Acetophenone	105	6.677	6.682	-0.005	86	132426	4.00	4.67	
41 N-Nitrosodi-n-propylamine	70	6.677	6.682	-0.005	71	61268	4.00	4.40	
45 Hexachloroethane	117	6.805	6.810	-0.005	96	44127	4.00	4.10	
46 Nitrobenzene	77	6.853	6.858	-0.005	86	95855	4.00	4.03	
48 Isophorone	82	7.099	7.104	-0.005	99	181711	4.00	4.08	
49 2-Nitrophenol	139	7.184	7.190	-0.006	90	51918	4.00	3.80	
50 2,4-Dimethylphenol	107	7.216	7.222	-0.006	92	99097	4.00	4.09	
52 Benzoic acid	122	7.254	7.248	0.006	86	35115	4.00	4.70	
53 Bis(2-chloroethoxy)methane	93	7.307	7.312	-0.005	98	119846	4.00	4.05	
54 2,4-Dichlorophenol	162	7.425	7.430	-0.005	92	87935	4.00	3.99	
56 1,2,4-Trichlorobenzene	180	7.521	7.521	0.000	94	102075	4.00	3.99	
58 Naphthalene	128	7.601	7.601	0.000	97	341243	4.00	4.06	
59 4-Chloroaniline	127	7.638	7.644	-0.006	98	142143	4.00	4.04	
60 2,6-Dichlorophenol	162	7.654	7.660	-0.006	98	90400	4.00	4.09	
62 Hexachlorobutadiene	225	7.724	7.729	-0.005	96	53955	4.00	4.05	
64 Caprolactam	113	7.943	7.943	0.000	80	31081	4.00	4.08	
67 4-Chloro-3-methylphenol	107	8.103	8.103	0.000	96	86765	4.00	4.06	
69 2-Methylnaphthalene	142	8.285	8.290	-0.005	93	234481	4.00	4.11	
71 1-Methylnaphthalene	142	8.386	8.386	0.000	94	222026	4.00	4.11	
72 Hexachlorocyclopentadiene	237	8.450	8.450	0.000	95	52582	4.00	3.87	
73 1,2,4,5-Tetrachlorobenzene	216	8.456	8.456	0.000	97	95278	4.00	4.12	
74 2,4,6-Trichlorophenol	196	8.557	8.557	0.000	93	61630	4.00	3.96	
75 2,4,5-Trichlorophenol	196	8.589	8.589	0.000	96	66487	4.00	4.05	
76 1,1'-Biphenyl	154	8.739	8.739	0.000	94	284142	4.00	4.16	
77 2-Chloronaphthalene	162	8.771	8.766	0.005	95	229385	4.00	4.15	
79 2-Nitroaniline	65	8.851	8.851	0.000	87	54579	4.00	4.06	
82 Dimethyl phthalate	163	9.011	9.011	0.000	99	221684	4.00	4.06	
83 1,3-Dinitrobenzene	168	9.049	9.049	0.000	84	27563	4.00	3.52	
84 2,6-Dinitrotoluene	165	9.076	9.075	0.001	96	47218	4.00	3.97	
85 Acenaphthylene	152	9.182	9.182	0.000	99	346398	4.00	4.03	
86 3-Nitroaniline	138	9.246	9.246	0.000	96	59727	4.00	4.02	
87 2,4-Dinitrophenol	184	9.348	9.348	0.000	59	26860	8.00	6.84	
88 Acenaphthene	153	9.348	9.348	0.000	94	223573	4.00	4.23	
89 4-Nitrophenol	109	9.385	9.380	0.005	85	45015	8.00	7.85	
91 2,4-Dinitrotoluene	165	9.471	9.471	0.000	94	59868	4.00	4.22	
93 Dibenzofuran	168	9.514	9.513	0.001	97	304171	4.00	4.04	
96 2,3,4,6-Tetrachlorophenol	232	9.588	9.588	0.000	72	52070	4.00	3.99	
95 2,3,5,6-Tetrachlorophenol	232	9.631	9.631	0.000	92	56075	4.00	4.22	
97 2-Naphthylamine	143	9.658	9.658	0.000	97	233773	4.00	4.21	
98 Diethyl phthalate	149	9.690	9.690	0.000	98	228529	4.00	4.44	
99 Hexadecane	57	9.701	9.700	0.001	91	177384	4.00	4.31	
100 4-Chlorophenyl phenyl ethe	204	9.834	9.829	0.005	91	110343	4.00	4.11	
101 4-Nitroaniline	138	9.839	9.839	0.000	88	57584	4.00	4.13	
103 Fluorene	166	9.850	9.850	0.000	94	237658	4.00	4.15	
104 4,6-Dinitro-2-methylphenol	198	9.877	9.871	0.006	87	49734	8.00	7.33	
105 N-Nitrosodiphenylamine	169	9.941	9.941	0.000	63	170886	4.00	3.95	
90 1,2-Diphenylhydrazine	77	9.984	9.984	0.000	99	246331	4.00	4.02	
57 Azobenzene	77		9.989					ND	
110 4-Bromophenyl phenyl ether	248	10.310	10.309	0.001	68	59811	4.00	3.89	
112 Hexachlorobenzene	284	10.400	10.395	0.005	93	60440	4.00	3.95	
113 Atrazine	200	10.432	10.432	0.000	91	57197	4.00	3.99	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
116 Pentachlorophenol	266	10.593	10.587	0.006	92	68406	8.00	6.99	
115 n-Octadecane	57	10.598	10.598	0.000	94	176133	4.00	4.41	
121 Phenanthrene	178	10.822	10.822	0.000	97	346076	4.00	3.98	
122 Anthracene	178	10.881	10.876	0.005	97	353446	4.00	3.97	
124 Carbazole	167	11.036	11.036	0.000	95	309577	4.00	3.97	
126 Di-n-butyl phthalate	149	11.373	11.373	0.000	99	358147	4.00	3.79	
131 Fluoranthene	202	12.281	12.281	0.000	98	318571	4.00	3.84	
132 Benzidine	184	12.425	12.420	0.005	100	142676	4.00	3.62	
133 Pyrene	202	12.617	12.617	0.000	97	333779	4.00	4.00	
138 Butyl benzyl phthalate	149	13.568	13.563	0.005	98	132012	4.00	3.66	
144 3,3'-Dichlorobenzidine	252	14.589	14.583	0.006	75	82857	4.00	3.60	
145 Bis(2-ethylhexyl) phthalat	149	14.642	14.637	0.005	96	178092	4.00	3.68	
146 Benzo[a]anthracene	228	14.664	14.663	0.001	99	272746	4.00	3.93	
147 Chrysene	228	14.738	14.733	0.005	98	263673	4.00	3.96	
150 Di-n-octyl phthalate	149	15.978	15.972	0.006	99	261398	4.00	3.61	
151 7,12-Dimethylbenz(a)anthra	256	16.827	16.822	0.005	91	87384	4.00	3.68	
152 Benzo[b]fluoranthene	252	16.843	16.838	0.005	98	222178	4.00	3.81	
153 Benzo[k]fluoranthene	252	16.897	16.891	0.006	98	233086	4.00	3.84	
219 Benzo[e]pyrene	252	17.415	17.399	0.016	0	207695	4.00	3.84	
154 Benzo[a]pyrene	252	17.516	17.511	0.005	80	201661	4.00	3.80	
157 Indeno[1,2,3-cd]pyrene	276	20.139	20.129	0.010	97	185254	4.00	3.48	
158 Dibenz(a,h)anthracene	278	20.177	20.161	0.016	90	156860	4.00	3.52	
159 Benzo[g,h,i]perylene	276	20.871	20.855	0.016	94	163422	4.00	3.66	
S 199 Total Cresols	108				0		8.00	8.75	
S 197 Methyl Phenols,Total	108				0		8.00	8.75	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SVTAPSTD4.0i_00006 Amount Added: 1.00 Units: mL

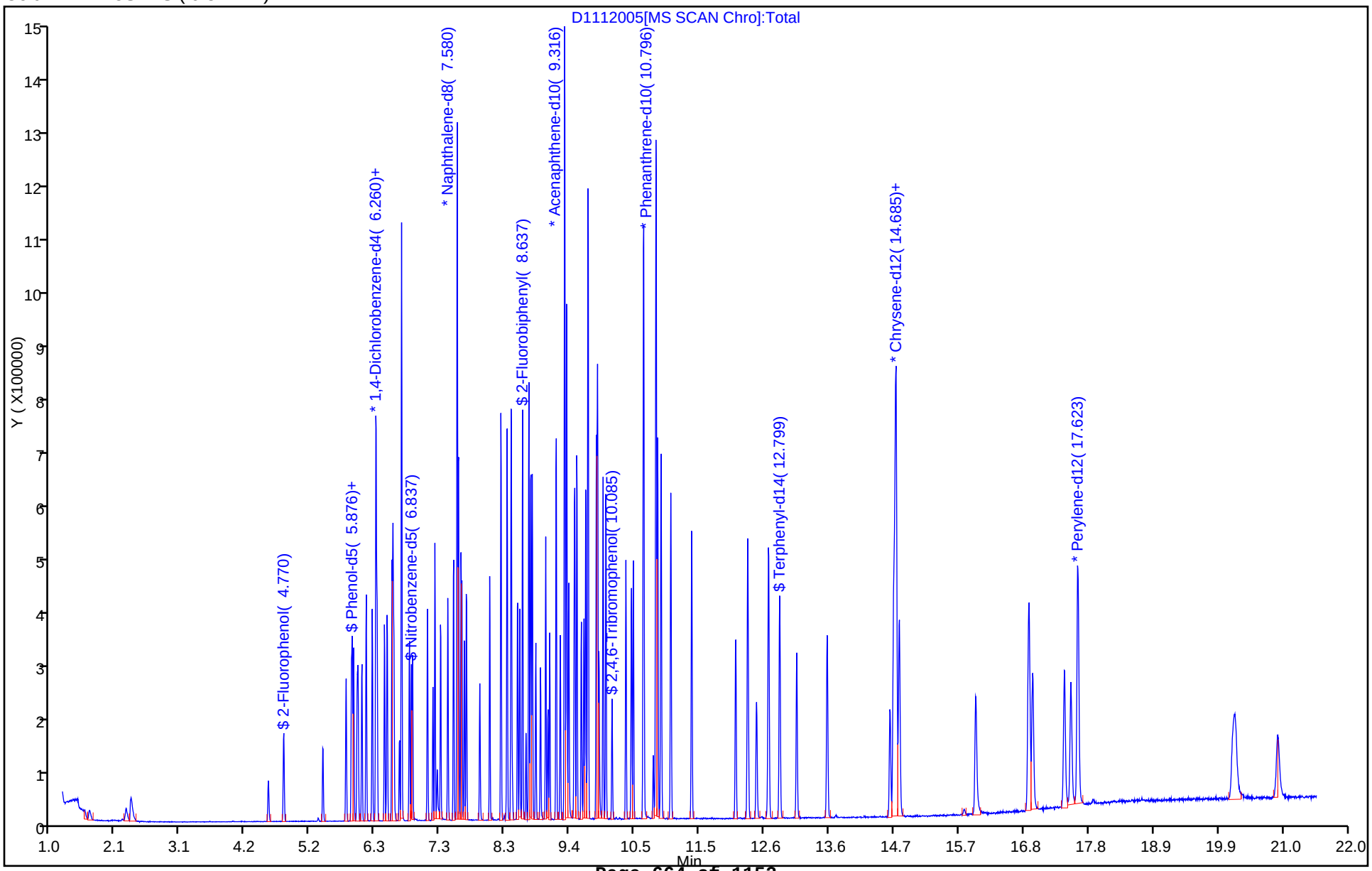
Report Date: 12-Nov-2014 14:12:21 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112005.D

Injection Date:	12-Nov-2014 11:13:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	5
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112006.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 12-Nov-2014 11:40:30 ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004340-006
Misc. Info.: icis
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\PITCHROM\ChromData\CH732\20141112-4340.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 12-Nov-2014 14:12:22 Calib Date: 12-Nov-2014 13:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: piccolinov Date: 12-Nov-2014 12:07:40

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.266	6.266	0.000	94	155940	8.00	8.00	
* 2 Naphthalene-d8	136	7.580	7.580	0.000	99	693042	8.00	8.00	
* 3 Acenaphthene-d10	164	9.321	9.321	0.000	92	398462	8.00	8.00	
* 4 Phenanthrene-d10	188	10.801	10.801	0.000	97	632646	8.00	8.00	
* 5 Chrysene-d12	240	14.690	14.690	0.000	97	522949	8.00	8.00	
* 6 Perylene-d12	264	17.639	17.639	0.000	96	394943	8.00	8.00	
$ 7 2-Fluorophenol	112	4.775	4.775	0.000	90	190658	10.0	10.1	
$ 8 Phenol-d5	99	5.870	5.870	0.000	97	294089	10.0	10.4	
$ 9 Nitrobenzene-d5	82	6.837	6.837	0.000	87	258862	10.0	10.3	
$ 10 2-Fluorobiphenyl	172	8.638	8.638	0.000	100	650499	10.0	10.2	
$ 11 2,4,6-Tribromophenol	330	10.091	10.091	0.000	92	67004	10.0	10.6	
$ 12 Terphenyl-d14	244	12.804	12.804	0.000	98	582100	10.0	10.2	
13 1,4-Dioxane	88	1.645	1.645	0.000	93	47894	10.0	10.0	
14 N-Nitrosodimethylamine	74	2.227	2.227	0.000	93	65378	10.0	10.1	
15 Pyridine	79	2.307	2.307	0.000	96	120700	10.0	10.3	
21 Methyl methanesulfonate	80	4.524	4.524	0.000	86	95541	10.0	10.3	
25 Benzaldehyde	77	5.779	5.779	0.000	94	161548	10.0	10.2	
26 Phenol	94	5.886	5.886	0.000	96	334653	10.0	10.5	
27 Aniline	93	5.902	5.902	0.000	98	382059	10.0	10.3	
29 Bis(2-chloroethyl)ether	93	5.977	5.977	0.000	96	230995	10.0	10.2	
30 2-Chlorophenol	128	6.041	6.041	0.000	95	266915	10.0	10.3	
31 n-Decane	43	6.105	6.105	0.000	92	265183	10.0	10.4	
32 1,3-Dichlorobenzene	146	6.207	6.207	0.000	99	307192	10.0	10.0	
33 1,4-Dichlorobenzene	146	6.282	6.282	0.000	97	311970	10.0	10.2	
34 Benzyl alcohol	108	6.404	6.404	0.000	96	175464	10.0	10.4	
35 1,2-Dichlorobenzene	146	6.447	6.447	0.000	99	303652	10.0	10.1	
36 2-Methylphenol	108	6.522	6.522	0.000	92	249286	10.0	10.6	
37 Indene	116	6.538	6.538	0.000	87	444899	10.0	10.5	
38 2,2'-oxybis[1-chloropropan	45	6.554	6.554	0.000	95	418467	10.0	10.3	
39 N-Nitrosopyrrolidine	100	6.645	6.645	0.000	95	124683	10.0	10.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 4-Methylphenol	108	6.682	6.682	0.000	73	256988	10.0	10.4	
40 Acetophenone	105	6.682	6.682	0.000	88	347806	10.0	11.1	
41 N-Nitrosodi-n-propylamine	70	6.682	6.682	0.000	70	163800	10.0	10.6	
45 Hexachloroethane	117	6.805	6.805	0.000	98	122051	10.0	10.3	
46 Nitrobenzene	77	6.859	6.859	0.000	86	258276	10.0	10.2	
48 Isophorone	82	7.099	7.099	0.000	99	487624	10.0	10.3	
49 2-Nitrophenol	139	7.190	7.190	0.000	88	151543	10.0	10.4	
50 2,4-Dimethylphenol	107	7.222	7.222	0.000	92	272119	10.0	10.5	
52 Benzoic acid	122	7.270	7.270	0.000	87	109052	10.0	9.16	M
53 Bis(2-chloroethoxy)methane	93	7.313	7.313	0.000	98	324556	10.0	10.3	
54 2,4-Dichlorophenol	162	7.430	7.430	0.000	91	244710	10.0	10.4	
56 1,2,4-Trichlorobenzene	180	7.521	7.521	0.000	94	278106	10.0	10.2	
58 Naphthalene	128	7.601	7.601	0.000	96	920996	10.0	10.3	
59 4-Chloroaniline	127	7.644	7.644	0.000	98	392174	10.0	10.5	
60 2,6-Dichlorophenol	162	7.655	7.655	0.000	98	246231	10.0	10.5	
62 Hexachlorobutadiene	225	7.729	7.729	0.000	96	145460	10.0	10.3	
64 Caprolactam	113	7.948	7.948	0.000	79	83876	10.0	10.4	
67 4-Chloro-3-methylphenol	107	8.109	8.109	0.000	95	243105	10.0	10.7	
69 2-Methylnaphthalene	142	8.290	8.290	0.000	93	625206	10.0	10.3	
71 1-Methylnaphthalene	142	8.386	8.386	0.000	93	592360	10.0	10.3	
72 Hexachlorocyclopentadiene	237	8.451	8.451	0.000	96	153020	10.0	10.5	
73 1,2,4,5-Tetrachlorobenzene	216	8.456	8.456	0.000	98	254754	10.0	10.3	
74 2,4,6-Trichlorophenol	196	8.557	8.557	0.000	92	173542	10.0	10.4	
75 2,4,5-Trichlorophenol	196	8.595	8.595	0.000	96	177337	10.0	10.1	
76 1,1'-Biphenyl	154	8.739	8.739	0.000	94	749516	10.0	10.2	
77 2-Chloronaphthalene	162	8.771	8.771	0.000	95	590351	10.0	9.97	
79 2-Nitroaniline	65	8.851	8.851	0.000	89	152540	10.0	10.6	
82 Dimethyl phthalate	163	9.017	9.017	0.000	100	599220	10.0	10.2	
83 1,3-Dinitrobenzene	168	9.049	9.049	0.000	86	85630	10.0	10.2	
84 2,6-Dinitrotoluene	165	9.081	9.081	0.000	96	131895	10.0	10.3	
85 Acenaphthylene	152	9.182	9.182	0.000	98	948962	10.0	10.3	
86 3-Nitroaniline	138	9.252	9.252	0.000	98	166481	10.0	10.5	
87 2,4-Dinitrophenol	184	9.353	9.353	0.000	63	125740	20.0	20.3	
88 Acenaphthene	153	9.353	9.353	0.000	92	591053	10.0	10.4	
89 4-Nitrophenol	109	9.385	9.385	0.000	86	131250	20.0	21.4	
91 2,4-Dinitrotoluene	165	9.476	9.476	0.000	95	168259	10.0	11.1	
93 Dibenzofuran	168	9.519	9.519	0.000	97	810242	10.0	10.1	
96 2,3,4,6-Tetrachlorophenol	232	9.588	9.588	0.000	72	146455	10.0	10.5	
95 2,3,5,6-Tetrachlorophenol	232	9.631	9.631	0.000	92	145058	10.0	10.2	
97 2-Naphthylamine	143	9.663	9.663	0.000	97	613058	10.0	10.3	
98 Diethyl phthalate	149	9.695	9.695	0.000	99	592404	10.0	10.7	
99 Hexadecane	57	9.701	9.701	0.000	91	466565	10.0	10.7	
100 4-Chlorophenyl phenyl ethe	204	9.834	9.834	0.000	93	294201	10.0	10.2	
101 4-Nitroaniline	138	9.845	9.845	0.000	91	161211	10.0	10.8	
103 Fluorene	166	9.856	9.856	0.000	95	641236	10.0	10.4	
104 4,6-Dinitro-2-methylphenol	198	9.877	9.877	0.000	88	172487	20.0	18.9	
105 N-Nitrosodiphenylamine	169	9.941	9.941	0.000	62	454765	10.0	10.1	
90 1,2-Diphenylhydrazine	77	9.989	9.989	0.000	98	657733	10.0	10.3	
57 Azobenzene	77		9.989					ND	
110 4-Bromophenyl phenyl ether	248	10.315	10.315	0.000	67	164263	10.0	10.2	
112 Hexachlorobenzene	284	10.406	10.406	0.000	94	161618	10.0	10.1	
113 Atrazine	200	10.433	10.433	0.000	91	156524	10.0	10.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
116 Pentachlorophenol	266	10.593	10.593	0.000	92	201328	20.0	19.7	
115 n-Octadecane	57	10.603	10.603	0.000	94	472634	10.0	10.7	
121 Phenanthrene	178	10.828	10.828	0.000	98	902184	10.0	9.93	
122 Anthracene	178	10.881	10.881	0.000	98	946207	10.0	10.2	
124 Carbazole	167	11.042	11.042	0.000	95	824006	10.0	10.1	
126 Di-n-butyl phthalate	149	11.378	11.378	0.000	100	992475	10.0	10.1	
131 Fluoranthene	202	12.286	12.286	0.000	98	867384	10.0	10.0	
132 Benzidine	184	12.431	12.431	0.000	100	419304	10.0	10.1	
133 Pyrene	202	12.623	12.623	0.000	97	894199	10.0	10.2	
138 Butyl benzyl phthalate	149	13.574	13.574	0.000	98	383421	10.0	10.1	
144 3,3'-Dichlorobenzidine	252	14.594	14.594	0.000	75	240007	10.0	9.89	
145 Bis(2-ethylhexyl) phthalat	149	14.642	14.642	0.000	97	525918	10.0	10.3	
146 Benzo[a]anthracene	228	14.674	14.674	0.000	99	737673	10.0	10.1	
147 Chrysene	228	14.744	14.744	0.000	98	698705	10.0	9.93	
150 Di-n-octyl phthalate	149	15.978	15.978	0.000	99	771581	10.0	10.0	
151 7,12-Dimethylbenz(a)anthra	256	16.833	16.833	0.000	91	267133	10.0	10.6	
152 Benzo[b]fluoranthene	252	16.849	16.849	0.000	98	623245	10.0	10.1	
153 Benzo[k]fluoranthene	252	16.907	16.907	0.000	98	670846	10.0	10.4	
219 Benzo[e]pyrene	252	17.415	17.415	0.000	0	574641	10.0	10.0	
154 Benzo[a]pyrene	252	17.522	17.522	0.000	80	576733	10.0	10.2	
157 Indeno[1,2,3-cd]pyrene	276	20.145	20.145	0.000	98	550429	10.0	9.74	
158 Dibenz(a,h)anthracene	278	20.187	20.187	0.000	91	457128	10.0	9.64	
159 Benzo[g,h,i]perylene	276	20.877	20.877	0.000	97	467863	10.0	9.86	
S 199 Total Cresols	108				0		20.0	21.0	
S 197 Methyl Phenols,Total	108				0		20.0	21.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD10i_00078 Amount Added: 1.00 Units: mL

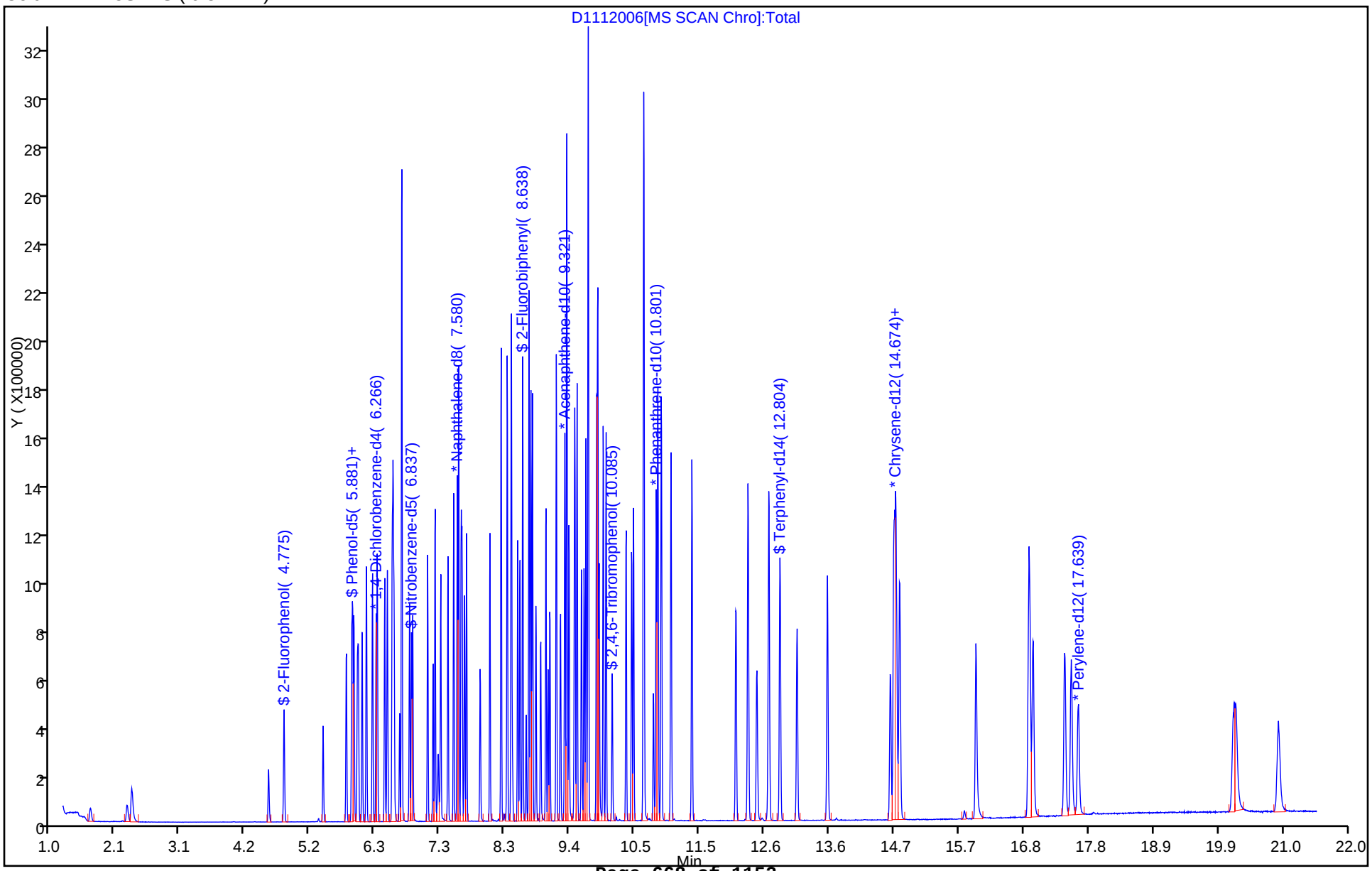
Report Date: 12-Nov-2014 14:12:23 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112006.D

Injection Date:	12-Nov-2014 11:40:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	ICIS			Worklist Smp#:	6
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

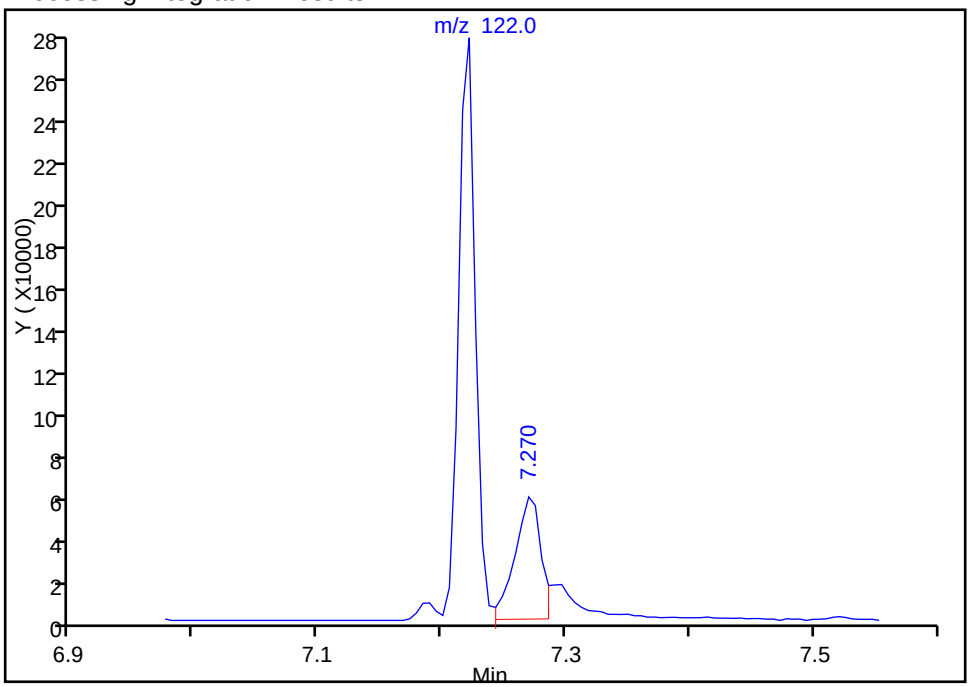
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH732\20141112-4340.b\D1112006.D				
Injection Date:	12-Nov-2014 11:40:30	Instrument ID:	CH732		
Lims ID:	ICIS				
Client ID:					
Operator ID:	003200	ALS Bottle#:	5	Worklist Smp#:	6
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

52 Benzoic acid, CAS: 65-85-0

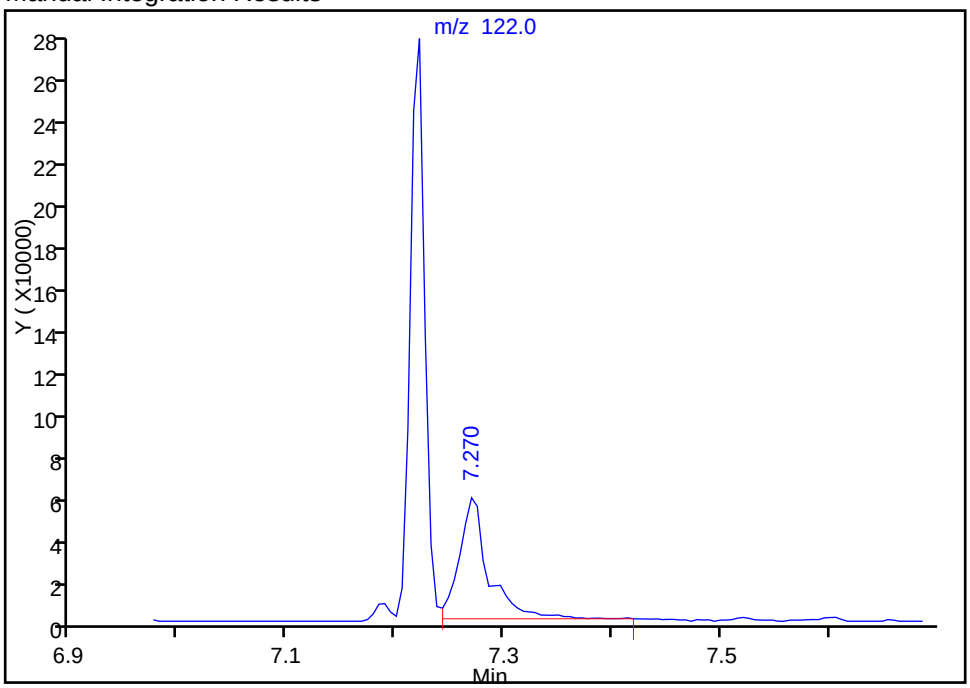
Processing Integration Results

RT: 7.27
Response: 86259
Amount: 6.493123



Manual Integration Results

RT: 7.27
Response: 109052
Amount: 9.158803



Reviewer: piccolinov, 12-Nov-2014 12:07:40
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112007.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 12-Nov-2014 12:08:30 ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004340-007
Misc. Info.: ic
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\PITCHROM\ChromData\CH732\20141112-4340.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 12-Nov-2014 14:12:25 Calib Date: 12-Nov-2014 13:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: piccolinov Date: 12-Nov-2014 12:31:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.271	6.266	0.005	94	136759	8.00	8.00	
* 2 Naphthalene-d8	136	7.585	7.580	0.005	99	618399	8.00	8.00	
* 3 Acenaphthene-d10	164	9.321	9.321	0.000	91	345673	8.00	8.00	
* 4 Phenanthrene-d10	188	10.806	10.801	0.005	97	543663	8.00	8.00	
* 5 Chrysene-d12	240	14.701	14.690	0.011	97	461269	8.00	8.00	
* 6 Perylene-d12	264	17.644	17.639	0.005	95	341387	8.00	8.00	
$ 7 2-Fluorophenol	112	4.780	4.775	0.005	90	330296	20.0	19.9	
$ 8 Phenol-d5	99	5.875	5.870	0.005	96	488196	20.0	19.8	
$ 9 Nitrobenzene-d5	82	6.842	6.837	0.005	87	441844	20.0	19.7	
$ 10 2-Fluorobiphenyl	172	8.643	8.638	0.005	100	1068433	20.0	19.4	
$ 11 2,4,6-Tribromophenol	330	10.090	10.091	-0.001	91	114020	20.0	21.1	
$ 12 Terphenyl-d14	244	12.804	12.804	0.000	99	978534	20.0	19.4	
13 1,4-Dioxane	88	1.634	1.645	-0.011	94	80842	20.0	19.3	
14 N-Nitrosodimethylamine	74	2.227	2.227	0.000	94	114935	20.0	20.2	
15 Pyridine	79	2.296	2.307	-0.011	96	210539	20.0	20.4	
21 Methyl methanesulfonate	80	4.529	4.524	0.005	86	160967	20.0	19.8	
25 Benzaldehyde	77	5.790	5.779	0.011	94	285579	20.0	20.6	
26 Phenol	94	5.891	5.886	0.005	96	555876	20.0	19.9	
27 Aniline	93	5.913	5.902	0.011	98	643766	20.0	19.9	
29 Bis(2-chloroethyl)ether	93	5.982	5.977	0.005	96	386032	20.0	19.4	
30 2-Chlorophenol	128	6.046	6.041	0.005	95	450282	20.0	19.7	
31 n-Decane	43	6.110	6.105	0.005	92	445305	20.0	19.8	
32 1,3-Dichlorobenzene	146	6.212	6.207	0.005	99	517815	20.0	19.3	
33 1,4-Dichlorobenzene	146	6.287	6.282	0.005	96	524613	20.0	19.6	
34 Benzyl alcohol	108	6.410	6.404	0.006	96	298070	20.0	20.2	
35 1,2-Dichlorobenzene	146	6.452	6.447	0.005	99	513707	20.0	19.5	
36 2-Methylphenol	108	6.533	6.522	0.010	93	416378	20.0	20.2	
37 Indene	116	6.543	6.538	0.005	89	738881	20.0	19.9	
38 2,2'-oxybis[1-chloropropan	45	6.559	6.554	0.005	95	702785	20.0	19.8	
39 N-Nitrosopyrrolidine	100	6.650	6.645	0.005	95	211755	20.0	19.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 4-Methylphenol	108	6.687	6.682	0.005	72	421721	20.0	19.5	
40 Acetophenone	105	6.687	6.682	0.005	87	565558	20.0	20.5	
41 N-Nitrosodi-n-propylamine	70	6.687	6.682	0.005	69	264525	20.0	19.6	
45 Hexachloroethane	117	6.810	6.805	0.005	96	205463	20.0	19.7	
46 Nitrobenzene	77	6.864	6.859	0.005	87	438332	20.0	19.4	
48 Isophorone	82	7.104	7.099	0.005	99	821271	20.0	19.4	
49 2-Nitrophenol	139	7.190	7.190	0.000	90	265639	20.0	20.5	
50 2,4-Dimethylphenol	107	7.222	7.222	0.000	92	451267	20.0	19.6	
52 Benzoic acid	122	7.291	7.270	0.021	87	216757	20.0	17.5	
53 Bis(2-chloroethoxy)methane	93	7.318	7.313	0.005	99	552741	20.0	19.7	
54 2,4-Dichlorophenol	162	7.435	7.430	0.005	91	419903	20.0	20.1	
56 1,2,4-Trichlorobenzene	180	7.526	7.521	0.005	94	465304	20.0	19.1	
58 Naphthalene	128	7.606	7.601	0.005	96	1550316	20.0	19.4	
59 4-Chloroaniline	127	7.644	7.644	0.000	98	655128	20.0	19.6	
60 2,6-Dichlorophenol	162	7.660	7.655	0.005	98	406906	20.0	19.4	
62 Hexachlorobutadiene	225	7.735	7.729	0.006	96	245923	20.0	19.4	
64 Caprolactam	113	7.959	7.948	0.011	79	140332	20.0	19.4	
67 4-Chloro-3-methylphenol	107	8.114	8.109	0.005	95	398389	20.0	19.6	
69 2-Methylnaphthalene	142	8.290	8.290	0.000	93	1035503	20.0	19.1	
71 1-Methylnaphthalene	142	8.392	8.386	0.006	93	986348	20.0	19.2	
72 Hexachlorocyclopentadiene	237	8.456	8.451	0.005	95	267612	20.0	21.2	
73 1,2,4,5-Tetrachlorobenzene	216	8.461	8.456	0.005	97	419697	20.0	19.5	
74 2,4,6-Trichlorophenol	196	8.563	8.557	0.006	92	289002	20.0	20.0	
75 2,4,5-Trichlorophenol	196	8.600	8.595	0.005	96	306031	20.0	20.1	
76 1,1'-Biphenyl	154	8.744	8.739	0.005	94	1247567	20.0	19.6	
77 2-Chloronaphthalene	162	8.776	8.771	0.005	95	1008429	20.0	19.6	
79 2-Nitroaniline	65	8.856	8.851	0.005	89	255442	20.0	20.5	
82 Dimethyl phthalate	163	9.017	9.017	0.000	100	992963	20.0	19.6	
83 1,3-Dinitrobenzene	168	9.054	9.049	0.005	86	146510	20.0	20.1	
84 2,6-Dinitrotoluene	165	9.081	9.081	0.000	95	223321	20.0	20.2	
85 Acenaphthylene	152	9.188	9.182	0.006	98	1598013	20.0	20.0	
86 3-Nitroaniline	138	9.252	9.252	0.000	97	286845	20.0	20.8	
87 2,4-Dinitrophenol	184	9.353	9.353	0.000	87	225363	40.0	39.0	
88 Acenaphthene	153	9.353	9.353	0.000	94	973978	20.0	19.8	
89 4-Nitrophenol	109	9.391	9.385	0.006	85	231663	40.0	43.5	
91 2,4-Dinitrotoluene	165	9.481	9.476	0.005	95	284936	20.0	21.6	
93 Dibenzofuran	168	9.524	9.519	0.005	97	1362530	20.0	19.5	
96 2,3,4,6-Tetrachlorophenol	232	9.594	9.588	0.006	71	251130	20.0	20.7	
95 2,3,5,6-Tetrachlorophenol	232	9.636	9.631	0.005	92	249668	20.0	20.2	
97 2-Naphthylamine	143	9.668	9.663	0.005	97	1034501	20.0	20.0	
98 Diethyl phthalate	149	9.700	9.695	0.005	99	977562	20.0	20.4	
99 Hexadecane	57	9.706	9.701	0.005	90	774113	20.0	19.8	
100 4-Chlorophenyl phenyl ethe	204	9.839	9.834	0.005	92	487370	20.0	19.5	
101 4-Nitroaniline	138	9.850	9.845	0.005	91	276790	20.0	21.3	
103 Fluorene	166	9.861	9.856	0.005	94	1059421	20.0	19.9	
104 4,6-Dinitro-2-methylphenol	198	9.882	9.877	0.005	87	318067	40.0	38.0	
105 N-Nitrosodiphenylamine	169	9.946	9.941	0.005	61	763722	20.0	19.7	
90 1,2-Diphenylhydrazine	77	9.994	9.989	0.005	98	1098671	20.0	20.0	
57 Azobenzene	77		9.989					ND	
110 4-Bromophenyl phenyl ether	248	10.315	10.315	0.000	67	267109	20.0	19.4	
112 Hexachlorobenzene	284	10.406	10.406	0.000	94	265041	20.0	19.3	
113 Atrazine	200	10.438	10.433	0.006	91	261092	20.0	20.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
116 Pentachlorophenol	266	10.598	10.593	0.005	93	355135	40.0	40.4	
115 n-Octadecane	57	10.603	10.603	0.000	94	772860	20.0	19.9	
121 Phenanthrene	178	10.828	10.828	0.000	97	1526141	20.0	19.5	
122 Anthracene	178	10.886	10.881	0.005	97	1580099	20.0	19.8	
124 Carbazole	167	11.041	11.042	-0.001	95	1399050	20.0	20.0	
126 Di-n-butyl phthalate	149	11.383	11.378	0.005	100	1703391	20.0	20.1	
131 Fluoranthene	202	12.291	12.286	0.005	98	1461298	20.0	19.6	
132 Benzidine	184	12.436	12.431	0.006	100	803944	20.0	21.9	
133 Pyrene	202	12.628	12.623	0.005	97	1511359	20.0	19.5	
138 Butyl benzyl phthalate	149	13.579	13.574	0.005	98	652524	20.0	19.4	
144 3,3'-Dichlorobenzidine	252	14.599	14.594	0.005	75	416855	20.0	19.5	
145 Bis(2-ethylhexyl) phthalat	149	14.653	14.642	0.011	97	904772	20.0	20.1	
146 Benzo[a]anthracene	228	14.674	14.674	0.000	99	1251693	20.0	19.3	
147 Chrysene	228	14.744	14.744	0.000	98	1200310	20.0	19.3	
150 Di-n-octyl phthalate	149	15.983	15.978	0.005	99	1375520	20.0	20.7	
151 7,12-Dimethylbenz(a)anthra	256	16.843	16.833	0.011	91	445989	20.0	20.5	
152 Benzo[b]fluoranthene	252	16.854	16.849	0.005	99	1079436	20.0	20.1	
153 Benzo[k]fluoranthene	252	16.912	16.907	0.005	98	1130146	20.0	20.3	
219 Benzo[e]pyrene	252	17.425	17.415	0.010	0	965300	20.0	19.4	
154 Benzo[a]pyrene	252	17.527	17.522	0.005	80	960030	20.0	19.7	
157 Indeno[1,2,3-cd]pyrene	276	20.161	20.145	0.016	96	964591	20.0	19.7	
158 Dibenz(a,h)anthracene	278	20.198	20.187	0.011	92	795096	20.0	19.4	
159 Benzo[g,h,i]perylene	276	20.887	20.877	0.010	94	814984	20.0	19.9	
S 199 Total Cresols	108				0		40.0	39.7	
S 197 Methyl Phenols,Total	108				0		40.0	39.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SVTAPSTD20i_00005 Amount Added: 1.00 Units: mL

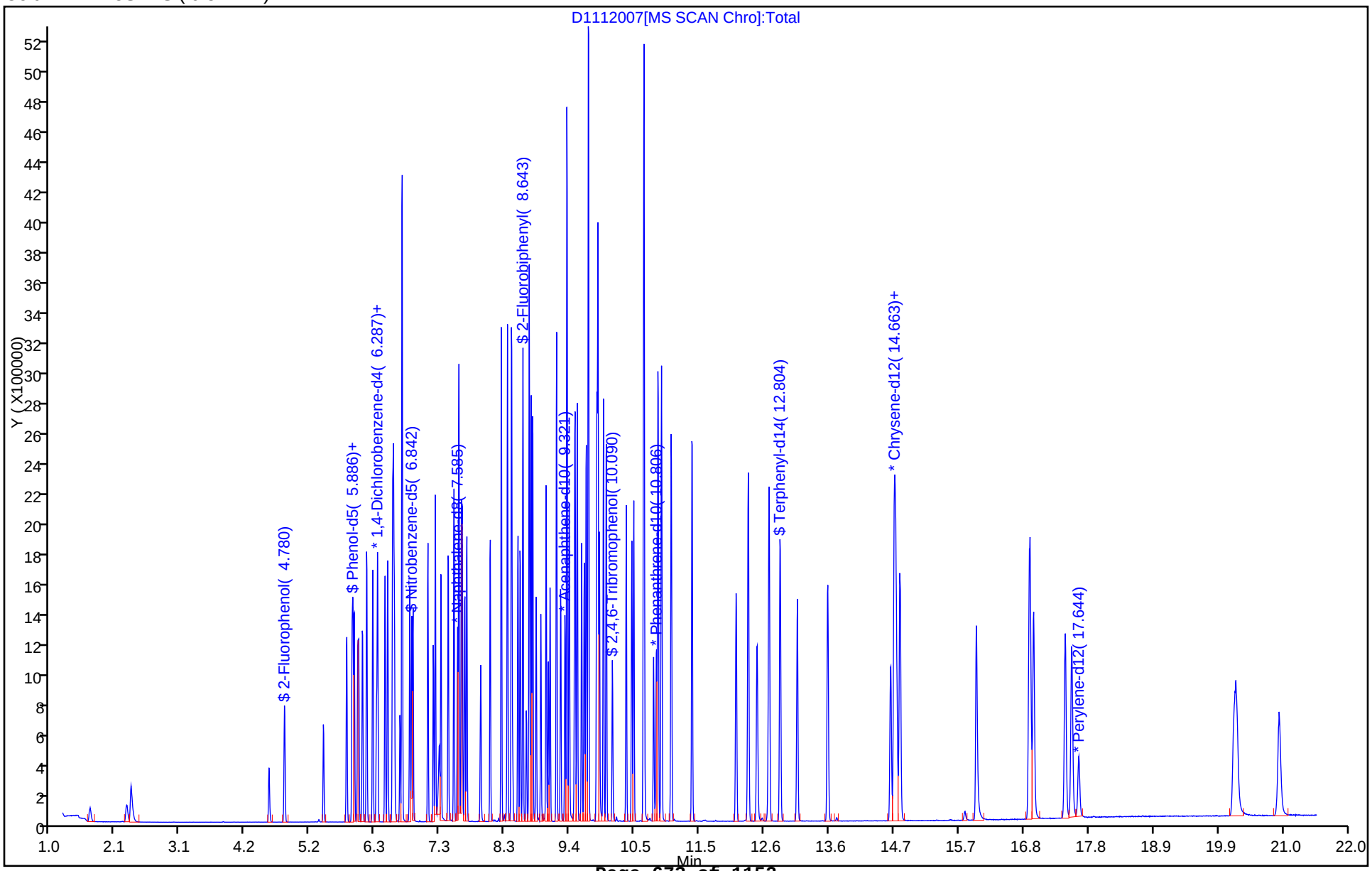
Report Date: 12-Nov-2014 14:12:25 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112007.D

Injection Date:	12-Nov-2014 12:08:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	7
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112008.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 12-Nov-2014 12:35:30 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004340-008
Misc. Info.: ic
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\PITCHROM\ChromData\CH732\20141112-4340.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 12-Nov-2014 14:12:26 Calib Date: 12-Nov-2014 13:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: piccolinov Date: 12-Nov-2014 13:03:12

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
*	1 1,4-Dichlorobenzene-d4	152	6.265	6.266	-0.001	93	140829	8.00	8.00	
*	2 Naphthalene-d8	136	7.580	7.580	0.000	99	619488	8.00	8.00	
*	3 Acenaphthene-d10	164	9.321	9.321	0.000	92	345534	8.00	8.00	
*	4 Phenanthrene-d10	188	10.806	10.801	0.005	97	530508	8.00	8.00	
*	5 Chrysene-d12	240	14.701	14.690	0.011	96	453287	8.00	8.00	
*	6 Perylene-d12	264	17.644	17.639	0.005	96	342088	8.00	8.00	
$	7 2-Fluorophenol	112	4.775	4.775	0.000	89	666402	40.0	39.0	
$	8 Phenol-d5	99	5.875	5.870	0.005	96	958614	40.0	37.7	
$	9 Nitrobenzene-d5	82	6.842	6.837	0.005	86	883538	40.0	39.4	
$	10 2-Fluorobiphenyl	172	8.643	8.638	0.005	100	2126066	40.0	38.5	
$	11 2,4,6-Tribromophenol	330	10.096	10.091	0.005	93	230277	40.0	43.6	
$	12 Terphenyl-d14	244	12.810	12.804	0.006	98	1957507	40.0	39.4	
	13 1,4-Dioxane	88	1.623	1.645	-0.022	94	165250	40.0	38.3	
	14 N-Nitrosodimethylamine	74	2.216	2.227	-0.011	94	232944	40.0	39.7	
	15 Pyridine	79	2.280	2.307	-0.027	96	425701	40.0	40.1	
	21 Methyl methanesulfonate	80	4.524	4.524	0.000	87	323325	40.0	38.6	
	25 Benzaldehyde	77	5.785	5.779	0.006	94	559454	40.0	39.3	
	26 Phenol	94	5.886	5.886	0.000	98	1066154	40.0	37.0	
	27 Aniline	93	5.907	5.902	0.005	98	1264021	40.0	37.9	
	29 Bis(2-chloroethyl)ether	93	5.977	5.977	0.000	97	762883	40.0	37.2	
	30 2-Chlorophenol	128	6.041	6.041	0.000	95	915885	40.0	38.9	
	31 n-Decane	43	6.110	6.105	0.005	92	844937	40.0	36.5	
	32 1,3-Dichlorobenzene	146	6.207	6.207	0.000	99	1031463	40.0	37.3	
	33 1,4-Dichlorobenzene	146	6.287	6.282	0.005	97	1045711	40.0	37.9	
	34 Benzyl alcohol	108	6.404	6.404	0.000	96	592500	40.0	39.0	
	35 1,2-Dichlorobenzene	146	6.447	6.447	0.000	99	1017740	40.0	37.5	
	36 2-Methylphenol	108	6.532	6.522	0.010	93	794862	40.0	37.4	
	37 Indene	116	6.543	6.538	0.005	91	1406050	40.0	36.8	
	38 2,2'-oxybis[1-chloropropan	45	6.559	6.554	0.005	96	1349431	40.0	36.9	
	39 N-Nitrosopyrrolidine	100	6.655	6.645	0.010	94	425678	40.0	38.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 4-Methylphenol	108	6.682	6.682	0.000	73	756941	40.0	34.0	
40 Acetophenone	105	6.682	6.682	0.000	86	1019002	40.0	35.9	
41 N-Nitrosodi-n-propylamine	70	6.682	6.682	0.000	67	465811	40.0	33.5	
45 Hexachloroethane	117	6.805	6.805	0.000	98	417840	40.0	38.9	
46 Nitrobenzene	77	6.864	6.859	0.005	86	878730	40.0	38.8	
48 Isophorone	82	7.104	7.099	0.005	99	1641641	40.0	38.8	
49 2-Nitrophenol	139	7.190	7.190	0.000	88	548308	40.0	42.2	
50 2,4-Dimethylphenol	107	7.222	7.222	0.000	92	888963	40.0	38.5	
52 Benzoic acid	122	7.307	7.270	0.037	88	531632	40.0	39.4	
53 Bis(2-chloroethoxy)methane	93	7.312	7.313	-0.001	99	1060620	40.0	37.7	
54 2,4-Dichlorophenol	162	7.430	7.430	0.000	91	822988	40.0	39.3	
56 1,2,4-Trichlorobenzene	180	7.521	7.521	0.000	93	941402	40.0	38.7	
58 Naphthalene	128	7.606	7.601	0.005	96	3062043	40.0	38.3	
59 4-Chloroaniline	127	7.644	7.644	0.000	98	1281104	40.0	38.3	
60 2,6-Dichlorophenol	162	7.660	7.655	0.005	98	814162	40.0	38.8	
62 Hexachlorobutadiene	225	7.729	7.729	0.000	96	488466	40.0	38.5	
64 Caprolactam	113	7.970	7.948	0.022	79	286731	40.0	39.6	
67 4-Chloro-3-methylphenol	107	8.114	8.109	0.005	95	790699	40.0	38.9	
69 2-Methylnaphthalene	142	8.290	8.290	0.000	93	2074316	40.0	38.2	
71 1-Methylnaphthalene	142	8.392	8.386	0.006	93	1966589	40.0	38.3	
72 Hexachlorocyclopentadiene	237	8.456	8.451	0.005	95	544225	40.0	43.1	
73 1,2,4,5-Tetrachlorobenzene	216	8.461	8.456	0.005	97	810825	40.0	37.8	
74 2,4,6-Trichlorophenol	196	8.563	8.557	0.006	91	584859	40.0	40.4	
75 2,4,5-Trichlorophenol	196	8.600	8.595	0.005	96	624027	40.0	40.9	
76 1,1'-Biphenyl	154	8.744	8.739	0.005	94	2456034	40.0	38.7	
77 2-Chloronaphthalene	162	8.776	8.771	0.005	94	1963047	40.0	38.2	
79 2-Nitroaniline	65	8.856	8.851	0.005	90	522788	40.0	41.9	
82 Dimethyl phthalate	163	9.022	9.017	0.005	100	1972253	40.0	38.9	
83 1,3-Dinitrobenzene	168	9.054	9.049	0.005	90	317128	40.0	43.6	
84 2,6-Dinitrotoluene	165	9.086	9.081	0.005	96	454793	40.0	41.1	
85 Acenaphthylene	152	9.188	9.182	0.006	98	3176630	40.0	39.8	
86 3-Nitroaniline	138	9.257	9.252	0.005	97	580518	40.0	42.0	
87 2,4-Dinitrophenol	184	9.359	9.353	0.006	65	501599	80.0	83.3	
88 Acenaphthene	153	9.359	9.353	0.006	90	1866537	40.0	38.0	
89 4-Nitrophenol	109	9.396	9.385	0.011	83	465212	80.0	87.4	
91 2,4-Dinitrotoluene	165	9.481	9.476	0.005	96	561642	40.0	42.6	
93 Dibenzofuran	168	9.524	9.519	0.005	97	2666010	40.0	38.1	
96 2,3,4,6-Tetrachlorophenol	232	9.594	9.588	0.006	71	509237	40.0	42.0	
95 2,3,5,6-Tetrachlorophenol	232	9.636	9.631	0.005	92	500953	40.0	40.5	
97 2-Naphthylamine	143	9.668	9.663	0.005	98	2009322	40.0	39.0	
98 Diethyl phthalate	149	9.700	9.695	0.005	99	1821343	40.0	38.1	
99 Hexadecane	57	9.706	9.701	0.005	90	1357937	40.0	34.7	
100 4-Chlorophenyl phenyl ethe	204	9.839	9.834	0.005	90	978669	40.0	39.2	
101 4-Nitroaniline	138	9.855	9.845	0.010	93	531943	40.0	41.0	
103 Fluorene	166	9.861	9.856	0.005	94	2038751	40.0	38.3	
104 4,6-Dinitro-2-methylphenol	198	9.882	9.877	0.005	90	699736	80.0	82.7	
105 N-Nitrosodiphenylamine	169	9.946	9.941	0.005	61	1521355	40.0	40.1	
90 1,2-Diphenylhydrazine	77	9.994	9.989	0.005	98	2122230	40.0	39.5	
57 Azobenzene	77		9.989					ND	
110 4-Bromophenyl phenyl ether	248	10.320	10.315	0.005	65	542921	40.0	40.3	
112 Hexachlorobenzene	284	10.406	10.406	0.000	94	534313	40.0	39.9	
113 Atrazine	200	10.443	10.433	0.011	92	520552	40.0	41.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
116 Pentachlorophenol	266	10.598	10.593	0.005	94	724273	80.0	84.4	
115 n-Octadecane	57	10.609	10.603	0.006	93	1369767	40.0	34.3	
121 Phenanthrene	178	10.833	10.828	0.005	97	2989669	40.0	39.2	
122 Anthracene	178	10.892	10.881	0.011	97	3098959	40.0	39.8	
124 Carbazole	167	11.047	11.042	0.005	95	2742865	40.0	40.1	
126 Di-n-butyl phthalate	149	11.383	11.378	0.005	99	3440022	40.0	41.6	
131 Fluoranthene	202	12.291	12.286	0.005	98	2900792	40.0	39.9	
132 Benzidine	184	12.436	12.431	0.006	100	1598255	40.0	44.3	
133 Pyrene	202	12.628	12.623	0.005	98	3035014	40.0	39.8	
138 Butyl benzyl phthalate	149	13.584	13.574	0.010	97	1356001	40.0	41.1	
144 3,3'-Dichlorobenzidine	252	14.605	14.594	0.011	75	888313	40.0	42.2	
145 Bis(2-ethylhexyl) phthalat	149	14.658	14.642	0.016	98	1863026	40.0	42.0	
146 Benzo[a]anthracene	228	14.679	14.674	0.005	99	2498188	40.0	39.3	
147 Chrysene	228	14.754	14.744	0.010	98	2434886	40.0	39.9	
150 Di-n-octyl phthalate	149	15.988	15.978	0.010	99	3059360	40.0	45.9	
151 7,12-Dimethylbenz(a)anthra	256	16.848	16.833	0.016	92	983533	40.0	45.0	
152 Benzo[b]fluoranthene	252	16.864	16.849	0.015	99	2223457	40.0	41.4	
153 Benzo[k]fluoranthene	252	16.923	16.907	0.016	99	2363951	40.0	42.3	
219 Benzo[e]pyrene	252	17.431	17.415	0.016	0	2089718	40.0	42.0	
154 Benzo[a]pyrene	252	17.538	17.522	0.016	80	2029309	40.0	41.5	
157 Indeno[1,2,3-cd]pyrene	276	20.177	20.145	0.032	97	2124859	40.0	43.4	
158 Dibenz(a,h)anthracene	278	20.209	20.187	0.022	94	1793430	40.0	43.7	
159 Benzo[g,h,i]perylene	276	20.903	20.877	0.026	94	1778133	40.0	43.2	
S 199 Total Cresols	108				0		80.0	71.4	
S 197 Methyl Phenols,Total	108				0		80.0	71.4	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SVTAPSTD40i_00005 Amount Added: 1.00 Units: mL

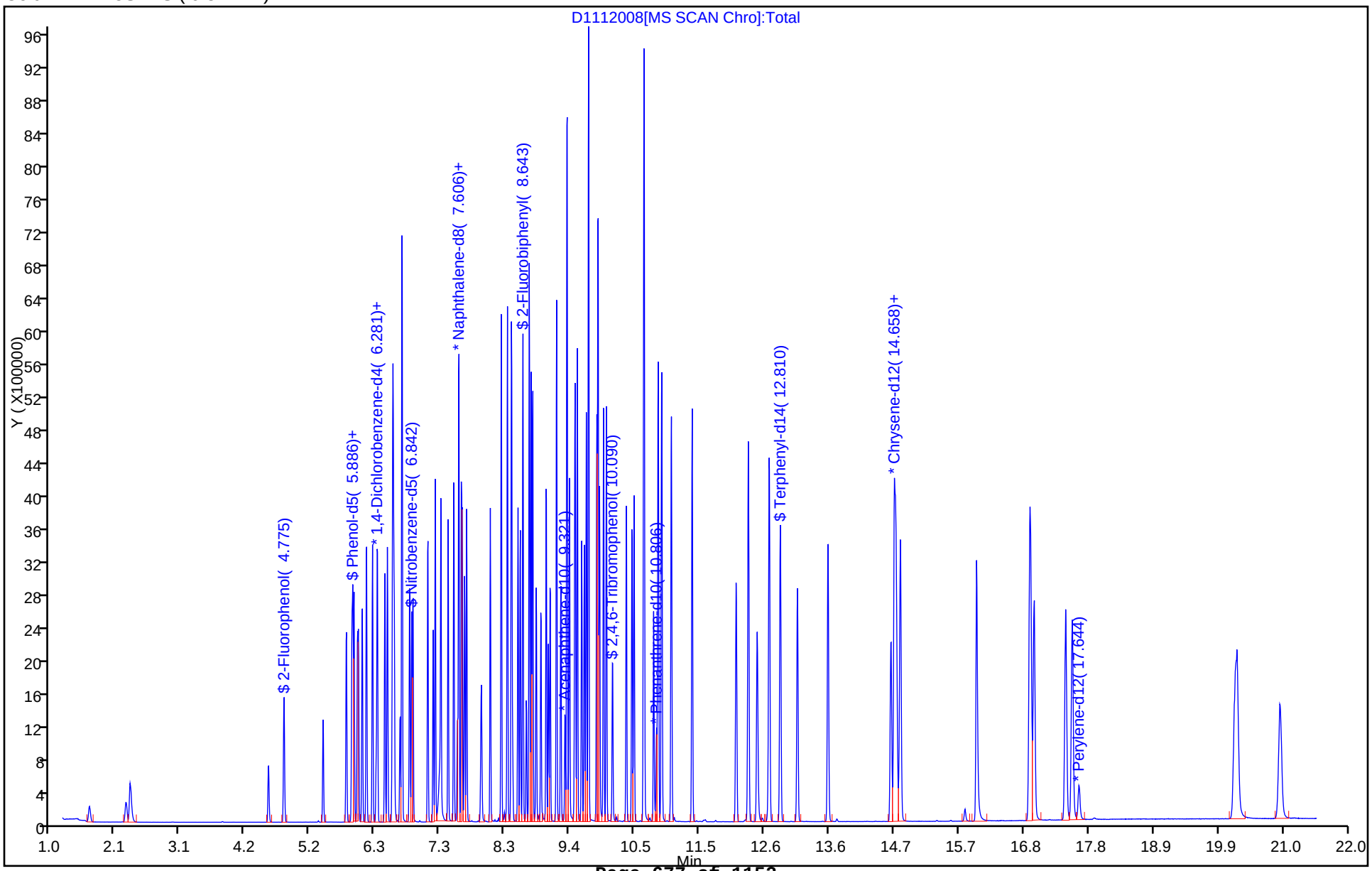
Report Date: 12-Nov-2014 14:12:27 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112008.D

Injection Date:	12-Nov-2014 12:35:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	8
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112009.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 12-Nov-2014 13:02:30 ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004340-009
Misc. Info.: ic
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\PITCHROM\ChromData\CH732\20141112-4340.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 12-Nov-2014 14:12:28 Calib Date: 12-Nov-2014 13:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: piccolinov Date: 12-Nov-2014 13:28:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.266	6.266	0.000	94	130872	8.00	8.00	
* 2 Naphthalene-d8	136	7.585	7.580	0.005	99	570220	8.00	8.00	
* 3 Acenaphthene-d10	164	9.327	9.321	0.006	91	317370	8.00	8.00	
* 4 Phenanthrene-d10	188	10.806	10.801	0.005	97	482375	8.00	8.00	
* 5 Chrysene-d12	240	14.706	14.690	0.016	96	415168	8.00	8.00	
* 6 Perylene-d12	264	17.650	17.639	0.011	96	327859	8.00	8.00	
$ 7 2-Fluorophenol	112	4.775	4.775	0.000	89	923761	60.0	58.1	
$ 8 Phenol-d5	99	5.876	5.870	0.006	97	1305146	60.0	55.2	
$ 9 Nitrobenzene-d5	82	6.842	6.837	0.005	86	1202946	60.0	58.2	
$ 10 2-Fluorobiphenyl	172	8.643	8.638	0.005	99	2849461	60.0	56.2	
$ 11 2,4,6-Tribromophenol	330	10.096	10.091	0.005	93	321578	60.0	66.9	
$ 12 Terphenyl-d14	244	12.810	12.804	0.006	98	2769550	60.0	60.9	
13 1,4-Dioxane	88	1.628	1.645	-0.017	94	233018	60.0	58.1	
14 N-Nitrosodimethylamine	74	2.216	2.227	-0.011	95	331371	60.0	60.8	
15 Pyridine	79	2.286	2.307	-0.021	96	590404	60.0	59.9	
21 Methyl methanesulfonate	80	4.524	4.524	0.000	86	431258	60.0	55.5	
25 Benzaldehyde	77	5.779	5.779	0.000	94	708200	60.0	53.5	
26 Phenol	94	5.892	5.886	0.006	97	1425092	60.0	53.2	
27 Aniline	93	5.908	5.902	0.006	62	1702849	60.0	55.0	
29 Bis(2-chloroethyl)ether	93	5.982	5.977	0.005	97	1037548	60.0	54.5	
30 2-Chlorophenol	128	6.041	6.041	0.000	95	1251993	60.0	57.3	
31 n-Decane	43	6.111	6.105	0.006	91	1115557	60.0	51.9	
32 1,3-Dichlorobenzene	146	6.207	6.207	0.000	98	1403595	60.0	54.6	
33 1,4-Dichlorobenzene	146	6.287	6.282	0.005	97	1423962	60.0	55.6	
34 Benzyl alcohol	108	6.410	6.404	0.006	96	801396	60.0	56.8	
35 1,2-Dichlorobenzene	146	6.447	6.447	0.000	99	1400946	60.0	55.6	
36 2-Methylphenol	108	6.533	6.522	0.011	93	1023288	60.0	51.8	
37 Indene	116	6.543	6.538	0.005	90	1789861	60.0	50.4	
38 2,2'-oxybis[1-chloropropan	45	6.559	6.554	0.005	95	1732756	60.0	50.9	
39 N-Nitrosopyrrolidine	100	6.656	6.645	0.011	94	585702	60.0	57.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 4-Methylphenol	108	6.688	6.682	0.006	76	942507	60.0	45.6	
40 Acetophenone	105	6.688	6.682	0.006	90	1291321	60.0	49.0	
41 N-Nitrosodi-n-propylamine	70	6.688	6.682	0.006	89	593267	60.0	45.9	
45 Hexachloroethane	117	6.805	6.805	0.000	98	568786	60.0	56.9	
46 Nitrobenzene	77	6.864	6.859	0.005	86	1207314	60.0	58.0	
48 Isophorone	82	7.104	7.099	0.005	99	2194899	60.0	56.3	
49 2-Nitrophenol	139	7.190	7.190	0.000	87	766406	60.0	64.1	
50 2,4-Dimethylphenol	107	7.222	7.222	0.000	92	1192076	60.0	56.1	
52 Benzoic acid	122	7.323	7.270	0.053	87	792632	60.0	62.3	
53 Bis(2-chloroethoxy)methane	93	7.313	7.313	0.000	99	1411948	60.0	54.5	
54 2,4-Dichlorophenol	162	7.430	7.430	0.000	91	1124759	60.0	58.3	
56 1,2,4-Trichlorobenzene	180	7.526	7.521	0.005	93	1268395	60.0	56.6	
58 Naphthalene	128	7.606	7.601	0.005	96	4076863	60.0	55.3	
59 4-Chloroaniline	127	7.644	7.644	0.000	98	1725546	60.0	56.0	
60 2,6-Dichlorophenol	162	7.660	7.655	0.005	98	1091680	60.0	56.5	
62 Hexachlorobutadiene	225	7.729	7.729	0.000	95	667230	60.0	57.2	
64 Caprolactam	113	7.975	7.948	0.027	79	403707	60.0	60.6	
67 4-Chloro-3-methylphenol	107	8.119	8.109	0.010	94	1082841	60.0	57.9	
69 2-Methylnaphthalene	142	8.290	8.290	0.000	94	2788225	60.0	55.8	
71 1-Methylnaphthalene	142	8.392	8.386	0.006	93	2613390	60.0	55.2	
72 Hexachlorocyclopentadiene	237	8.456	8.451	0.005	96	723946	60.0	62.4	
73 1,2,4,5-Tetrachlorobenzene	216	8.461	8.456	0.005	96	1065757	60.0	54.0	
74 2,4,6-Trichlorophenol	196	8.563	8.557	0.006	91	819174	60.0	61.7	
75 2,4,5-Trichlorophenol	196	8.600	8.595	0.005	96	852419	60.0	60.8	
76 1,1'-Biphenyl	154	8.744	8.739	0.005	93	3314307	60.0	56.9	
77 2-Chloronaphthalene	162	8.776	8.771	0.005	94	2649252	60.0	56.2	
79 2-Nitroaniline	65	8.862	8.851	0.011	90	710699	60.0	62.0	
82 Dimethyl phthalate	163	9.022	9.017	0.005	100	2679904	60.0	57.5	
83 1,3-Dinitrobenzene	168	9.054	9.049	0.005	91	451895	60.0	67.7	
84 2,6-Dinitrotoluene	165	9.086	9.081	0.005	96	627086	60.0	61.7	
85 Acenaphthylene	152	9.188	9.182	0.006	98	4314337	60.0	58.8	
86 3-Nitroaniline	138	9.257	9.252	0.005	97	803598	60.0	63.4	
87 2,4-Dinitrophenol	184	9.359	9.353	0.006	65	697046	120.0	124.5	
88 Acenaphthene	153	9.359	9.353	0.006	89	2406150	60.0	53.3	
89 4-Nitrophenol	109	9.401	9.385	0.016	82	632900	120.0	129.4	
91 2,4-Dinitrotoluene	165	9.482	9.476	0.006	96	760523	60.0	62.8	
93 Dibenzofuran	168	9.524	9.519	0.005	97	3629834	60.0	56.5	
96 2,3,4,6-Tetrachlorophenol	232	9.594	9.588	0.006	70	704511	60.0	63.3	
95 2,3,5,6-Tetrachlorophenol	232	9.636	9.631	0.005	92	695918	60.0	61.3	
97 2-Naphthylamine	143	9.674	9.663	0.011	98	2659320	60.0	56.1	
98 Diethyl phthalate	149	9.706	9.695	0.011	99	2351314	60.0	53.6	
99 Hexadecane	57	9.711	9.701	0.010	89	1636708	60.0	45.4	
100 4-Chlorophenyl phenyl ethe	204	9.839	9.834	0.005	90	1328744	60.0	57.9	
101 4-Nitroaniline	138	9.861	9.845	0.016	95	714766	60.0	60.0	
103 Fluorene	166	9.861	9.856	0.005	95	2701108	60.0	55.2	
104 4,6-Dinitro-2-methylphenol	198	9.888	9.877	0.011	90	975882	120.0	125.6	
105 N-Nitrosodiphenylamine	169	9.952	9.941	0.011	61	2074431	60.0	60.2	
90 1,2-Diphenylhydrazine	77	9.994	9.989	0.005	97	2892162	60.0	59.2	
57 Azobenzene	77		9.989					ND	
110 4-Bromophenyl phenyl ether	248	10.320	10.315	0.005	65	739534	60.0	60.4	
112 Hexachlorobenzene	284	10.411	10.406	0.005	95	727607	60.0	59.7	
113 Atrazine	200	10.443	10.433	0.011	93	673312	60.0	59.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
116 Pentachlorophenol	266	10.598	10.593	0.005	95	968848	120.0	124.2	
115 n-Octadecane	57	10.609	10.603	0.006	94	1670331	60.0	45.0	
121 Phenanthrene	178	10.833	10.828	0.005	97	4132443	60.0	59.6	
122 Anthracene	178	10.892	10.881	0.011	97	4265327	60.0	60.2	
124 Carbazole	167	11.047	11.042	0.005	95	3689813	60.0	59.3	
126 Di-n-butyl phthalate	149	11.383	11.378	0.005	99	4755967	60.0	63.2	
131 Fluoranthene	202	12.297	12.286	0.011	98	4028131	60.0	61.0	
132 Benzidine	184	12.441	12.431	0.011	99	2105247	60.0	63.7	
133 Pyrene	202	12.633	12.623	0.010	95	4158251	60.0	59.5	
138 Butyl benzyl phthalate	149	13.584	13.574	0.010	96	1884156	60.0	62.4	
144 3,3'-Dichlorobenzidine	252	14.605	14.594	0.011	66	1254690	60.0	65.1	
145 Bis(2-ethylhexyl) phthalat	149	14.658	14.642	0.016	95	2612409	60.0	64.3	
146 Benzo[a]anthracene	228	14.685	14.674	0.011	97	3517791	60.0	60.4	
147 Chrysene	228	14.760	14.744	0.016	94	3349341	60.0	60.0	
150 Di-n-octyl phthalate	149	15.988	15.978	0.010	99	4424064	60.0	69.2	
151 7,12-Dimethylbenz(a)anthra	256	16.854	16.833	0.022	73	1420975	60.0	67.9	
152 Benzo[b]fluoranthene	252	16.875	16.849	0.026	93	3201783	60.0	62.2	
153 Benzo[k]fluoranthene	252	16.923	16.907	0.016	94	3351697	60.0	62.6	
219 Benzo[e]pyrene	252	17.436	17.415	0.021	0	2967003	60.0	62.2	
154 Benzo[a]pyrene	252	17.543	17.522	0.021	77	2969992	60.0	63.4	
157 Indeno[1,2,3-cd]pyrene	276	20.182	20.145	0.037	95	3193268	60.0	68.1	
158 Dibenz(a,h)anthracene	278	20.219	20.187	0.032	68	2698018	60.0	68.5	
159 Benzo[g,h,i]perylene	276	20.914	20.877	0.037	87	2712801	60.0	68.8	
S 199 Total Cresols	108				0		120.0	97.4	
S 197 Methyl Phenols,Total	108				0		120.0	97.4	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SVTAPSTD60i_00005 Amount Added: 1.00 Units: mL

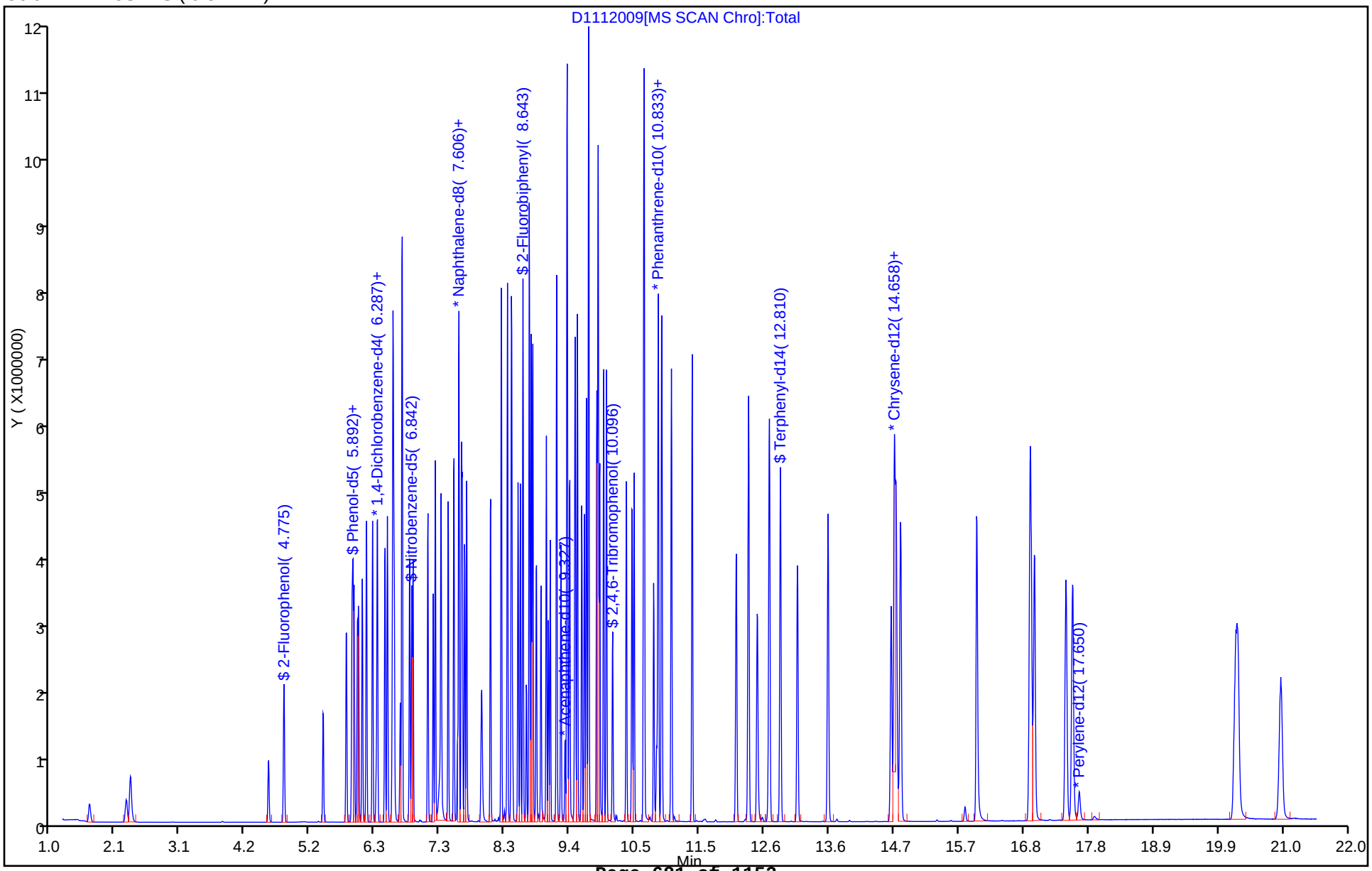
Report Date: 12-Nov-2014 14:12:29 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112009.D

Injection Date:	12-Nov-2014 13:02:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	9
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112010.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 12-Nov-2014 13:29:30 ALS Bottle#: 9 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004340-010
Misc. Info.: ic
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\PITCHROM\ChromData\CH732\20141112-4340.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 12-Nov-2014 14:12:30 Calib Date: 12-Nov-2014 13:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: piccolinov Date: 12-Nov-2014 14:10:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.266	6.266	0.000	94	116772	8.00	8.00	
* 2 Naphthalene-d8	136	7.585	7.580	0.005	99	504472	8.00	8.00	
* 3 Acenaphthene-d10	164	9.327	9.321	0.006	91	283337	8.00	8.00	
* 4 Phenanthrene-d10	188	10.812	10.801	0.011	97	428378	8.00	8.00	
* 5 Chrysene-d12	240	14.712	14.690	0.022	96	376403	8.00	8.00	
* 6 Perylene-d12	264	17.650	17.639	0.011	96	316025	8.00	8.00	
$ 7 2-Fluorophenol	112	4.775	4.775	0.000	89	1091479	80.0	77.0	
$ 8 Phenol-d5	99	5.876	5.870	0.006	97	1521053	80.0	72.1	
$ 9 Nitrobenzene-d5	82	6.843	6.837	0.006	86	1419667	80.0	77.7	
$ 10 2-Fluorobiphenyl	172	8.643	8.638	0.005	99	3374413	80.0	74.6	
$ 11 2,4,6-Tribromophenol	330	10.096	10.091	0.005	93	382286	80.0	89.6	
$ 12 Terphenyl-d14	244	12.815	12.804	0.011	98	3249667	80.0	78.9	
13 1,4-Dioxane	88	1.607	1.645	-0.038	94	275701	80.0	77.1	
14 N-Nitrosodimethylamine	74	2.200	2.227	-0.027	93	397626	80.0	81.7	
15 Pyridine	79	2.264	2.307	-0.043	96	695543	80.0	79.0	
21 Methyl methanesulfonate	80	4.524	4.524	0.000	86	499770	80.0	72.0	
25 Benzaldehyde	77	5.785	5.779	0.006	94	796756	80.0	67.5	
26 Phenol	94	5.892	5.886	0.006	97	1645516	80.0	68.9	
27 Aniline	93	5.908	5.902	0.006	69	1958003	80.0	70.8	
29 Bis(2-chloroethyl)ether	93	5.983	5.977	0.006	96	1203191	80.0	70.8	
30 2-Chlorophenol	128	6.041	6.041	0.000	95	1479625	80.0	75.9	
31 n-Decane	43	6.111	6.105	0.006	91	1266295	80.0	66.0	
32 1,3-Dichlorobenzene	146	6.207	6.207	0.000	98	1653848	80.0	72.1	
33 1,4-Dichlorobenzene	146	6.287	6.282	0.005	97	1651627	80.0	72.2	
34 Benzyl alcohol	108	6.410	6.404	0.006	96	935815	80.0	74.3	
35 1,2-Dichlorobenzene	146	6.447	6.447	0.000	99	1617961	80.0	71.9	
36 2-Methylphenol	108	6.533	6.522	0.011	94	1157595	80.0	65.7	
37 Indene	116	6.543	6.538	0.005	91	2026655	80.0	64.0	
38 2,2'-oxybis[1-chloropropan	45	6.559	6.554	0.005	95	1991125	80.0	65.6	
39 N-Nitrosopyrrolidine	100	6.661	6.645	0.016	95	686795	80.0	75.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 4-Methylphenol	108	6.688	6.682	0.006	77	1023816	80.0	55.5	
40 Acetophenone	105	6.688	6.682	0.006	86	1431577	80.0	60.9	
41 N-Nitrosodi-n-propylamine	70	6.688	6.682	0.006	61	646351	80.0	56.0	
45 Hexachloroethane	117	6.805	6.805	0.000	97	665116	80.0	74.6	
46 Nitrobenzene	77	6.864	6.859	0.005	86	1407860	80.0	76.4	
48 Isophorone	82	7.104	7.099	0.005	99	2551468	80.0	74.0	
49 2-Nitrophenol	139	7.190	7.190	0.000	87	902349	80.0	85.3	
50 2,4-Dimethylphenol	107	7.222	7.222	0.000	92	1368246	80.0	72.8	
52 Benzoic acid	122	7.334	7.270	0.064	55	919688	80.0	81.0	M
53 Bis(2-chloroethoxy)methane	93	7.318	7.313	0.005	99	1660583	80.0	72.4	
54 2,4-Dichlorophenol	162	7.430	7.430	0.000	91	1307015	80.0	76.6	
56 1,2,4-Trichlorobenzene	180	7.526	7.521	0.005	93	1491754	80.0	75.2	
58 Naphthalene	128	7.607	7.601	0.006	96	4717085	80.0	72.4	
59 4-Chloroaniline	127	7.649	7.644	0.005	98	1991213	80.0	73.0	
60 2,6-Dichlorophenol	162	7.660	7.655	0.005	98	1259239	80.0	73.6	
62 Hexachlorobutadiene	225	7.729	7.729	0.000	95	776339	80.0	75.2	
64 Caprolactam	113	7.981	7.948	0.033	79	474960	80.0	80.6	M
67 4-Chloro-3-methylphenol	107	8.119	8.109	0.010	94	1235374	80.0	74.6	
69 2-Methylnaphthalene	142	8.296	8.290	0.006	93	3205820	80.0	72.5	
71 1-Methylnaphthalene	142	8.392	8.386	0.006	93	3020591	80.0	72.2	
72 Hexachlorocyclopentadiene	237	8.456	8.451	0.005	94	845888	80.0	81.6	
73 1,2,4,5-Tetrachlorobenzene	216	8.461	8.456	0.005	96	1218014	80.0	69.2	
74 2,4,6-Trichlorophenol	196	8.563	8.557	0.006	91	945064	80.0	79.7	
75 2,4,5-Trichlorophenol	196	8.606	8.595	0.011	96	1002144	80.0	80.1	
76 1,1'-Biphenyl	154	8.750	8.739	0.011	93	3832723	80.0	73.6	
77 2-Chloronaphthalene	162	8.777	8.771	0.005	94	3309343	80.0	78.6	
79 2-Nitroaniline	65	8.862	8.851	0.011	91	821073	80.0	80.2	
82 Dimethyl phthalate	163	9.022	9.017	0.005	99	3121938	80.0	75.0	
83 1,3-Dinitrobenzene	168	9.060	9.049	0.011	90	528775	80.0	88.7	
84 2,6-Dinitrotoluene	165	9.086	9.081	0.005	94	744528	80.0	82.1	
85 Acenaphthylene	152	9.188	9.182	0.006	98	5014210	80.0	76.6	
86 3-Nitroaniline	138	9.263	9.252	0.011	97	932697	80.0	82.4	
87 2,4-Dinitrophenol	184	9.359	9.353	0.006	66	810371	160.0	161.3	
88 Acenaphthene	153	9.359	9.353	0.006	89	2709652	80.0	67.2	
89 4-Nitrophenol	109	9.402	9.385	0.017	82	741227	160.0	169.7	
91 2,4-Dinitrotoluene	165	9.487	9.476	0.011	96	873525	80.0	80.8	
93 Dibenzofuran	168	9.530	9.519	0.011	98	4218895	80.0	73.6	
96 2,3,4,6-Tetrachlorophenol	232	9.599	9.588	0.011	70	831020	80.0	83.6	
95 2,3,5,6-Tetrachlorophenol	232	9.642	9.631	0.011	92	808112	80.0	79.7	
97 2-Naphthylamine	143	9.674	9.663	0.011	98	3111753	80.0	73.6	
98 Diethyl phthalate	149	9.706	9.695	0.011	98	2606535	80.0	66.5	
99 Hexadecane	57	9.711	9.701	0.010	91	1775244	80.0	55.7	
100 4-Chlorophenyl phenyl ethe	204	9.840	9.834	0.006	90	1560164	80.0	76.2	
101 4-Nitroaniline	138	9.861	9.845	0.016	53	816464	80.0	76.8	
103 Fluorene	166	9.861	9.856	0.005	94	3109029	80.0	71.2	
104 4,6-Dinitro-2-methylphenol	198	9.888	9.877	0.011	91	1171005	160.0	168.9	
105 N-Nitrosodiphenylamine	169	9.952	9.941	0.011	60	2415116	80.0	78.9	
90 1,2-Diphenylhydrazine	77	10.000	9.989	0.011	97	3312255	80.0	76.4	
57 Azobenzene	77		9.989					ND	
110 4-Bromophenyl phenyl ether	248	10.320	10.315	0.005	64	868225	80.0	79.9	
112 Hexachlorobenzene	284	10.411	10.406	0.005	95	855096	80.0	79.0	
113 Atrazine	200	10.443	10.433	0.011	93	721915	80.0	71.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
116 Pentachlorophenol	266	10.604	10.593	0.011	94	1107024	160.0	159.8	
115 n-Octadecane	57	10.609	10.603	0.006	94	1752030	80.0	52.9	
121 Phenanthrene	178	10.839	10.828	0.011	97	4782784	80.0	77.7	
122 Anthracene	178	10.892	10.881	0.011	96	5029312	80.0	79.9	
124 Carbazole	167	11.052	11.042	0.010	95	4441249	80.0	80.4	
126 Di-n-butyl phthalate	149	11.389	11.378	0.011	99	5523943	80.0	82.7	
131 Fluoranthene	202	12.297	12.286	0.011	98	4745049	80.0	80.9	
132 Benzidine	184	12.441	12.431	0.011	99	2424762	80.0	80.9	
133 Pyrene	202	12.639	12.623	0.016	97	4961454	80.0	78.3	
138 Butyl benzyl phthalate	149	13.585	13.574	0.011	96	2245235	80.0	82.0	
144 3,3'-Dichlorobenzidine	252	14.610	14.594	0.016	65	1565926	80.0	89.6	
145 Bis(2-ethylhexyl) phthalat	149	14.658	14.642	0.016	95	3076198	80.0	83.6	
146 Benzo[a]anthracene	228	14.685	14.674	0.011	98	4223407	80.0	80.0	
147 Chrysene	228	14.760	14.744	0.016	94	4098178	80.0	80.9	
150 Di-n-octyl phthalate	149	15.994	15.978	0.016	99	5398338	80.0	87.6	
151 7,12-Dimethylbenz(a)anthra	256	16.859	16.833	0.027	74	1776406	80.0	88.1	
152 Benzo[b]fluoranthene	252	16.881	16.849	0.032	93	4207282	80.0	84.8	
153 Benzo[k]fluoranthene	252	16.934	16.907	0.027	99	4089288	80.0	79.3	
219 Benzo[e]pyrene	252	17.447	17.415	0.032	0	3852640	80.0	83.8	
154 Benzo[a]pyrene	252	17.548	17.522	0.026	74	3859891	80.0	85.5	
157 Indeno[1,2,3-cd]pyrene	276	20.193	20.145	0.048	92	4339115	80.0	95.9	
158 Dibenz(a,h)anthracene	278	20.230	20.187	0.043	64	3671649	80.0	96.8	
159 Benzo[g,h,i]perylene	276	20.930	20.877	0.053	87	3739161	80.0	98.4	M
S 199 Total Cresols	108				0		160.0	121.2	
S 197 Methyl Phenols,Total	108				0		160.0	121.2	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD80i_00005 Amount Added: 1.00 Units: mL

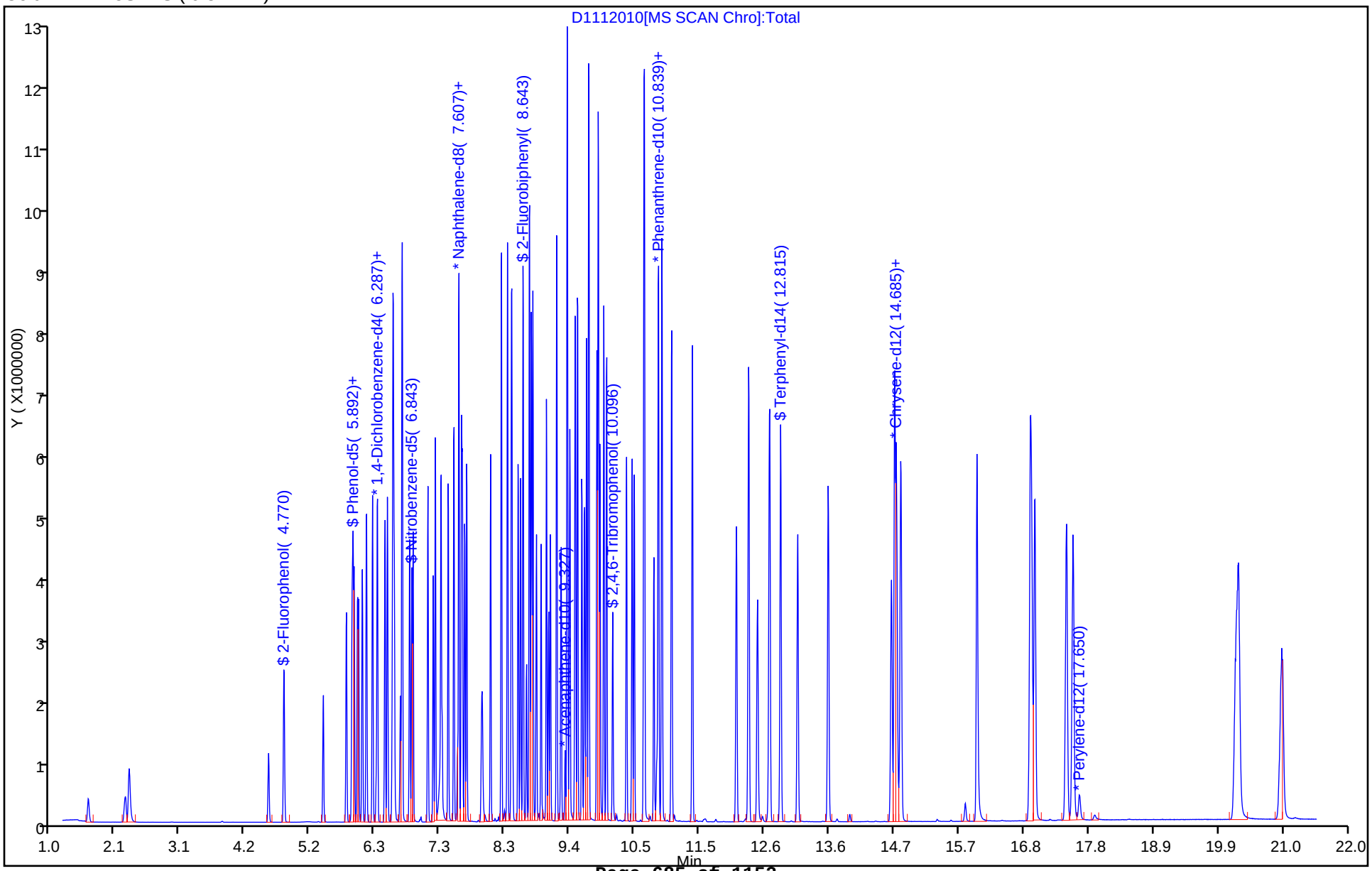
Report Date: 12-Nov-2014 14:12:30 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112010.D

Injection Date:	12-Nov-2014 13:29:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	IC			Worklist Smp#:	10
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

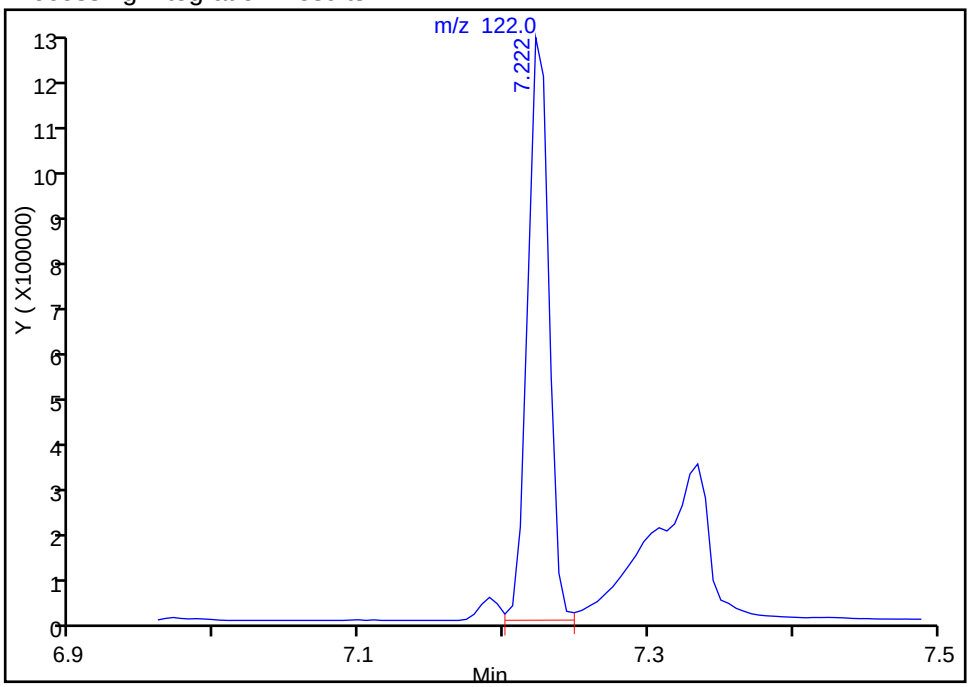
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH732\20141112-4340.b\D1112010.D				
Injection Date:	12-Nov-2014 13:29:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	9	Worklist Smp#:	10
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

52 Benzoic acid, CAS: 65-85-0

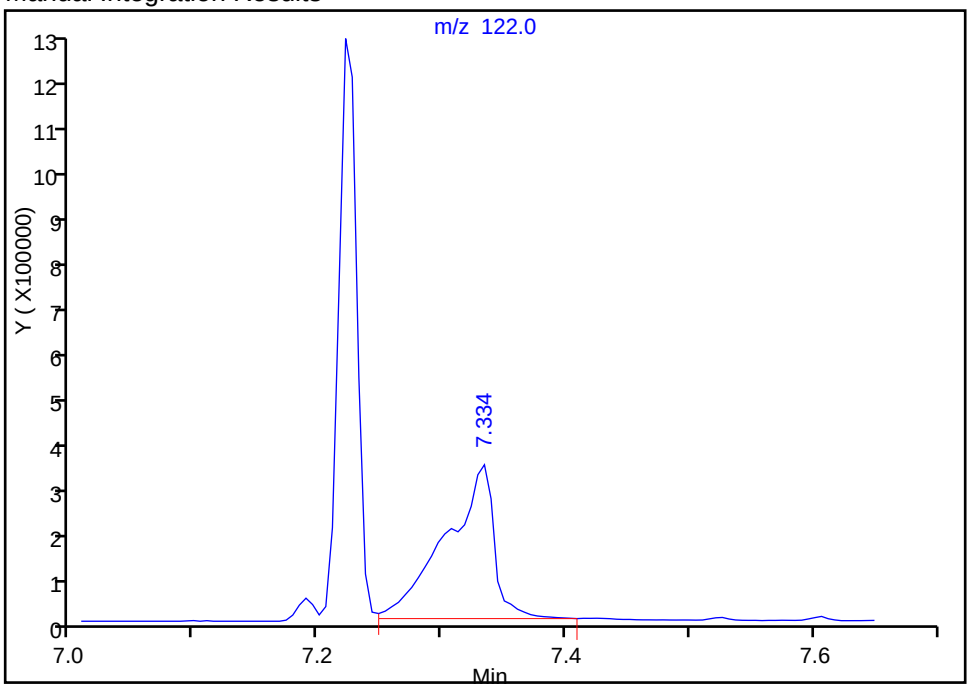
Processing Integration Results

RT: 7.22
Response: 1320420
Amount: 136.1124



Manual Integration Results

RT: 7.33
Response: 919688
Amount: 80.975132



Reviewer: piccolinov, 12-Nov-2014 13:56:37
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

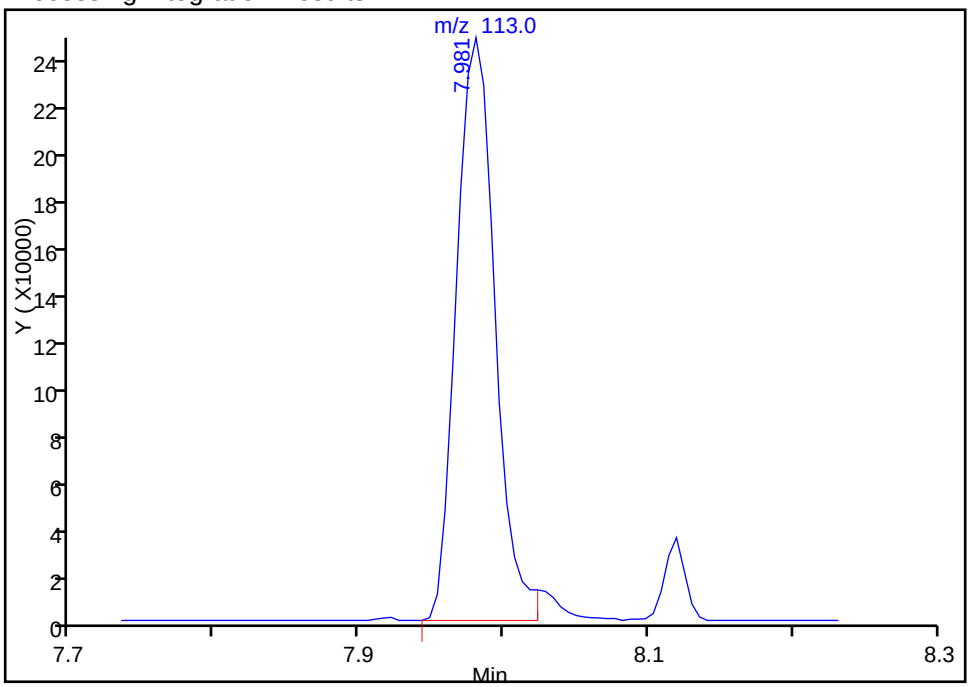
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH732\20141112-4340.b\D1112010.D				
Injection Date:	12-Nov-2014 13:29:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	9	Worklist Smp#:	10
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

64 Caprolactam, CAS: 105-60-2

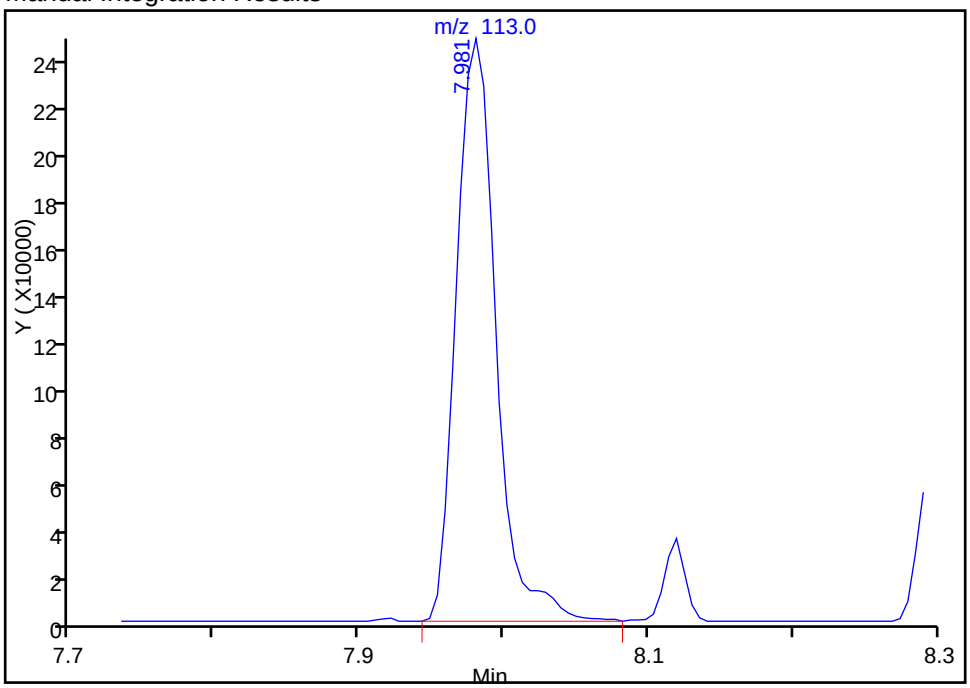
Processing Integration Results

RT: 7.98
Response: 462520
Amount: 78.736004



Manual Integration Results

RT: 7.98
Response: 474960
Amount: 80.587044



Reviewer: piccolinov, 12-Nov-2014 13:56:37
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

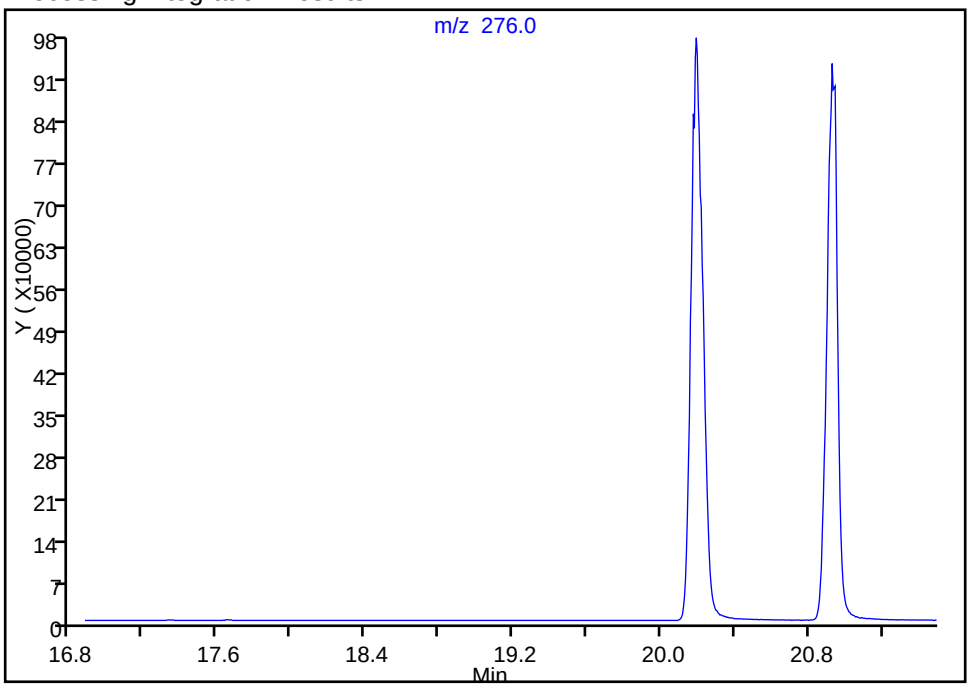
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH732\20141112-4340.b\D1112010.D				
Injection Date:	12-Nov-2014 13:29:30	Instrument ID:	CH732		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	9	Worklist Smp#:	10
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

159 Benzo[g,h,i]perylene, CAS: 191-24-2

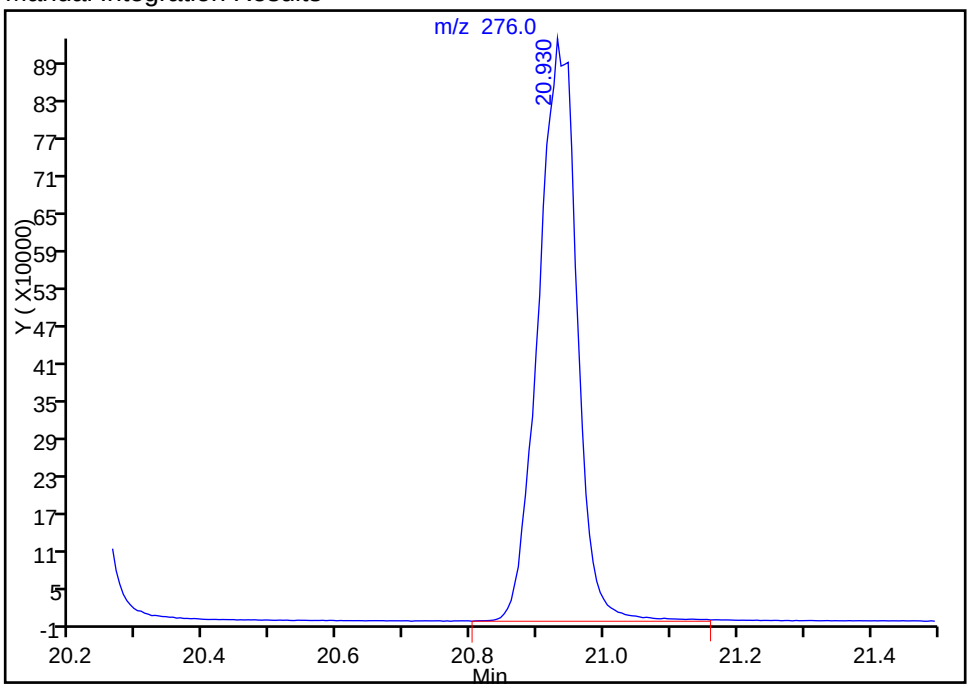
Not Detected
Expected RT: 20.88

Processing Integration Results



Manual Integration Results

RT: 20.93
Response: 3739161
Amount: 98.437383



Reviewer: piccolinov, 12-Nov-2014 13:56:37
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCVIS 180-126233/3 Calibration Date: 11/24/2014 12:00

Instrument ID: CH731 Calib Start Date: 11/18/2014 04:22

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 11/18/2014 07:43

Lab File ID: V1124003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5645	0.6228	0.0100	5.52	5.00	10.3	20.0
N-Nitrosodimethylamine	Ave	0.8422	0.8505	0.0100	5.05	5.00	1.0	20.0
Pyridine	Ave	1.524	1.541	0.0100	5.05	5.00	1.1	20.0
Methyl methanesulfonate	Ave	1.103	1.169	0.0100	5.30	5.00	6.0	20.0
Benzaldehyde	Ave	1.173	1.103	0.0100	4.70	5.00	-6.0	20.0
Phenol	Ave	1.741	1.604	0.8000	4.61	5.00	-7.9	20.0
Aniline	Ave	1.983	1.854	0.0100	4.68	5.00	-6.5	20.0
Bis(2-chloroethyl)ether	Ave	1.146	1.053	0.7000	4.60	5.00	-8.1	20.0
2-Chlorophenol	Ave	1.305	1.231	0.8000	4.72	5.00	-5.7	20.0
n-Decane	Ave	0.9799	0.8689		4.43	5.00	-11.3	20.0
1,3-Dichlorobenzene	Ave	1.525	1.592	0.0100	5.22	5.00	4.4	20.0
1,4-Dichlorobenzene	Ave	1.566	1.551	0.0100	4.95	5.00	-0.9	20.0
Benzyl alcohol	Ave	0.7583	0.6716	0.0100	4.43	5.00	-11.4	20.0
1,2-Dichlorobenzene	Ave	1.453	1.442	0.0100	4.96	5.00	-0.7	20.0
2-Methylphenol	Ave	1.200	1.105	0.7000	4.61	5.00	-7.9	20.0
Indene	Ave	2.147	2.021	0.0100	4.71	5.00	-5.8	20.0
2,2'-oxybis[1-chloropropane]	Ave	0.9712	0.8320	0.0100	4.28	5.00	-14.3	20.0
N-Nitrosopyrrolidine	Ave	0.4882	0.5128	0.0100	5.25	5.00	5.0	20.0
Acetophenone	Ave	2.077	1.958	0.0100	4.71	5.00	-5.8	20.0
Methylphenol, 3 & 4	Ave	1.350	1.208	0.6000	4.47	5.00	-10.5	20.0
N-Nitrosodi-n-propylamine	Ave	1.170	1.117	0.5000	4.77	5.00	-4.5	20.0
Hexachloroethane	Ave	0.7434	0.7502	0.3000	5.05	5.00	0.9	20.0
Nitrobenzene	Ave	0.5523	0.5315	0.2000	4.81	5.00	-3.8	20.0
Isophorone	Ave	0.8409	0.7605	0.4000	4.52	5.00	-9.6	20.0
2-Nitrophenol	Ave	0.1999	0.2009	0.1000	5.02	5.00	0.5	20.0
2,4-Dimethylphenol	Ave	0.4727	0.4540	0.2000	4.80	5.00	-4.0	20.0
Benzoic acid	Ave	0.1781	0.1456	0.0100	4.09	5.00	-18.3	20.0
Bis(2-chloroethoxy)methane	Ave	0.4237	0.3779	0.3000	4.46	5.00	-10.8	20.0
2,4-Dichlorophenol	Ave	0.3851	0.3565	0.2000	4.63	5.00	-7.4	20.0
1,2,4-Trichlorobenzene	Ave	0.4932	0.4807	0.0100	4.87	5.00	-2.5	20.0
Naphthalene	Ave	1.138	1.065	0.7000	4.68	5.00	-6.4	20.0
4-Chloroaniline	Ave	0.4677	0.4330	0.0100	4.63	5.00	-7.4	20.0
2,6-Dichlorophenol	Ave	0.3761	0.3498	0.0100	4.65	5.00	-7.0	20.0
Hexachlorobutadiene	Ave	0.4164	0.4164	0.0100	5.00	5.00	-0.0	20.0
Caprolactam	Ave	0.0932	0.0935	0.0100	5.02	5.00	0.3	20.0
4-Chloro-3-methylphenol	Ave	0.3882	0.3703	0.2000	4.77	5.00	-4.6	20.0
2-Methylnaphthalene	Ave	0.8231	0.7961	0.4000	4.84	5.00	-3.3	20.0
1-Methylnaphthalene	Ave	0.7581	0.7612	0.0100	5.02	5.00	0.4	20.0
Hexachlorocyclopentadiene	Ave	0.6388	0.5918	0.0500	4.63	5.00	-7.4	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.8716	0.8245	0.0100	4.73	5.00	-5.4	20.0
2,4,6-Trichlorophenol	Ave	0.5023	0.4720	0.2000	4.70	5.00	-6.0	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCVIS 180-126233/3 Calibration Date: 11/24/2014 12:00

Instrument ID: CH731 Calib Start Date: 11/18/2014 04:22

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 11/18/2014 07:43

Lab File ID: V1124003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,4,5-Trichlorophenol	Ave	0.5187	0.4826	0.2000	4.65	5.00	-7.0	20.0
1,1'-Biphenyl	Ave	1.452	1.305	0.0100	4.49	5.00	-10.1	20.0
2-Chloronaphthalene	Ave	1.293	1.147	0.8000	4.43	5.00	-11.3	20.0
2-Nitroaniline	Ave	0.3815	0.3837	0.0100	5.03	5.00	0.6	20.0
Dimethyl phthalate	Ave	1.346	1.335	0.0100	4.96	5.00	-0.9	20.0
1,3-Dinitrobenzene	Ave	0.2082	0.2151	0.0100	5.16	5.00	3.3	20.0
2,6-Dinitrotoluene	Ave	0.2926	0.2846	0.2000	4.86	5.00	-2.7	20.0
Acenaphthylene	Ave	1.790	1.693	0.9000	4.73	5.00	-5.5	20.0
3-Nitroaniline	Ave	0.2389	0.2460	0.0100	5.15	5.00	3.0	20.0
2,4-Dinitrophenol	Lin1		0.1937	0.0100	8.31	10.0	-16.9	20.0
Acenaphthene	Ave	1.221	1.149	0.9000	4.70	5.00	-5.9	20.0
4-Nitrophenol	Ave	0.3009	0.2870	0.0100	9.54	10.0	-4.6	20.0
2,4-Dinitrotoluene	Ave	0.4000	0.4175	0.2000	5.22	5.00	4.4	20.0
Dibenzofuran	Ave	1.872	1.779	0.8000	4.75	5.00	-5.0	20.0
2,3,5,6-Tetrachlorophenol	Ave	0.5467	0.5171	0.0100	4.73	5.00	-5.4	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.5132	0.5175	0.0100	5.04	5.00	0.8	20.0
2-Naphthylamine	Ave	1.009	1.032	0.0100	5.11	5.00	2.2	20.0
Diethyl phthalate	Ave	1.490	1.420	0.0100	4.76	5.00	-4.7	20.0
Hexadecane	Ave	0.3855	0.3910		5.07	5.00	1.4	20.0
4-Chlorophenyl phenyl ether	Ave	0.9327	0.9334	0.4000	5.00	5.00	0.0	20.0
4-Nitroaniline	Ave	0.2649	0.2759	0.0100	5.21	5.00	4.2	20.0
Fluorene	Ave	1.359	1.372	0.9000	5.05	5.00	1.0	20.0
4,6-Dinitro-2-methylphenol	Ave	0.1455	0.1498	0.0100	10.3	10.0	2.9	20.0
N-Nitrosodiphenylamine	Ave	0.5094	0.5008	0.0100	4.92	5.00	-1.7	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.7870	0.7468	0.0100	4.74	5.00	-5.1	20.0
4-Bromophenyl phenyl ether	Ave	0.2639	0.2687	0.1000	5.09	5.00	1.8	20.0
Hexachlorobenzene	Ave	0.2590	0.2492	0.1000	4.81	5.00	-3.8	20.0
Atrazine	Ave	0.2385	0.2424	0.0100	5.08	5.00	1.6	20.0
n-Octadecane	Ave	1.372	1.434		5.22	5.00	4.5	20.0
Pentachlorophenol	Lin1		0.1641	0.0500	8.35	10.0	-16.5	20.0
Phenanthrene	Ave	1.110	1.070	0.7000	4.82	5.00	-3.5	20.0
Anthracene	Ave	1.118	1.146	0.7000	5.13	5.00	2.5	20.0
Carbazole	Ave	0.8999	0.9148	0.0100	5.08	5.00	1.6	20.0
Di-n-butyl phthalate	Ave	1.090	1.118	0.0100	5.13	5.00	2.5	20.0
Fluoranthene	Ave	1.372	1.395	0.6000	5.08	5.00	1.7	20.0
Benzidine	Ave	0.4502	0.4183	0.0100		5.00	-7.1	20.0
Pyrene	Ave	1.354	1.317	0.6000	4.86	5.00	-2.7	20.0
Butyl benzyl phthalate	Ave	0.4476	0.4216	0.0100	4.71	5.00	-5.8	20.0
3,3'-Dichlorobenzidine	Ave	0.4077	0.3807	0.0100	4.67	5.00	-6.6	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.5951	0.5454	0.0100	4.58	5.00	-8.3	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCVIS 180-126233/3 Calibration Date: 11/24/2014 12:00

Instrument ID: CH731 Calib Start Date: 11/18/2014 04:22

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 11/18/2014 07:43

Lab File ID: V1124003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[a]anthracene	Ave	1.206	1.148	0.8000	4.76	5.00	-4.8	20.0
Chrysene	Ave	1.109	1.137	0.7000	5.12	5.00	2.4	20.0
Di-n-octyl phthalate	Ave	1.334	1.314	0.0100	4.93	5.00	-1.4	20.0
7,12-Dimethylbenz(a)anthracene	Ave	0.5534	0.5723	0.0100	5.17	5.00	3.4	20.0
Benzo[b]fluoranthene	Ave	1.448	1.420	0.7000	4.91	5.00	-1.9	20.0
Benzo[k]fluoranthene	Ave	1.390	1.399	0.7000	5.03	5.00	0.7	20.0
Benzo[e]pyrene	Ave	1.294	1.299	0.0100	5.02	5.00	0.4	20.0
Benzo[a]pyrene	Ave	1.262	1.242	0.7000	4.92	5.00	-1.5	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.151	1.056	0.5000	4.59	5.00	-8.3	20.0
Dibenz(a,h)anthracene	Ave	0.9832	0.9278	0.4000	4.72	5.00	-5.6	20.0
Benzo[g,h,i]perylene	Ave	0.9553	0.9019	0.5000	4.72	5.00	-5.6	20.0
2-Fluorophenol (Surr)	Ave	1.294	1.236		4.78	5.00	-4.5	20.0
Phenol-d5 (Surr)	Ave	1.575	1.429		4.54	5.00	-9.2	20.0
Nitrobenzene-d5 (Surr)	Ave	0.5653	0.5107		4.52	5.00	-9.7	20.0
2-Fluorobiphenyl	Ave	1.544	1.410		4.57	5.00	-8.7	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.0961	0.0908	0.0100	4.73	5.00	-5.5	20.0
Terphenyl-d14 (Surr)	Ave	0.9522	0.9342		4.91	5.00	-1.9	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141124-4564.b\V1124003.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 24-Nov-2014 12:00:30 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004564-003
Misc. Info.: CCVIS
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub4

Method: \\PITCHROM\ChromData\CH731\20141124-4564.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 25-Nov-2014 04:12:16 Calib Date: 18-Nov-2014 07:43:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: piccolinov Date: 24-Nov-2014 12:51:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.277	6.277	0.000	89	95418	8.00	8.00	
* 2 Naphthalene-d8	136	7.479	7.479	0.000	98	330882	8.00	8.00	
* 3 Acenaphthene-d10	164	9.098	9.098	0.000	92	261163	8.00	8.00	
* 4 Phenanthrene-d10	188	10.465	10.465	0.000	97	567448	8.00	8.00	
* 5 Chrysene-d12	240	13.948	13.948	0.000	96	620643	8.00	8.00	
* 6 Perylene-d12	264	16.855	16.855	0.000	98	449502	8.00	8.00	
$ 7 2-Fluorophenol	112	4.931	4.931	0.000	90	147370	10.0	9.55	
$ 8 Phenol-d5	99	5.919	5.919	0.000	85	170461	10.0	9.08	
$ 9 Nitrobenzene-d5	82	6.801	6.801	0.000	90	211211	10.0	9.03	
$ 10 2-Fluorobiphenyl	172	8.462	8.462	0.000	99	460242	10.0	9.13	
$ 11 2,4,6-Tribromophenol	330	9.819	9.819	0.000	83	64421	10.0	9.45	
$ 12 Terphenyl-d14	244	12.212	12.212	0.000	98	724790	10.0	9.81	
13 1,4-Dioxane	88	1.838	1.838	0.000	88	74278	10.0	11.0	
14 N-Nitrosodimethylamine	74	2.490	2.490	0.000	88	101435	10.0	10.1	
15 Pyridine	79	2.564	2.564	0.000	92	183741	10.0	10.1	
22 Methyl methanesulfonate	80	4.701	4.701	0.000	93	139448	10.0	10.6	
26 Benzaldehyde	77	5.839	5.839	0.000	89	131565	10.0	9.40	
27 Phenol	94	5.935	5.935	0.000	95	191327	10.0	9.21	
28 Aniline	93	5.951	5.951	0.000	95	221138	10.0	9.35	
29 Bis(2-chloroethyl)ether	93	6.015	6.015	0.000	94	125645	10.0	9.19	
31 2-Chlorophenol	128	6.074	6.074	0.000	90	146873	10.0	9.43	
32 n-Decane	43	6.133	6.133	0.000	78	103640	10.0	8.87	
33 1,3-Dichlorobenzene	146	6.224	6.224	0.000	89	189877	10.0	10.4	
34 1,4-Dichlorobenzene	146	6.293	6.293	0.000	84	185042	10.0	9.91	
36 Benzyl alcohol	108	6.405	6.405	0.000	81	80101	10.0	8.86	
37 1,2-Dichlorobenzene	146	6.443	6.443	0.000	87	172023	10.0	9.93	
38 2-Methylphenol	108	6.512	6.512	0.000	89	131830	10.0	9.21	
39 Indene	116	6.528	6.528	0.000	88	241105	10.0	9.42	
40 2,2'-oxybis[1-chloropropan	45	6.539	6.539	0.000	61	99235	10.0	8.57	
41 N-Nitrosopyrrolidine	100	6.624	6.624	0.000	74	61157	10.0	10.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
45 4-Methylphenol	108	6.656	6.656	0.000	52	144133	10.0	8.95	
44 N-Nitrosodi-n-propylamine	70	6.656	6.656	0.000	63	133257	10.0	9.55	
43 Acetophenone	105	6.656	6.656	0.000	75	233484	10.0	9.42	
47 Hexachloroethane	117	6.769	6.769	0.000	84	89480	10.0	10.1	
48 Nitrobenzene	77	6.817	6.817	0.000	86	219821	10.0	9.62	
50 Isophorone	82	7.041	7.041	0.000	96	314547	10.0	9.04	
51 2-Nitrophenol	139	7.121	7.121	0.000	78	83089	10.0	10.0	
52 2,4-Dimethylphenol	107	7.148	7.148	0.000	95	187793	10.0	9.60	
56 Benzoic acid	122	7.196	7.196	0.000	88	60217	10.0	8.17	M
55 Bis(2-chloroethoxy)methane	93	7.233	7.233	0.000	96	156283	10.0	8.92	
57 2,4-Dichlorophenol	162	7.340	7.340	0.000	92	147461	10.0	9.26	
61 Azobenzene	77		7.403				ND	ND	
59 1,2,4-Trichlorobenzene	180	7.426	7.426	0.000	90	198796	10.0	9.75	
60 Naphthalene	128	7.500	7.500	0.000	97	440330	10.0	9.36	
62 4-Chloroaniline	127	7.538	7.538	0.000	89	179095	10.0	9.26	
63 2,6-Dichlorophenol	162	7.554	7.554	0.000	92	144689	10.0	9.30	
64 Hexachlorobutadiene	225	7.618	7.618	0.000	94	172211	10.0	10.0	
67 Caprolactam	113	7.821	7.821	0.000	79	38664	10.0	10.0	
70 4-Chloro-3-methylphenol	107	7.965	7.965	0.000	89	153145	10.0	9.54	
72 2-Methylnaphthalene	142	8.136	8.136	0.000	88	329265	10.0	9.67	
75 1-Methylnaphthalene	142	8.227	8.227	0.000	88	314846	10.0	10.0	
76 Hexachlorocyclopentadiene	237	8.286	8.286	0.000	97	193180	10.0	9.26	
77 1,2,4,5-Tetrachlorobenzene	216	8.291	8.291	0.000	98	269150	10.0	9.46	
78 2,4,6-Trichlorophenol	196	8.387	8.387	0.000	94	154074	10.0	9.40	
79 2,4,5-Trichlorophenol	196	8.419	8.419	0.000	91	157540	10.0	9.30	
80 1,1'-Biphenyl	154	8.558	8.558	0.000	97	425921	10.0	8.99	
81 2-Chloronaphthalene	162	8.585	8.585	0.000	98	374330	10.0	8.87	
82 2-Nitroaniline	65	8.660	8.660	0.000	72	125263	10.0	10.1	
86 Dimethyl phthalate	163	8.809	8.809	0.000	95	435655	10.0	9.91	
87 1,3-Dinitrobenzene	168	8.847	8.847	0.000	81	70203	10.0	10.3	
88 2,6-Dinitrotoluene	165	8.868	8.868	0.000	84	92895	10.0	9.73	
89 Acenaphthylene	152	8.970	8.970	0.000	97	552570	10.0	9.45	
90 3-Nitroaniline	138	9.034	9.034	0.000	86	80291	10.0	10.3	
92 2,4-Dinitrophenol	184	9.124	9.124	0.000	71	126464	20.0	16.6	
91 Acenaphthene	153	9.124	9.124	0.000	85	375064	10.0	9.41	
93 4-Nitrophenol	109	9.162	9.162	0.000	81	187388	20.0	19.1	
94 2,4-Dinitrotoluene	165	9.242	9.242	0.000	84	136282	10.0	10.4	
95 Dibenzofuran	168	9.285	9.285	0.000	94	580884	10.0	9.50	
97 2,3,5,6-Tetrachlorophenol	232	9.349	9.349	0.000	91	168813	10.0	9.46	
99 2,3,4,6-Tetrachlorophenol	232	9.392	9.392	0.000	71	168937	10.0	10.1	
100 2-Naphthylamine	143	9.418	9.418	0.000	93	336758	10.0	10.2	
101 Diethyl phthalate	149	9.445	9.445	0.000	96	463449	10.0	9.53	
102 Hexadecane	57	9.450	9.450	0.000	83	161731	10.0	10.1	
104 4-Chlorophenyl phenyl ethe	204	9.579	9.579	0.000	92	304704	10.0	10.0	
105 4-Nitroaniline	138	9.595	9.595	0.000	79	90079	10.0	10.4	
106 Fluorene	166	9.600	9.600	0.000	94	448002	10.0	10.1	
108 4,6-Dinitro-2-methylphenol	198	9.621	9.621	0.000	90	212454	20.0	20.6	
109 N-Nitrosodiphenylamine	169	9.680	9.680	0.000	64	355214	10.0	9.83	
111 1,2-Diphenylhydrazine	77	9.723	9.723	0.000	99	529736	10.0	9.49	
116 4-Bromophenyl phenyl ether	248	10.027	10.027	0.000	66	190591	10.0	10.2	
118 Hexachlorobenzene	284	10.113	10.113	0.000	91	176769	10.0	9.62	
119 Atrazine	200	10.139	10.139	0.000	92	171922	10.0	10.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
122 Pentachlorophenol	266	10.284	10.284	0.000	88	232754	20.0	16.7	
121 n-Octadecane	57	10.284	10.284	0.000	87	170986	10.0	10.4	
126 Phenanthrene	178	10.487	10.487	0.000	97	759283	10.0	9.65	
128 Anthracene	178	10.535	10.535	0.000	96	812639	10.0	10.3	
130 Carbazole	167	10.674	10.674	0.000	96	648850	10.0	10.2	
132 Di-n-butyl phthalate	149	10.962	10.962	0.000	99	793030	10.0	10.3	
137 Fluoranthene	202	11.763	11.763	0.000	95	989159	10.0	10.2	
138 Benzidine	184	11.886	11.886	0.000	98	324478	10.0	9.29	
139 Pyrene	202	12.063	12.063	0.000	98	1021926	10.0	9.73	
144 Butyl benzyl phthalate	149	12.896	12.896	0.000	95	327044	10.0	9.42	
149 3,3'-Dichlorobenzidine	252	13.847	13.847	0.000	73	295344	10.0	9.34	
151 Bis(2-ethylhexyl) phthalat	149	13.884	13.884	0.000	95	423118	10.0	9.17	
152 Benzo[a]anthracene	228	13.927	13.927	0.000	96	890577	10.0	9.52	
153 Chrysene	228	13.996	13.996	0.000	95	881838	10.0	10.2	
156 Di-n-octyl phthalate	149	15.177	15.177	0.000	99	738418	10.0	9.86	
157 7,12-Dimethylbenz(a)anthra	256	16.037	16.037	0.000	90	321563	10.0	10.3	
158 Benzo[b]fluoranthene	252	16.059	16.059	0.000	94	798036	10.0	9.81	
159 Benzo[k]fluoranthene	252	16.112	16.112	0.000	96	786221	10.0	10.1	
176 Benzo[e]pyrene	252	16.635	16.635	0.000	0	730044	10.0	10.0	
160 Benzo[a]pyrene	252	16.742	16.742	0.000	74	698026	10.0	9.85	
163 Indeno[1,2,3-cd]pyrene	276	19.066	19.066	0.000	96	593185	10.0	9.17	
164 Dibenz(a,h)anthracene	278	19.093	19.093	0.000	86	521288	10.0	9.44	
165 Benzo[g,h,i]perylene	276	19.654	19.654	0.000	96	506768	10.0	9.44	
S 208 Methyl Phenols,Total	108				0		20.0	18.2	
S 206 Total Cresols	108				0		20.0	18.2	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

SVTAPSTD10i_00079 Amount Added: 1.00 Units: mL

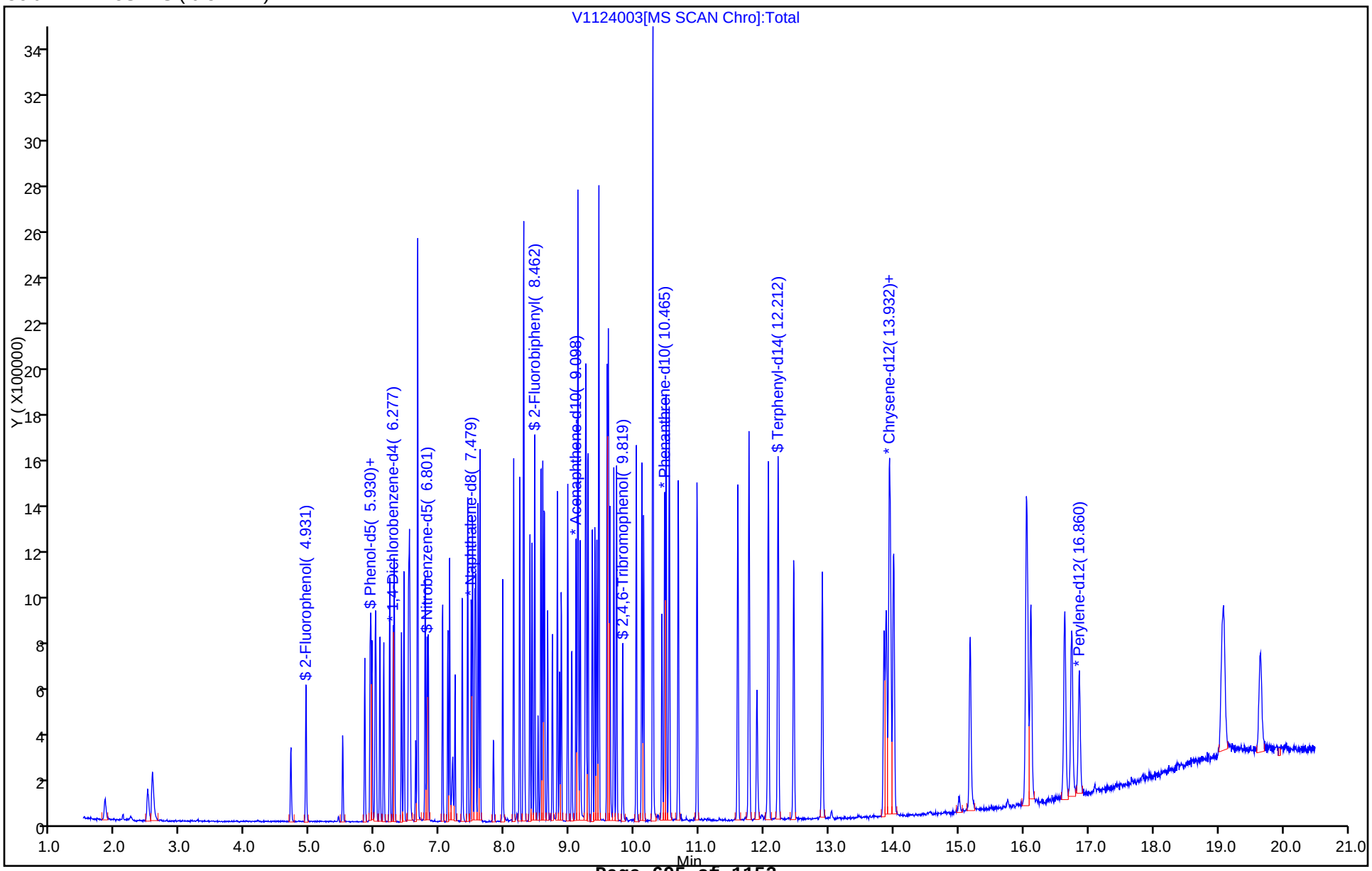
Report Date: 25-Nov-2014 04:12:17 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20141124-4564.b\V1124003.D

Injection Date:	24-Nov-2014 12:00:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

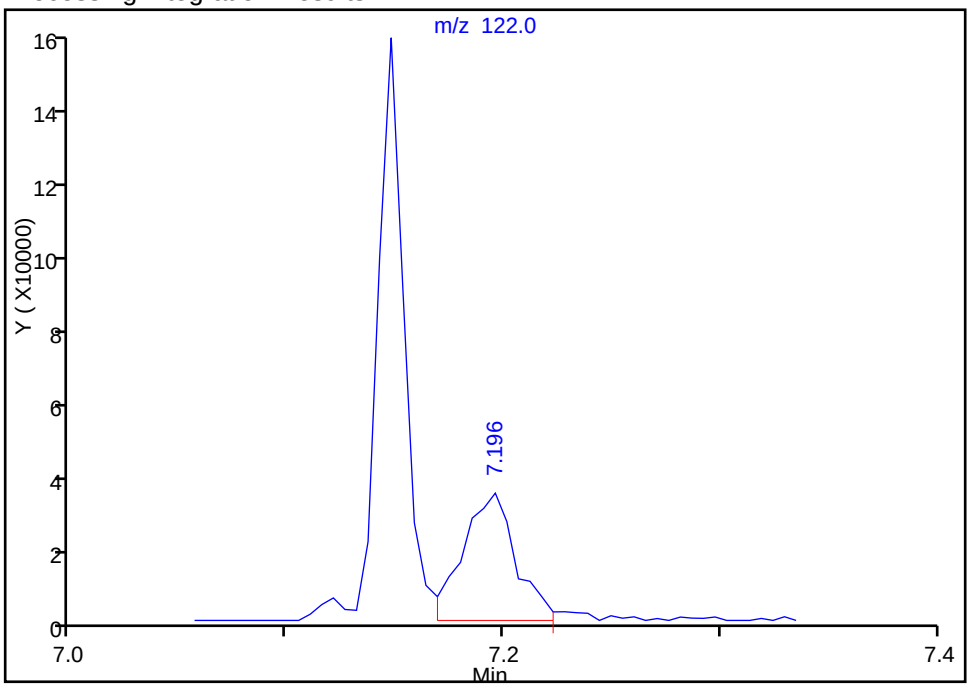
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20141124-4564.b\V1124003.D
Injection Date: 24-Nov-2014 12:00:30 Instrument ID: CH731
Lims ID: CCVIS
Client ID:
Operator ID: 003200 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL
Column: Rxi-5SilMS (0.32 mm) Detector MS SCAN

56 Benzoic acid, CAS: 65-85-0

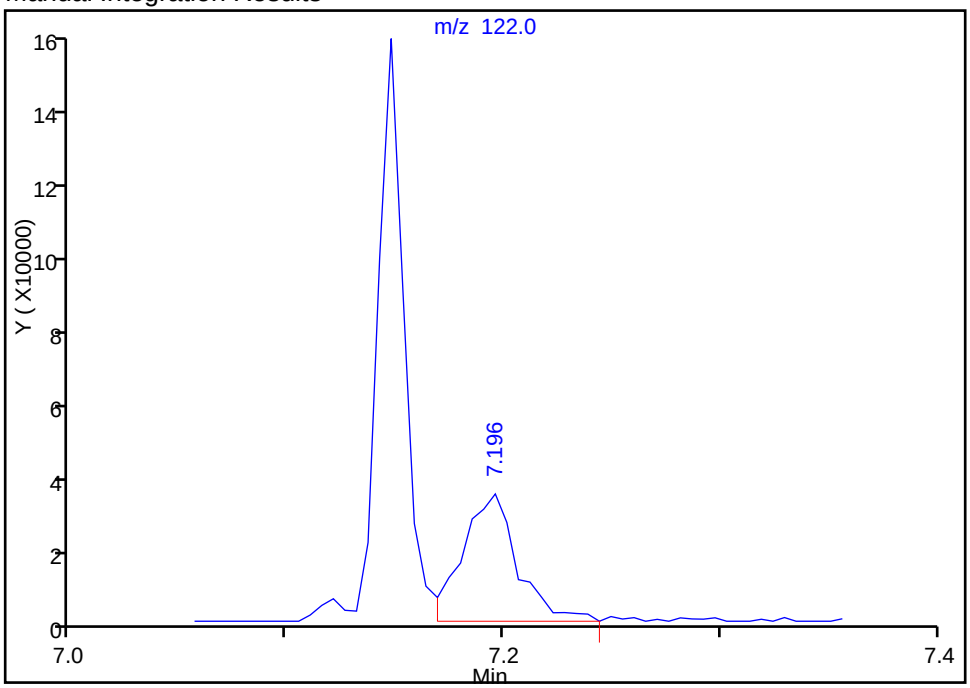
Processing Integration Results

RT: 7.20
Response: 58199
Amount: 7.900394



Manual Integration Results

RT: 7.20
Response: 60217
Amount: 8.174333



Reviewer: piccolinov, 24-Nov-2014 12:51:05
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCVIS 180-126682/3 Calibration Date: 11/28/2014 13:16

Instrument ID: CH732 Calib Start Date: 11/12/2014 10:20

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 11/12/2014 13:29

Lab File ID: D1128003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.2451	0.2431	0.0100	4.96	5.00	-0.8	20.0
N-Nitrosodimethylamine	Ave	0.3333	0.3157	0.0100	4.74	5.00	-5.3	20.0
Pyridine	Ave	0.6029	0.5789	0.0100	4.80	5.00	-4.0	20.0
Methyl methanesulfonate	Ave	0.4753	0.4989	0.0100	5.25	5.00	5.0	20.0
Benzaldehyde	Ave	0.8090	0.8591	0.0100	5.31	5.00	6.2	20.0
Phenol	Ave	1.637	1.717	0.8000	5.25	5.00	4.9	20.0
Aniline	Ave	1.894	1.962	0.0100	5.18	5.00	3.6	20.0
Bis(2-chloroethyl)ether	Ave	1.164	1.214	0.7000	5.22	5.00	4.3	20.0
2-Chlorophenol	Ave	1.336	1.380	0.8000	5.16	5.00	3.3	20.0
n-Decane	Ave	1.314	1.356		5.16	5.00	3.2	20.0
1,3-Dichlorobenzene	Ave	1.571	1.593	0.0100	5.07	5.00	1.4	20.0
1,4-Dichlorobenzene	Ave	1.566	1.610	0.0100	5.14	5.00	2.8	20.0
Benzyl alcohol	Ave	0.8627	0.8823	0.0100	5.11	5.00	2.3	20.0
1,2-Dichlorobenzene	Ave	1.541	1.573	0.0100	5.11	5.00	2.1	20.0
2-Methylphenol	Ave	1.207	1.280	0.7000	5.30	5.00	6.0	20.0
Indene	Ave	2.170	2.311	0.0100	5.33	5.00	6.5	20.0
2,2'-oxybis[1-chloropropane]	Ave	2.080	2.109	0.0100	5.07	5.00	1.4	20.0
N-Nitrosopyrrolidine	Ave	0.6273	0.6531	0.0100	5.21	5.00	4.1	20.0
Acetophenone	Ave	1.611	1.814	0.0100	5.63	5.00	12.6	20.0
Methylphenol, 3 & 4	Ave	1.265	1.350	0.6000	5.34	5.00	6.8	20.0
N-Nitrosodi-n-propylamine	Ave	0.7909	0.8406	0.5000	5.31	5.00	6.3	20.0
Hexachloroethane	Ave	0.6108	0.6443	0.3000	5.27	5.00	5.5	20.0
Nitrobenzene	Ave	0.2922	0.3009	0.2000	5.15	5.00	3.0	20.0
Isophorone	Ave	0.5467	0.5708	0.4000	5.22	5.00	4.4	20.0
2-Nitrophenol	Ave	0.1677	0.1779	0.1000	5.30	5.00	6.1	20.0
2,4-Dimethylphenol	Ave	0.2979	0.3081	0.2000	5.17	5.00	3.4	20.0
Benzoic acid	Lin1		0.1201	0.0100	4.42	5.00	-11.5	20.0
Bis(2-chloroethoxy)methane	Ave	0.3638	0.3800	0.3000	5.22	5.00	4.5	20.0
2,4-Dichlorophenol	Ave	0.2705	0.2772	0.2000	5.12	5.00	2.5	20.0
1,2,4-Trichlorobenzene	Ave	0.3145	0.3152	0.0100	5.01	5.00	0.2	20.0
Naphthalene	Ave	1.034	1.061	0.7000	5.13	5.00	2.6	20.0
4-Chloroaniline	Ave	0.4324	0.4474	0.0100	5.17	5.00	3.5	20.0
2,6-Dichlorophenol	Ave	0.2712	0.2769	0.0100	5.10	5.00	2.1	20.0
Hexachlorobutadiene	Ave	0.1638	0.1658	0.0100	5.06	5.00	1.2	20.0
Caprolactam	Ave	0.0935	0.1014	0.0100	5.42	5.00	8.5	20.0
4-Chloro-3-methylphenol	Ave	0.2625	0.2788	0.2000	5.31	5.00	6.2	20.0
2-Methylnaphthalene	Ave	0.7016	0.7159	0.4000	5.10	5.00	2.0	20.0
1-Methylnaphthalene	Ave	0.6639	0.6792	0.0100	5.12	5.00	2.3	20.0
Hexachlorocyclopentadiene	Ave	0.2926	0.3148	0.0500	5.38	5.00	7.6	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.4971	0.5017	0.0100	5.05	5.00	0.9	20.0
2,4,6-Trichlorophenol	Ave	0.3349	0.3334	0.2000	4.98	5.00	-0.4	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCVIS 180-126682/3 Calibration Date: 11/28/2014 13:16

Instrument ID: CH732 Calib Start Date: 11/12/2014 10:20

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 11/12/2014 13:29

Lab File ID: D1128003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,4,5-Trichlorophenol	Ave	0.3531	0.3564	0.2000	5.05	5.00	0.9	20.0
1,1'-Biphenyl	Ave	1.470	1.467	0.0100	4.99	5.00	-0.2	20.0
2-Chloronaphthalene	Ave	1.189	1.219	0.8000	5.12	5.00	2.5	20.0
2-Nitroaniline	Ave	0.2890	0.3171	0.0100	5.49	5.00	9.7	20.0
Dimethyl phthalate	Ave	1.175	1.201	0.0100	5.11	5.00	2.2	20.0
1,3-Dinitrobenzene	Ave	0.1683	0.1897	0.0100	5.63	5.00	12.7	20.0
2,6-Dinitrotoluene	Ave	0.2561	0.2702	0.2000	5.28	5.00	5.5	20.0
Acenaphthylene	Ave	1.849	1.892	0.9000	5.12	5.00	2.4	20.0
3-Nitroaniline	Ave	0.3196	0.3442	0.0100	5.38	5.00	7.7	20.0
2,4-Dinitrophenol	Lin2		0.1419	0.0100	11.2	10.0	12.4	20.0
Acenaphthene	Ave	1.138	1.189	0.9000	5.22	5.00	4.5	20.0
4-Nitrophenol	Ave	0.1233	0.1376	0.0100	11.2	10.0	11.6	20.0
2,4-Dinitrotoluene	Ave	0.3053	0.3534	0.2000	5.79	5.00	15.8	20.0
Dibenzofuran	Ave	1.618	1.639	0.8000	5.07	5.00	1.3	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.2807	0.2760	0.0100	4.92	5.00	-1.7	20.0
2,3,5,6-Tetrachlorophenol	Ave	0.2861	0.2865	0.0100	5.01	5.00	0.1	20.0
2-Naphthylamine	Ave	1.194	1.239	0.0100	5.19	5.00	3.8	20.0
Diethyl phthalate	Ave	1.106	1.222	0.0100	5.52	5.00	10.4	20.0
Hexadecane	Ave	0.5056	0.5276		5.22	5.00	4.4	20.0
4-Chlorophenyl phenyl ether	Ave	0.5781	0.5756	0.4000	4.98	5.00	-0.4	20.0
4-Nitroaniline	Ave	0.3002	0.3390	0.0100	5.65	5.00	12.9	20.0
Fluorene	Ave	1.233	1.301	0.9000	5.27	5.00	5.5	20.0
4,6-Dinitro-2-methylphenol	Lin2		0.1172	0.0100	10.1	10.0	0.8	20.0
N-Nitrosodiphenylamine	Ave	0.5718	0.5837	0.0100	5.10	5.00	2.1	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.8099	0.8694	0.0100	5.37	5.00	7.3	20.0
4-Bromophenyl phenyl ether	Ave	0.2030	0.2022	0.1000	4.98	5.00	-0.4	20.0
Hexachlorobenzene	Ave	0.2020	0.1969	0.1000	4.87	5.00	-2.5	20.0
Atrazine	Ave	0.1893	0.1992	0.0100	5.26	5.00	5.2	20.0
n-Octadecane	Ave	2.270	2.428		5.35	5.00	7.0	20.0
Pentachlorophenol	Ave	0.1293	0.1068	0.0500	8.26	10.0	-17.4	20.0
Phenanthrene	Ave	1.149	1.162	0.7000	5.06	5.00	1.1	20.0
Anthracene	Ave	1.176	1.194	0.7000	5.08	5.00	1.5	20.0
Carbazole	Ave	1.031	1.082	0.0100	5.25	5.00	4.9	20.0
Di-n-butyl phthalate	Ave	1.248	1.320	0.0100	5.29	5.00	5.8	20.0
Fluoranthene	Ave	1.096	1.121	0.6000	5.11	5.00	2.3	20.0
Benzidine	Ave	0.6371	0.5623	0.0100		5.00	-11.7	20.0
Pyrene	Ave	1.347	1.401	0.6000	5.20	5.00	4.0	20.0
Butyl benzyl phthalate	Ave	0.5821	0.6203	0.0100	5.33	5.00	6.6	20.0
3,3'-Dichlorobenzidine	Ave	0.3714	0.3645	0.0100	4.91	5.00	-1.9	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.7824	0.8522	0.0100	5.45	5.00	8.9	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCVIS 180-126682/3 Calibration Date: 11/28/2014 13:16

Instrument ID: CH732 Calib Start Date: 11/12/2014 10:20

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 11/12/2014 13:29

Lab File ID: D1128003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[a]anthracene	Ave	1.123	1.163	0.8000	5.18	5.00	3.6	20.0
Chrysene	Ave	1.076	1.069	0.7000	4.97	5.00	-0.7	20.0
Di-n-octyl phthalate	Ave	1.560	1.829	0.0100	5.86	5.00	17.2	20.0
7,12-Dimethylbenz(a)anthracene	Ave	0.5107	0.5468	0.0100	5.35	5.00	7.1	20.0
Benzo[b]fluoranthene	Ave	1.256	1.320	0.7000	5.26	5.00	5.1	20.0
Benzo[k]fluoranthene	Ave	1.306	1.396	0.7000	5.35	5.00	6.9	20.0
Benzo[e]pyrene	Ave	1.164	1.192	0.0100	5.12	5.00	2.4	20.0
Benzo[a]pyrene	Ave	1.143	1.152	0.7000	5.04	5.00	0.7	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.145	1.157	0.5000	5.05	5.00	1.0	20.0
Dibenz(a,h)anthracene	Ave	0.9607	0.9591	0.4000	4.99	5.00	-0.2	20.0
Benzo[g,h,i]perylene	Ave	0.9616	0.9756	0.5000	5.07	5.00	1.5	20.0
2-Fluorophenol (Surr)	Ave	0.9712	1.015		5.22	5.00	4.5	20.0
Phenol-d5 (Surr)	Ave	1.445	1.551		5.37	5.00	7.4	20.0
Nitrobenzene-d5 (Surr)	Ave	0.2898	0.3017		5.20	5.00	4.1	20.0
2-Fluorobiphenyl	Ave	1.277	1.267		4.96	5.00	-0.8	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.0797	0.0818	0.0100	5.13	5.00	2.6	20.0
Terphenyl-d14 (Surr)	Ave	0.8757	0.8800		5.02	5.00	0.5	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20141128-4633.b\D1128003.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 28-Nov-2014 13:16:30 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004633-003
Misc. Info.: CCVIS
Operator ID: 003200 Instrument ID: CH732
Sublist: chrom-BNA_CH732*sub4

Method: \\PITCHROM\ChromData\CH732\20141128-4633.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 01-Dec-2014 02:15:20 Calib Date: 12-Nov-2014 13:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: piccolinov Date: 28-Nov-2014 13:45:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.287	6.287	0.000	94	220832	8.00	8.00	
* 2 Naphthalene-d8	136	7.596	7.596	0.000	99	992198	8.00	8.00	
* 3 Acenaphthene-d10	164	9.327	9.327	0.000	91	579578	8.00	8.00	
* 4 Phenanthrene-d10	188	10.801	10.801	0.000	97	913220	8.00	8.00	
* 5 Chrysene-d12	240	14.674	14.674	0.000	96	765150	8.00	8.00	
* 6 Perylene-d12	264	17.607	17.607	0.000	95	550122	8.00	8.00	
$ 7 2-Fluorophenol	112	4.818	4.818	0.000	90	280136	10.0	10.4	
$ 8 Phenol-d5	99	5.902	5.902	0.000	96	428271	10.0	10.7	
$ 9 Nitrobenzene-d5	82	6.853	6.853	0.000	86	374118	10.0	10.4	
$ 10 2-Fluorobiphenyl	172	8.648	8.648	0.000	99	917934	10.0	9.92	
$ 11 2,4,6-Tribromophenol	330	10.091	10.091	0.000	90	93335	10.0	10.3	
$ 12 Terphenyl-d14	244	12.788	12.788	0.000	98	841684	10.0	10.0	
13 1,4-Dioxane	88	1.655	1.655	0.000	93	67101	10.0	9.92	
14 N-Nitrosodimethylamine	74	2.269	2.269	0.000	93	87145	10.0	9.47	
15 Pyridine	79	2.339	2.339	0.000	97	159791	10.0	9.60	
21 Methyl methanesulfonate	80	4.567	4.567	0.000	87	137705	10.0	10.5	
25 Benzaldehyde	77	5.806	5.806	0.000	94	237135	10.0	10.6	
26 Phenol	94	5.913	5.913	0.000	99	474072	10.0	10.5	
27 Aniline	93	5.929	5.929	0.000	94	541490	10.0	10.4	
29 Bis(2-chloroethyl)ether	93	5.998	5.998	0.000	96	335209	10.0	10.4	
30 2-Chlorophenol	128	6.062	6.062	0.000	95	380859	10.0	10.3	
31 n-Decane	43	6.127	6.127	0.000	93	374227	10.0	10.3	
32 1,3-Dichlorobenzene	146	6.228	6.228	0.000	99	439863	10.0	10.1	
33 1,4-Dichlorobenzene	146	6.303	6.303	0.000	96	444554	10.0	10.3	
34 Benzyl alcohol	108	6.426	6.426	0.000	96	243541	10.0	10.2	
35 1,2-Dichlorobenzene	146	6.463	6.463	0.000	99	434302	10.0	10.2	
36 2-Methylphenol	108	6.549	6.549	0.000	93	353273	10.0	10.6	
37 Indene	116	6.559	6.559	0.000	90	637972	10.0	10.7	
38 2,2'-oxybis[1-chloropropan	45	6.570	6.570	0.000	94	582226	10.0	10.1	
39 N-Nitrosopyrrolidine	100	6.666	6.666	0.000	96	180276	10.0	10.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
41 N-Nitrosodi-n-propylamine	70	6.698	6.698	0.000	73	232046	10.0	10.6	
40 Acetophenone	105	6.698	6.698	0.000	92	500690	10.0	11.3	
42 4-Methylphenol	108	6.698	6.698	0.000	91	372661	10.0	10.7	
45 Hexachloroethane	117	6.821	6.821	0.000	97	177838	10.0	10.5	
46 Nitrobenzene	77	6.875	6.875	0.000	86	373239	10.0	10.3	
48 Isophorone	82	7.115	7.115	0.000	99	707908	10.0	10.4	
49 2-Nitrophenol	139	7.206	7.206	0.000	89	220671	10.0	10.6	
50 2,4-Dimethylphenol	107	7.238	7.238	0.000	93	382095	10.0	10.3	
52 Benzoic acid	122	7.291	7.291	0.000	86	148960	10.0	8.85	
53 Bis(2-chloroethoxy)methane	93	7.323	7.323	0.000	99	471347	10.0	10.4	
54 2,4-Dichlorophenol	162	7.446	7.446	0.000	92	343776	10.0	10.2	
56 1,2,4-Trichlorobenzene	180	7.537	7.537	0.000	94	390962	10.0	10.0	
58 Naphthalene	128	7.617	7.617	0.000	96	1315326	10.0	10.3	
59 4-Chloroaniline	127	7.654	7.654	0.000	98	554876	10.0	10.3	
60 2,6-Dichlorophenol	162	7.670	7.670	0.000	98	343445	10.0	10.2	
62 Hexachlorobutadiene	225	7.740	7.740	0.000	96	205602	10.0	10.1	
64 Caprolactam	113	7.964	7.964	0.000	80	125732	10.0	10.8	
67 4-Chloro-3-methylphenol	107	8.119	8.119	0.000	96	345762	10.0	10.6	
69 2-Methylnaphthalene	142	8.301	8.301	0.000	93	887925	10.0	10.2	
71 1-Methylnaphthalene	142	8.397	8.397	0.000	94	842417	10.0	10.2	
72 Hexachlorocyclopentadiene	237	8.461	8.461	0.000	97	228046	10.0	10.8	
73 1,2,4,5-Tetrachlorobenzene	216	8.466	8.466	0.000	97	363455	10.0	10.1	
74 2,4,6-Trichlorophenol	196	8.568	8.568	0.000	92	241563	10.0	9.96	
75 2,4,5-Trichlorophenol	196	8.605	8.605	0.000	96	258195	10.0	10.1	
76 1,1'-Biphenyl	154	8.750	8.750	0.000	94	1063000	10.0	9.98	
77 2-Chloronaphthalene	162	8.782	8.782	0.000	95	882882	10.0	10.2	
79 2-Nitroaniline	65	8.862	8.862	0.000	88	229751	10.0	11.0	
82 Dimethyl phthalate	163	9.017	9.017	0.000	99	870223	10.0	10.2	
83 1,3-Dinitrobenzene	168	9.059	9.059	0.000	89	137404	10.0	11.3	
84 2,6-Dinitrotoluene	165	9.086	9.086	0.000	95	195739	10.0	10.6	
85 Acenaphthylene	152	9.188	9.188	0.000	98	1370830	10.0	10.2	
86 3-Nitroaniline	138	9.257	9.257	0.000	97	249350	10.0	10.8	
87 2,4-Dinitrophenol	184	9.353	9.353	0.000	86	205538	20.0	22.5	
88 Acenaphthene	153	9.359	9.359	0.000	94	861413	10.0	10.4	
89 4-Nitrophenol	109	9.396	9.396	0.000	87	199399	20.0	22.3	
91 2,4-Dinitrotoluene	165	9.482	9.482	0.000	95	256022	10.0	11.6	
93 Dibenzofuran	168	9.524	9.524	0.000	97	1187730	10.0	10.1	
96 2,3,4,6-Tetrachlorophenol	232	9.594	9.594	0.000	72	199923	10.0	9.83	
95 2,3,5,6-Tetrachlorophenol	232	9.636	9.636	0.000	91	207544	10.0	10.0	
97 2-Naphthylamine	143	9.668	9.668	0.000	97	897968	10.0	10.4	
98 Diethyl phthalate	149	9.695	9.695	0.000	99	885126	10.0	11.0	
99 Hexadecane	57	9.701	9.701	0.000	91	654379	10.0	10.4	
100 4-Chlorophenyl phenyl ethe	204	9.834	9.834	0.000	94	417013	10.0	9.96	
101 4-Nitroaniline	138	9.850	9.850	0.000	91	245622	10.0	11.3	
103 Fluorene	166	9.855	9.855	0.000	95	942222	10.0	10.5	
104 4,6-Dinitro-2-methylphenol	198	9.882	9.882	0.000	87	267467	20.0	20.2	
105 N-Nitrosodiphenylamine	169	9.946	9.946	0.000	62	666250	10.0	10.2	
57 Azobenzene	77		9.989				ND	ND	
90 1,2-Diphenylhydrazine	77	9.989	9.989	0.000	99	992473	10.0	10.7	
110 4-Bromophenyl phenyl ether	248	10.310	10.310	0.000	68	230822	10.0	9.96	
112 Hexachlorobenzene	284	10.406	10.406	0.000	93	224780	10.0	9.75	
113 Atrazine	200	10.432	10.432	0.000	90	227410	10.0	10.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.593	10.593	0.000	94	670245	10.0	10.7	
116 Pentachlorophenol	266	10.593	10.593	0.000	92	243846	20.0	16.5	
121 Phenanthrene	178	10.828	10.828	0.000	97	1326382	10.0	10.1	
122 Anthracene	178	10.881	10.881	0.000	97	1362556	10.0	10.2	
124 Carbazole	167	11.041	11.041	0.000	96	1235008	10.0	10.5	
126 Di-n-butyl phthalate	149	11.367	11.367	0.000	100	1506982	10.0	10.6	
131 Fluoranthene	202	12.281	12.281	0.000	98	1279425	10.0	10.2	
132 Benzidine	184	12.425	12.425	0.000	100	537838	10.0	8.83	
133 Pyrene	202	12.612	12.612	0.000	97	1339935	10.0	10.4	
138 Butyl benzyl phthalate	149	13.552	13.552	0.000	98	593259	10.0	10.7	
144 3,3'-Dichlorobenzidine	252	14.573	14.573	0.000	75	348616	10.0	9.81	
145 Bis(2-ethylhexyl) phthalat	149	14.615	14.615	0.000	97	815034	10.0	10.9	
146 Benzo[a]anthracene	228	14.653	14.653	0.000	99	1112073	10.0	10.4	
147 Chrysene	228	14.722	14.722	0.000	98	1022326	10.0	9.93	
150 Di-n-octyl phthalate	149	15.940	15.940	0.000	99	1257785	10.0	11.7	
151 7,12-Dimethylbenz(a)anthra	256	16.806	16.806	0.000	89	376014	10.0	10.7	
152 Benzo[b]fluoranthene	252	16.822	16.822	0.000	99	907707	10.0	10.5	
153 Benzo[k]fluoranthene	252	16.881	16.881	0.000	98	959927	10.0	10.7	
219 Benzo[e]pyrene	252	17.388	17.388	0.000	0	819599	10.0	10.2	
154 Benzo[a]pyrene	252	17.490	17.490	0.000	81	792014	10.0	10.1	
157 Indeno[1,2,3-cd]pyrene	276	20.107	20.107	0.000	95	795541	10.0	10.1	
158 Dibenz(a,h)anthracene	278	20.139	20.139	0.000	91	659522	10.0	9.98	
159 Benzo[g,h,i]perylene	276	20.828	20.828	0.000	96	670899	10.0	10.1	
S 197 Methyl Phenols,Total	108				0		20.0	21.3	
S 199 Total Cresols	108				0		20.0	21.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SVTAPSTD10i_00080 Amount Added: 1.00 Units: mL

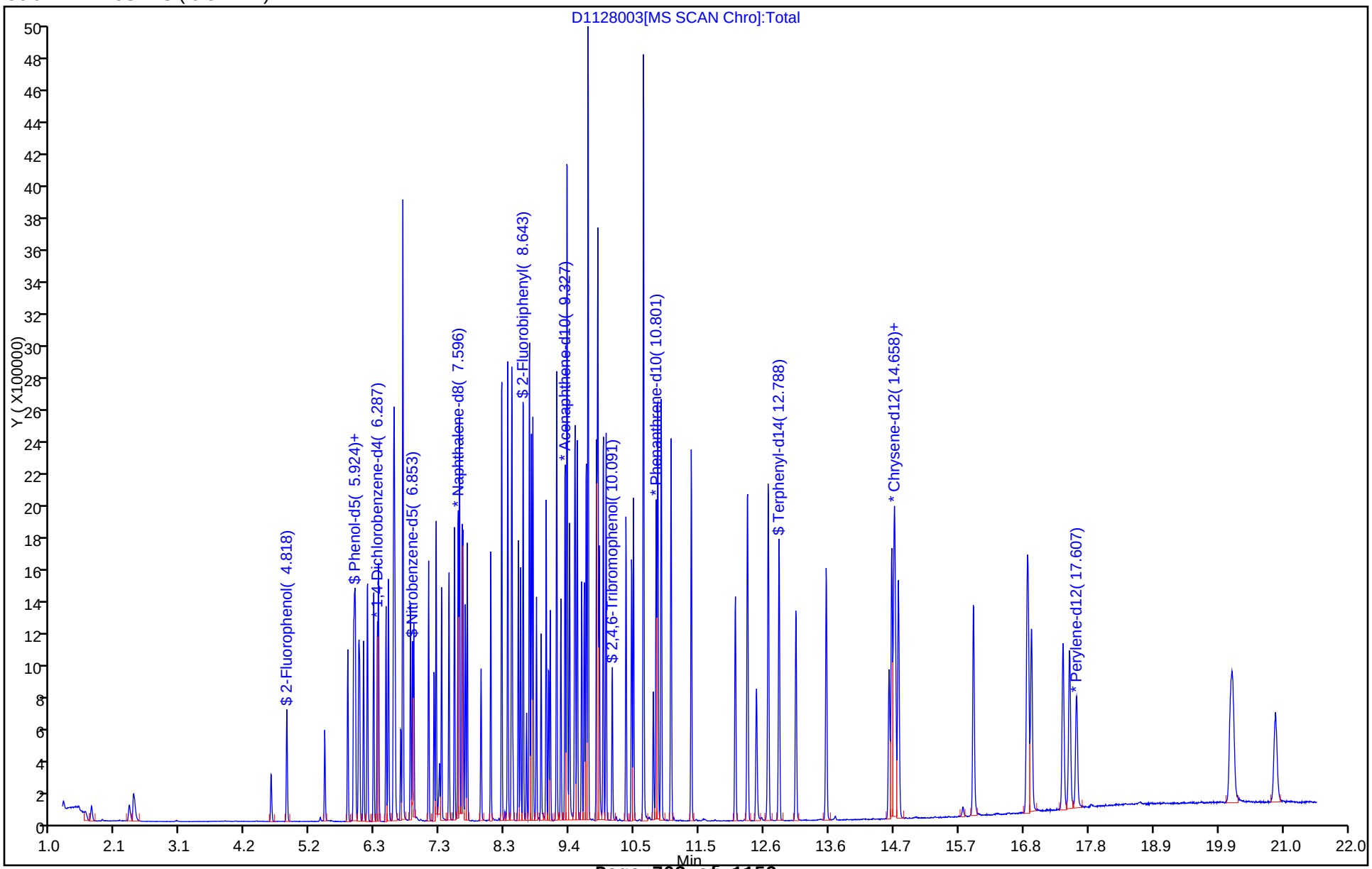
Report Date: 01-Dec-2014 02:15:20 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20141128-4633.b\D1128003.D

Injection Date:	28-Nov-2014 13:16:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118002.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 18-Nov-2014 04:03:30 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004448-002
Misc. Info.: ,dftpp
Operator ID: 003200 Instrument ID: CH731

Method: \\PITCHROM\ChromData\CH731\20141118-4448.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 18-Nov-2014 08:45:51 Calib Date: 18-Nov-2014 07:43:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: piccolinov Date: 18-Nov-2014 04:32:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
198 Pentachlorophenol_T	266	5.412	5.412	0.000	87	417339	NR	NR	
199 DFTPP									
200 Benzidine_T	184	8.014	8.014	0.000	98	2264422	NR	NR	
201 4,4'-DDE	246		8.346					ND	
202 4,4'-DDD	235	9.018	8.993	0.025	95	18243		NR	
203 4,4'-DDT	235	9.547	9.547	0.000	96	1298894	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

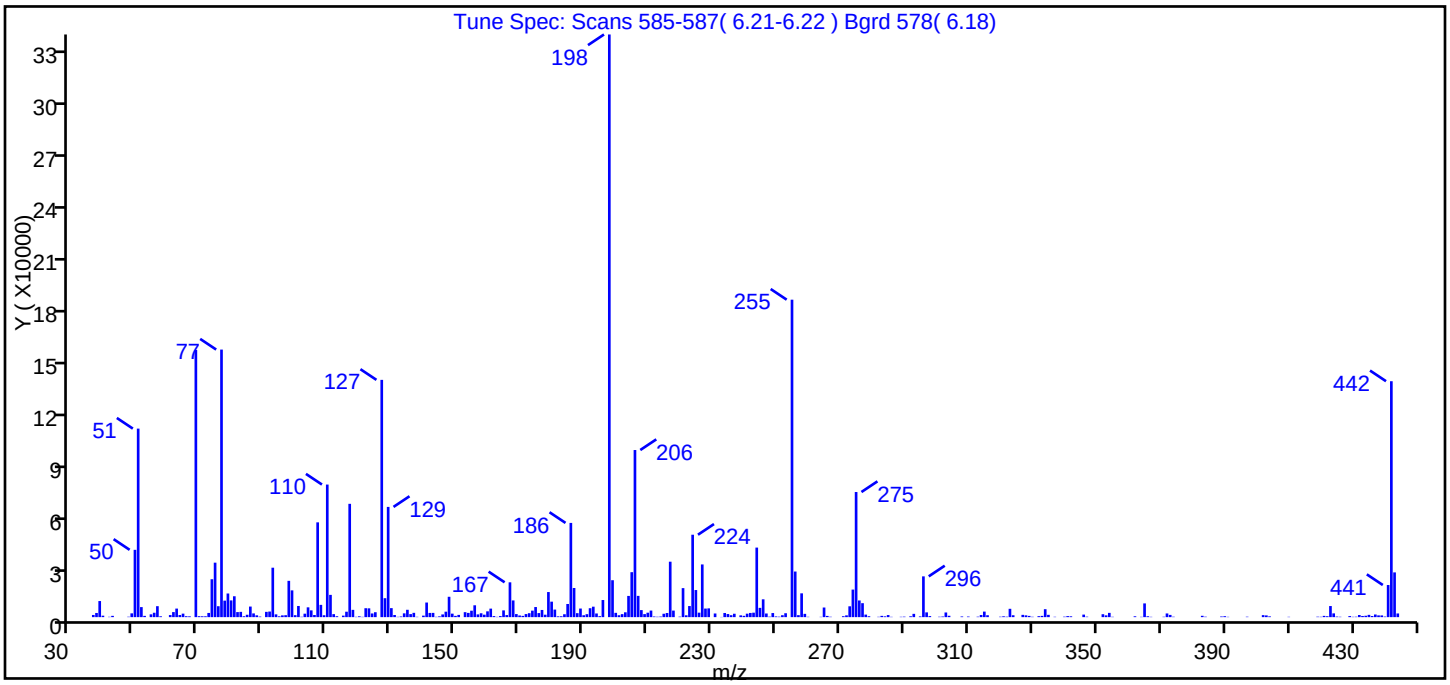
SVDFTPP50i_00020 Amount Added: 1.00 Units: mL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118002.D
Injection Date: 18-Nov-2014 04:03:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL
Tune Method: DFTPP Method 8270

199 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	32.4
68	<2% of mass 69	0.0 (0.0)
69	Present	45.8
70	<2% of mass 69	0.2 (0.4)
127	40-60% of mass 198	40.7
197	<1% of mass 198	0.0
199	5-9% of mass 198	6.3
275	10-30% of mass 198	21.5
365	>1% of mass 198	2.4
441	Present but less than mass 443	5.5 (71.8)
442	>40% of mass 198	40.5
443	17-23% of mass 442	7.7 (19.0)

Data File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118002.D\BNA_CH731.rslt\spectra.d
Injection Date: 18-Nov-2014 04:03:30
Spectrum: Tune Spec: Scans 585-587(6.21-6.22) Bgrd 578(6.18)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 306

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	1239	125.00	2800	206.00	94976	302.00	355
38.00	2369	127.00	134848	207.00	12087	303.00	2652
39.00	9146	128.00	10770	208.00	4000	304.00	777
40.00	826	129.00	62648	209.00	1731	308.00	382
42.00	188	130.00	5122	210.00	2520	310.00	339
43.00	737	131.00	1221	211.00	3737	313.00	261
48.00	237	132.00	179	212.00	363	314.00	1205
49.00	2157	133.00	372	213.00	226	315.00	3154
50.00	38256	134.00	2155	214.00	331	316.00	1090
51.00	107144	135.00	4182	215.00	1924	320.00	243
52.00	5707	136.00	1728	216.00	2349	321.00	471
53.00	724	137.00	2448	217.00	31512	322.00	254
55.00	1597	138.00	188	218.00	3720	323.00	4738
56.00	2495	140.00	856	220.00	273	324.00	1072
57.00	6233	141.00	8301	221.00	16488	327.00	1298
58.00	479	142.00	2396	222.00	1044	328.00	1022
61.00	1187	143.00	2416	223.00	6312	329.00	705
62.00	2873	144.00	187	224.00	46840	330.00	211
63.00	4862	145.00	449	225.00	15398	332.00	552
64.00	1205	146.00	1545	226.00	2544	333.00	721
65.00	1993	147.00	3102	227.00	29952	334.00	4517
66.00	520	148.00	11575	228.00	4875	335.00	1312
67.00	456	149.00	1987	229.00	4988	337.00	202
69.00	151808	150.00	729	231.00	2077	340.00	269
70.00	537	151.00	1278	233.00	112	341.00	586
71.00	484	153.00	2828	234.00	2363	342.00	466
72.00	479	154.00	2413	235.00	1763	346.00	1446
73.00	2388	155.00	3662	236.00	1101	347.00	266
74.00	21544	156.00	6736	237.00	1933	352.00	1668
75.00	30960	157.00	1557	239.00	1013	353.00	1019
76.00	6208	158.00	2209	240.00	748	354.00	2425
77.00	152064	159.00	1401	241.00	1972	355.00	198
78.00	9380	160.00	3300	242.00	2382	362.00	485

Report Date: 18-Nov-2014 08:45:51 Chrom Revision: 2.2 06-Nov-2014 14:50:32
Data File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118002.D\BNA_CH731.rslt\spectra.d
Injection Date: 18-Nov-2014 04:03:30
Spectrum: Tune Spec: Scans 585-587(6.21-6.22) Bgrd 578(6.18)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 306

m/z	Y	m/z	Y	m/z	Y	m/z	Y
79.00	13438	161.00	4844	243.00	2531	364.00	179
80.00	9511	162.00	592	244.00	39528	365.00	7807
81.00	11866	163.00	167	245.00	5275	366.00	494
82.00	2870	164.00	602	246.00	10136	367.00	180
83.00	3007	165.00	3840	247.00	2072	371.00	220
84.00	510	166.00	1178	248.00	284	372.00	2097
85.00	1353	167.00	19792	249.00	2330	373.00	1271
86.00	6015	168.00	9497	250.00	397	374.00	232
87.00	2123	169.00	1743	251.00	260	383.00	762
88.00	1034	170.00	944	252.00	1096	384.00	255
89.00	322	171.00	720	253.00	2226	389.00	372
91.00	3006	172.00	1750	255.00	180416	390.00	534
92.00	3186	173.00	2241	256.00	25920	391.00	175
93.00	28096	174.00	3689	257.00	1134	397.00	248
94.00	1580	175.00	5741	258.00	13531	402.00	1142
95.00	481	176.00	2312	259.00	1870	403.00	986
96.00	1009	177.00	4082	260.00	196	404.00	440
97.00	1105	178.00	1380	264.00	176	410.00	184
98.00	20632	179.00	14260	265.00	5471	419.00	257
99.00	15216	180.00	8796	266.00	699	420.00	199
100.00	1118	181.00	4300	267.00	218	421.00	725
101.00	6342	182.00	452	271.00	530	422.00	518
102.00	205	183.00	492	272.00	1015	423.00	6308
103.00	1958	184.00	1645	273.00	6164	424.00	2142
104.00	5573	185.00	7481	274.00	15661	425.00	319
105.00	3853	186.00	53552	275.00	71112	426.00	210
106.00	1216	187.00	16560	276.00	9474	429.00	602
107.00	53872	188.00	2259	277.00	7935	430.00	190
108.00	6979	189.00	4893	278.00	1444	431.00	246
109.00	1078	190.00	1079	279.00	518	432.00	1216
110.00	75352	191.00	1680	282.00	197	433.00	660
111.00	12658	192.00	5072	283.00	728	434.00	791
112.00	1710	193.00	5946	284.00	446	435.00	1298
113.00	518	194.00	2078	285.00	1185	436.00	637

Report Date: 18-Nov-2014 08:45:52 Chrom Revision: 2.2 06-Nov-2014 14:50:32
Data File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118002.D\BNA_CH731.rslt\spectra.d
Injection Date: 18-Nov-2014 04:03:30
Spectrum: Tune Spec: Scans 585-587(6.21-6.22) Bgrd 578(6.18)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 306

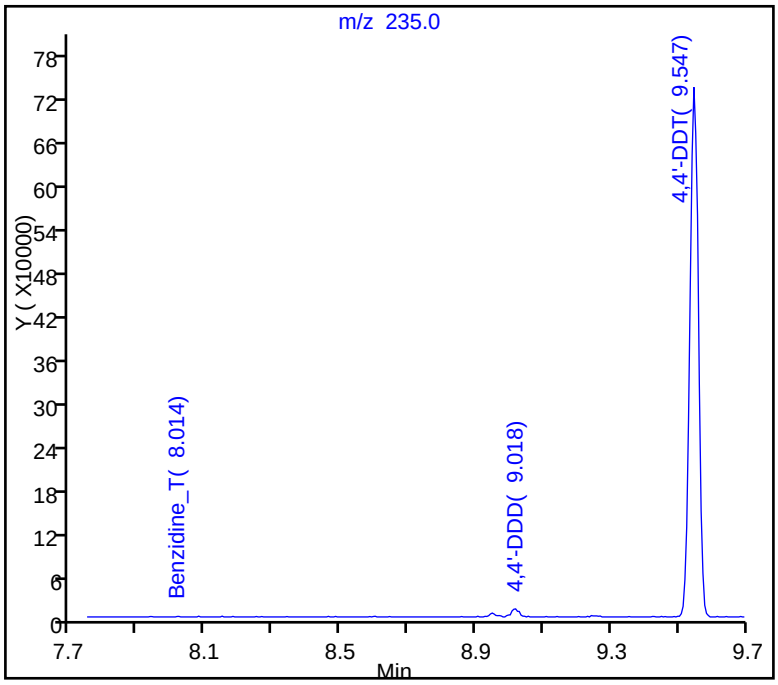
m/z	Y	m/z	Y	m/z	Y	m/z	Y
115.00	863	195.00	563	286.00	176	437.00	1509
116.00	3088	196.00	9725	289.00	198	438.00	1001
117.00	64400	198.00	331136	290.00	276	439.00	974
118.00	4147	199.00	20984	292.00	478	440.00	324
119.00	186	200.00	2450	293.00	1870	441.00	18256
120.00	474	201.00	1083	295.00	394	442.00	134080
121.00	168	202.00	1706	296.00	23176	443.00	25432
122.00	5073	203.00	2754	297.00	2710	444.00	2095
123.00	5005	204.00	12060	298.00	593		
124.00	2099	205.00	25552	301.00	232		

Breakdown Report

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141118-4448.b\V1118002.D				
Injection Date:	18-Nov-2014 04:03:30	Instrument ID:	CH731		
Lims ID:	DFTPP				
Client ID:					
Operator ID:	003200	ALS Bottle#:	1	Worklist Smp#:	2
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

203 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

203 4,4'-DDT, Area = 1298894
201 4,4'-DDE, Area = 0
202 4,4'-DDD, Area = 18243

%Breakdown: 1.39%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Pittsburgh

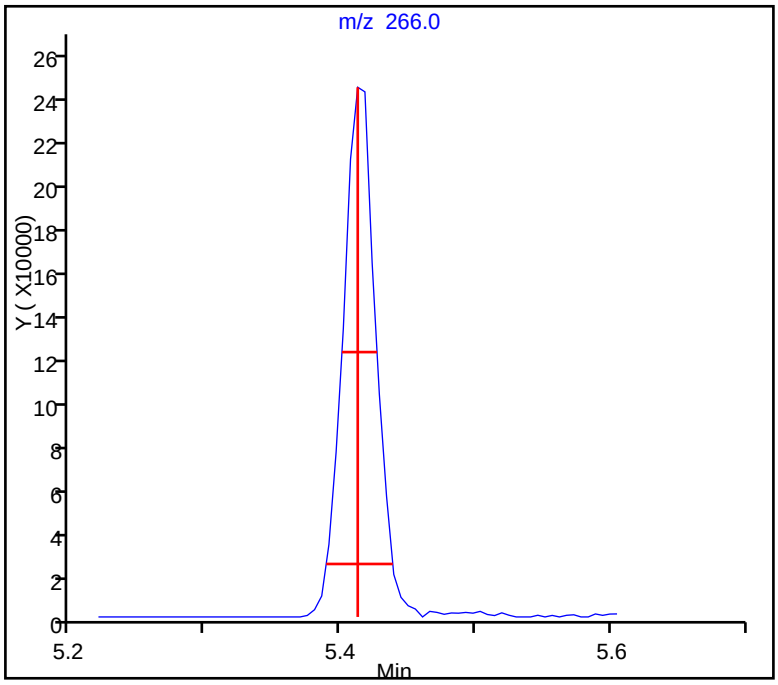
Data File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118002.D
Injection Date: 18-Nov-2014 04:03:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL

198 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.026 (min.)
Front Width = 0.023 (min.)

Tailing Factor = 1.1, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Pittsburgh

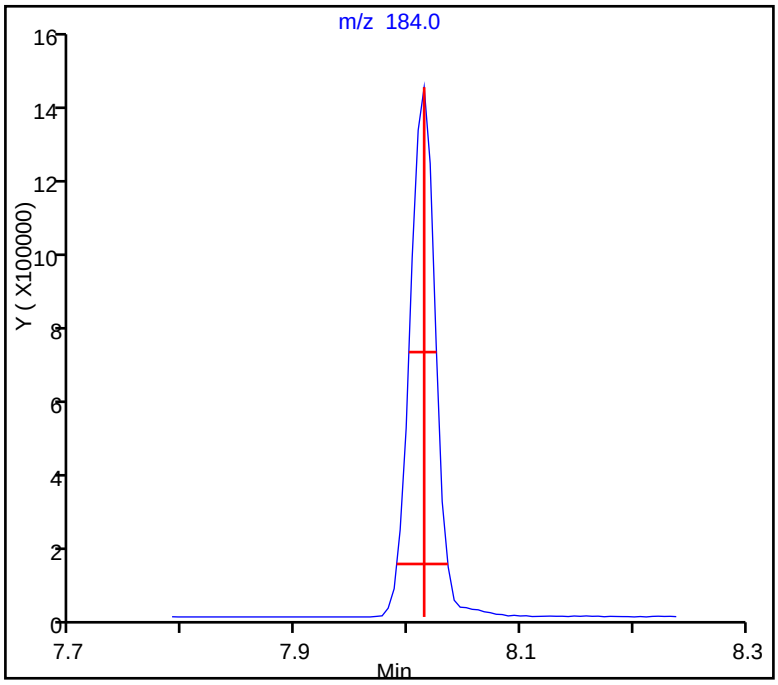
Data File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118002.D
Injection Date: 18-Nov-2014 04:03:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL

200 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.021 (min.)
Front Width = 0.024 (min.)

Tailing Factor = 0.9, Max. Tailing < 2.00
Passed



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File:	\\PITCHROM\ChromData\CH731\20141124-4564.b\V1124002.D				
Lims ID:	DFTPP				
Client ID:					
Sample Type:	DFTPP				
Inject. Date:	24-Nov-2014 11:43:30	ALS Bottle#:	1	Worklist Smp#:	2
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Sample Info:	180-0004564-002				
Misc. Info.:	DFTPP				
Operator ID:	003200	Instrument ID:	CH731		
Method:	\\PITCHROM\ChromData\CH731\20141124-4564.b\BNA_CH731.m				
Limit Group:	BNA 8270D ICAL				
Last Update:	25-Nov-2014 04:12:14	Calib Date:	18-Nov-2014 07:43:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\PITCHROM\ChromData\CH731\20141118-4448.b\V1118010.D				
Column 1 :	Rxi-5SilMS (0.32 mm)		Det: MS SCAN		
Process Host:	XAWRK018				
First Level Reviewer: piccolinov		Date:	24-Nov-2014 12:37:39		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
198 Pentachlorophenol_T	266	5.369	5.369	0.000	89	153993	NR	NR	
199 DFTPP									
200 Benzidine_T	184	7.965	7.965	0.000	98	869109	NR	NR	
201 4,4'-DDE	246		8.313					ND	
202 4,4'-DDD	235	8.959	8.959	0.000	1	6438		NR	
203 4,4'-DDT	235	9.482	9.482	0.000	97	565546	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

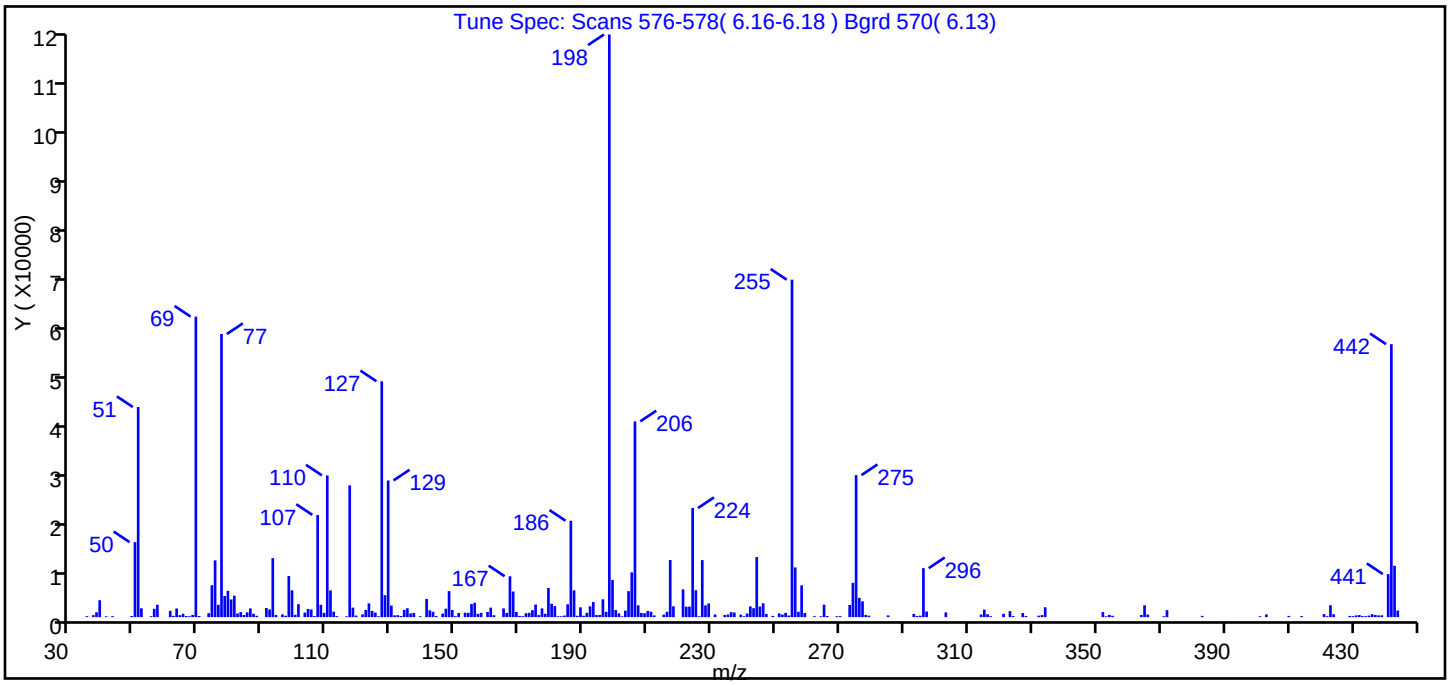
SVDFTPP50i_00020 Amount Added: 1.00 Units: mL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20141124-4564.b\V1124002.D
Injection Date: 24-Nov-2014 11:43:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL
Tune Method: DFTPP Method 8270

199 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	36.1
68	<2% of mass 69	0.4 (0.7)
69	Present	51.6
70	<2% of mass 69	0.2 (0.4)
127	40-60% of mass 198	40.5
197	<1% of mass 198	0.9
199	5-9% of mass 198	6.4
275	10-30% of mass 198	24.4
365	>1% of mass 198	2.0
441	Present but less than mass 443	7.4 (83.8)
442	>40% of mass 198	46.8
443	17-23% of mass 442	8.8 (18.8)

Data File: \\PITCHROM\ChromData\CH731\20141124-4564.b\V1124002.D\BNA_CH731.rslt\spectra.d
Injection Date: 24-Nov-2014 11:43:30
Spectrum: Tune Spec: Scans 576-578(6.16-6.18) Bgrd 570(6.13)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 251

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	200	119.00	313	190.00	285	266.00	242
37.00	402	121.00	547	191.00	874	269.00	190
38.00	976	122.00	1466	192.00	2183	270.00	205
39.00	3411	123.00	2783	193.00	3045	273.00	2456
41.00	176	124.00	1263	194.00	422	274.00	6924
43.00	197	125.00	927	195.00	444	275.00	28640
49.00	240	126.00	175	196.00	3593	276.00	3897
50.00	15122	127.00	47568	197.00	1069	277.00	3180
51.00	42376	128.00	4435	198.00	117504	278.00	445
52.00	1789	129.00	27560	199.00	7505	279.00	296
55.00	184	130.00	2337	200.00	1417	285.00	349
56.00	1685	131.00	365	201.00	745	293.00	648
57.00	2512	132.00	398	202.00	167	294.00	244
61.00	1281	133.00	234	203.00	1315	295.00	292
62.00	259	134.00	1469	204.00	5245	296.00	9880
63.00	1758	135.00	1792	205.00	9028	297.00	1140
64.00	393	136.00	750	206.00	39480	303.00	955
65.00	672	137.00	858	207.00	2391	314.00	527
66.00	230	139.00	177	208.00	853	315.00	1522
67.00	183	141.00	3682	209.00	791	316.00	595
68.00	442	142.00	1377	210.00	1261	317.00	189
69.00	60608	143.00	1070	211.00	1104	321.00	681
70.00	232	144.00	219	212.00	350	323.00	1215
73.00	798	146.00	712	215.00	509	324.00	224
74.00	6431	147.00	1706	216.00	1083	327.00	818
75.00	11450	148.00	5249	217.00	11519	328.00	236
76.00	2486	149.00	1448	218.00	2185	332.00	298
77.00	57096	150.00	196	221.00	5602	333.00	416
78.00	4271	151.00	828	222.00	2109	334.00	1991
79.00	5315	153.00	912	223.00	2122	352.00	1019
80.00	3568	154.00	873	224.00	22000	353.00	171
81.00	4326	155.00	2646	225.00	5431	354.00	467
82.00	737	156.00	2897	226.00	177	355.00	277

Report Date: 25-Nov-2014 04:12:15 Chrom Revision: 2.2 06-Nov-2014 14:50:32
Data File: \\PITCHROM\ChromData\CH731\20141124-4564.b\V1124002.D\BNA_CH731.rslt\spectra.d
Injection Date: 24-Nov-2014 11:43:30
Spectrum: Tune Spec: Scans 576-578(6.16-6.18) Bgrd 570(6.13)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 251

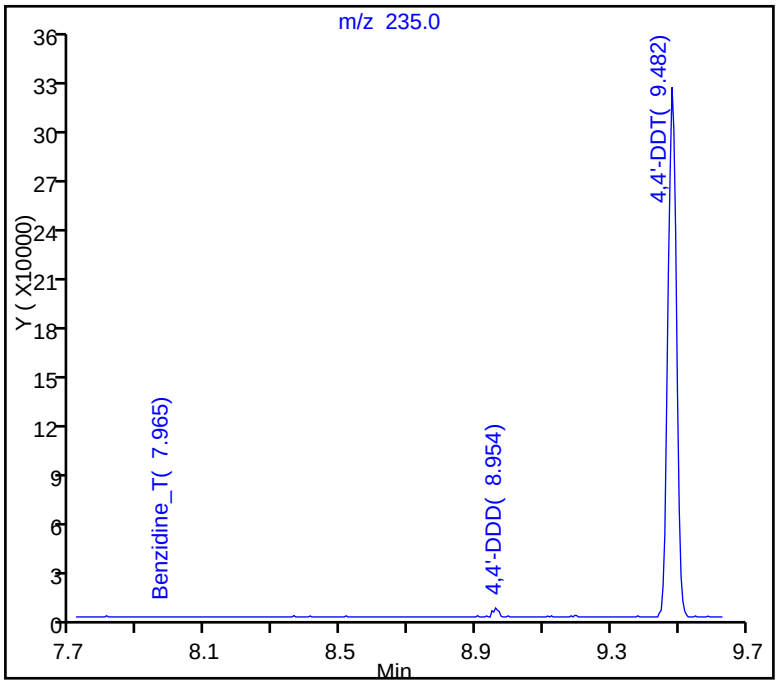
m/z	Y	m/z	Y	m/z	Y	m/z	Y
83.00	1027	157.00	663	227.00	11506	364.00	439
84.00	433	158.00	870	228.00	2379	365.00	2393
85.00	975	160.00	1037	229.00	2765	366.00	523
86.00	1760	161.00	1918	231.00	536	371.00	187
87.00	680	162.00	389	234.00	417	372.00	1410
88.00	278	165.00	1769	235.00	532	383.00	256
91.00	1843	166.00	852	236.00	1015	401.00	178
92.00	1555	167.00	8245	237.00	937	403.00	543
93.00	11887	168.00	5163	239.00	490	410.00	246
94.00	445	169.00	1054	240.00	175	414.00	212
96.00	556	170.00	250	241.00	729	421.00	603
97.00	283	171.00	200	242.00	2165	422.00	184
98.00	8308	172.00	794	243.00	1802	423.00	2407
99.00	5405	173.00	869	244.00	12119	424.00	592
100.00	461	174.00	1399	245.00	2138	429.00	250
101.00	2611	175.00	2538	246.00	2795	430.00	204
103.00	924	176.00	418	247.00	634	431.00	354
104.00	1650	177.00	1771	249.00	254	432.00	408
105.00	1546	178.00	685	251.00	769	433.00	215
106.00	206	179.00	5882	252.00	523	434.00	193
107.00	20616	180.00	2695	253.00	868	435.00	306
108.00	2486	181.00	2235	254.00	326	436.00	603
109.00	865	182.00	188	255.00	68056	437.00	434
110.00	28584	183.00	171	256.00	10027	438.00	354
111.00	5386	184.00	322	257.00	1080	439.00	370
112.00	1111	185.00	2587	258.00	6417	441.00	8682
113.00	196	186.00	19440	259.00	843	442.00	55048
116.00	179	187.00	5405	262.00	187	443.00	10361
117.00	26560	188.00	277	264.00	177	444.00	1339
118.00	1920	189.00	1977	265.00	2507		

Breakdown Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20141124-4564.b\V1124002.D
Injection Date: 24-Nov-2014 11:43:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL

203 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

203 4,4'-DDT, Area = 565546
201 4,4'-DDE, Area = 0
202 4,4'-DDD, Area = 6438

%Breakdown: 1.13%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Pittsburgh

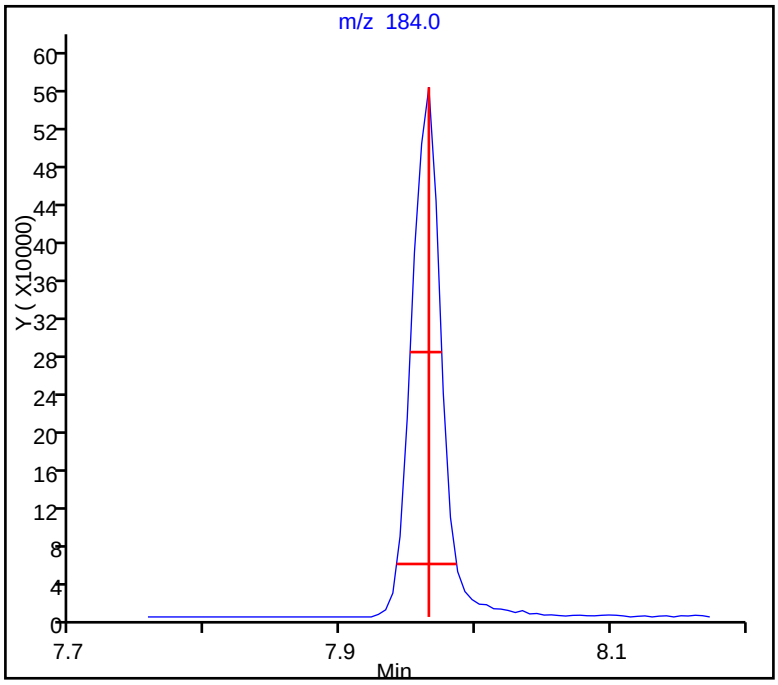
Data File: \\PITCHROM\ChromData\CH731\20141124-4564.b\V1124002.D
Injection Date: 24-Nov-2014 11:43:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL

200 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.021 (min.)
Front Width = 0.024 (min.)

Tailing Factor = 0.9, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Pittsburgh

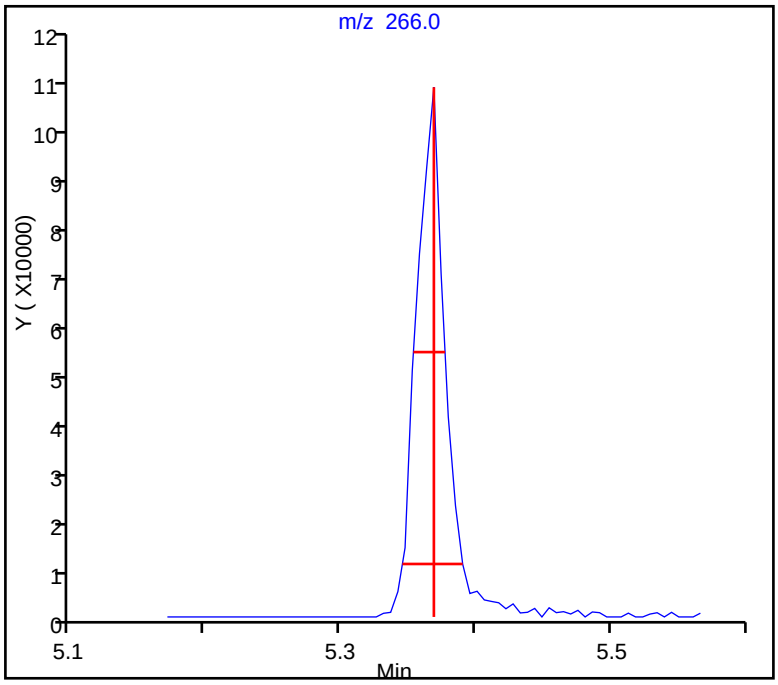
Data File: \\PITCHROM\ChromData\CH731\20141124-4564.b\V1124002.D
Injection Date: 24-Nov-2014 11:43:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL

198 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.021 (min.)
Front Width = 0.023 (min.)

Tailing Factor = 0.9, Max. Tailing < 2.00
Passed



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112002.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 12-Nov-2014 10:04:30 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004340-002
Misc. Info.: DFTPP
Operator ID: 003200 Instrument ID: CH732

Method: \\PITCHROM\ChromData\CH732\20141112-4340.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 12-Nov-2014 14:12:14 Calib Date: 12-Nov-2014 13:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: piccolinov Date: 12-Nov-2014 11:03:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
189 Pentachlorophenol_T	266	5.686	5.686	0.000	94	413969	NR	NR	
190 DFTPP									
191 Benzidine_T	184	8.394	8.394	0.000	100	2873479	NR	NR	
192 4,4'-DDE	246		8.608					ND	
193 4,4'-DDD	235		9.655					ND	
194 4,4'-DDT	235	10.157	10.157	0.000	98	1143565	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
ND - Not Detected or Marked ND

Reagents:

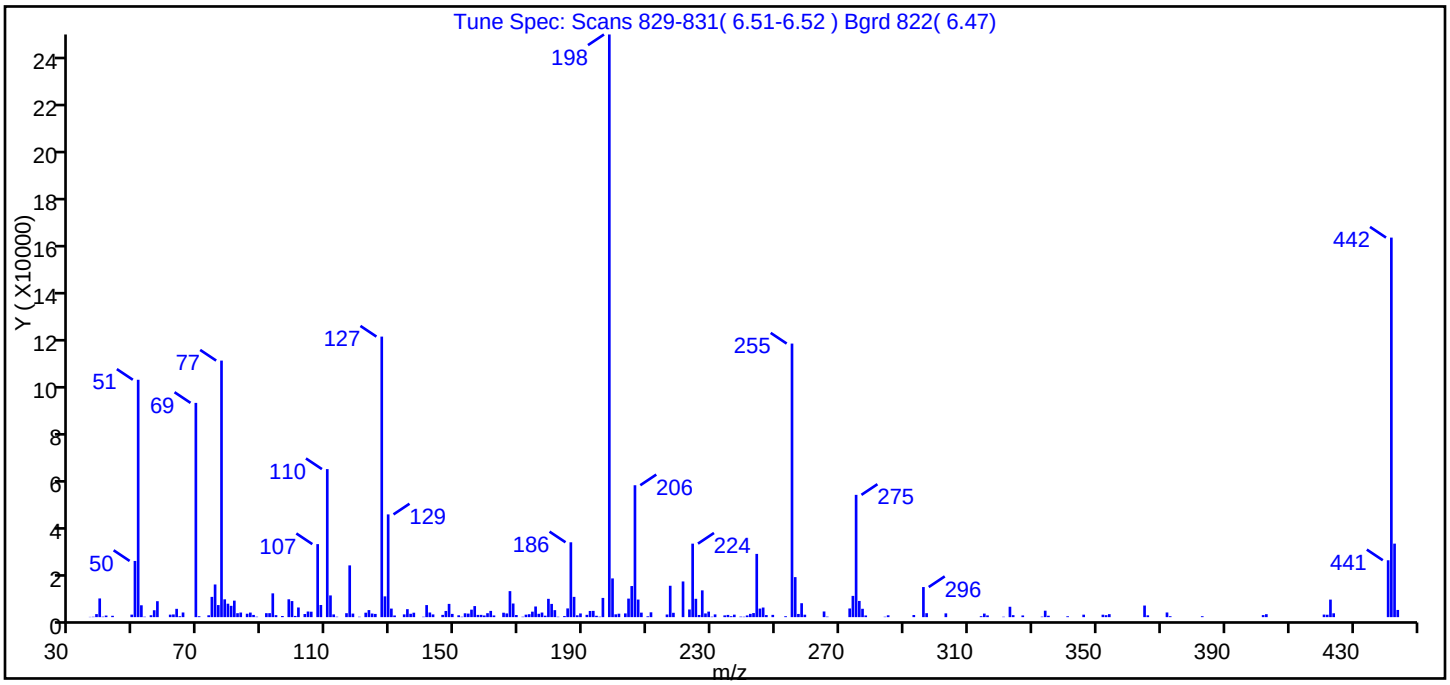
SVDFTPP50i_00020 Amount Added: 1.00 Units: mL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112002.D
Injection Date: 12-Nov-2014 10:04:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL
Tune Method: DFTPP Method 8270

190 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	40.70
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Present	36.80
70	Less than 2.00% of mass 69	0.20 (0.40)
127	40.00 - 60.00% of mass 198	48.10
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.60
275	10.00 - 30.00% of mass 198	21.00
365	Greater than 1.00% of mass 198	2.00
441	Present, but less than mass 443	9.80 (77.40)
442	Greater than 40.00% of mass 198	65.10
443	17.00 - 23.00% of mass 442	12.60 (19.40)

Data File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112002.D\BNA_CH732.rslt\spectra.d
Injection Date: 12-Nov-2014 10:04:30
Spectrum: Tune Spec: Scans 829-831(6.51-6.52) Bgrd 822(6.47)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 210

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	105	112.00	1155	180.00	5594	249.00	962
37.00	167	113.00	184	181.00	2958	253.00	395
38.00	1281	116.00	1670	182.00	173	255.00	115600
39.00	7903	117.00	21872	184.00	456	256.00	16912
40.00	209	118.00	1508	185.00	3691	257.00	1345
41.00	681	120.00	171	186.00	31632	258.00	5887
43.00	572	122.00	1876	187.00	8566	259.00	1036
49.00	1062	123.00	2981	188.00	778	265.00	2400
50.00	23744	124.00	1528	189.00	1561	266.00	212
51.00	100304	125.00	1360	191.00	977	273.00	3665
52.00	5014	127.00	118544	192.00	2609	274.00	8981
53.00	183	128.00	8783	193.00	2648	275.00	51672
55.00	801	129.00	43416	194.00	581	276.00	6850
56.00	2912	130.00	3617	195.00	186	277.00	3533
57.00	6741	131.00	698	196.00	8125	278.00	710
61.00	1054	134.00	1168	198.00	246208	284.00	171
62.00	1143	135.00	3374	199.00	16365	285.00	781
63.00	3513	136.00	1421	200.00	1194	293.00	899
64.00	366	137.00	1873	201.00	1455	296.00	12716
65.00	1971	140.00	177	203.00	1577	297.00	1676
69.00	90536	141.00	5100	204.00	7834	303.00	1601
70.00	372	142.00	1962	205.00	13141	314.00	392
73.00	784	143.00	1153	206.00	55736	315.00	1503
74.00	8558	146.00	960	207.00	7432	316.00	731
75.00	13807	147.00	2612	208.00	1906	321.00	171
76.00	5102	148.00	5601	210.00	352	323.00	4386
77.00	108408	149.00	1369	211.00	2045	324.00	836
78.00	7531	151.00	782	216.00	1117	327.00	717
79.00	5677	152.00	172	217.00	13260	333.00	205
80.00	4781	153.00	1623	218.00	1837	334.00	2724
81.00	6975	154.00	1504	221.00	15083	335.00	586
82.00	1666	155.00	3163	223.00	3243	341.00	370
83.00	1945	156.00	4678	224.00	31056	346.00	1046

Report Date: 12-Nov-2014 14:12:15 Chrom Revision: 2.2 07-Oct-2014 12:16:06
Data File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112002.D\BNA_CH732.rslt\spectra.d
Injection Date: 12-Nov-2014 10:04:30
Spectrum: Tune Spec: Scans 829-831(6.51-6.52) Bgrd 822(6.47)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 210

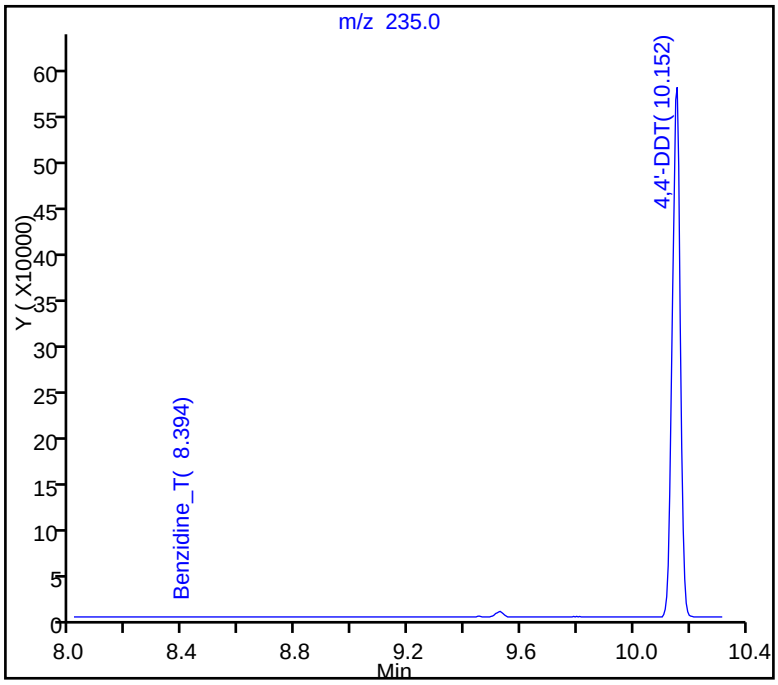
m/z	Y	m/z	Y	m/z	Y	m/z	Y
85.00	1445	157.00	953	225.00	7749	352.00	1034
86.00	1933	158.00	959	226.00	916	353.00	827
87.00	941	159.00	697	227.00	11314	354.00	1259
88.00	189	160.00	1672	228.00	1566	365.00	4903
91.00	1679	161.00	2644	229.00	2342	366.00	767
92.00	1689	162.00	712	230.00	192	372.00	1975
93.00	10054	165.00	1870	231.00	1157	373.00	389
94.00	839	166.00	1572	234.00	743	383.00	392
96.00	478	167.00	10995	235.00	944	402.00	871
98.00	7545	168.00	5759	236.00	387	403.00	1251
99.00	6790	169.00	900	237.00	1053	421.00	1089
100.00	509	171.00	181	239.00	219	422.00	1020
101.00	4082	172.00	1051	240.00	170	423.00	7412
103.00	1319	173.00	1235	241.00	719	424.00	1627
104.00	2383	174.00	2320	242.00	1382	441.00	24040
105.00	2300	175.00	4504	243.00	1727	442.00	160384
107.00	30856	176.00	1416	244.00	26728	443.00	31064
108.00	5134	177.00	1943	245.00	3618	444.00	3043
110.00	62552	178.00	612	246.00	4062		
111.00	9177	179.00	7737	247.00	876		

Breakdown Report

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH732\20141112-4340.b\D1112002.D				
Injection Date:	12-Nov-2014 10:04:30	Instrument ID:	CH732		
Lims ID:	DFTPP				
Client ID:					
Operator ID:	003200	ALS Bottle#:	1	Worklist Smp#:	2
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

194 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

194 4,4'-DDT, Area = 1143565
192 4,4'-DDE, Area = 0
193 4,4'-DDD, Area = 0

%Breakdown: 0.00%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Pittsburgh

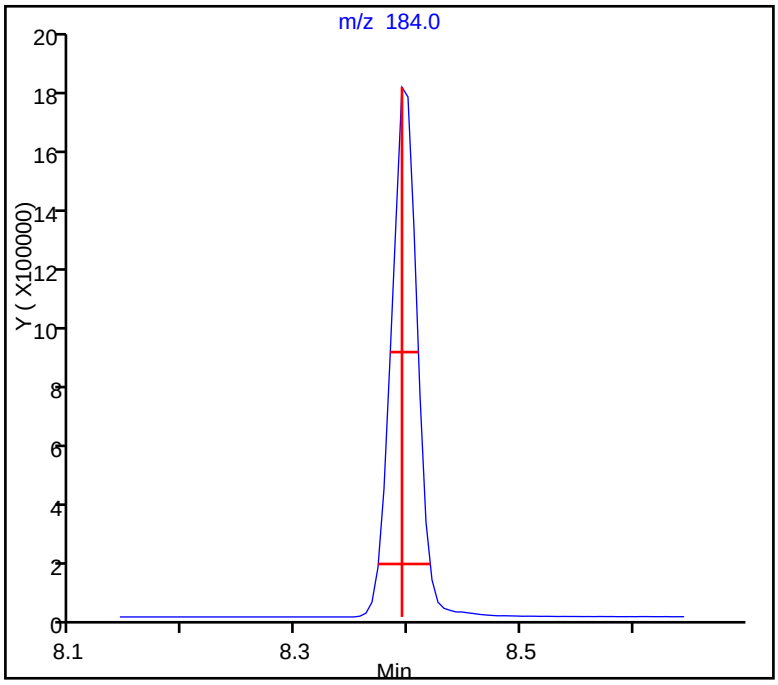
Data File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112002.D
Injection Date: 12-Nov-2014 10:04:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL

191 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.025 (min.)
Front Width = 0.021 (min.)

Tailing Factor = 1.2, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Pittsburgh

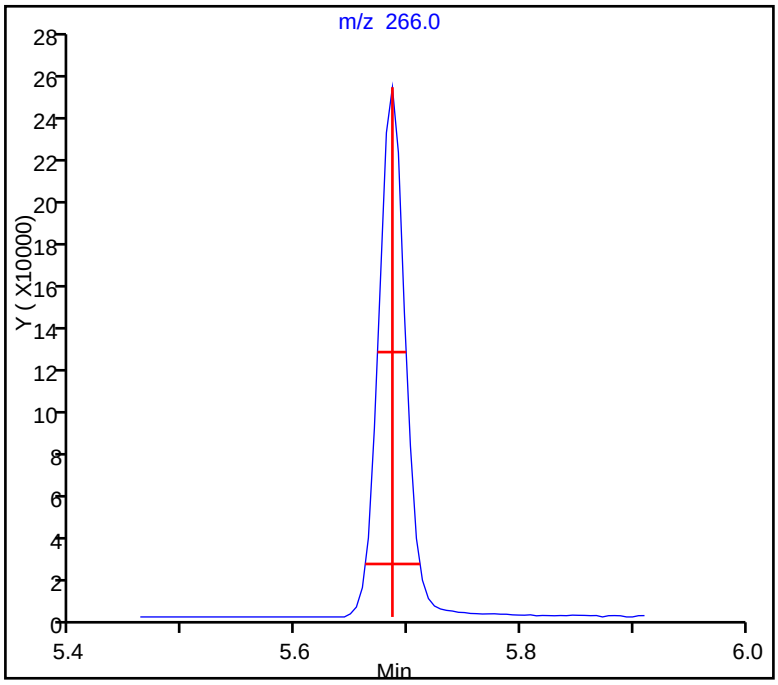
Data File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112002.D
Injection Date: 12-Nov-2014 10:04:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL

189 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.025 (min.)
Front Width = 0.024 (min.)

Tailing Factor = 1.0, Max. Tailing < 2.00
Passed



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20141128-4633.b\D1128002.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 28-Nov-2014 13:01:30 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004633-002
Misc. Info.: DFTPP
Operator ID: 003200 Instrument ID: CH732

Method: \\PITCHROM\ChromData\CH732\20141128-4633.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 01-Dec-2014 02:15:19 Calib Date: 12-Nov-2014 13:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: piccolinov Date: 01-Dec-2014 01:39:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
189 Pentachlorophenol_T	266	5.734	5.734	0.000	93	269373	NR	NR	
190 DFTPP									
191 Benzidine_T	184	8.426	8.426	0.000	100	2584600	NR	NR	
192 4,4'-DDE	246		8.843					ND	
193 4,4'-DDD	235		9.698					ND	
194 4,4'-DDT	235	10.184	10.184	0.000	98	952509	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

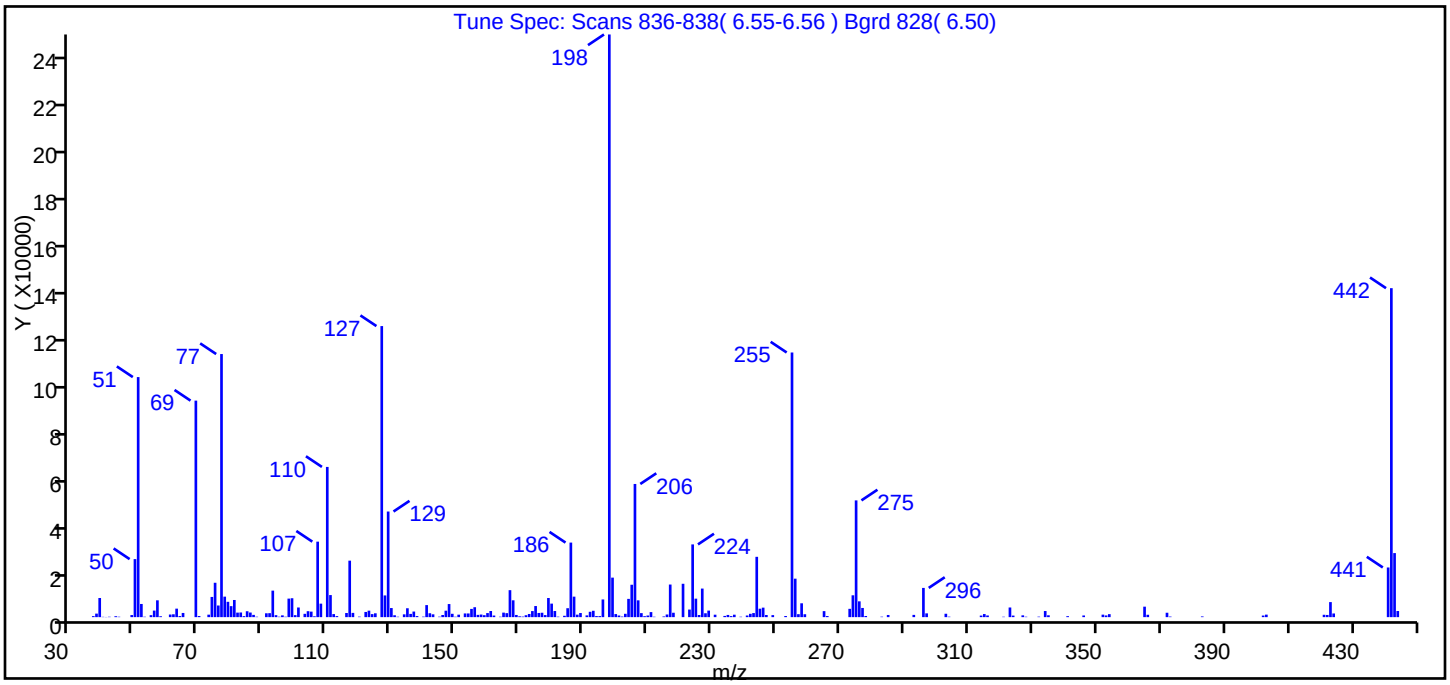
SVDFTPP50i_00020 Amount Added: 1.00 Units: mL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20141128-4633.b\D1128002.D
Injection Date: 28-Nov-2014 13:01:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL
Tune Method: DFTPP Method 8270

190 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	41.2
68	<2% of mass 69	0.0 (0.0)
69	Present	37.2
70	<2% of mass 69	0.2 (0.5)
127	40-60% of mass 198	50.0
197	<1% of mass 198	0.0
199	5-9% of mass 198	6.8
275	10-30% of mass 198	20.0
365	>1% of mass 198	1.8
441	Present but less than mass 443	8.5 (77.5)
442	>40% of mass 198	56.5
443	17-23% of mass 442	11.0 (19.5)

Data File: \\PITCHROM\ChromData\CH732\20141128-4633.b\D1128002.D\BNA_CH732.rslt\spectra.d
Injection Date: 28-Nov-2014 13:01:30
Spectrum: Tune Spec: Scans 836-838(6.55-6.56) Bgrd 828(6.50)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 225

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	429	110.00	62832	177.00	1841	247.00	895
38.00	1475	111.00	9229	178.00	858	249.00	845
39.00	8004	112.00	1280	179.00	8002	253.00	474
40.00	131	113.00	437	180.00	5655	255.00	110696
41.00	71	116.00	1735	181.00	2559	256.00	16091
42.00	167	117.00	23624	182.00	203	257.00	1240
44.00	385	118.00	1778	184.00	566	258.00	5794
45.00	173	120.00	213	185.00	3737	259.00	1220
49.00	867	122.00	2167	186.00	31184	265.00	2514
50.00	24272	123.00	2706	187.00	8573	266.00	454
51.00	100408	124.00	1269	188.00	1037	273.00	3476
52.00	5510	125.00	1606	189.00	1727	274.00	9139
53.00	174	127.00	121744	191.00	738	275.00	48832
55.00	827	128.00	9082	192.00	2238	276.00	6610
56.00	2741	129.00	44176	193.00	2659	277.00	3841
57.00	7039	130.00	3804	194.00	449	278.00	477
58.00	372	131.00	788	195.00	435	283.00	191
61.00	1095	132.00	174	196.00	7397	285.00	904
62.00	1195	134.00	1170	198.00	243712	293.00	944
63.00	3555	135.00	3719	199.00	16528	296.00	12226
64.00	445	136.00	1358	200.00	1283	297.00	1580
65.00	1747	137.00	2339	201.00	678	303.00	1417
69.00	90560	138.00	444	202.00	245	304.00	196
70.00	464	140.00	213	203.00	1404	314.00	656
73.00	1035	141.00	5038	204.00	7638	315.00	1295
74.00	8448	142.00	1633	205.00	13550	316.00	695
75.00	14381	143.00	1178	206.00	55704	321.00	168
76.00	4870	145.00	193	207.00	7033	323.00	4038
77.00	110048	146.00	892	208.00	1678	324.00	648
78.00	8574	147.00	2694	209.00	396	327.00	753
79.00	6408	148.00	5476	210.00	677	328.00	176
80.00	4602	149.00	1402	211.00	2111	332.00	207
81.00	7176	150.00	173	212.00	170	334.00	2556

Report Date: 01-Dec-2014 02:15:19 Chrom Revision: 2.2 06-Nov-2014 14:50:32
Data File: \\PITCHROM\ChromData\CH732\20141128-4633.b\D1128002.D\BNA_CH732.rslt\spectra.d
Injection Date: 28-Nov-2014 13:01:30
Spectrum: Tune Spec: Scans 836-838(6.55-6.56) Bgrd 828(6.50)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 225

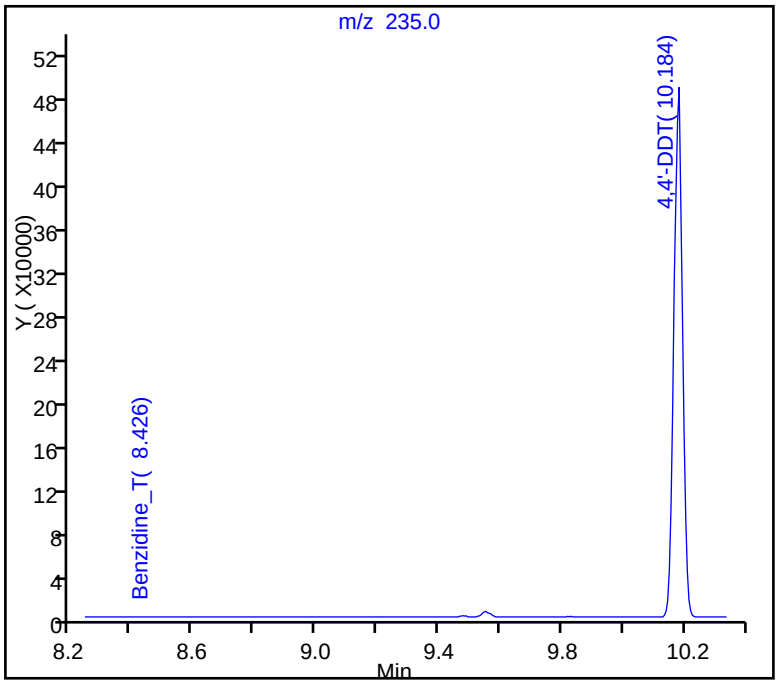
m/z	Y	m/z	Y	m/z	Y	m/z	Y
82.00	1891	151.00	1032	215.00	285	335.00	774
83.00	1948	153.00	1547	216.00	1107	341.00	408
84.00	414	154.00	1544	217.00	13638	346.00	697
85.00	2473	155.00	3443	218.00	1839	352.00	1044
86.00	1922	156.00	4149	221.00	13957	353.00	713
87.00	946	157.00	951	223.00	3172	354.00	1248
88.00	175	158.00	1086	224.00	30424	365.00	4382
91.00	1619	159.00	818	225.00	7730	366.00	991
92.00	1667	160.00	1703	226.00	894	372.00	1837
93.00	11089	161.00	2561	227.00	11953	373.00	237
94.00	825	162.00	668	228.00	1626	383.00	296
95.00	181	164.00	175	229.00	2734	402.00	668
96.00	744	165.00	1890	231.00	1021	403.00	1052
97.00	173	166.00	1673	234.00	509	421.00	991
98.00	7752	167.00	11282	235.00	922	422.00	916
99.00	7910	168.00	7041	236.00	432	423.00	6292
100.00	836	169.00	911	237.00	1023	424.00	1535
101.00	4037	170.00	352	239.00	172	441.00	20776
103.00	1388	171.00	224	241.00	686	442.00	137600
104.00	2486	172.00	802	242.00	1391	443.00	26792
105.00	2309	173.00	1319	243.00	1704	444.00	2563
106.00	353	174.00	2543	244.00	25232		
107.00	31576	175.00	4646	245.00	3531		
108.00	5644	176.00	1753	246.00	3974		

Breakdown Report

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH732\20141128-4633.b\D1128002.D				
Injection Date:	28-Nov-2014 13:01:30	Instrument ID:	CH732		
Lims ID:	DFTPP				
Client ID:					
Operator ID:	003200	ALS Bottle#:	1	Worklist Smp#:	2
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

194 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

194 4,4'-DDT, Area = 952509
192 4,4'-DDE, Area = 0
193 4,4'-DDD, Area = 0

%Breakdown: 0.00%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Pittsburgh

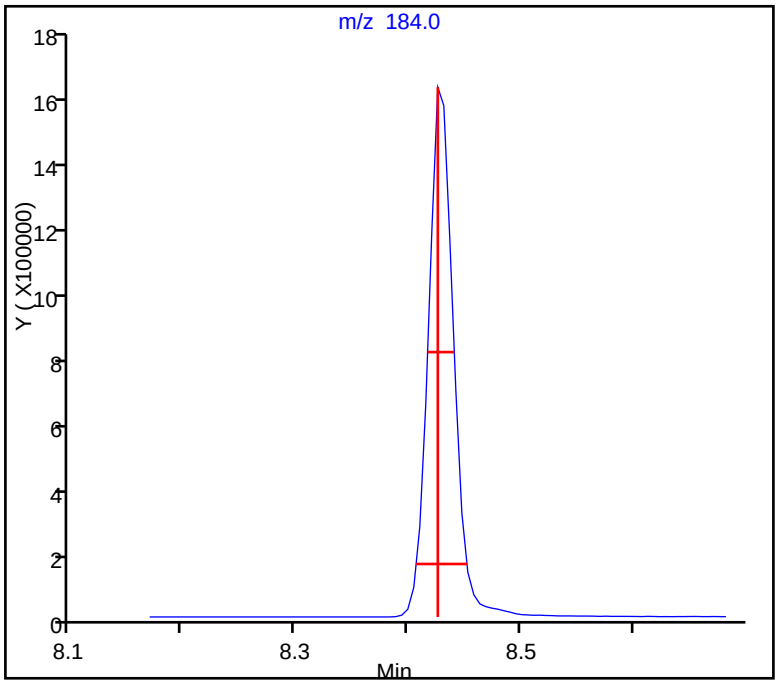
Data File: \\PITCHROM\ChromData\CH732\20141128-4633.b\D1128002.D
Injection Date: 28-Nov-2014 13:01:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL

191 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.026 (min.)
Front Width = 0.019 (min.)

Tailing Factor = 1.3, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Pittsburgh

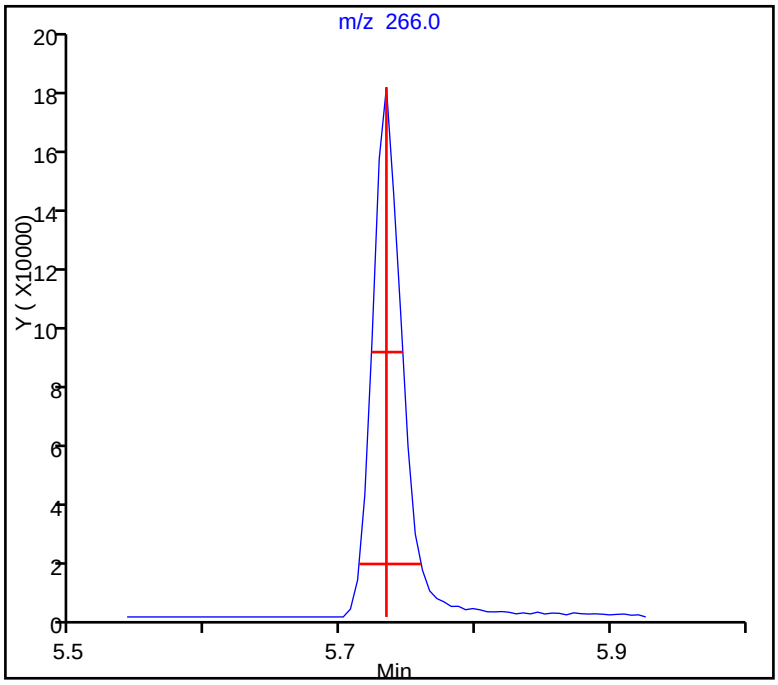
Data File: \\PITCHROM\ChromData\CH732\20141128-4633.b\D1128002.D
Injection Date: 28-Nov-2014 13:01:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL

189 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.026 (min.)
Front Width = 0.020 (min.)

Tailing Factor = 1.3, Max. Tailing < 2.00
Passed



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-39026-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-125791/1-A

Matrix: Water | Lab File ID: V1124005.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 11/20/2014 09:07

Sample wt/vol: 250(mL) | Date Analyzed: 11/24/2014 12:57

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 126233 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		0.20	0.029
208-96-8	Acenaphthylene	ND		0.20	0.022
120-12-7	Anthracene	ND		0.20	0.019
92-87-5	Benzidine	ND		20	4.7
56-55-3	Benzo[a]anthracene	ND		0.20	0.037
205-99-2	Benzo[b]fluoranthene	ND		0.20	0.049
207-08-9	Benzo[k]fluoranthene	ND		0.20	0.030
65-85-0	Benzoic acid	ND		5.0	1.6
191-24-2	Benzo[g,h,i]perylene	ND		0.20	0.029
50-32-8	Benzo[a]pyrene	ND		0.20	0.028
111-91-1	Bis(2-chloroethoxy)methane	ND		1.0	0.13
111-44-4	Bis(2-chloroethyl)ether	ND		1.0	0.032
117-81-7	Bis(2-ethylhexyl) phthalate	ND		2.0	0.44
108-60-1	2,2'-oxybis[1-chloropropane]	ND		1.0	0.024
101-55-3	4-Bromophenyl phenyl ether	ND		1.0	0.12
7005-72-3	4-Chlorophenyl phenyl ether	ND		1.0	0.080
91-58-7	2-Chloronaphthalene	ND		0.20	0.031
85-68-7	Butyl benzyl phthalate	ND		1.0	0.21
218-01-9	Chrysene	ND		0.20	0.031
53-70-3	Dibenz(a,h)anthracene	ND		0.20	0.027
84-74-2	Di-n-butyl phthalate	ND		1.0	0.24
117-84-0	Di-n-octyl phthalate	ND		1.0	0.20
84-66-2	Diethyl phthalate	ND		1.0	0.30
131-11-3	Dimethyl phthalate	ND		1.0	0.18
91-94-1	3,3'-Dichlorobenzidine	ND		1.0	0.15
121-14-2	2,4-Dinitrotoluene	ND		1.0	0.21
606-20-2	2,6-Dinitrotoluene	ND		1.0	0.14
95-57-8	2-Chlorophenol	ND		1.0	0.23
120-83-2	2,4-Dichlorophenol	ND		1.0	0.067
105-67-9	2,4-Dimethylphenol	ND		1.0	0.17
51-28-5	2,4-Dinitrophenol	ND		5.0	2.5
88-75-5	2-Nitrophenol	ND		1.0	0.11
88-06-2	2,4,6-Trichlorophenol	ND		1.0	0.30
122-66-7	1,2-Diphenylhydrazine(as Azobenzene)	ND		1.0	0.12

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-39026-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-125791/1-A

Matrix: Water | Lab File ID: V1124005.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 11/20/2014 09:07

Sample wt/vol: 250(mL) | Date Analyzed: 11/24/2014 12:57

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 126233 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.085
59-50-7	4-Chloro-3-methylphenol	ND		1.0	0.17
100-02-7	4-Nitrophenol	ND		5.0	0.80
534-52-1	4,6-Dinitro-2-methylphenol	ND		5.0	1.6
206-44-0	Fluoranthene	ND		0.20	0.021
86-73-7	Fluorene	ND		0.20	0.024
118-74-1	Hexachlorobenzene	ND		1.0	0.061
87-68-3	Hexachlorobutadiene	ND		1.0	0.094
77-47-4	Hexachlorocyclopentadiene	ND		1.0	0.14
67-72-1	Hexachloroethane	ND		1.0	0.14
193-39-5	Indeno[1,2,3-cd]pyrene	ND		0.20	0.043
78-59-1	Isophorone	ND		1.0	0.074
91-20-3	Naphthalene	ND		0.20	0.023
98-95-3	Nitrobenzene	ND		2.0	0.15
621-64-7	N-Nitrosodi-n-propylamine	ND		1.0	0.050
62-75-9	N-Nitrosodimethylamine	ND		1.0	0.12
86-30-6	N-Nitrosodiphenylamine	ND		1.0	0.12
85-01-8	Phenanthrene	ND		0.20	0.042
129-00-0	Pyrene	ND		0.20	0.023
87-86-5	Pentachlorophenol	ND		1.0	0.50
108-95-2	Phenol	ND		1.0	0.055

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	54		30-150
321-60-8	2-Fluorobiphenyl	63		30-150
367-12-4	2-Fluorophenol (Surr)	67		30-150
4165-60-0	Nitrobenzene-d5 (Surr)	63		30-150
4165-62-2	Phenol-d5 (Surr)	61		30-150
1718-51-0	Terphenyl-d14 (Surr)	57		10-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141124-4564.b\V1124005.D
Lims ID: MB 180-125791/1-A
Client ID:
Sample Type: MB
Inject. Date: 24-Nov-2014 12:57:30 ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004564-005
Misc. Info.: MB 180-125791/1-A
Operator ID: 003200 Instrument ID: CH731

Method: \\PITCHROM\ChromData\CH731\20141124-4564.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 25-Nov-2014 04:12:16 Calib Date: 18-Nov-2014 07:43:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: piccolinov Date: 24-Nov-2014 13:43:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.277	6.277	0.000	89	104629	8.00	8.00	
* 2 Naphthalene-d8	136	7.484	7.479	0.005	97	363598	8.00	8.00	
* 3 Acenaphthene-d10	164	9.103	9.098	0.005	90	285868	8.00	8.00	
* 4 Phenanthrene-d10	188	10.471	10.465	0.006	96	642544	8.00	8.00	
* 5 Chrysene-d12	240	13.959	13.948	0.011	95	699014	8.00	8.00	
* 6 Perylene-d12	264	16.870	16.855	0.016	98	514128	8.00	8.00	
$ 7 2-Fluorophenol	112	4.931	4.931	0.000	89	451766	40.0	26.7	
$ 8 Phenol-d5	99	5.924	5.919	0.005	84	498930	40.0	24.2	
$ 9 Nitrobenzene-d5	82	6.801	6.801	0.000	92	642338	40.0	25.0	
$ 10 2-Fluorobiphenyl	172	8.462	8.462	0.000	99	1398040	40.0	25.3	
$ 11 2,4,6-Tribromophenol	330	9.824	9.819	0.005	88	168023	40.0	21.8	
$ 12 Terphenyl-d14	244	12.223	12.212	0.011	98	1892518	40.0	22.7	
13 1,4-Dioxane	88		1.838					ND	
14 N-Nitrosodimethylamine	74		2.490					ND	
15 Pyridine	79		2.564					ND	
17 2-Butoxyethanol	57		3.450					ND	
16 Dimethylformamide	73		3.482					ND	
18 Dibromoacetonitrile	120		3.590					ND	
19 2-Picoline	93		4.030					ND	
20 N-Nitrosomethylethylamine	88		4.233					ND	
21 Acrylamide	71		4.597					ND	
22 Methyl methanesulfonate	80		4.701					ND	
23 Phenylmercaptan	110		5.000					ND	
24 N-Nitrosodiethylamine	102		5.115					ND	
25 Ethyl methanesulfonate	79		5.517					ND	
26 Benzaldehyde	77		5.839					ND	
27 Phenol	94		5.935					ND	
28 Aniline	93		5.951					ND	
29 Bis(2-chloroethyl)ether	93		6.015					ND	
30 Pentachloroethane	167		6.025					ND	
31 2-Chlorophenol	128		6.074					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
32 n-Decane	43		6.133					ND	
33 1,3-Dichlorobenzene	146		6.224					ND	
34 1,4-Dichlorobenzene	146		6.293					ND	
35 1,2,3-Trimethylbenzene	105		6.350					ND	
36 Benzyl alcohol	108		6.405					ND	
37 1,2-Dichlorobenzene	146		6.443					ND	
38 2-Methylphenol	108		6.512					ND	
39 Indene	116		6.528					ND	
40 2,2'-oxybis[1-chloropropan	45		6.539					ND	
41 N-Nitrosopyrrolidine	100		6.624					ND	
42 N-Nitrosomorpholine	116		6.632					ND	
43 Acetophenone	105		6.656					ND	
45 4-Methylphenol	108		6.656					ND	
44 N-Nitrosodi-n-propylamine	70		6.656					ND	
46 2-Toluidine	106		6.664					ND	
194 Benzotrichloride TIC	159		6.750					ND	
47 Hexachloroethane	117		6.769					ND	
48 Nitrobenzene	77		6.817					ND	
49 N-Nitrosopiperidine	114		6.926					ND	
50 Isophorone	82		7.041					ND	
51 2-Nitrophenol	139		7.121					ND	
52 2,4-Dimethylphenol	107		7.148					ND	
54 o,o',o''-Triethylphosphoro	198		7.182					ND	
56 Benzoic acid	122		7.196					ND	
53 4-Chloro-3-nitro-alpha,alp	179		7.205					ND	
55 Bis(2-chloroethoxy)methane	93		7.233					ND	
57 2,4-Dichlorophenol	162		7.340					ND	
58 alpha,alpha-Dimethyl phene	58		7.353					ND	
61 Azobenzene	77		7.403					ND	
59 1,2,4-Trichlorobenzene	180		7.426					ND	
60 Naphthalene	128		7.500					ND	
62 4-Chloroaniline	127		7.538					ND	
63 2,6-Dichlorophenol	162		7.554					ND	
64 Hexachlorobutadiene	225		7.618					ND	
65 Hexachloropropene	213		7.627					ND	
66 Quinoline	129		7.786					ND	
68 N-Nitrosodi-n-butylamine	84		7.818					ND	
67 Caprolactam	113		7.821					ND	
69 p-Phenylene diamine	108		7.834					ND	
70 4-Chloro-3-methylphenol	107		7.965					ND	
71 Safrole, Total	162		8.026					ND	
72 2-Methylnaphthalene	142		8.136					ND	
73 Phthalic anhydride	104		8.172					ND	
74 Diphenamid	168		8.200					ND	
75 1-Methylnaphthalene	142		8.227					ND	
76 Hexachlorocyclopentadiene	237		8.286					ND	
77 1,2,4,5-Tetrachlorobenzene	216		8.291					ND	
78 2,4,6-Trichlorophenol	196		8.387					ND	
79 2,4,5-Trichlorophenol	196		8.419					ND	
80 1,1'-Biphenyl	154		8.558					ND	
81 2-Chloronaphthalene	162		8.585					ND	
83 1-Chloronaphthalene	162		8.648					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
82 2-Nitroaniline	65		8.660					ND	
84 1,4-Dinitrobenzene	168		8.769					ND	
85 1,4-Naphthoquinone	158		8.771					ND	
86 Dimethyl phthalate	163		8.809					ND	
87 1,3-Dinitrobenzene	168		8.847					ND	
88 2,6-Dinitrotoluene	165		8.868					ND	
89 Acenaphthylene	152		8.970					ND	
90 3-Nitroaniline	138		9.034					ND	
92 2,4-Dinitrophenol	184		9.124					ND	
91 Acenaphthene	153		9.124					ND	
93 4-Nitrophenol	109		9.162					ND	
94 2,4-Dinitrotoluene	165		9.242					ND	
95 Dibenzofuran	168		9.285					ND	
96 Pentachlorobenzene	250		9.299					ND	
98 1-Naphthylamine	143		9.340					ND	
97 2,3,5,6-Tetrachlorophenol	232		9.349					ND	
99 2,3,4,6-Tetrachlorophenol	232		9.392					ND	
100 2-Naphthylamine	143		9.418					ND	
101 Diethyl phthalate	149	9.450	9.445	0.005	94	7908		0.1485	
102 Hexadecane	57		9.450					ND	
103 4-tert-Octylphenol	135		9.561					ND	
104 4-Chlorophenyl phenyl ethe	204		9.579					ND	
107 N-Nitro-o-toluidine	152		9.586					ND	
105 4-Nitroaniline	138		9.595					ND	
106 Fluorene	166		9.600					ND	
108 4,6-Dinitro-2-methylphenol	198		9.621					ND	
110 Diphenylamine	169		9.677					ND	
109 N-Nitrosodiphenylamine	169		9.680					ND	
111 1,2-Diphenylhydrazine	77		9.723					ND	
112 1,3,5-Trinitrobenzene	213		9.896					ND	
113 Phenacetin	108		9.939					ND	
114 Phorate	121		9.944					ND	
115 2,3,7,8-TCDD TIC	322		10.000					ND	
116 4-Bromophenyl phenyl ether	248		10.027					ND	
117 Dimethoate	87		10.099					ND	
118 Hexachlorobenzene	284		10.113					ND	
119 Atrazine	200		10.139					ND	
120 4-Aminobiphenyl	169		10.265					ND	
122 Pentachlorophenol	266		10.284					ND	
121 n-Octadecane	57		10.284					ND	
123 Pronamide	173		10.297					ND	
124 Pentachloronitrobenzene	237		10.302					ND	
125 Disulfoton	88		10.419					ND	
127 Dinoseb	211		10.475					ND	
126 Phenanthrene	178		10.487					ND	
128 Anthracene	178		10.535					ND	
129 Hexachlorophene TIC	198		10.600					ND	
130 Carbazole	167		10.674					ND	
131 Methyl parathion	109		10.793					ND	
132 Di-n-butyl phthalate	149		10.962					ND	
133 Ethyl Parathion	109		11.189					ND	
134 4-Nitroquinoline-1-oxide	190		11.263					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
135 Methapyrilene	58		11.317					ND	
136 Isodrin	193		11.661					ND	
137 Fluoranthene	202		11.763					ND	
138 Benzidine	184		11.886					ND	
139 Pyrene	202		12.063					ND	
140 1,2,3,4 -Tetrachlorobenzen	216		12.215					ND	
141 p-Dimethylamino azobenzene	225		12.428					ND	
142 Chlorobenzilate	139		12.542					ND	
143 Famphur	218		12.850					ND	
144 Butyl benzyl phthalate	149		12.896					ND	
145 3,3'-Dimethylbenzidine	212		12.936					ND	
146 Kepone	272		13.030					ND	
147 2-Acetylaminofluorene	181		13.363					ND	
148 Thionazin	97		13.789					ND	
149 3,3'-Dichlorobenzidine	252		13.847					ND	
150 4,4'-Methylene bis(2-chlor	231		13.881					ND	
151 Bis(2-ethylhexyl) phthalat	149		13.884					ND	
152 Benzo[a]anthracene	228		13.927					ND	
153 Chrysene	228		13.996					ND	
154 Sulfotepp	97		14.530					ND	
155 6-Methylchrysene	242		14.907					ND	
156 Di-n-octyl phthalate	149		15.177					ND	
157 7,12-Dimethylbenz(a)anthra	256		16.037					ND	
158 Benzo[b]fluoranthene	252		16.059					ND	
159 Benzo[k]fluoranthene	252		16.112					ND	
176 Benzo[e]pyrene	252		16.635					ND	
160 Benzo[a]pyrene	252		16.742					ND	
161 3-Methylcholanthrene	268		17.524					ND	
162 Dibenz[a,h]acridine	279		18.636					ND	
163 Indeno[1,2,3-cd]pyrene	276		19.066					ND	
164 Dibenz(a,h)anthracene	278		19.093					ND	
165 Benzo[g,h,i]perylene	276		19.654					ND	
181 Isosafrole	162		0.000					ND	
170 2-Chlorobenzoic Acid	139		0.000					ND	
182 Aramite Peak 2	185		0.000					ND	
183 Octachlorocyclopentene	307		0.000					ND	
169 Diallate Peak 1	86		0.000					ND	
166 2,5-Dichlorophenol	162		0.000					ND	
185 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
168 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
175 Dibenz[a,j]acridine	279		0.000					ND	
196 Trifluralin	306		0.000					ND	
197 1-Phenyl-1-(4-methylphenyl	1		0.000					ND	
195 1-Phenyl-1-(2,4-dimethylph	1		0.000					ND	
167 o-Phenylphenol	1		0.000					ND	
186 n,n'-Dimethylaniline	120		0.000					ND	
172 4-Chlorophenol	128		0.000					ND	
188 Carbaryl	144		0.000					ND	
190 Octachlorostyrene	308		0.000					ND	
184 3-Chlorobenzoic Acid	139		0.000					ND	
191 2,3-Dichlorophenol	162		0.000					ND	
192 4-Chlorobenzoic Acid	139		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
193 1,2,3,4-Tetrahydronaphthal	104		0.000					ND	
187 1,2-Dibromo-3-Chloropropan	157		0.000					ND	
189 Benzotrichloride	159		0.000					ND	
180 Aramite Peak 1	185		0.000					ND	
171 Diallate Peak 2	86		0.000					ND	
173 3-Methylphenol	1		0.000					ND	
174 2-Bromonaphthalene	127		0.000					ND	
179 4-Nitrobiphenyl	199		0.000					ND	
177 1-Phenyl-1-(4-methylphenyl	1		0.000					ND	
178 1-Phenyl-1-(2,4-dimethylph	1		0.000					ND	
198 Pentachlorophenol_T	266		5.369					ND	
200 Benzidine_T	184		7.965					ND	
201 4,4'-DDE	246		8.313					ND	
202 4,4'-DDD	235		8.959					ND	
203 4,4'-DDT	235		9.482					ND	
S 204 Aramite, Total	185		1.000					ND	
S 207 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
S 208 Methyl Phenols,Total	108		0.000					ND	
S 205 Diallate	86		0.000					ND	
S 206 Total Cresols	108		0.000					ND	
T 209 Quinoline TIC	129		0.000					ND	

Reagents:

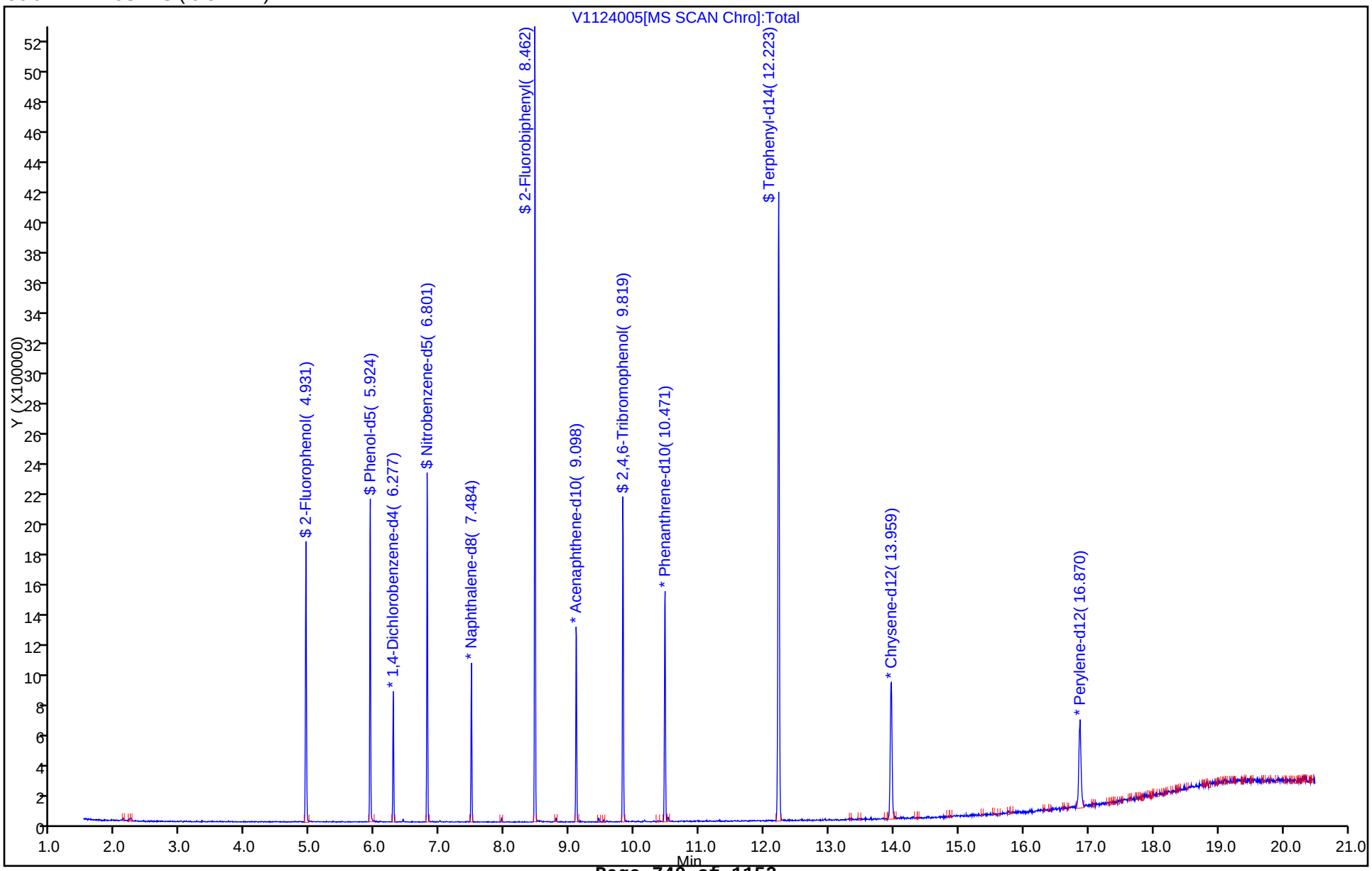
SVTAPITINTRNi_00006 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 25-Nov-2014 04:12:20 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141124-4564.b\V1124005.D				
Injection Date:	24-Nov-2014 12:57:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	MB 180-125791/1-A			Worklist Smp#:	5
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-39026-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-126402/1-A

Matrix: Water | Lab File ID: D1128005.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 11/25/2014 09:59

Sample wt/vol: 250(mL) | Date Analyzed: 11/28/2014 14:09

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 126682 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		0.20	0.029
208-96-8	Acenaphthylene	ND		0.20	0.022
120-12-7	Anthracene	ND		0.20	0.019
92-87-5	Benzidine	ND		20	4.7
56-55-3	Benzo[a]anthracene	ND		0.20	0.037
205-99-2	Benzo[b]fluoranthene	ND		0.20	0.049
207-08-9	Benzo[k]fluoranthene	ND		0.20	0.030
65-85-0	Benzoic acid	ND		5.0	1.6
191-24-2	Benzo[g,h,i]perylene	ND		0.20	0.029
50-32-8	Benzo[a]pyrene	ND		0.20	0.028
111-91-1	Bis(2-chloroethoxy)methane	ND		1.0	0.13
111-44-4	Bis(2-chloroethyl)ether	ND		1.0	0.032
117-81-7	Bis(2-ethylhexyl) phthalate	ND		2.0	0.44
108-60-1	2,2'-oxybis[1-chloropropane]	ND		1.0	0.024
101-55-3	4-Bromophenyl phenyl ether	ND		1.0	0.12
7005-72-3	4-Chlorophenyl phenyl ether	ND		1.0	0.080
91-58-7	2-Chloronaphthalene	ND		0.20	0.031
85-68-7	Butyl benzyl phthalate	ND		1.0	0.21
218-01-9	Chrysene	ND		0.20	0.031
53-70-3	Dibenz(a,h)anthracene	ND		0.20	0.027
84-74-2	Di-n-butyl phthalate	ND		1.0	0.24
117-84-0	Di-n-octyl phthalate	ND		1.0	0.20
84-66-2	Diethyl phthalate	ND		1.0	0.30
131-11-3	Dimethyl phthalate	ND		1.0	0.18
91-94-1	3,3'-Dichlorobenzidine	ND		1.0	0.15
121-14-2	2,4-Dinitrotoluene	ND		1.0	0.21
606-20-2	2,6-Dinitrotoluene	ND		1.0	0.14
95-57-8	2-Chlorophenol	ND		1.0	0.23
120-83-2	2,4-Dichlorophenol	ND		1.0	0.067
105-67-9	2,4-Dimethylphenol	ND		1.0	0.17
51-28-5	2,4-Dinitrophenol	ND		5.0	2.5
88-75-5	2-Nitrophenol	ND		1.0	0.11
88-06-2	2,4,6-Trichlorophenol	ND		1.0	0.30
122-66-7	1,2-Diphenylhydrazine(as Azobenzene)	ND		1.0	0.12

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-39026-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-126402/1-A

Matrix: Water | Lab File ID: D1128005.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 11/25/2014 09:59

Sample wt/vol: 250(mL) | Date Analyzed: 11/28/2014 14:09

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 126682 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.085
59-50-7	4-Chloro-3-methylphenol	ND		1.0	0.17
100-02-7	4-Nitrophenol	ND		5.0	0.80
534-52-1	4,6-Dinitro-2-methylphenol	ND		5.0	1.6
206-44-0	Fluoranthene	ND		0.20	0.021
86-73-7	Fluorene	ND		0.20	0.024
118-74-1	Hexachlorobenzene	ND		1.0	0.061
87-68-3	Hexachlorobutadiene	ND		1.0	0.094
77-47-4	Hexachlorocyclopentadiene	ND		1.0	0.14
67-72-1	Hexachloroethane	ND		1.0	0.14
193-39-5	Indeno[1,2,3-cd]pyrene	ND		0.20	0.043
78-59-1	Isophorone	ND		1.0	0.074
91-20-3	Naphthalene	ND		0.20	0.023
98-95-3	Nitrobenzene	ND		2.0	0.15
621-64-7	N-Nitrosodi-n-propylamine	ND		1.0	0.050
62-75-9	N-Nitrosodimethylamine	ND		1.0	0.12
86-30-6	N-Nitrosodiphenylamine	ND		1.0	0.12
85-01-8	Phenanthrene	ND		0.20	0.042
129-00-0	Pyrene	ND		0.20	0.023
87-86-5	Pentachlorophenol	ND		1.0	0.50
108-95-2	Phenol	ND		1.0	0.055

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	71		30-150
321-60-8	2-Fluorobiphenyl	70		30-150
367-12-4	2-Fluorophenol (Surr)	74		30-150
4165-60-0	Nitrobenzene-d5 (Surr)	73		30-150
4165-62-2	Phenol-d5 (Surr)	75		30-150
1718-51-0	Terphenyl-d14 (Surr)	77		10-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20141128-4633.b\D1128005.D
Lims ID: MB 180-126402/1-A
Client ID:
Sample Type: MB
Inject. Date: 28-Nov-2014 14:09:30 ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004633-005
Misc. Info.: MB 180-126402/1-A
Operator ID: 003200 Instrument ID: CH732

Method: \\PITCHROM\ChromData\CH732\20141128-4633.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 01-Dec-2014 02:15:20 Calib Date: 12-Nov-2014 13:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: piccolinov Date: 01-Dec-2014 01:42:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.271	6.287	-0.016	94	235741	8.00	8.00	
* 2 Naphthalene-d8	136	7.580	7.596	-0.016	99	1094668	8.00	8.00	
* 3 Acenaphthene-d10	164	9.316	9.327	-0.011	91	653944	8.00	8.00	
* 4 Phenanthrene-d10	188	10.790	10.801	-0.011	97	1067189	8.00	8.00	
* 5 Chrysene-d12	240	14.658	14.674	-0.016	97	842670	8.00	8.00	
* 6 Perylene-d12	264	17.596	17.607	-0.011	96	626717	8.00	8.00	
$ 7 2-Fluorophenol	112	4.802	4.818	-0.016	89	850306	40.0	29.7	
$ 8 Phenol-d5	99	5.886	5.902	-0.016	97	1280937	40.0	30.1	
$ 9 Nitrobenzene-d5	82	6.842	6.853	-0.011	87	1153137	40.0	29.1	
$ 10 2-Fluorobiphenyl	172	8.637	8.648	-0.011	99	2924155	40.0	28.0	
$ 11 2,4,6-Tribromophenol	330	10.080	10.091	-0.011	92	302379	40.0	28.4	
$ 12 Terphenyl-d14	244	12.778	12.788	-0.010	99	2830640	40.0	30.7	
13 1,4-Dioxane	88		1.655					ND	
14 N-Nitrosodimethylamine	74		2.269					ND	
15 Pyridine	79		2.339					ND	
16 2-Butoxyethanol	57		3.450					ND	
17 Dibromoacetonitrile	120		3.590					ND	
18 2-Picoline	93		4.030					ND	
19 N-Nitrosomethylethylamine	88		4.233					ND	
21 Methyl methanesulfonate	80		4.567					ND	
20 Acrylamide	71	4.796	4.597	0.200	26	1886			NC
22 Phenylmercaptan	110	4.802	5.000	-0.198	43	2885			NC
23 N-Nitrosodiethylamine	102		5.115					ND	
24 Ethyl methanesulfonate	79		5.256					ND	
28 Pentachloroethane	167		5.806					ND	
25 Benzaldehyde	77		5.806					ND	
26 Phenol	94		5.913					ND	
27 Aniline	93		5.929					ND	
29 Bis(2-chloroethyl)ether	93		5.998					ND	
30 2-Chlorophenol	128		6.062					ND	
31 n-Decane	43		6.127					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
32 1,3-Dichlorobenzene	146		6.228					ND	
33 1,4-Dichlorobenzene	146		6.303					ND	
34 Benzyl alcohol	108		6.426					ND	
35 1,2-Dichlorobenzene	146		6.463					ND	
36 2-Methylphenol	108		6.549					ND	
37 Indene	116		6.559					ND	
38 2,2'-oxybis[1-chloropropan	45		6.570					ND	
43 N-Nitrosomorpholine	116	6.271	6.632	-0.361	41	10179			NC
44 2-Toluidine	106		6.664					ND	
39 N-Nitrosopyrrolidine	100		6.666					ND	
41 N-Nitrosodi-n-propylamine	70		6.698					ND	
40 Acetophenone	105		6.698					ND	
42 4-Methylphenol	108		6.698					ND	
45 Hexachloroethane	117		6.821					ND	
46 Nitrobenzene	77		6.875					ND	
47 N-Nitrosopiperidine	114		6.926					ND	
48 Isophorone	82		7.115					ND	
51 o,o',o''-Triethylphosphoro	198		7.182					ND	
49 2-Nitrophenol	139		7.206					ND	
50 2,4-Dimethylphenol	107		7.238					ND	
52 Benzoic acid	122		7.291					ND	
53 Bis(2-chloroethoxy)methane	93		7.323					ND	
55 alpha,alpha-Dimethyl phene	58	7.580	7.353	0.227	44	1013			NC
54 2,4-Dichlorophenol	162		7.446					ND	
61 Hexachloropropene	213		7.526					ND	
56 1,2,4-Trichlorobenzene	180		7.537					ND	
58 Naphthalene	128		7.617					ND	
59 4-Chloroaniline	127		7.654					ND	
60 2,6-Dichlorophenol	162		7.670					ND	
62 Hexachlorobutadiene	225		7.740					ND	
63 Quinoline	129		7.786					ND	
65 N-Nitrosodi-n-butylamine	84	7.580	7.818	-0.238	41	23242			NC
66 p-Phenylene diamine	108	7.580	7.834	-0.254	47	94988			NC
64 Caprolactam	113		7.964					ND	
68 Safrole, Total	162		8.026					ND	
67 4-Chloro-3-methylphenol	107		8.119					ND	
69 2-Methylnaphthalene	142		8.301					ND	
71 1-Methylnaphthalene	142		8.397					ND	
72 Hexachlorocyclopentadiene	237		8.461					ND	
73 1,2,4,5-Tetrachlorobenzene	216		8.466					ND	
180 Isosafrole	162		8.514					ND	
74 2,4,6-Trichlorophenol	196		8.568					ND	
75 2,4,5-Trichlorophenol	196		8.605					ND	
78 1-Chloronaphthalene	162		8.616					ND	
80 1,4-Naphthoquinone	158	8.637	8.750	-0.113	44	4577			NC
76 1,1'-Biphenyl	154		8.750					ND	
81 1,4-Dinitrobenzene	168	8.637	8.769	-0.132	30	35133			NC
77 2-Chloronaphthalene	162		8.782					ND	
79 2-Nitroaniline	65		8.862					ND	
82 Dimethyl phthalate	163		9.017					ND	
83 1,3-Dinitrobenzene	168		9.059					ND	
84 2,6-Dinitrotoluene	165		9.086					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
85 Acenaphthylene	152		9.188					ND	
86 3-Nitroaniline	138		9.257					ND	
92 Pentachlorobenzene	250		9.294					ND	
94 1-Naphthylamine	143		9.340					ND	
87 2,4-Dinitrophenol	184		9.353					ND	
88 Acenaphthene	153		9.359					ND	
89 4-Nitrophenol	109		9.396					ND	
91 2,4-Dinitrotoluene	165		9.482					ND	
93 Dibenzofuran	168		9.524					ND	
102 N-Nitro-o-toluidine	152		9.586					ND	
96 2,3,4,6-Tetrachlorophenol	232		9.594					ND	
95 2,3,5,6-Tetrachlorophenol	232		9.636					ND	
97 2-Naphthylamine	143		9.668					ND	
98 Diethyl phthalate	149		9.695					ND	
99 Hexadecane	57		9.701					ND	
100 4-Chlorophenyl phenyl ethe	204		9.834					ND	
101 4-Nitroaniline	138		9.850					ND	
103 Fluorene	166		9.855					ND	
104 4,6-Dinitro-2-methylphenol	198		9.882					ND	
107 1,3,5-Trinitrobenzene	213		9.896					ND	
108 Phenacetin	108		9.939					ND	
109 Phorate	121		9.944					ND	
105 N-Nitrosodiphenylamine	169		9.946					ND	
57 Azobenzene	77		9.989					ND	
90 1,2-Diphenylhydrazine	77		9.989					ND	
111 Dimethoate	87		10.099					ND	
114 4-Aminobiphenyl	169	10.080	10.265	-0.184	57	13080			NC
117 Pronamide	173	10.080	10.297	-0.217	56	6351			NC
118 Pentachloronitrobenzene	237		10.302					ND	
110 4-Bromophenyl phenyl ether	248		10.310					ND	
112 Hexachlorobenzene	284		10.406					ND	
119 Disulfoton	88		10.419					ND	
113 Atrazine	200		10.432					ND	
120 Dinoseb	211		10.545					ND	
115 n-Octadecane	57		10.593					ND	
116 Pentachlorophenol	266		10.593					ND	
123 Hexachlorophene TIC	198		10.600					ND	
125 Methyl parathion	109		10.793					ND	
121 Phenanthrene	178		10.828					ND	
122 Anthracene	178		10.881					ND	
124 Carbazole	167		11.041					ND	
127 Ethyl Parathion	109		11.189					ND	
128 4-Nitroquinoline-1-oxide	190	10.785	11.263	-0.478	44	10692			NC
129 Methapyrilene	58		11.317					ND	
126 Di-n-butyl phthalate	149		11.367					ND	
70 Diphenamid	167		11.603					ND	
106 Diphenylamine	167		11.620					ND	
130 Isodrin	193		11.821					ND	
134 1,2,3,4 -Tetrachlorobenzen	216		12.215					ND	
131 Fluoranthene	202		12.281					ND	
132 Benzidine	184		12.425					ND	
135 p-Dimethylamino azobenzene	225	12.778	12.428	0.350	42	16316			NC

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
133 Pyrene	202		12.612					ND	
136 Chlorobenzilate	139		12.783					ND	
137 Famphur	218		12.850					ND	
139 3,3'-Dimethylbenzidine	212	12.778	12.936	-0.158	65	187973			NC
140 Kepone	272		13.030					ND	
141 2-Acetylaminofluorene	181		13.363					ND	
138 Butyl benzyl phthalate	149		13.552					ND	
142 Thionazin	97		13.789					ND	
143 4,4'-Methylene bis(2-chlor	231		13.881					ND	
148 Sulfotepp	97		14.530					ND	
144 3,3'-Dichlorobenzidine	252		14.573					ND	
145 Bis(2-ethylhexyl) phthalat	149		14.615					ND	
146 Benzo[a]anthracene	228		14.653					ND	
147 Chrysene	228		14.722					ND	
149 6-Methylchrysene	242	14.658	14.907	-0.249	50	14302			NC
150 Di-n-octyl phthalate	149		15.940					ND	
151 7,12-Dimethylbenz(a)anthra	256		16.806					ND	
152 Benzo[b]fluoranthene	252		16.822					ND	
153 Benzo[k]fluoranthene	252		16.881					ND	
219 Benzo[e]pyrene	252		17.388					ND	
154 Benzo[a]pyrene	252		17.490					ND	
155 3-Methylcholanthrene	268		17.524					ND	
156 Dibenz[a,h]acridine	279		18.636					ND	
220 Dibenz[a,j]acridine	279		19.210					ND	
157 Indeno[1,2,3-cd]pyrene	276		20.107					ND	
158 Dibenz(a,h)anthracene	278		20.139					ND	
159 Benzo[g,h,i]perylene	276		20.828					ND	
161 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
168 Aramite Peak 1	185		0.000					ND	
187 1,2-Dibromo-3-Chloropropan	157		0.000					ND	
174 2-Chlorobenzoic Acid	139		0.000					ND	
215 1-Phenyl-1-(2,4-dimethylph	1		0.000					ND	
162 3-Chlorobenzoic Acid	139		0.000					ND	
179 2,5-Dichlorophenol	162		0.000					ND	
184 Diallate Peak 1	86		0.000					ND	
172 Carbaryl	144		0.000					ND	
164 Aramite Peak 2	185		0.000					ND	
171 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
186 o-Phenylphenol	1		0.000					ND	
163 Diallate Peak 2	86		0.000					ND	
175 1,2,3-Trimethylbenzene	105		0.000					ND	
181 4-Chlorobenzoic Acid	139		0.000					ND	
165 Benzotrichloride	159		0.000					ND	
182 4-Chlorophenol	128		0.000					ND	
177 1,2,3,4-Tetrahydronaphthal	104		0.000					ND	
167 Phthalic anhydride	104		0.000					ND	
176 Dimethylformamide	73		0.000					ND	
178 Trifluralin	306		0.000					ND	
170 4-tert-Octylphenol	135		0.000					ND	
212 2,3,7,8-TCDD TIC	1		0.000					ND	
169 Octachlorostyrene	308		0.000					ND	
173 Octachlorocyclopentene	307		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
185 4-Nitrobiphenyl	199		0.000					ND	
166 4-Chloro-3-nitro-alpha,alp	179		0.000					ND	
188 2-Bromonaphthalene	127		0.000					ND	
160 n,n'-Dimethylaniline	120		0.000					ND	
217 1-Phenyl-1-(4-methylphenyl	1		0.000					ND	
216 1-Phenyl-1-(2,4-dimethylph	1		0.000					ND	
213 3-Methylphenol	1		0.000					ND	
183 2,3-Dichlorophenol	162		0.000					ND	
218 Benzotrichloride TIC	1		0.000					ND	
214 1-Phenyl-1-(4-methylphenyl	1		0.000					ND	
189 Pentachlorophenol_T	266		5.734					ND	
191 Benzidine_T	184		8.426					ND	
192 4,4'-DDE	246		8.843					ND	
193 4,4'-DDD	235		9.698					ND	
194 4,4'-DDT	235		10.184					ND	
S 195 Aramite, Total	185		1.000					ND	
S 196 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
S 197 Methyl Phenols,Total	108		0.000					ND	
S 198 Diallate	86		0.000					ND	
S 199 Total Cresols	108		0.000					ND	
T 200 Quinoline TIC	129		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SVTAPITINTRNi_00006 Amount Added: 1.00 Units: uL Run Reagent

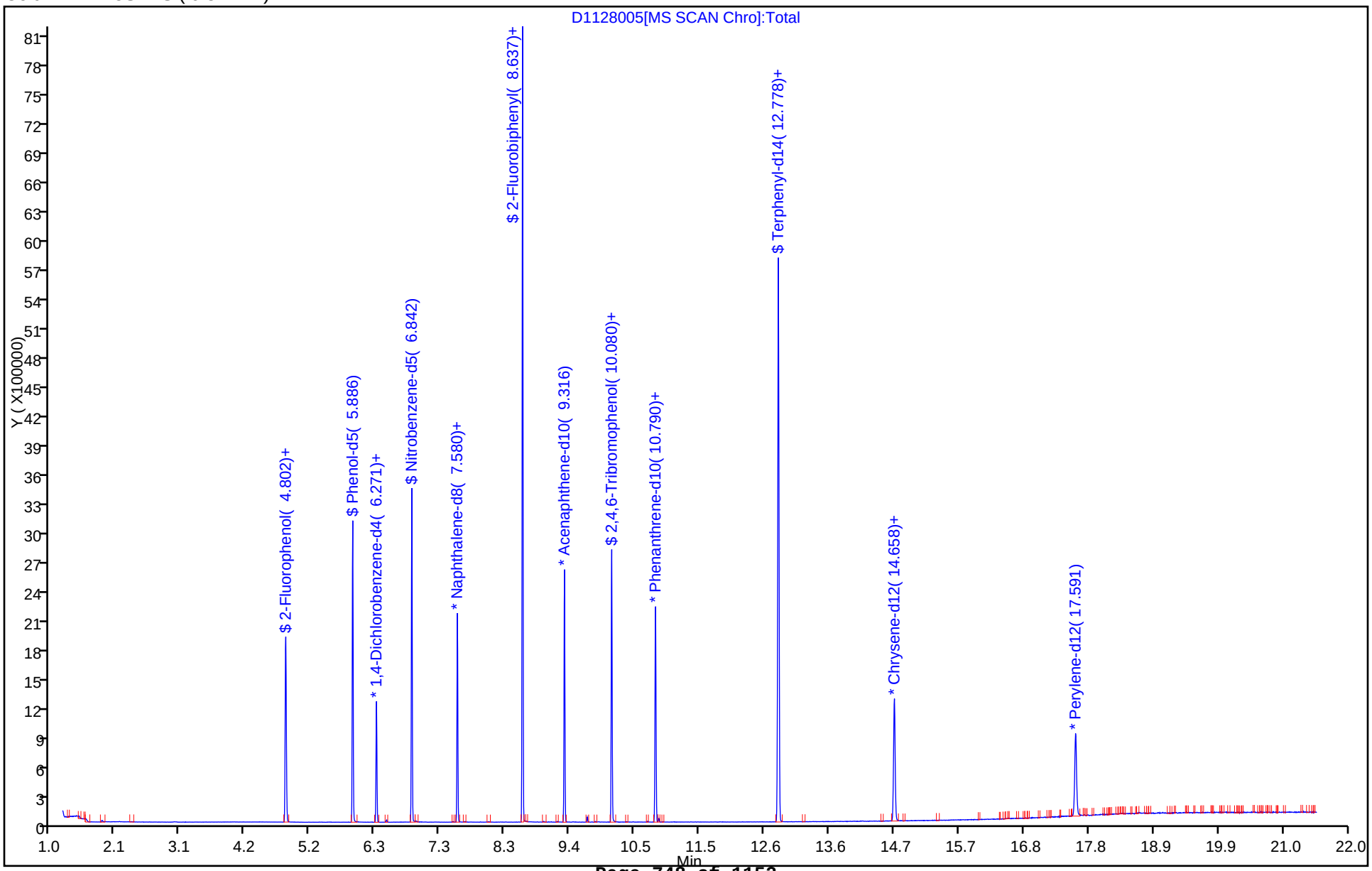
Report Date: 01-Dec-2014 02:15:23 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20141128-4633.b\D1128005.D

Injection Date:	28-Nov-2014 14:09:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	MB 180-126402/1-A			Worklist Smp#:	5
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-39026-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-125791/2-A

Matrix: Water | Lab File ID: V1124009.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 11/20/2014 09:07

Sample wt/vol: 250(mL) | Date Analyzed: 11/24/2014 15:24

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 126233 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	13.0		0.20	0.029
208-96-8	Acenaphthylene	13.4		0.20	0.022
120-12-7	Anthracene	13.0		0.20	0.019
92-87-5	Benzidine	4.75	J	20	4.7
56-55-3	Benzo[a]anthracene	13.4		0.20	0.037
205-99-2	Benzo[b]fluoranthene	12.6		0.20	0.049
207-08-9	Benzo[k]fluoranthene	13.7		0.20	0.030
65-85-0	Benzoic acid	15.0		5.0	1.6
191-24-2	Benzo[g,h,i]perylene	13.4		0.20	0.029
50-32-8	Benzo[a]pyrene	12.9		0.20	0.028
111-91-1	Bis(2-chloroethoxy)methane	12.2		1.0	0.13
111-44-4	Bis(2-chloroethyl)ether	12.4		1.0	0.032
117-81-7	Bis(2-ethylhexyl) phthalate	12.7		2.0	0.44
108-60-1	2,2'-oxybis[1-chloropropane]	11.6		1.0	0.024
101-55-3	4-Bromophenyl phenyl ether	13.4		1.0	0.12
7005-72-3	4-Chlorophenyl phenyl ether	13.7		1.0	0.080
91-58-7	2-Chloronaphthalene	12.0		0.20	0.031
85-68-7	Butyl benzyl phthalate	12.7		1.0	0.21
218-01-9	Chrysene	13.4		0.20	0.031
53-70-3	Dibenz(a,h)anthracene	13.3		0.20	0.027
84-74-2	Di-n-butyl phthalate	12.5		1.0	0.24
117-84-0	Di-n-octyl phthalate	12.0		1.0	0.20
84-66-2	Diethyl phthalate	13.6		1.0	0.30
131-11-3	Dimethyl phthalate	13.6		1.0	0.18
91-94-1	3,3'-Dichlorobenzidine	11.4		1.0	0.15
121-14-2	2,4-Dinitrotoluene	13.6		1.0	0.21
606-20-2	2,6-Dinitrotoluene	13.5		1.0	0.14
95-57-8	2-Chlorophenol	12.6		1.0	0.23
120-83-2	2,4-Dichlorophenol	12.7		1.0	0.067
105-67-9	2,4-Dimethylphenol	12.6		1.0	0.17
51-28-5	2,4-Dinitrophenol	19.3		5.0	2.5
88-75-5	2-Nitrophenol	12.9		1.0	0.11
88-06-2	2,4,6-Trichlorophenol	12.8		1.0	0.30
122-66-7	1,2-Diphenylhydrazine(as Azobenzene)	12.6		1.0	0.12

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-39026-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-125791/2-A

Matrix: Water | Lab File ID: V1124009.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 11/20/2014 09:07

Sample wt/vol: 250(mL) | Date Analyzed: 11/24/2014 15:24

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 126233 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-82-1	1,2,4-Trichlorobenzene	13.3		1.0	0.085
59-50-7	4-Chloro-3-methylphenol	13.4		1.0	0.17
100-02-7	4-Nitrophenol	28.6		5.0	0.80
534-52-1	4,6-Dinitro-2-methylphenol	26.1		5.0	1.6
206-44-0	Fluoranthene	12.8		0.20	0.021
86-73-7	Fluorene	14.3		0.20	0.024
118-74-1	Hexachlorobenzene	13.2		1.0	0.061
87-68-3	Hexachlorobutadiene	13.5		1.0	0.094
77-47-4	Hexachlorocyclopentadiene	14.2		1.0	0.14
67-72-1	Hexachloroethane	13.3		1.0	0.14
193-39-5	Indeno[1,2,3-cd]pyrene	13.2		0.20	0.043
78-59-1	Isophorone	12.6		1.0	0.074
91-20-3	Naphthalene	13.4		0.20	0.023
98-95-3	Nitrobenzene	13.0		2.0	0.15
621-64-7	N-Nitrosodi-n-propylamine	13.6		1.0	0.050
62-75-9	N-Nitrosodimethylamine	12.8		1.0	0.12
86-30-6	N-Nitrosodiphenylamine	13.0		1.0	0.12
85-01-8	Phenanthrene	12.8		0.20	0.042
129-00-0	Pyrene	12.7		0.20	0.023
87-86-5	Pentachlorophenol	23.6		1.0	0.50
108-95-2	Phenol	13.1		1.0	0.055

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	71		30-150
321-60-8	2-Fluorobiphenyl	65		30-150
367-12-4	2-Fluorophenol (Surr)	67		30-150
4165-60-0	Nitrobenzene-d5 (Surr)	64		30-150
4165-62-2	Phenol-d5 (Surr)	65		30-150
1718-51-0	Terphenyl-d14 (Surr)	58		10-150

Report Date: 25-Nov-2014 04:12:25 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141124-4564.b\V1124009.D
Lims ID: LCS 180-125791/2-A
Client ID:
Sample Type: LCS
Inject. Date: 24-Nov-2014 15:24:30 ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004564-009
Misc. Info.: LCS 180-125791/2-A
Operator ID: 003200 Instrument ID: CH731

Method: \\PITCHROM\ChromData\CH731\20141124-4564.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 25-Nov-2014 04:12:16 Calib Date: 18-Nov-2014 07:43:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: piccolinov Date: 25-Nov-2014 03:50:13

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.280	6.277	0.003	89	118649	8.00	8.00	
* 2 Naphthalene-d8	136	7.482	7.479	0.003	97	407660	8.00	8.00	
* 3 Acenaphthene-d10	164	9.101	9.098	0.003	93	306862	8.00	8.00	
* 4 Phenanthrene-d10	188	10.468	10.465	0.003	96	687038	8.00	8.00	
* 5 Chrysene-d12	240	13.962	13.948	0.014	95	707432	8.00	8.00	
* 6 Perylene-d12	264	16.873	16.855	0.019	97	515955	8.00	8.00	
$ 7 2-Fluorophenol	112	4.934	4.931	0.003	91	510563	40.0	26.6	
$ 8 Phenol-d5	99	5.927	5.919	0.008	87	611037	40.0	26.2	
$ 9 Nitrobenzene-d5	82	6.804	6.801	0.003	90	743083	40.0	25.8	
$ 10 2-Fluorobiphenyl	172	8.465	8.462	0.003	99	1551291	40.0	26.2	
$ 11 2,4,6-Tribromophenol	330	9.822	9.819	0.003	85	233410	40.0	28.3	
$ 12 Terphenyl-d14	244	12.226	12.212	0.014	99	1939001	40.0	23.0	
13 1,4-Dioxane	88	1.835	1.838	-0.003	89	234398	40.0	28.0	
14 N-Nitrosodimethylamine	74	2.498	2.490	0.008	85	318720	40.0	25.5	
15 Pyridine	79	2.562	2.564	-0.002	92	649450	40.0	28.7	
26 Benzaldehyde	77	5.842	5.839	0.003	87	447384	40.0	25.7	
27 Phenol	94	5.938	5.935	0.003	98	677615	40.0	26.2	
28 Aniline	93	5.954	5.951	0.003	96	753568	40.0	25.6	
29 Bis(2-chloroethyl)ether	93	6.018	6.015	0.003	94	421072	40.0	24.8	
31 2-Chlorophenol	128	6.072	6.074	-0.002	90	485996	40.0	25.1	
32 n-Decane	43	6.130	6.133	-0.003	76	353666	40.0	24.3	
33 1,3-Dichlorobenzene	146	6.227	6.224	0.003	89	608591	40.0	26.9	
34 1,4-Dichlorobenzene	146	6.296	6.293	0.003	85	637151	40.0	27.4	
36 Benzyl alcohol	108	6.408	6.405	0.003	83	299709	40.0	26.6	
37 1,2-Dichlorobenzene	146	6.446	6.443	0.003	87	579738	40.0	26.9	
38 2-Methylphenol	108	6.515	6.512	0.003	90	468983	40.0	26.4	
39 Indene	116	6.526	6.528	-0.002	87	891465	40.0	28.0	
40 2,2'-oxybis[1-chloropropan	45	6.542	6.539	0.003	63	334426	40.0	23.2	
43 Acetophenone	105	6.659	6.656	0.003	75	806320	40.0	26.2	
45 4-Methylphenol	108	6.659	6.656	0.003	57	534990	40.0	26.7	
44 N-Nitrosodi-n-propylamine	70	6.659	6.656	0.003	64	471281	40.0	27.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
47 Hexachloroethane	117	6.771	6.769	0.002	83	293755	40.0	26.6	
48 Nitrobenzene	77	6.820	6.817	0.003	86	731163	40.0	26.0	
50 Isophorone	82	7.039	7.041	-0.002	97	1078568	40.0	25.2	
51 2-Nitrophenol	139	7.124	7.121	0.003	77	261857	40.0	25.7	
52 2,4-Dimethylphenol	107	7.151	7.148	0.003	93	608373	40.0	25.3	
56 Benzoic acid	122	7.231	7.196	0.035	87	271665	40.0	29.9	
55 Bis(2-chloroethoxy)methane	93	7.231	7.233	-0.002	97	525186	40.0	24.3	
57 2,4-Dichlorophenol	162	7.343	7.340	0.003	94	497027	40.0	25.3	
61 Azobenzene	77		7.403				ND	ND	
59 1,2,4-Trichlorobenzene	180	7.429	7.426	0.003	91	667753	40.0	26.6	
60 Naphthalene	128	7.503	7.500	0.003	98	1556847	40.0	26.8	
62 4-Chloroaniline	127	7.541	7.538	0.003	89	556623	40.0	23.4	
64 Hexachlorobutadiene	225	7.621	7.618	0.003	94	573963	40.0	27.0	
67 Caprolactam	113	7.845	7.821	0.024	79	118330	40.0	24.9	
70 4-Chloro-3-methylphenol	107	7.973	7.965	0.008	89	530947	40.0	26.8	
72 2-Methylnaphthalene	142	8.139	8.136	0.003	88	1119843	40.0	26.7	
75 1-Methylnaphthalene	142	8.230	8.227	0.003	88	1011774	40.0	26.2	
76 Hexachlorocyclopentadiene	237	8.289	8.286	0.003	97	695869	40.0	28.4	
77 1,2,4,5-Tetrachlorobenzene	216	8.294	8.291	0.003	97	887022	40.0	26.5	
78 2,4,6-Trichlorophenol	196	8.390	8.387	0.003	93	494715	40.0	25.7	
79 2,4,5-Trichlorophenol	196	8.428	8.419	0.009	91	546644	40.0	27.5	
80 1,1'-Biphenyl	154	8.561	8.558	0.003	96	1480538	40.0	26.6	
81 2-Chloronaphthalene	162	8.588	8.585	0.003	98	1190187	40.0	24.0	
82 2-Nitroaniline	65	8.663	8.660	0.003	71	395082	40.0	27.0	
86 Dimethyl phthalate	163	8.818	8.809	0.009	95	1402122	40.0	27.2	
87 1,3-Dinitrobenzene	168	8.850	8.847	0.003	83	227752	40.0	28.5	
88 2,6-Dinitrotoluene	165	8.876	8.868	0.008	83	302966	40.0	27.0	
89 Acenaphthylene	152	8.972	8.970	0.002	97	1844138	40.0	26.9	
90 3-Nitroaniline	138	9.037	9.034	0.003	84	249482	40.0	27.2	
92 2,4-Dinitrophenol	184	9.133	9.124	0.009	70	386792	80.0	38.5	
91 Acenaphthene	153	9.133	9.124	0.009	86	1213892	40.0	25.9	
93 4-Nitrophenol	109	9.170	9.162	0.008	81	661001	80.0	57.3	
94 2,4-Dinitrotoluene	165	9.250	9.242	0.008	83	418167	40.0	27.3	
95 Dibenzofuran	168	9.288	9.285	0.003	95	1903628	40.0	26.5	
99 2,3,4,6-Tetrachlorophenol	232	9.394	9.392	0.002	72	535290	40.0	27.2	
101 Diethyl phthalate	149	9.453	9.445	0.008	96	1553682	40.0	27.2	
102 Hexadecane	57	9.459	9.450	0.009	83	536129	40.0	27.3	
104 4-Chlorophenyl phenyl ethe	204	9.581	9.579	0.002	91	982913	40.0	27.5	
105 4-Nitroaniline	138	9.597	9.595	0.002	71	275340	40.0	27.1	
106 Fluorene	166	9.603	9.600	0.003	93	1486819	40.0	28.5	
108 4,6-Dinitro-2-methylphenol	198	9.630	9.621	0.009	87	652883	80.0	52.3	
109 N-Nitrosodiphenylamine	169	9.688	9.680	0.008	64	1141123	40.0	26.1	
111 1,2-Diphenylhydrazine	77	9.731	9.723	0.008	99	1700013	40.0	25.2	
116 4-Bromophenyl phenyl ether	248	10.036	10.027	0.009	67	609630	40.0	26.9	
118 Hexachlorobenzene	284	10.121	10.113	0.008	92	586391	40.0	26.4	
119 Atrazine	200	10.148	10.139	0.009	92	478332	40.0	23.4	
122 Pentachlorophenol	266	10.287	10.284	0.003	90	807420	80.0	47.2	
121 n-Octadecane	57	10.287	10.284	0.003	88	627460	40.0	30.8	
126 Phenanthrene	178	10.495	10.487	0.008	97	2445364	40.0	25.7	
128 Anthracene	178	10.543	10.535	0.008	96	2494984	40.0	26.0	
130 Carbazole	167	10.682	10.674	0.008	97	2029482	40.0	26.3	
132 Di-n-butyl phthalate	149	10.970	10.962	0.008	99	2347571	40.0	25.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
137 Fluoranthene	202	11.777	11.763	0.014	95	3023273	40.0	25.7	
138 Benzidine	184	11.900	11.886	0.014	98	378367	40.0	9.50	
139 Pyrene	202	12.076	12.063	0.013	98	3032480	40.0	25.3	
144 Butyl benzyl phthalate	149	12.910	12.896	0.014	95	1002878	40.0	25.3	
149 3,3'-Dichlorobenzidine	252	13.866	13.847	0.019	73	824673	40.0	22.9	
151 Bis(2-ethylhexyl) phthalat	149	13.898	13.884	0.014	94	1337511	40.0	25.4	
152 Benzo[a]anthracene	228	13.946	13.927	0.019	95	2858338	40.0	26.8	
153 Chrysene	228	14.015	13.996	0.019	94	2637568	40.0	26.9	
156 Di-n-octyl phthalate	149	15.191	15.177	0.014	99	2067448	40.0	24.0	
158 Benzo[b]fluoranthene	252	16.083	16.059	0.024	93	2343894	40.0	25.1	
159 Benzo[k]fluoranthene	252	16.136	16.112	0.024	95	2448225	40.0	27.3	
160 Benzo[a]pyrene	252	16.761	16.742	0.019	73	2094481	40.0	25.7	
163 Indeno[1,2,3-cd]pyrene	276	19.090	19.066	0.024	96	1956311	40.0	26.4	
164 Dibenz(a,h)anthracene	278	19.112	19.093	0.019	89	1680714	40.0	26.5	
165 Benzo[g,h,i]perylene	276	19.673	19.654	0.019	95	1647951	40.0	26.7	
S 208 Methyl Phenols,Total	108				0		80.0	53.1	
S 206 Total Cresols	108				0		80.0	53.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SVTAPITINTRNi_00006 Amount Added: 1.00 Units: uL Run Reagent

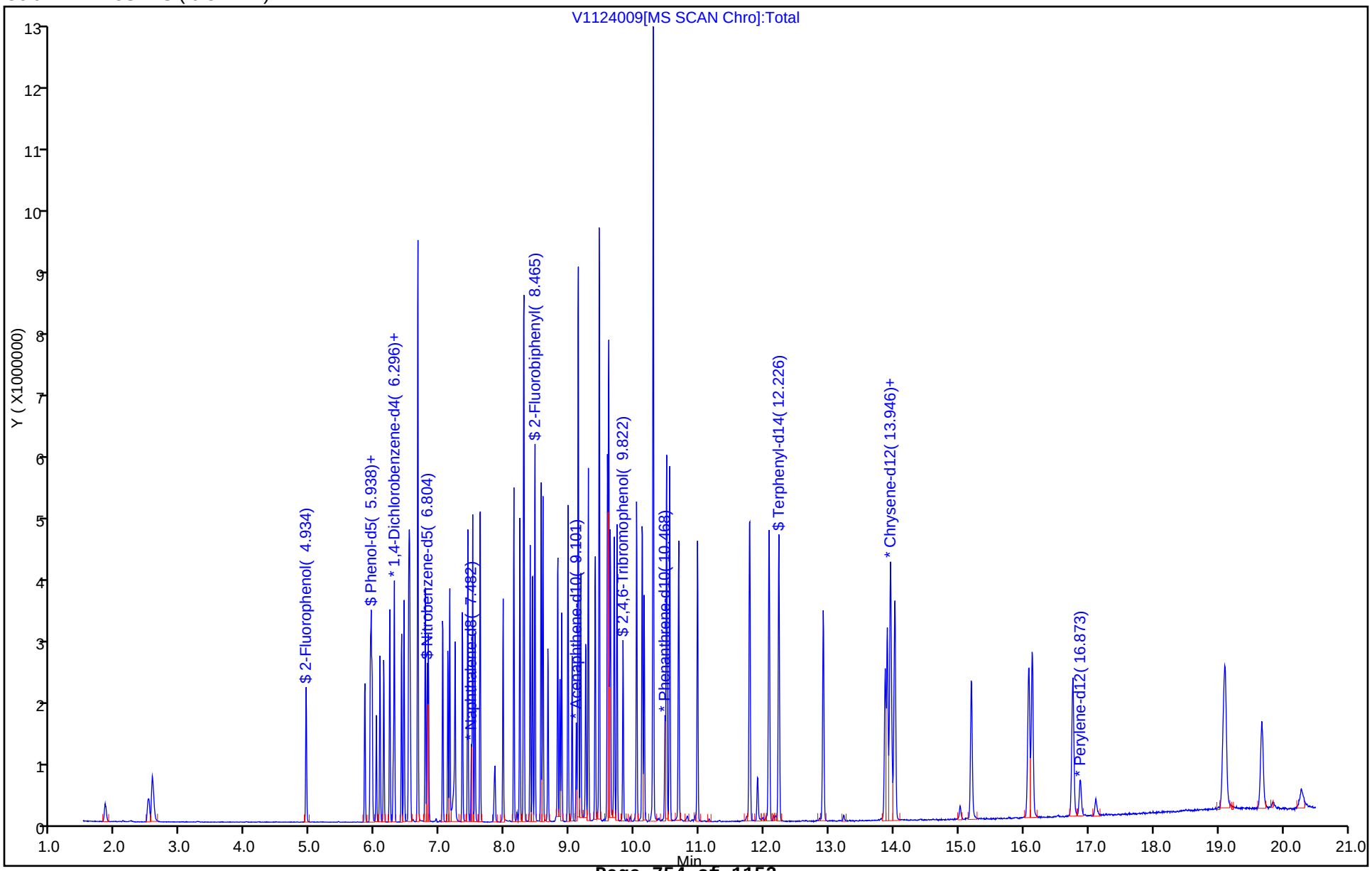
Report Date: 25-Nov-2014 04:12:25 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20141124-4564.b\V1124009.D

Injection Date:	24-Nov-2014 15:24:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	LCS 180-125791/2-A			Worklist Smp#:	9
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-39026-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-126402/2-A

Matrix: Water | Lab File ID: D1128009.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 11/25/2014 09:59

Sample wt/vol: 250(mL) | Date Analyzed: 11/28/2014 15:56

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 126682 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	14.6		0.20	0.029
208-96-8	Acenaphthylene	15.2		0.20	0.022
120-12-7	Anthracene	15.7		0.20	0.019
92-87-5	Benzidine	ND		20	4.7
56-55-3	Benzo[a]anthracene	15.6		0.20	0.037
205-99-2	Benzo[b]fluoranthene	16.7		0.20	0.049
207-08-9	Benzo[k]fluoranthene	15.9		0.20	0.030
65-85-0	Benzoic acid	11.4		5.0	1.6
191-24-2	Benzo[g,h,i]perylene	16.4		0.20	0.029
50-32-8	Benzo[a]pyrene	16.2		0.20	0.028
111-91-1	Bis(2-chloroethoxy)methane	14.4		1.0	0.13
111-44-4	Bis(2-chloroethyl)ether	14.5		1.0	0.032
117-81-7	Bis(2-ethylhexyl) phthalate	16.9		2.0	0.44
108-60-1	2,2'-oxybis[1-chloropropane]	12.7		1.0	0.024
101-55-3	4-Bromophenyl phenyl ether	14.6		1.0	0.12
7005-72-3	4-Chlorophenyl phenyl ether	14.8		1.0	0.080
91-58-7	2-Chloronaphthalene	13.5		0.20	0.031
85-68-7	Butyl benzyl phthalate	16.7		1.0	0.21
218-01-9	Chrysene	15.3		0.20	0.031
53-70-3	Dibenz(a,h)anthracene	16.9		0.20	0.027
84-74-2	Di-n-butyl phthalate	16.3		1.0	0.24
117-84-0	Di-n-octyl phthalate	20.1		1.0	0.20
84-66-2	Diethyl phthalate	15.6		1.0	0.30
131-11-3	Dimethyl phthalate	15.3		1.0	0.18
91-94-1	3,3'-Dichlorobenzidine	14.1		1.0	0.15
121-14-2	2,4-Dinitrotoluene	17.8		1.0	0.21
606-20-2	2,6-Dinitrotoluene	15.9		1.0	0.14
95-57-8	2-Chlorophenol	14.7		1.0	0.23
120-83-2	2,4-Dichlorophenol	15.0		1.0	0.067
105-67-9	2,4-Dimethylphenol	14.4		1.0	0.17
51-28-5	2,4-Dinitrophenol	29.7		5.0	2.5
88-75-5	2-Nitrophenol	15.9		1.0	0.11
88-06-2	2,4,6-Trichlorophenol	15.0		1.0	0.30
122-66-7	1,2-Diphenylhydrazine(as Azobenzene)	15.3		1.0	0.12

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-39026-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-126402/2-A

Matrix: Water | Lab File ID: D1128009.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 11/25/2014 09:59

Sample wt/vol: 250(mL) | Date Analyzed: 11/28/2014 15:56

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 126682 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-82-1	1,2,4-Trichlorobenzene	14.4		1.0	0.085
59-50-7	4-Chloro-3-methylphenol	15.6		1.0	0.17
100-02-7	4-Nitrophenol	33.5		5.0	0.80
534-52-1	4,6-Dinitro-2-methylphenol	30.6		5.0	1.6
206-44-0	Fluoranthene	15.4		0.20	0.021
86-73-7	Fluorene	15.9		0.20	0.024
118-74-1	Hexachlorobenzene	14.5		1.0	0.061
87-68-3	Hexachlorobutadiene	14.2		1.0	0.094
77-47-4	Hexachlorocyclopentadiene	15.4		1.0	0.14
67-72-1	Hexachloroethane	15.1		1.0	0.14
193-39-5	Indeno[1,2,3-cd]pyrene	16.6		0.20	0.043
78-59-1	Isophorone	14.9		1.0	0.074
91-20-3	Naphthalene	14.8		0.20	0.023
98-95-3	Nitrobenzene	14.7		2.0	0.15
621-64-7	N-Nitrosodi-n-propylamine	13.7		1.0	0.050
62-75-9	N-Nitrosodimethylamine	13.9		1.0	0.12
86-30-6	N-Nitrosodiphenylamine	15.3		1.0	0.12
85-01-8	Phenanthrene	15.4		0.20	0.042
129-00-0	Pyrene	15.0		0.20	0.023
87-86-5	Pentachlorophenol	26.7		1.0	0.50
108-95-2	Phenol	14.4		1.0	0.055

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	76		30-150
321-60-8	2-Fluorobiphenyl	71		30-150
367-12-4	2-Fluorophenol (Surr)	74		30-150
4165-60-0	Nitrobenzene-d5 (Surr)	73		30-150
4165-62-2	Phenol-d5 (Surr)	74		30-150
1718-51-0	Terphenyl-d14 (Surr)	70		10-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20141128-4633.b\D1128009.D
Lims ID: LCS 180-126402/2-A
Client ID:
Sample Type: LCS
Inject. Date: 28-Nov-2014 15:56:30 ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004633-009
Misc. Info.: LCS 180-126402/2-A
Operator ID: 003200 Instrument ID: CH732

Method: \\PITCHROM\ChromData\CH732\20141128-4633.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 01-Dec-2014 02:15:20 Calib Date: 12-Nov-2014 13:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: piccolinov Date: 01-Dec-2014 01:47:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.260	6.287	-0.027	95	206508	8.00	8.00	
* 2 Naphthalene-d8	136	7.580	7.596	-0.016	99	956835	8.00	8.00	
* 3 Acenaphthene-d10	164	9.316	9.327	-0.011	91	572808	8.00	8.00	
* 4 Phenanthrene-d10	188	10.790	10.801	-0.011	97	919449	8.00	8.00	
* 5 Chrysene-d12	240	14.669	14.674	-0.005	97	778117	8.00	8.00	
* 6 Perylene-d12	264	17.602	17.607	-0.005	95	541516	8.00	8.00	
$ 7 2-Fluorophenol	112	4.786	4.818	-0.032	89	744657	40.0	29.7	
$ 8 Phenol-d5	99	5.875	5.902	-0.027	96	1107887	40.0	29.7	
$ 9 Nitrobenzene-d5	82	6.837	6.853	-0.016	86	1010839	40.0	29.2	
$ 10 2-Fluorobiphenyl	172	8.632	8.648	-0.016	99	2594534	40.0	28.4	
$ 11 2,4,6-Tribromophenol	330	10.080	10.091	-0.011	91	279018	40.0	30.5	
$ 12 Terphenyl-d14	244	12.783	12.788	-0.005	99	2375139	40.0	27.9	
13 1,4-Dioxane	88	1.607	1.655	-0.048	92	177556	40.0	28.1	
14 N-Nitrosodimethylamine	74	2.211	2.269	-0.058	94	238612	40.0	27.7	
15 Pyridine	79	2.280	2.339	-0.059	96	467448	40.0	30.0	
25 Benzaldehyde	77	5.779	5.806	-0.027	94	518449	40.0	24.8	
26 Phenol	94	5.891	5.913	-0.022	98	1219990	40.0	28.9	
27 Aniline	93	5.902	5.929	-0.027	94	1346362	40.0	27.5	
29 Bis(2-chloroethyl)ether	93	5.972	5.998	-0.026	96	872097	40.0	29.0	
30 2-Chlorophenol	128	6.036	6.062	-0.026	95	1013686	40.0	29.4	
31 n-Decane	43	6.100	6.127	-0.027	91	895400	40.0	26.4	
32 1,3-Dichlorobenzene	146	6.201	6.228	-0.027	99	1130809	40.0	27.9	
33 1,4-Dichlorobenzene	146	6.281	6.303	-0.022	97	1181977	40.0	29.2	
34 Benzyl alcohol	108	6.404	6.426	-0.022	96	652706	40.0	29.3	
35 1,2-Dichlorobenzene	146	6.442	6.463	-0.021	99	1135181	40.0	28.5	
36 2-Methylphenol	108	6.527	6.549	-0.022	93	955160	40.0	30.6	
37 Indene	116	6.538	6.559	-0.021	90	1655339	40.0	29.6	
38 2,2'-oxybis[1-chloropropan	45	6.549	6.570	-0.021	95	1360295	40.0	25.3	
41 N-Nitrosodi-n-propylamine	70	6.677	6.698	-0.021	88	559269	40.0	27.4	
40 Acetophenone	105	6.677	6.698	-0.021	95	1147586	40.0	27.6	
42 4-Methylphenol	108	6.682	6.698	-0.016	92	935507	40.0	28.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
45 Hexachloroethane	117	6.800	6.821	-0.021	98	475220	40.0	30.1	
46 Nitrobenzene	77	6.853	6.875	-0.021	86	1028225	40.0	29.4	
48 Isophorone	82	7.099	7.115	-0.016	99	1952171	40.0	29.9	
49 2-Nitrophenol	139	7.184	7.206	-0.022	89	636926	40.0	31.8	
50 2,4-Dimethylphenol	107	7.222	7.238	-0.016	92	1026368	40.0	28.8	
52 Benzoic acid	122	7.307	7.291	0.016	89	453742	40.0	22.8	
53 Bis(2-chloroethoxy)methane	93	7.307	7.323	-0.016	99	1248987	40.0	28.7	
54 2,4-Dichlorophenol	162	7.430	7.446	-0.016	91	967377	40.0	29.9	
56 1,2,4-Trichlorobenzene	180	7.516	7.537	-0.021	94	1081646	40.0	28.8	
58 Naphthalene	128	7.601	7.617	-0.016	96	3656085	40.0	29.6	
59 4-Chloroaniline	127	7.644	7.654	-0.010	98	1474902	40.0	28.5	
62 Hexachlorobutadiene	225	7.724	7.740	-0.016	97	557702	40.0	28.5	
64 Caprolactam	113	7.964	7.964	0.000	80	372968	40.0	33.4	
67 4-Chloro-3-methylphenol	107	8.114	8.119	-0.005	95	977012	40.0	31.1	
69 2-Methylnaphthalene	142	8.285	8.301	-0.016	93	2470215	40.0	29.4	
71 1-Methylnaphthalene	142	8.386	8.397	-0.011	93	2343963	40.0	29.5	
72 Hexachlorocyclopentadiene	237	8.445	8.461	-0.016	95	647180	40.0	30.9	
73 1,2,4,5-Tetrachlorobenzene	216	8.456	8.466	-0.010	97	972772	40.0	27.3	
74 2,4,6-Trichlorophenol	196	8.557	8.568	-0.011	91	717456	40.0	29.9	
75 2,4,5-Trichlorophenol	196	8.595	8.605	-0.010	96	778714	40.0	30.8	
76 1,1'-Biphenyl	154	8.739	8.750	-0.011	93	3062143	40.0	29.1	
77 2-Chloronaphthalene	162	8.766	8.782	-0.016	94	2303551	40.0	27.1	
79 2-Nitroaniline	65	8.851	8.862	-0.011	89	661306	40.0	32.0	
82 Dimethyl phthalate	163	9.011	9.017	-0.006	100	2576167	40.0	30.6	
83 1,3-Dinitrobenzene	168	9.049	9.059	-0.010	88	418260	40.0	34.7	
84 2,6-Dinitrotoluene	165	9.075	9.086	-0.011	95	583393	40.0	31.8	
85 Acenaphthylene	152	9.177	9.188	-0.011	98	4016157	40.0	30.3	
86 3-Nitroaniline	138	9.246	9.257	-0.011	97	703493	40.0	30.7	
87 2,4-Dinitrophenol	184	9.348	9.353	-0.005	64	585665	80.0	59.5	
88 Acenaphthene	153	9.348	9.359	-0.011	90	2380386	40.0	29.2	
89 4-Nitrophenol	109	9.391	9.396	-0.005	84	592145	80.0	67.1	
91 2,4-Dinitrotoluene	165	9.471	9.482	-0.011	95	776778	40.0	35.5	
93 Dibenzofuran	168	9.514	9.524	-0.010	98	3411503	40.0	29.4	
96 2,3,4,6-Tetrachlorophenol	232	9.626	9.594	0.032	73	597386	40.0	29.7	
98 Diethyl phthalate	149	9.690	9.695	-0.005	98	2464406	40.0	31.1	
99 Hexadecane	57	9.690	9.701	-0.011	89	1590887	40.0	26.3	
100 4-Chlorophenyl phenyl ethe	204	9.823	9.834	-0.011	92	1225467	40.0	29.6	
101 4-Nitroaniline	138	9.845	9.850	-0.005	92	705041	40.0	32.8	
103 Fluorene	166	9.850	9.855	-0.005	95	2812818	40.0	31.9	
104 4,6-Dinitro-2-methylphenol	198	9.871	9.882	-0.011	89	889390	80.0	61.3	
105 N-Nitrosodiphenylamine	169	9.936	9.946	-0.010	61	2009384	40.0	30.6	
57 Azobenzene	77		9.989				ND	ND	
90 1,2-Diphenylhydrazine	77	9.978	9.989	-0.011	98	2845068	40.0	30.6	
110 4-Bromophenyl phenyl ether	248	10.304	10.310	-0.006	69	682550	40.0	29.3	
112 Hexachlorobenzene	284	10.395	10.406	-0.011	94	672879	40.0	29.0	
113 Atrazine	200	10.427	10.432	-0.005	92	584901	40.0	26.9	
115 n-Octadecane	57	10.587	10.593	-0.006	94	1648036	40.0	28.1	
116 Pentachlorophenol	266	10.582	10.593	-0.011	94	792561	80.0	53.3	
121 Phenanthrene	178	10.817	10.828	-0.011	97	4061746	40.0	30.8	
122 Anthracene	178	10.870	10.881	-0.011	97	4230790	40.0	31.3	
124 Carbazole	167	11.031	11.041	-0.010	95	3716605	40.0	31.4	
126 Di-n-butyl phthalate	149	11.362	11.367	-0.005	99	4669915	40.0	32.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
131 Fluoranthene	202	12.270	12.281	-0.011	98	3883259	40.0	30.8	
132 Benzidine	184	12.414	12.425	-0.011	100	541089	40.0	8.73	
133 Pyrene	202	12.607	12.612	-0.005	97	3925731	40.0	30.0	
138 Butyl benzyl phthalate	149	13.547	13.552	-0.005	97	1895215	40.0	33.5	
144 3,3'-Dichlorobenzidine	252	14.567	14.573	-0.006	75	1022197	40.0	28.3	
145 Bis(2-ethylhexyl) phthalat	149	14.605	14.615	-0.010	96	2568767	40.0	33.8	
146 Benzo[a]anthracene	228	14.647	14.653	-0.006	98	3398821	40.0	31.1	
147 Chrysene	228	14.717	14.722	-0.005	98	3212971	40.0	30.7	
150 Di-n-octyl phthalate	149	15.930	15.940	-0.010	99	4247522	40.0	40.2	
152 Benzo[b]fluoranthene	252	16.822	16.822	0.000	99	2838799	40.0	33.4	
153 Benzo[k]fluoranthene	252	16.875	16.881	-0.005	99	2807589	40.0	31.8	
154 Benzo[a]pyrene	252	17.489	17.490	-0.001	79	2508136	40.0	32.4	
157 Indeno[1,2,3-cd]pyrene	276	20.102	20.107	-0.005	96	2567097	40.0	33.1	
158 Dibenz(a,h)anthracene	278	20.139	20.139	0.000	90	2192848	40.0	33.7	
159 Benzo[g,h,i]perylene	276	20.823	20.828	-0.005	95	2137939	40.0	32.8	
S 197 Methyl Phenols,Total	108				0		80.0	59.3	
S 199 Total Cresols	108				0		80.0	59.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SVTAPITINTRNi_00006 Amount Added: 1.00 Units: uL Run Reagent

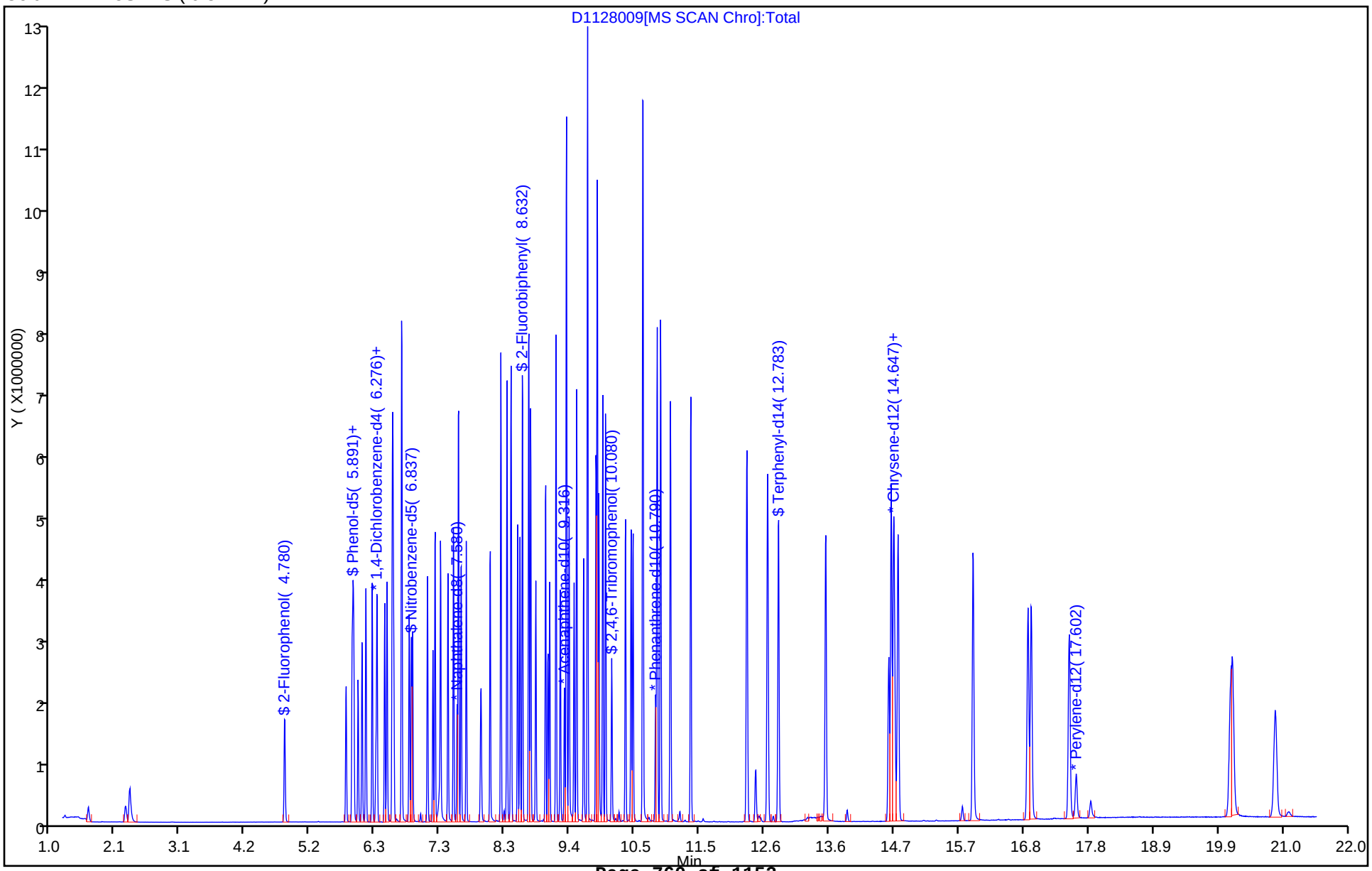
Report Date: 01-Dec-2014 02:15:29 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20141128-4633.b\D1128009.D

Injection Date:	28-Nov-2014 15:56:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	LCS 180-126402/2-A			Worklist Smp#:	9
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-39026-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 180-125791/3-A

Matrix: Water | Lab File ID: V1124010.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 11/20/2014 09:07

Sample wt/vol: 250(mL) | Date Analyzed: 11/24/2014 15:53

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 126233 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	13.0		0.20	0.029
208-96-8	Acenaphthylene	13.4		0.20	0.022
120-12-7	Anthracene	13.3		0.20	0.019
92-87-5	Benzidine	ND		20	4.7
56-55-3	Benzo[a]anthracene	13.6		0.20	0.037
205-99-2	Benzo[b]fluoranthene	13.1		0.20	0.049
207-08-9	Benzo[k]fluoranthene	13.7		0.20	0.030
65-85-0	Benzoic acid	15.5		5.0	1.6
191-24-2	Benzo[g,h,i]perylene	13.4		0.20	0.029
50-32-8	Benzo[a]pyrene	13.4		0.20	0.028
111-91-1	Bis(2-chloroethoxy)methane	12.7		1.0	0.13
111-44-4	Bis(2-chloroethyl)ether	12.7		1.0	0.032
117-81-7	Bis(2-ethylhexyl) phthalate	12.7		2.0	0.44
108-60-1	2,2'-oxybis[1-chloropropane]	11.8		1.0	0.024
101-55-3	4-Bromophenyl phenyl ether	13.9		1.0	0.12
7005-72-3	4-Chlorophenyl phenyl ether	13.6		1.0	0.080
91-58-7	2-Chloronaphthalene	11.9		0.20	0.031
85-68-7	Butyl benzyl phthalate	12.4		1.0	0.21
218-01-9	Chrysene	13.7		0.20	0.031
53-70-3	Dibenz(a,h)anthracene	13.4		0.20	0.027
84-74-2	Di-n-butyl phthalate	13.1		1.0	0.24
117-84-0	Di-n-octyl phthalate	12.5		1.0	0.20
84-66-2	Diethyl phthalate	13.4		1.0	0.30
131-11-3	Dimethyl phthalate	13.7		1.0	0.18
91-94-1	3,3'-Dichlorobenzidine	11.7		1.0	0.15
121-14-2	2,4-Dinitrotoluene	13.6		1.0	0.21
606-20-2	2,6-Dinitrotoluene	13.5		1.0	0.14
95-57-8	2-Chlorophenol	12.8		1.0	0.23
120-83-2	2,4-Dichlorophenol	13.0		1.0	0.067
105-67-9	2,4-Dimethylphenol	13.1		1.0	0.17
51-28-5	2,4-Dinitrophenol	17.8		5.0	2.5
88-75-5	2-Nitrophenol	13.1		1.0	0.11
88-06-2	2,4,6-Trichlorophenol	13.1		1.0	0.30
122-66-7	1,2-Diphenylhydrazine(as Azobenzene)	13.1		1.0	0.12

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-39026-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 180-125791/3-A

Matrix: Water | Lab File ID: V1124010.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 11/20/2014 09:07

Sample wt/vol: 250(mL) | Date Analyzed: 11/24/2014 15:53

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 126233 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-82-1	1,2,4-Trichlorobenzene	13.5		1.0	0.085
59-50-7	4-Chloro-3-methylphenol	13.3		1.0	0.17
100-02-7	4-Nitrophenol	27.6		5.0	0.80
534-52-1	4,6-Dinitro-2-methylphenol	27.0		5.0	1.6
206-44-0	Fluoranthene	13.4		0.20	0.021
86-73-7	Fluorene	14.2		0.20	0.024
118-74-1	Hexachlorobenzene	13.1		1.0	0.061
87-68-3	Hexachlorobutadiene	13.6		1.0	0.094
77-47-4	Hexachlorocyclopentadiene	13.8		1.0	0.14
67-72-1	Hexachloroethane	14.0		1.0	0.14
193-39-5	Indeno[1,2,3-cd]pyrene	13.1		0.20	0.043
78-59-1	Isophorone	13.1		1.0	0.074
91-20-3	Naphthalene	13.8		0.20	0.023
98-95-3	Nitrobenzene	12.6		2.0	0.15
621-64-7	N-Nitrosodi-n-propylamine	14.0		1.0	0.050
62-75-9	N-Nitrosodimethylamine	13.5		1.0	0.12
86-30-6	N-Nitrosodiphenylamine	13.7		1.0	0.12
85-01-8	Phenanthrene	12.7		0.20	0.042
129-00-0	Pyrene	12.3		0.20	0.023
87-86-5	Pentachlorophenol	25.0		1.0	0.50
108-95-2	Phenol	13.4		1.0	0.055

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	72		30-150
321-60-8	2-Fluorobiphenyl	64		30-150
367-12-4	2-Fluorophenol (Surr)	68		30-150
4165-60-0	Nitrobenzene-d5 (Surr)	64		30-150
4165-62-2	Phenol-d5 (Surr)	66		30-150
1718-51-0	Terphenyl-d14 (Surr)	59		10-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20141124-4564.b\V1124010.D
Lims ID: LCSD 180-125791/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 24-Nov-2014 15:53:30 ALS Bottle#: 9 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004564-010
Misc. Info.: LCSD 180-125791/3-A
Operator ID: 003200 Instrument ID: CH731

Method: \\PITCHROM\ChromData\CH731\20141124-4564.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 25-Nov-2014 04:12:16 Calib Date: 18-Nov-2014 07:43:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20141118-4448.b\V1118010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: piccolinov Date: 25-Nov-2014 03:51:32

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.280	6.277	0.003	90	117040	8.00	8.00	
* 2 Naphthalene-d8	136	7.488	7.479	0.009	97	401439	8.00	8.00	
* 3 Acenaphthene-d10	164	9.106	9.098	0.008	91	311317	8.00	8.00	
* 4 Phenanthrene-d10	188	10.474	10.465	0.009	96	661260	8.00	8.00	
* 5 Chrysene-d12	240	13.968	13.948	0.020	95	715382	8.00	8.00	
* 6 Perylene-d12	264	16.879	16.855	0.025	97	513302	8.00	8.00	
$ 7 2-Fluorophenol	112	4.939	4.931	0.008	90	515957	40.0	27.3	
$ 8 Phenol-d5	99	5.928	5.919	0.009	87	605362	40.0	26.3	
$ 9 Nitrobenzene-d5	82	6.804	6.801	0.003	90	721662	40.0	25.4	
$ 10 2-Fluorobiphenyl	172	8.465	8.462	0.003	99	1548465	40.0	25.8	
$ 11 2,4,6-Tribromophenol	330	9.827	9.819	0.008	87	227976	40.0	28.7	
$ 12 Terphenyl-d14	244	12.231	12.212	0.019	98	2011447	40.0	23.6	
13 1,4-Dioxane	88	1.852	1.838	0.014	87	239396	40.0	29.0	
14 N-Nitrosodimethylamine	74	2.514	2.490	0.024	85	332907	40.0	27.0	
15 Pyridine	79	2.567	2.564	0.003	93	634368	40.0	28.4	
26 Benzaldehyde	77	5.842	5.839	0.003	87	460537	40.0	26.8	
27 Phenol	94	5.938	5.935	0.003	97	682144	40.0	26.8	
28 Aniline	93	5.954	5.951	0.003	96	744178	40.0	25.7	
29 Bis(2-chloroethyl)ether	93	6.018	6.015	0.003	96	424605	40.0	25.3	
31 2-Chlorophenol	128	6.077	6.074	0.003	90	488474	40.0	25.6	
32 n-Decane	43	6.136	6.133	0.003	75	352204	40.0	24.6	
33 1,3-Dichlorobenzene	146	6.227	6.224	0.003	89	616491	40.0	27.6	
34 1,4-Dichlorobenzene	146	6.296	6.293	0.003	86	625204	40.0	27.3	
36 Benzyl alcohol	108	6.408	6.405	0.003	83	298333	40.0	26.9	
37 1,2-Dichlorobenzene	146	6.446	6.443	0.003	88	583247	40.0	27.4	
38 2-Methylphenol	108	6.521	6.512	0.009	91	486497	40.0	27.7	
39 Indene	116	6.531	6.528	0.003	88	902556	40.0	28.7	
40 2,2'-oxybis[1-chloropropan	45	6.542	6.539	0.003	66	335975	40.0	23.6	
43 Acetophenone	105	6.660	6.656	0.004	75	824259	40.0	27.1	
45 4-Methylphenol	108	6.660	6.656	0.004	56	537179	40.0	27.2	
44 N-Nitrosodi-n-propylamine	70	6.660	6.656	0.004	62	478160	40.0	27.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
47 Hexachloroethane	117	6.777	6.769	0.008	84	305142	40.0	28.1	
48 Nitrobenzene	77	6.825	6.817	0.008	88	698685	40.0	25.2	
50 Isophorone	82	7.044	7.041	0.003	97	1108821	40.0	26.3	
51 2-Nitrophenol	139	7.124	7.121	0.003	74	262128	40.0	26.1	
52 2,4-Dimethylphenol	107	7.151	7.148	0.003	94	620577	40.0	26.2	
56 Benzoic acid	122	7.231	7.196	0.035	88	277720	40.0	31.1	M
55 Bis(2-chloroethoxy)methane	93	7.236	7.233	0.003	97	540846	40.0	25.4	
57 2,4-Dichlorophenol	162	7.349	7.340	0.009	95	502316	40.0	26.0	
61 Azobenzene	77		7.403				ND	ND	
59 1,2,4-Trichlorobenzene	180	7.434	7.426	0.008	91	668020	40.0	27.0	
60 Naphthalene	128	7.504	7.500	0.004	98	1572351	40.0	27.5	
62 4-Chloroaniline	127	7.541	7.538	0.003	89	579704	40.0	24.7	
64 Hexachlorobutadiene	225	7.621	7.618	0.003	94	569365	40.0	27.2	
67 Caprolactam	113	7.845	7.821	0.024	80	129741	40.0	27.7	
70 4-Chloro-3-methylphenol	107	7.974	7.965	0.009	89	516977	40.0	26.5	
72 2-Methylnaphthalene	142	8.139	8.136	0.003	88	1109252	40.0	26.9	
75 1-Methylnaphthalene	142	8.235	8.227	0.008	88	1023340	40.0	26.9	
76 Hexachlorocyclopentadiene	237	8.294	8.286	0.008	96	687046	40.0	27.6	
77 1,2,4,5-Tetrachlorobenzene	216	8.300	8.291	0.009	98	909927	40.0	26.8	
78 2,4,6-Trichlorophenol	196	8.390	8.387	0.003	93	513236	40.0	26.3	
79 2,4,5-Trichlorophenol	196	8.428	8.419	0.009	91	517552	40.0	25.6	
80 1,1'-Biphenyl	154	8.561	8.558	0.003	96	1474681	40.0	26.1	
81 2-Chloronaphthalene	162	8.593	8.585	0.008	98	1199017	40.0	23.8	
82 2-Nitroaniline	65	8.668	8.660	0.008	71	402558	40.0	27.1	
86 Dimethyl phthalate	163	8.818	8.809	0.009	95	1433722	40.0	27.4	
87 1,3-Dinitrobenzene	168	8.850	8.847	0.003	83	230003	40.0	28.4	
88 2,6-Dinitrotoluene	165	8.882	8.868	0.014	82	307389	40.0	27.0	
89 Acenaphthylene	152	8.978	8.970	0.008	97	1865022	40.0	26.8	
90 3-Nitroaniline	138	9.042	9.034	0.008	86	254981	40.0	27.4	
92 2,4-Dinitrophenol	184	9.133	9.124	0.009	69	361026	80.0	35.7	
91 Acenaphthene	153	9.133	9.124	0.009	85	1234602	40.0	26.0	
93 4-Nitrophenol	109	9.170	9.162	0.008	81	647385	80.0	55.3	
94 2,4-Dinitrotoluene	165	9.250	9.242	0.008	82	422001	40.0	27.1	
95 Dibenzofuran	168	9.293	9.285	0.008	95	1884208	40.0	25.9	
99 2,3,4,6-Tetrachlorophenol	232	9.395	9.392	0.003	72	536282	40.0	26.9	
101 Diethyl phthalate	149	9.459	9.445	0.014	96	1551761	40.0	26.8	
102 Hexadecane	57	9.459	9.450	0.009	85	564391	40.0	29.2	
104 4-Chlorophenyl phenyl ethe	204	9.587	9.579	0.008	92	986885	40.0	27.2	
105 4-Nitroaniline	138	9.603	9.595	0.008	74	270678	40.0	26.3	
106 Fluorene	166	9.608	9.600	0.008	95	1502659	40.0	28.4	
108 4,6-Dinitro-2-methylphenol	198	9.630	9.621	0.009	88	648324	80.0	53.9	
109 N-Nitrosodiphenylamine	169	9.689	9.680	0.009	64	1155682	40.0	27.4	
111 1,2-Diphenylhydrazine	77	9.731	9.723	0.008	99	1707668	40.0	26.2	
116 4-Bromophenyl phenyl ether	248	10.036	10.027	0.009	67	607144	40.0	27.8	
118 Hexachlorobenzene	284	10.121	10.113	0.008	92	562363	40.0	26.3	
119 Atrazine	200	10.153	10.139	0.014	92	498823	40.0	25.3	
122 Pentachlorophenol	266	10.292	10.284	0.008	89	822249	80.0	50.0	
121 n-Octadecane	57	10.292	10.284	0.008	87	590076	40.0	29.4	
126 Phenanthrene	178	10.495	10.487	0.008	97	2331872	40.0	25.4	
128 Anthracene	178	10.543	10.535	0.008	96	2458899	40.0	26.6	
130 Carbazole	167	10.682	10.674	0.008	96	1968081	40.0	26.5	
132 Di-n-butyl phthalate	149	10.976	10.962	0.014	99	2361555	40.0	26.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
137 Fluoranthene	202	11.777	11.763	0.014	95	3039489	40.0	26.8	
138 Benzidine	184	11.900	11.886	0.014	98	370314	40.0	9.20	
139 Pyrene	202	12.082	12.063	0.019	98	2984110	40.0	24.6	
144 Butyl benzyl phthalate	149	12.910	12.896	0.014	94	994425	40.0	24.8	
149 3,3'-Dichlorobenzidine	252	13.871	13.847	0.024	73	856701	40.0	23.5	
151 Bis(2-ethylhexyl) phthalat	149	13.903	13.884	0.019	94	1347543	40.0	25.3	
152 Benzo[a]anthracene	228	13.946	13.927	0.019	94	2928749	40.0	27.2	
153 Chrysene	228	14.021	13.996	0.025	94	2710807	40.0	27.3	
156 Di-n-octyl phthalate	149	15.196	15.177	0.019	99	2144169	40.0	25.1	
158 Benzo[b]fluoranthene	252	16.083	16.059	0.024	94	2430938	40.0	26.2	
159 Benzo[k]fluoranthene	252	16.142	16.112	0.030	90	2438501	40.0	27.4	
160 Benzo[a]pyrene	252	16.767	16.742	0.025	73	2173234	40.0	26.8	
163 Indeno[1,2,3-cd]pyrene	276	19.096	19.066	0.030	96	1937835	40.0	26.2	
164 Dibenz(a,h)anthracene	278	19.117	19.093	0.024	87	1685110	40.0	26.7	
165 Benzo[g,h,i]perylene	276	19.689	19.654	0.035	95	1642804	40.0	26.8	
S 208 Methyl Phenols,Total	108				0		80.0	54.9	
S 206 Total Cresols	108				0		80.0	54.9	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

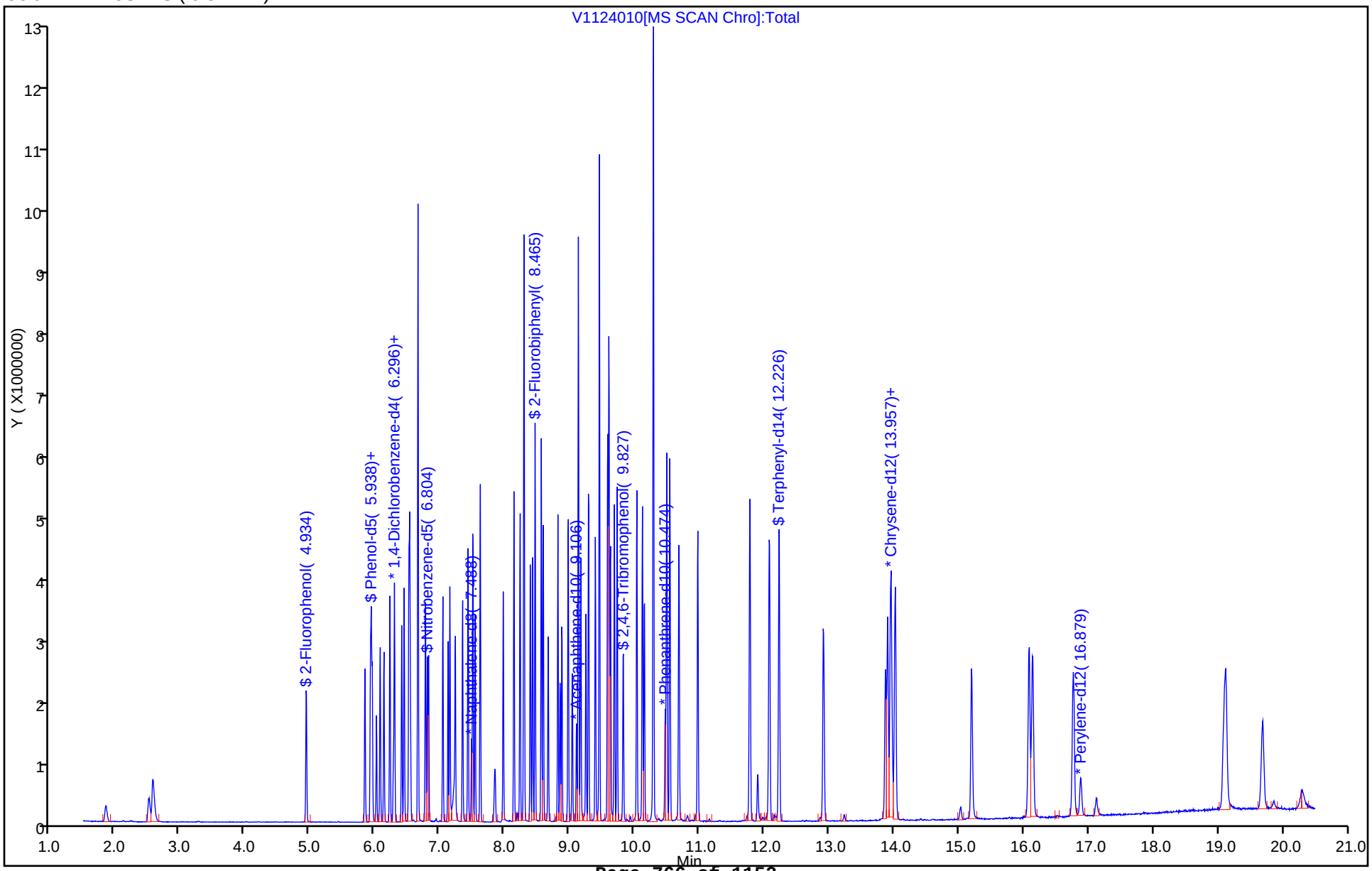
SVTAPITINTRNi_00006 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 25-Nov-2014 04:12:26 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141124-4564.b\V1124010.D				
Injection Date:	24-Nov-2014 15:53:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	LCSD 180-125791/3-A			Worklist Smp#:	10
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Manual Integration/User Assign Peak Report

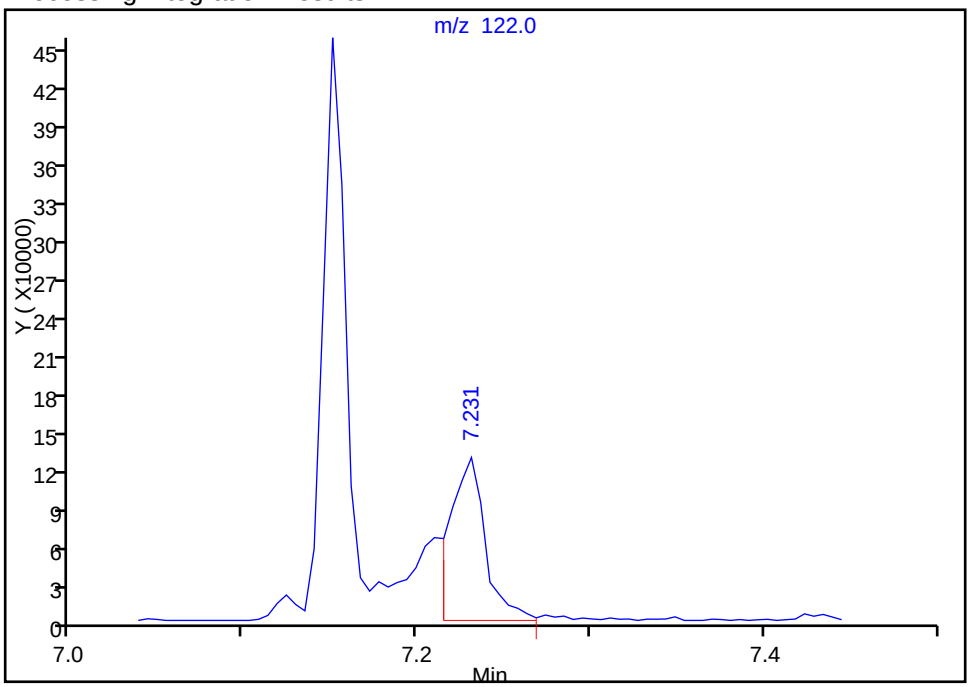
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20141124-4564.b\V1124010.D				
Injection Date:	24-Nov-2014 15:53:30	Instrument ID:	CH731		
Lims ID:	LCSD 180-125791/3-A				
Client ID:					
Operator ID:	003200	ALS Bottle#:	9	Worklist Smp#:	10
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

56 Benzoic acid, CAS: 65-85-0

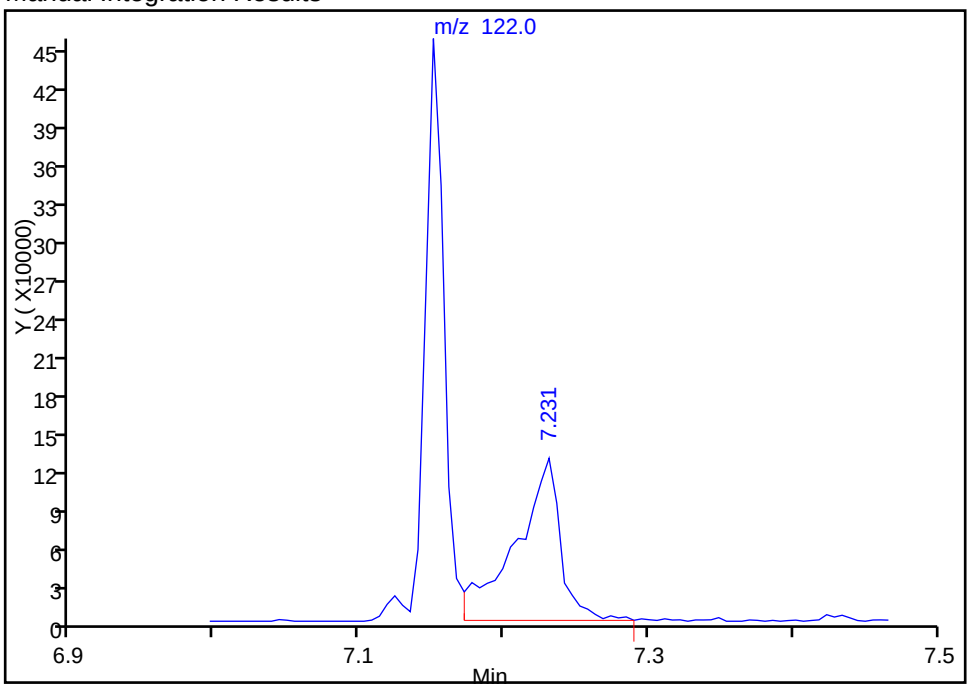
Processing Integration Results

RT: 7.23
Response: 180940
Amount: 20.245169



Manual Integration Results

RT: 7.23
Response: 277720
Amount: 31.073771



Reviewer: piccolinov, 25-Nov-2014 03:52:21
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-39026-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 180-126402/3-A

Matrix: Water | Lab File ID: D1128010.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 11/25/2014 09:59

Sample wt/vol: 250(mL) | Date Analyzed: 11/28/2014 16:22

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 126682 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	14.0		0.20	0.029
208-96-8	Acenaphthylene	14.4		0.20	0.022
120-12-7	Anthracene	15.4		0.20	0.019
92-87-5	Benzidine	ND		20	4.7
56-55-3	Benzo[a]anthracene	15.0		0.20	0.037
205-99-2	Benzo[b]fluoranthene	15.6		0.20	0.049
207-08-9	Benzo[k]fluoranthene	15.5		0.20	0.030
65-85-0	Benzoic acid	11.5		5.0	1.6
191-24-2	Benzo[g,h,i]perylene	15.8		0.20	0.029
50-32-8	Benzo[a]pyrene	15.6		0.20	0.028
111-91-1	Bis(2-chloroethoxy)methane	13.9		1.0	0.13
111-44-4	Bis(2-chloroethyl)ether	13.6		1.0	0.032
117-81-7	Bis(2-ethylhexyl) phthalate	15.9		2.0	0.44
108-60-1	2,2'-oxybis[1-chloropropane]	11.8		1.0	0.024
101-55-3	4-Bromophenyl phenyl ether	14.3		1.0	0.12
7005-72-3	4-Chlorophenyl phenyl ether	14.0		1.0	0.080
91-58-7	2-Chloronaphthalene	12.7		0.20	0.031
85-68-7	Butyl benzyl phthalate	16.0		1.0	0.21
218-01-9	Chrysene	14.6		0.20	0.031
53-70-3	Dibenz(a,h)anthracene	16.4		0.20	0.027
84-74-2	Di-n-butyl phthalate	15.9		1.0	0.24
117-84-0	Di-n-octyl phthalate	19.2		1.0	0.20
84-66-2	Diethyl phthalate	14.6		1.0	0.30
131-11-3	Dimethyl phthalate	14.4		1.0	0.18
91-94-1	3,3'-Dichlorobenzidine	13.4		1.0	0.15
121-14-2	2,4-Dinitrotoluene	16.7		1.0	0.21
606-20-2	2,6-Dinitrotoluene	15.1		1.0	0.14
95-57-8	2-Chlorophenol	13.7		1.0	0.23
120-83-2	2,4-Dichlorophenol	14.0		1.0	0.067
105-67-9	2,4-Dimethylphenol	14.1		1.0	0.17
51-28-5	2,4-Dinitrophenol	28.5		5.0	2.5
88-75-5	2-Nitrophenol	15.0		1.0	0.11
88-06-2	2,4,6-Trichlorophenol	14.1		1.0	0.30
122-66-7	1,2-Diphenylhydrazine(as Azobenzene)	14.8		1.0	0.12

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-39026-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 180-126402/3-A

Matrix: Water | Lab File ID: D1128010.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 11/25/2014 09:59

Sample wt/vol: 250(mL) | Date Analyzed: 11/28/2014 16:22

Con. Extract Vol.: 0.25(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 126682 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-82-1	1,2,4-Trichlorobenzene	13.7		1.0	0.085
59-50-7	4-Chloro-3-methylphenol	14.9		1.0	0.17
100-02-7	4-Nitrophenol	31.5		5.0	0.80
534-52-1	4,6-Dinitro-2-methylphenol	30.0		5.0	1.6
206-44-0	Fluoranthene	15.0		0.20	0.021
86-73-7	Fluorene	14.9		0.20	0.024
118-74-1	Hexachlorobenzene	14.2		1.0	0.061
87-68-3	Hexachlorobutadiene	13.8		1.0	0.094
77-47-4	Hexachlorocyclopentadiene	14.9		1.0	0.14
67-72-1	Hexachloroethane	14.2		1.0	0.14
193-39-5	Indeno[1,2,3-cd]pyrene	15.9		0.20	0.043
78-59-1	Isophorone	14.3		1.0	0.074
91-20-3	Naphthalene	14.2		0.20	0.023
98-95-3	Nitrobenzene	14.0		2.0	0.15
621-64-7	N-Nitrosodi-n-propylamine	13.0		1.0	0.050
62-75-9	N-Nitrosodimethylamine	13.2		1.0	0.12
86-30-6	N-Nitrosodiphenylamine	14.8		1.0	0.12
85-01-8	Phenanthrene	15.0		0.20	0.042
129-00-0	Pyrene	14.8		0.20	0.023
87-86-5	Pentachlorophenol	26.1		1.0	0.50
108-95-2	Phenol	13.5		1.0	0.055

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	74		30-150
321-60-8	2-Fluorobiphenyl	68		30-150
367-12-4	2-Fluorophenol (Surr)	71		30-150
4165-60-0	Nitrobenzene-d5 (Surr)	70		30-150
4165-62-2	Phenol-d5 (Surr)	70		30-150
1718-51-0	Terphenyl-d14 (Surr)	68		10-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20141128-4633.b\D1128010.D
Lims ID: LCSD 180-126402/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 28-Nov-2014 16:22:30 ALS Bottle#: 9 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004633-010
Misc. Info.: LCSD 180-126402/3-A
Operator ID: 003200 Instrument ID: CH732

Method: \\PITCHROM\ChromData\CH732\20141128-4633.b\BNA_CH732.m
Limit Group: BNA 8270D ICAL
Last Update: 01-Dec-2014 02:15:20 Calib Date: 12-Nov-2014 13:29:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH732\20141112-4340.b\D1112010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: piccolinov Date: 01-Dec-2014 01:47:51

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.260	6.287	-0.027	95	220455	8.00	8.00	
* 2 Naphthalene-d8	136	7.580	7.596	-0.016	99	1005325	8.00	8.00	
* 3 Acenaphthene-d10	164	9.316	9.327	-0.011	91	604162	8.00	8.00	
* 4 Phenanthrene-d10	188	10.796	10.801	-0.005	97	943355	8.00	8.00	
* 5 Chrysene-d12	240	14.674	14.674	0.000	96	790526	8.00	8.00	
* 6 Perylene-d12	264	17.607	17.607	0.000	95	543658	8.00	8.00	
$ 7 2-Fluorophenol	112	4.786	4.818	-0.032	89	756641	40.0	28.3	
$ 8 Phenol-d5	99	5.876	5.902	-0.026	96	1108480	40.0	27.8	
$ 9 Nitrobenzene-d5	82	6.837	6.853	-0.016	86	1015340	40.0	27.9	
$ 10 2-Fluorobiphenyl	172	8.638	8.648	-0.010	99	2633788	40.0	27.3	
$ 11 2,4,6-Tribromophenol	330	10.085	10.091	-0.006	92	276723	40.0	29.4	
$ 12 Terphenyl-d14	244	12.788	12.788	0.000	99	2365259	40.0	27.3	
13 1,4-Dioxane	88	1.607	1.655	-0.048	92	177194	40.0	26.2	
14 N-Nitrosodimethylamine	74	2.205	2.269	-0.064	93	241687	40.0	26.3	
15 Pyridine	79	2.270	2.339	-0.069	97	472512	40.0	28.4	
25 Benzaldehyde	77	5.779	5.806	-0.027	94	528348	40.0	23.7	
26 Phenol	94	5.892	5.913	-0.021	98	1215679	40.0	27.0	
27 Aniline	93	5.902	5.929	-0.027	96	1353464	40.0	25.9	
29 Bis(2-chloroethyl)ether	93	5.972	5.998	-0.026	96	869396	40.0	27.1	
30 2-Chlorophenol	128	6.036	6.062	-0.026	96	1011214	40.0	27.5	
31 n-Decane	43	6.100	6.127	-0.027	91	902079	40.0	24.9	
32 1,3-Dichlorobenzene	146	6.201	6.228	-0.027	98	1136602	40.0	26.3	
33 1,4-Dichlorobenzene	146	6.282	6.303	-0.021	96	1175264	40.0	27.2	
34 Benzyl alcohol	108	6.404	6.426	-0.022	96	654220	40.0	27.5	
35 1,2-Dichlorobenzene	146	6.442	6.463	-0.021	99	1137088	40.0	26.8	
36 2-Methylphenol	108	6.527	6.549	-0.022	93	932090	40.0	28.0	
37 Indene	116	6.538	6.559	-0.021	90	1668953	40.0	27.9	
38 2,2'-oxybis[1-chloropropan	45	6.554	6.570	-0.016	96	1356880	40.0	23.7	
41 N-Nitrosodi-n-propylamine	70	6.677	6.698	-0.021	73	564535	40.0	25.9	
40 Acetophenone	105	6.677	6.698	-0.021	95	1155085	40.0	26.0	
42 4-Methylphenol	108	6.688	6.698	-0.010	92	923008	40.0	26.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
45 Hexachloroethane	117	6.800	6.821	-0.021	98	476876	40.0	28.3	
46 Nitrobenzene	77	6.859	6.875	-0.015	86	1026937	40.0	28.0	
48 Isophorone	82	7.099	7.115	-0.016	99	1965598	40.0	28.6	
49 2-Nitrophenol	139	7.190	7.206	-0.016	88	633546	40.0	30.1	
50 2,4-Dimethylphenol	107	7.222	7.238	-0.016	92	1052675	40.0	28.1	
52 Benzoic acid	122	7.307	7.291	0.016	87	478675	40.0	22.9	
53 Bis(2-chloroethoxy)methane	93	7.313	7.323	-0.010	99	1269843	40.0	27.8	
54 2,4-Dichlorophenol	162	7.430	7.446	-0.016	91	952870	40.0	28.0	
56 1,2,4-Trichlorobenzene	180	7.521	7.537	-0.016	93	1081703	40.0	27.4	
58 Naphthalene	128	7.601	7.617	-0.016	96	3677090	40.0	28.3	
59 4-Chloroaniline	127	7.644	7.654	-0.010	98	1436473	40.0	26.4	
62 Hexachlorobutadiene	225	7.729	7.740	-0.011	96	567871	40.0	27.6	
64 Caprolactam	113	7.964	7.964	0.000	80	371798	40.0	31.7	
67 4-Chloro-3-methylphenol	107	8.114	8.119	-0.005	95	980594	40.0	29.7	
69 2-Methylnaphthalene	142	8.290	8.301	-0.011	94	2482491	40.0	28.2	
71 1-Methylnaphthalene	142	8.386	8.397	-0.011	94	2355953	40.0	28.2	
72 Hexachlorocyclopentadiene	237	8.451	8.461	-0.010	95	660018	40.0	29.9	
73 1,2,4,5-Tetrachlorobenzene	216	8.456	8.466	-0.010	97	976641	40.0	26.0	
74 2,4,6-Trichlorophenol	196	8.563	8.568	-0.005	92	713491	40.0	28.2	
75 2,4,5-Trichlorophenol	196	8.595	8.605	-0.010	96	759865	40.0	28.5	
76 1,1'-Biphenyl	154	8.739	8.750	-0.011	93	3046809	40.0	27.5	
77 2-Chloronaphthalene	162	8.771	8.782	-0.011	95	2277795	40.0	25.4	
79 2-Nitroaniline	65	8.851	8.862	-0.011	90	652024	40.0	29.9	
82 Dimethyl phthalate	163	9.011	9.017	-0.006	100	2552148	40.0	28.8	
83 1,3-Dinitrobenzene	168	9.049	9.059	-0.010	88	418802	40.0	33.0	
84 2,6-Dinitrotoluene	165	9.081	9.086	-0.005	96	584889	40.0	30.2	
85 Acenaphthylene	152	9.182	9.188	-0.006	98	4013579	40.0	28.8	
86 3-Nitroaniline	138	9.252	9.257	-0.005	98	714604	40.0	29.6	
87 2,4-Dinitrophenol	184	9.348	9.353	-0.005	64	590599	80.0	57.0	
88 Acenaphthene	153	9.348	9.359	-0.011	90	2403457	40.0	28.0	
89 4-Nitrophenol	109	9.391	9.396	-0.005	84	587388	80.0	63.1	
91 2,4-Dinitrotoluene	165	9.476	9.482	-0.006	95	769288	40.0	33.4	
93 Dibenzofuran	168	9.514	9.524	-0.010	97	3392030	40.0	27.8	
96 2,3,4,6-Tetrachlorophenol	232	9.631	9.594	0.037	73	587388	40.0	27.7	
98 Diethyl phthalate	149	9.690	9.695	-0.005	99	2445878	40.0	29.3	
99 Hexadecane	57	9.695	9.701	-0.006	89	1622455	40.0	25.5	
100 4-Chlorophenyl phenyl ethe	204	9.829	9.834	-0.005	91	1226210	40.0	28.1	
101 4-Nitroaniline	138	9.845	9.850	-0.005	91	701912	40.0	31.0	
103 Fluorene	166	9.850	9.855	-0.005	95	2783300	40.0	29.9	
104 4,6-Dinitro-2-methylphenol	198	9.877	9.882	-0.005	89	894035	80.0	60.1	
105 N-Nitrosodiphenylamine	169	9.941	9.946	-0.005	61	1990739	40.0	29.5	
57 Azobenzene	77		9.989				ND	ND	
90 1,2-Diphenylhydrazine	77	9.984	9.989	-0.005	98	2821583	40.0	29.5	
110 4-Bromophenyl phenyl ether	248	10.310	10.310	0.000	68	682556	40.0	28.5	
112 Hexachlorobenzene	284	10.400	10.406	-0.006	94	675810	40.0	28.4	
113 Atrazine	200	10.433	10.432	0.001	92	575201	40.0	25.8	
115 n-Octadecane	57	10.587	10.593	-0.006	93	1638916	40.0	26.2	
116 Pentachlorophenol	266	10.587	10.593	-0.006	94	795186	80.0	52.1	
121 Phenanthrene	178	10.823	10.828	-0.006	97	4076185	40.0	30.1	
122 Anthracene	178	10.876	10.881	-0.005	96	4255799	40.0	30.7	
124 Carbazole	167	11.036	11.041	-0.005	95	3783047	40.0	31.1	
126 Di-n-butyl phthalate	149	11.367	11.367	0.000	99	4671284	40.0	31.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
131 Fluoranthene	202	12.276	12.281	-0.005	98	3879263	40.0	30.0	
132 Benzidine	184	12.414	12.425	-0.011	100	563303	40.0	8.95	
133 Pyrene	202	12.612	12.612	0.000	97	3933836	40.0	29.6	
138 Butyl benzyl phthalate	149	13.552	13.552	0.000	97	1844186	40.0	32.1	
144 3,3'-Dichlorobenzidine	252	14.573	14.573	0.000	75	981651	40.0	26.7	
145 Bis(2-ethylhexyl) phthalat	149	14.615	14.615	0.000	96	2465522	40.0	31.9	
146 Benzo[a]anthracene	228	14.653	14.653	0.000	98	3333008	40.0	30.0	
147 Chrysene	228	14.722	14.722	0.000	98	3101343	40.0	29.2	
150 Di-n-octyl phthalate	149	15.940	15.940	0.000	99	4074218	40.0	38.4	
152 Benzo[b]fluoranthene	252	16.827	16.822	0.005	98	2667498	40.0	31.3	
153 Benzo[k]fluoranthene	252	16.881	16.881	0.001	98	2752092	40.0	31.0	
154 Benzo[a]pyrene	252	17.495	17.490	0.005	79	2428188	40.0	31.2	
157 Indeno[1,2,3-cd]pyrene	276	20.113	20.107	0.006	96	2479540	40.0	31.9	
158 Dibenz(a,h)anthracene	278	20.145	20.139	0.006	93	2138965	40.0	32.8	
159 Benzo[g,h,i]perylene	276	20.834	20.828	0.006	97	2067583	40.0	31.6	
S 197 Methyl Phenols,Total	108				0		80.0	54.5	
S 199 Total Cresols	108				0		80.0	54.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SVTAPITINTRNi_00006 Amount Added: 1.00 Units: uL Run Reagent

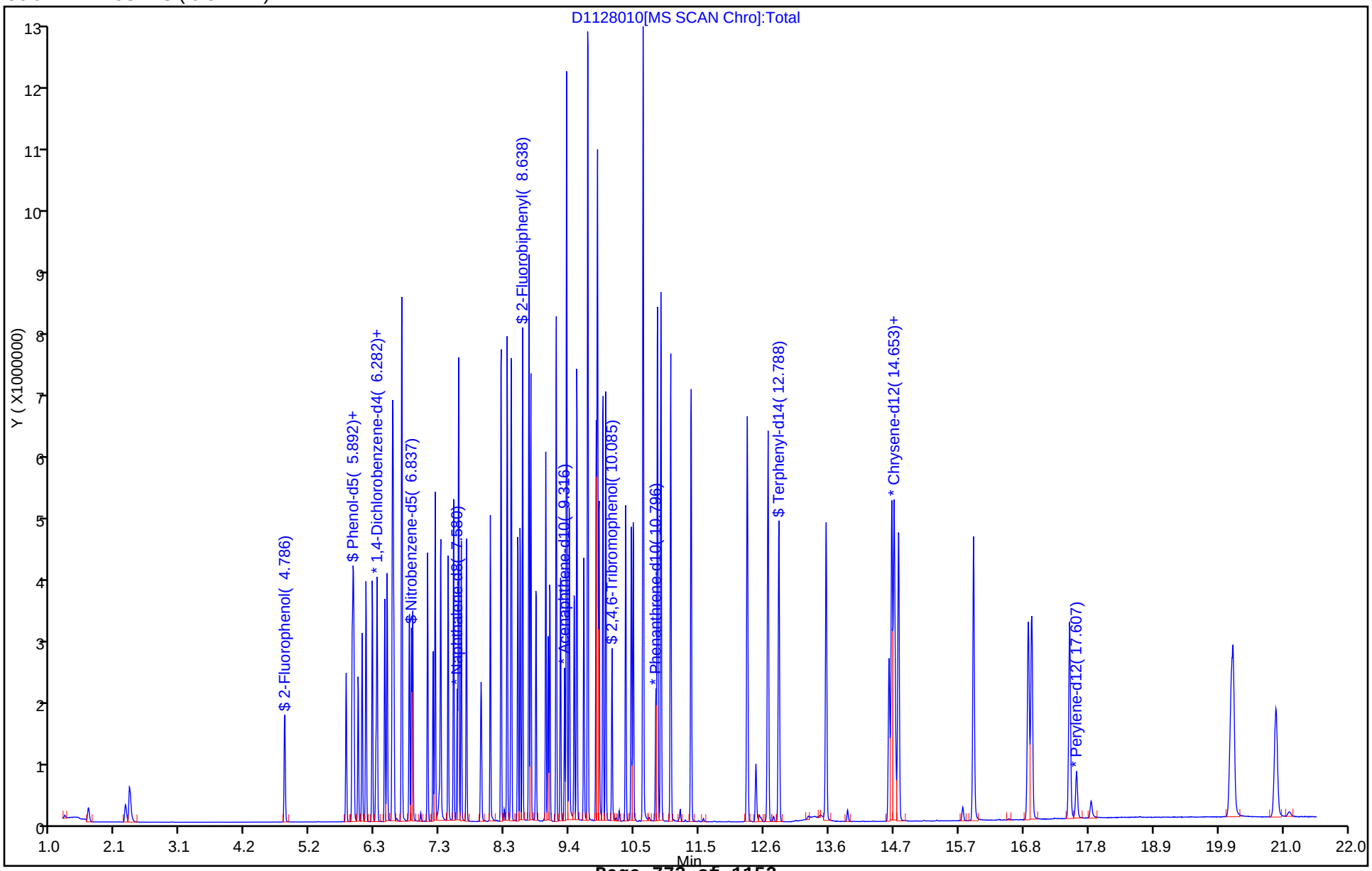
Report Date: 01-Dec-2014 02:15:30 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20141128-4633.b\D1128010.D

Injection Date:	28-Nov-2014 16:22:30	Instrument ID:	CH732	Operator ID:	003200
Lims ID:	LCSD 180-126402/3-A			Worklist Smp#:	10
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	BNA_CH732	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Instrument ID: CH731 Start Date: 11/18/2014 04:03

Analysis Batch Number: 125450 End Date: 11/18/2014 09:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-125450/2		11/18/2014 04:03	1	V1118002.D	Rxi-5SilMS 0.32(mm)
IC 180-125450/3		11/18/2014 04:22	1	V1118003.D	Rxi-5SilMS 0.32(mm)
IC 180-125450/4		11/18/2014 04:50	1	V1118004.D	Rxi-5SilMS 0.32(mm)
IC 180-125450/5		11/18/2014 05:19	1	V1118005.D	Rxi-5SilMS 0.32(mm)
ICIS 180-125450/6		11/18/2014 05:47	1	V1118006.D	Rxi-5SilMS 0.32(mm)
IC 180-125450/7		11/18/2014 06:17	1	V1118007.D	Rxi-5SilMS 0.32(mm)
IC 180-125450/8		11/18/2014 06:45	1	V1118008.D	Rxi-5SilMS 0.32(mm)
IC 180-125450/9		11/18/2014 07:14	1	V1118009.D	Rxi-5SilMS 0.32(mm)
IC 180-125450/10		11/18/2014 07:43	1	V1118010.D	Rxi-5SilMS 0.32(mm)
ICV 180-125450/11		11/18/2014 08:11	1		Rxi-5SilMS 0.32(mm)
ICV 180-125450/12		11/18/2014 08:40	1		Rxi-5SilMS 0.32(mm)
ICV 180-125450/13		11/18/2014 09:09	1		Rxi-5SilMS 0.32(mm)
ICV 180-125450/14		11/18/2014 09:37	1		Rxi-5SilMS 0.32(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Instrument ID: CH731 Start Date: 11/24/2014 11:43

Analysis Batch Number: 126233 End Date: 11/25/2014 00:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-126233/2		11/24/2014 11:43	1	V1124002.D	Rxi-5SilMS 0.32(mm)
CCVIS 180-126233/3		11/24/2014 12:00	1	V1124003.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		11/24/2014 12:28	1		Rxi-5SilMS 0.32(mm)
MB 180-125791/1-A		11/24/2014 12:57	1	V1124005.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		11/24/2014 14:00	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		11/24/2014 14:28	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		11/24/2014 14:56	1		Rxi-5SilMS 0.32(mm)
LCS 180-125791/2-A		11/24/2014 15:24	1	V1124009.D	Rxi-5SilMS 0.32(mm)
LCSD 180-125791/3-A		11/24/2014 15:53	1	V1124010.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		11/24/2014 16:21	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		11/24/2014 16:49	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		11/24/2014 17:17	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		11/24/2014 17:45	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		11/24/2014 18:12	1		Rxi-5SilMS 0.32(mm)
180-39026-1	ST-018-111614	11/24/2014 18:40	1	V1124016.D	Rxi-5SilMS 0.32(mm)
180-39026-2	ST-UNNAMED-111614	11/24/2014 19:08	1	V1124017.D	Rxi-5SilMS 0.32(mm)
180-39026-3	ST-DUP1-111614	11/24/2014 19:35	1	V1124018.D	Rxi-5SilMS 0.32(mm)
180-39026-4	ST-014-111614	11/24/2014 20:02	1	V1124019.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		11/24/2014 21:53	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		11/24/2014 22:20	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		11/24/2014 22:47	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		11/24/2014 23:15	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		11/24/2014 23:43	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		11/25/2014 00:10	1		Rxi-5SilMS 0.32(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Instrument ID: CH732 Start Date: 11/12/2014 10:04

Analysis Batch Number: 124766 End Date: 11/12/2014 15:18

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-124766/2		11/12/2014 10:04	1	D1112002.D	Rxi-5SilMS 0.32(mm)
IC 180-124766/3		11/12/2014 10:20	1	D1112003.D	Rxi-5SilMS 0.32(mm)
IC 180-124766/4		11/12/2014 10:46	1	D1112004.D	Rxi-5SilMS 0.32(mm)
IC 180-124766/5		11/12/2014 11:13	1	D1112005.D	Rxi-5SilMS 0.32(mm)
ICIS 180-124766/6		11/12/2014 11:40	1	D1112006.D	Rxi-5SilMS 0.32(mm)
IC 180-124766/7		11/12/2014 12:08	1	D1112007.D	Rxi-5SilMS 0.32(mm)
IC 180-124766/8		11/12/2014 12:35	1	D1112008.D	Rxi-5SilMS 0.32(mm)
IC 180-124766/9		11/12/2014 13:02	1	D1112009.D	Rxi-5SilMS 0.32(mm)
IC 180-124766/10		11/12/2014 13:29	1	D1112010.D	Rxi-5SilMS 0.32(mm)
ICV 180-124766/11		11/12/2014 13:56	1		Rxi-5SilMS 0.32(mm)
ICV 180-124766/12		11/12/2014 14:23	1		Rxi-5SilMS 0.32(mm)
ICV 180-124766/13		11/12/2014 14:51	1		Rxi-5SilMS 0.32(mm)
ICV 180-124766/14		11/12/2014 15:18	1		Rxi-5SilMS 0.32(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Instrument ID: CH732 Start Date: 11/28/2014 13:01

Analysis Batch Number: 126682 End Date: 11/29/2014 00:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-126682/2		11/28/2014 13:01	1	D1128002.D	Rxi-5SilMS 0.32(mm)
CCVIS 180-126682/3		11/28/2014 13:16	1	D1128003.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		11/28/2014 13:43	1		Rxi-5SilMS 0.32(mm)
MB 180-126402/1-A		11/28/2014 14:09	1	D1128005.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		11/28/2014 15:03	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		11/28/2014 15:29	1		Rxi-5SilMS 0.32(mm)
LCS 180-126402/2-A		11/28/2014 15:56	1	D1128009.D	Rxi-5SilMS 0.32(mm)
LCSD 180-126402/3-A		11/28/2014 16:22	1	D1128010.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		11/28/2014 17:42	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		11/28/2014 18:09	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		11/28/2014 18:36	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		11/28/2014 19:02	5		Rxi-5SilMS 0.32(mm)
ZZZZZ		11/28/2014 19:29	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		11/28/2014 19:56	20		Rxi-5SilMS 0.32(mm)
ZZZZZ		11/28/2014 20:22	20		Rxi-5SilMS 0.32(mm)
ZZZZZ		11/28/2014 20:49	20		Rxi-5SilMS 0.32(mm)
ZZZZZ		11/28/2014 21:17	5		Rxi-5SilMS 0.32(mm)
180-39026-1 RE	ST-018-111614 RE	11/28/2014 21:45	1	D1128022.D	Rxi-5SilMS 0.32(mm)
180-39026-3 RE	ST-DUP1-111614 RE	11/28/2014 22:11	1	D1128023.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		11/28/2014 23:58	200		Rxi-5SilMS 0.32(mm)
ZZZZZ		11/29/2014 00:25	200		Rxi-5SilMS 0.32(mm)

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Batch Number: 125791 Batch Start Date: 11/20/14 13:55 Batch Analyst: Trout, Bill

Batch Method: 3520C Batch End Date: 11/22/14 03:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	FirstAdjustpH	SecondAdjustpH	OPLVISPKMIX1i 00032
MB 180-125791/1		3520C, 8270D LL		5 SU	250 mL	0.25 mL	2	11	
LCS 180-125791/2		3520C, 8270D LL		5 SU	250 mL	0.25 mL	2	11	25 uL
LCSD 180-125791/3		3520C, 8270D LL		5 SU	250 mL	0.25 mL	2	11	25 uL
180-39026-E-1	ST-018-111614	3520C, 8270D LL	T	7 SU	260 mL	0.25 mL	2	11	
180-39026-E-2	ST-UNNAMED-111614	3520C, 8270D LL	T	7 SU	260 mL	0.25 mL	2	11	
180-39026-E-3	ST-DUP1-111614	3520C, 8270D LL	T	7 SU	260 mL	0.25 mL	2	11	
180-39026-E-4	ST-014-111614	3520C, 8270D LL	T	6 SU	260 mL	0.25 mL	2	11	

Lab Sample ID	Client Sample ID	Method Chain	Basis	OPQL8270SURi 00025					
MB 180-125791/1		3520C, 8270D LL		25 uL					
LCS 180-125791/2		3520C, 8270D LL		25 uL					
LCSD 180-125791/3		3520C, 8270D LL		25 uL					
180-39026-E-1	ST-018-111614	3520C, 8270D LL	T	25 uL					
180-39026-E-2	ST-UNNAMED-111614	3520C, 8270D LL	T	25 uL					
180-39026-E-3	ST-DUP1-111614	3520C, 8270D LL	T	25 uL					
180-39026-E-4	ST-014-111614	3520C, 8270D LL	T	25 uL					

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 Pittsburgh Job No.: 180-39026-1

SDG No.:

Batch Number: 125791 Batch Start Date: 11/20/14 13:55 Batch Analyst: Trout, Bill

Batch Method: 3520C Batch End Date: 11/22/14 03:40

Batch Notes	
Acid used for pH adjustment	1:1 Sulfuric acid
Acid used for pH adjust Lot #	1329979
Base used for pH adjustment	10N sodium hydroxide
Base used for pH adjust Lot #	1405770
Person's name who did the concentration	cdm
Time the first extraction ended 24hr	0820
Time the first extraction started 24 hr	1355
N-evap #	1
Na2SO4 Lot Number	1369078
pH Paper Lot Number	Ph paper HC419379
Prep Solvent Lot #	1406137
Prep Solvent Name	Methylene chloride
Prep Solvent Volume Used	100 mL
Person's name who did the prep	BT
Time the second extraction ended 24hr	0340
Time the second extraction started 24hr	0915
Uncorrected N-evap Temperature	26 Celsius
Uncorrected Temperature	75 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.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Batch Number: 126402 Batch Start Date: 11/25/14 13:55 Batch Analyst: Trout, Bill

Batch Method: 3520C Batch End Date: 11/27/14 08:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	FirstAdjustpH	SecondAdjustpH	OPLVISPKMIX1i 00032
MB 180-126402/1		3520C, 8270D LL		5 SU	250 mL	0.25 mL	2	11	
LCS 180-126402/2		3520C, 8270D LL		5 SU	250 mL	0.25 mL	2	11	25 uL
LCSD 180-126402/3		3520C, 8270D LL		5 SU	250 mL	0.25 mL	2	11	25 uL
180-39026-F-1	ST-018-111614	3520C, 8270D LL	T	7 SU	260 mL	0.25 mL	2	11	
180-39026-F-3	ST-DUP1-111614	3520C, 8270D LL	T	7 SU	260 mL	0.25 mL	2	11	

Lab Sample ID	Client Sample ID	Method Chain	Basis	OPQL8270SURi 00025					
MB 180-126402/1		3520C, 8270D LL		25 uL					
LCS 180-126402/2		3520C, 8270D LL		25 uL					
LCSD 180-126402/3		3520C, 8270D LL		25 uL					
180-39026-F-1	ST-018-111614	3520C, 8270D LL	T	25 uL					
180-39026-F-3	ST-DUP1-111614	3520C, 8270D LL	T	25 uL					

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 Pittsburgh Job No.: 180-39026-1

SDG No.:

Batch Number: 126402 Batch Start Date: 11/25/14 13:55 Batch Analyst: Trout, Bill

Batch Method: 3520C Batch End Date: 11/27/14 08:10

Batch Notes	
Acid used for pH adjustment	1:1 Sulfuric acid
Acid used for pH adjust Lot #	1329979
Base used for pH adjustment	10N sodium hydroxide
Base used for pH adjust Lot #	1405770
Person's name who did the concentration	cdm
Time the first extraction ended 24hr	0820
Time the first extraction started 24 hr	1355
N-evap #	1
Na2SO4 Lot Number	1369078
pH Paper Lot Number	Ph paper HC419379
Prep Solvent Lot #	1406137
Prep Solvent Name	Methylene chloride
Prep Solvent Volume Used	100 mL
Person's name who did the prep	BT
Time the second extraction ended 24hr	0810
Time the second extraction started 24hr	1255
Sufficient volume for MS/MSD?	Yes
Uncorrected N-evap Temperature	30 Celsius
Uncorrected Temperature	75 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.

Method 8082A Low Level

Polychlorinated Biphenyls (PCBs) (GC) by Method 8082A Low Level

FORM II
GC SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RTX-CLP1 ID: 0.53 (mm) GC Column (2): RTX-CLP2 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	TCX1 #	TCX2 #	DCB1 #	DCB2 #
ST-018-111614	180-39026-1	87	86	120	128
ST-UNNAMED-111614	180-39026-2	79	78	112	120
ST-DUP1-111614	180-39026-3	93	91	113	122
ST-014-111614	180-39026-4	98	100	117	126
	MB 180-126039/1-A	85	82	93	107
	LCS 180-126039/4-A	96	91	105	107
	LCSD 180-126039/5-A	91	86	105	102

	QC LIMITS
TCX = Tetrachloro-m-xylene (Surr)	25-150
DCB = DCB Decachlorobiphenyl (Surr)	60-135

Column to be used to flag recovery values

FORM II 8082A

FORM III
GC SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 120314075.D

Lab ID: LCS 180-126039/4-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
PCB-1016	1.00	0.902	90	55-120	
PCB-1260	1.00	1.05	105	55-120	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM III
GC SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 120314076.D

Lab ID: LCSD 180-126039/5-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
PCB-1016	1.00	0.861	86	5	25	55-120	
PCB-1260	1.00	1.04	104	0	25	55-120	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM IV
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: MB 180-126039/1-A

Matrix: Water Date Extracted: 11/21/2014 16:15

Lab File ID:(1) 120314057.D Lab File ID:(2) 120314057.D

Date Analyzed:(1) 12/04/2014 05:19 Date Analyzed:(2) 12/04/2014 05:19

Instrument ID:(1) CHGC16 Instrument ID:(2) CHGC16

GC Column:(1) RTX-CLP1 ID: 0.53(mm) GC Column:(2) RTX-CLP2 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
ST-018-111614	180-39026-1	12/04/2014 06:36	12/04/2014 06:36
ST-UNNAMED-111614	180-39026-2	12/04/2014 06:56	12/04/2014 06:56
ST-DUP1-111614	180-39026-3	12/04/2014 07:15	12/04/2014 07:15
ST-014-111614	180-39026-4	12/04/2014 07:35	12/04/2014 07:35
	LCS 180-126039/4-A	12/04/2014 11:04	12/04/2014 11:04
	LCSD 180-126039/5-A	12/04/2014 11:23	12/04/2014 11:23

FORM VIII
GC SEMI VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Sample No.: CCVRT 180-127055/1 Date Analyzed: 12/03/2014 09:52

Instrument ID: CHGC16 GC Column: RTX-CLP1 ID: 0.53(mm)

Lab File ID (Standard): 120314001.D Heated Purge: (Y/N) N

Calibration ID: 18827

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				3.20	11.28	
UPPER LIMIT				3.25	11.33	
LOWER LIMIT				3.15	11.23	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 180-127055/1		12/03/2014 09:52	120314001.D	3.20	11.28	
CCV 180-127055/35		12/03/2014 21:32	120314038.D	3.20	11.28	
CCV 180-127055/53		12/04/2014 05:00	120314056.D	3.20	11.28	
MB 180-126039/1-A		12/04/2014 05:19	120314057.D	3.20	11.28	
180-39026-1	ST-018-111614	12/04/2014 06:36	120314061.D	3.20	11.27	
180-39026-2	ST-UNNAMED-111614	12/04/2014 06:56	120314062.D	3.20	11.27	
180-39026-3	ST-DUP1-111614	12/04/2014 07:15	120314063.D	3.20	11.27	
180-39026-4	ST-014-111614	12/04/2014 07:35	120314064.D	3.20	11.27	
LCS 180-126039/4-A		12/04/2014 11:04	120314075.D	3.20	11.27	
LCSD 180-126039/5-A		12/04/2014 11:23	120314076.D	3.20	11.27	
CCV 180-127055/74		12/04/2014 13:58	120314077.D	3.20	11.28	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl (Surr)

TCX RT Limit = ± 0.05 minutes of surrogate RT
DCB RT Limit = ± 0.05 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
GC SEMI VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Sample No.: CCVRT 180-127055/1 Date Analyzed: 12/03/2014 09:52

Instrument ID: CHGC16 GC Column: RTX-CLP2 ID: 0.53(mm)

Lab File ID (Standard): 120314001.D Heated Purge: (Y/N) N

Calibration ID: 18828

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				3.86	13.07	
UPPER LIMIT				3.91	13.12	
LOWER LIMIT				3.81	13.02	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 180-127055/1		12/03/2014 09:52	120314001.D	3.86	13.07	
CCV 180-127055/35		12/03/2014 21:32	120314038.D	3.86	13.07	
CCV 180-127055/53		12/04/2014 05:00	120314056.D	3.85	13.06	
MB 180-126039/1-A		12/04/2014 05:19	120314057.D	3.86	13.07	
180-39026-1	ST-018-111614	12/04/2014 06:36	120314061.D	3.86	13.07	
180-39026-2	ST-UNNAMED-111614	12/04/2014 06:56	120314062.D	3.86	13.07	
180-39026-3	ST-DUP1-111614	12/04/2014 07:15	120314063.D	3.86	13.06	
180-39026-4	ST-014-111614	12/04/2014 07:35	120314064.D	3.86	13.07	
LCS 180-126039/4-A		12/04/2014 11:04	120314075.D	3.86	13.06	
LCSD 180-126039/5-A		12/04/2014 11:23	120314076.D	3.86	13.06	
CCV 180-127055/74		12/04/2014 13:58	120314077.D	3.85	13.06	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl (Surr)

TCX RT Limit = ± 0.05 minutes of surrogate RT
DCB RT Limit = ± 0.05 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-126039/4-A

Instrument ID (1): CHGC16 Instrument ID (2): CHGC16

Date Analyzed (1): 12/04/2014 11:04 Date Analyzed (2): 12/04/2014 11:04

GC Column (1): RTX-CLP1 ID: 0.53(mm) GC Column (2): RTX-CLP2 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
PCB-1016	1	1	3.51	3.47	3.57	0.835	0.902	0.2
		2	3.85	3.80	3.90	0.839		
		3	4.33	4.29	4.39	0.942		
		4	4.48	4.44	4.54	0.917		
		5	4.98	4.94	5.04	0.977		
	2	1	4.93	4.87	4.97	0.854	0.901	
		2	5.60	5.54	5.64	0.937		
		3	5.80	5.75	5.85	0.883		
		4	5.97	5.91	6.01	0.891		
		5	7.35	7.29	7.39	0.938		
PCB-1260	1	1	7.86	7.82	7.92	1.03	1.05	9.0
		2	8.56	8.53	8.63	1.03		
		3	9.13	9.09	9.19	1.10		
		4	9.60	9.56	9.66	1.06		
		5	10.58	10.54	10.64	1.02		
	2	1	9.39	9.34	9.44	0.933	0.956	
		2	10.00	9.95	10.05	0.943		
		3	10.61	10.56	10.66	0.939		
		4	10.99	10.94	11.04	1.01		
		5	11.52	11.47	11.57	0.950		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 180-126039/5-A

Instrument ID (1): CHGC16 Instrument ID (2): CHGC16

Date Analyzed (1): 12/04/2014 11:23 Date Analyzed (2): 12/04/2014 11:23

GC Column (1): RTX-CLP1 ID: 0.53(mm) GC Column (2): RTX-CLP2 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
PCB-1016	1	1	3.51	3.47	3.57	0.804	0.861	0.7
		2	3.85	3.80	3.90	0.816		
		3	4.33	4.29	4.39	0.890		
		4	4.48	4.44	4.54	0.871		
		5	4.98	4.94	5.04	0.924		
	2	1	4.93	4.87	4.97	0.817	0.855	
		2	5.60	5.54	5.64	0.878		
		3	5.80	5.75	5.85	0.837		
		4	5.97	5.91	6.01	0.841		
		5	7.35	7.29	7.39	0.902		
PCB-1260	1	1	7.86	7.82	7.92	1.01	1.04	9.1
		2	8.57	8.53	8.63	1.04		
		3	9.12	9.09	9.19	1.10		
		4	9.60	9.56	9.66	1.05		
		5	10.58	10.54	10.64	1.03		
	2	1	9.39	9.34	9.44	0.911	0.953	
		2	10.01	9.95	10.05	0.924		
		3	10.62	10.56	10.66	0.930		
		4	10.99	10.94	11.04	0.990		
		5	11.52	11.47	11.57	1.01		

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-018-111614 Lab Sample ID: 180-39026-1

Matrix: Water Lab File ID: 120314061.D

Analysis Method: 8082A Date Collected: 11/16/2014 18:08

Extraction Method: 3510C Date Extracted: 11/21/2014 16:15

Sample wt/vol: 1060(mL) Date Analyzed: 12/04/2014 06:36

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-CLP1 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 127055 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	ND		0.0094	0.0024
11104-28-2	PCB-1221	ND		0.0094	0.0039
11141-16-5	PCB-1232	ND		0.0094	0.0037
53469-21-9	PCB-1242	ND		0.0094	0.0018
12672-29-6	PCB-1248	ND		0.0094	0.0025
11097-69-1	PCB-1254	ND		0.0094	0.0028
11096-82-5	PCB-1260	ND		0.0094	0.0016

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	120		60-135
877-09-8	Tetrachloro-m-xylene (Surr)	87		25-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314061.D
Lims ID: 180-39026-C-1-A Lab Sample ID: 180-39026-1
Client ID: ST-018-111614
Sample Type: Client
Inject. Date: 04-Dec-2014 06:36:47 ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004694-058
Operator ID: 402331 Instrument ID: CHGC16

Method: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 04-Dec-2014 14:10:22 Calib Date: 03-Dec-2014 02:40:17
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141202-4675.b\120214066.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: oravecj Date: 04-Dec-2014 14:09:23

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng	Flags
2 PCB-1221						
1		2.767			ND	
1		3.510				
1		3.342				
2		3.374				
2		4.170				
2		4.413				
$ 1 Tetrachloro-m-xylene						
1	3.200	3.202	-0.002	24613458	H 0.0174	
2	3.857	3.850	0.007	17841918	H 0.0173	
					RPD = 0.64	
5 PCB-1232						
1		3.343			ND	
1		3.511				
1		3.850				
1		4.332				
1		4.730				
2		4.171				
2		4.416				
2		4.935				
2		5.601				
2		5.810				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng	Flags
3 PCB-1242						
1		3.511			ND	
1		3.847				
1		4.331				
1		4.980				
1		5.589				
2		4.416				
2		4.935				
2		5.600				
2		6.588				
2		7.835				
4 PCB-1016						
1		3.515			ND	
1		3.854				
1		4.337				
1		4.487				
1		4.987				
2		4.923				
2		5.587				
2		5.796				
2		5.963				
2		7.342				
6 PCB-1248						
1		4.696			ND	
1		4.978				
1		5.548				
1		5.877				
1		6.505				
2		6.118				
2		6.586				
2		7.273				
2		7.363				
2		7.836				
7 PCB-1254						
1		5.498			ND	
1		5.871				
1		6.507				
1		6.980				
1		7.864				
2		7.355				
2		7.726				
2		8.667				
2		9.083				
2		10.009				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng	Flags
8 PCB-1260						
1		7.870			ND	
1		8.577				
1		9.135				
1		9.612				
1		10.589				
2		9.385				
2		9.999				
2		10.610				
2		10.985				
2		11.518				
$ 11 DCB Decachlorobiphenyl (Surr)						
1	11.274	11.279	-0.005	21018750H	0.0240	
2	13.066	13.064	0.002	21124863H	0.0256	
					RPD = 6.41	

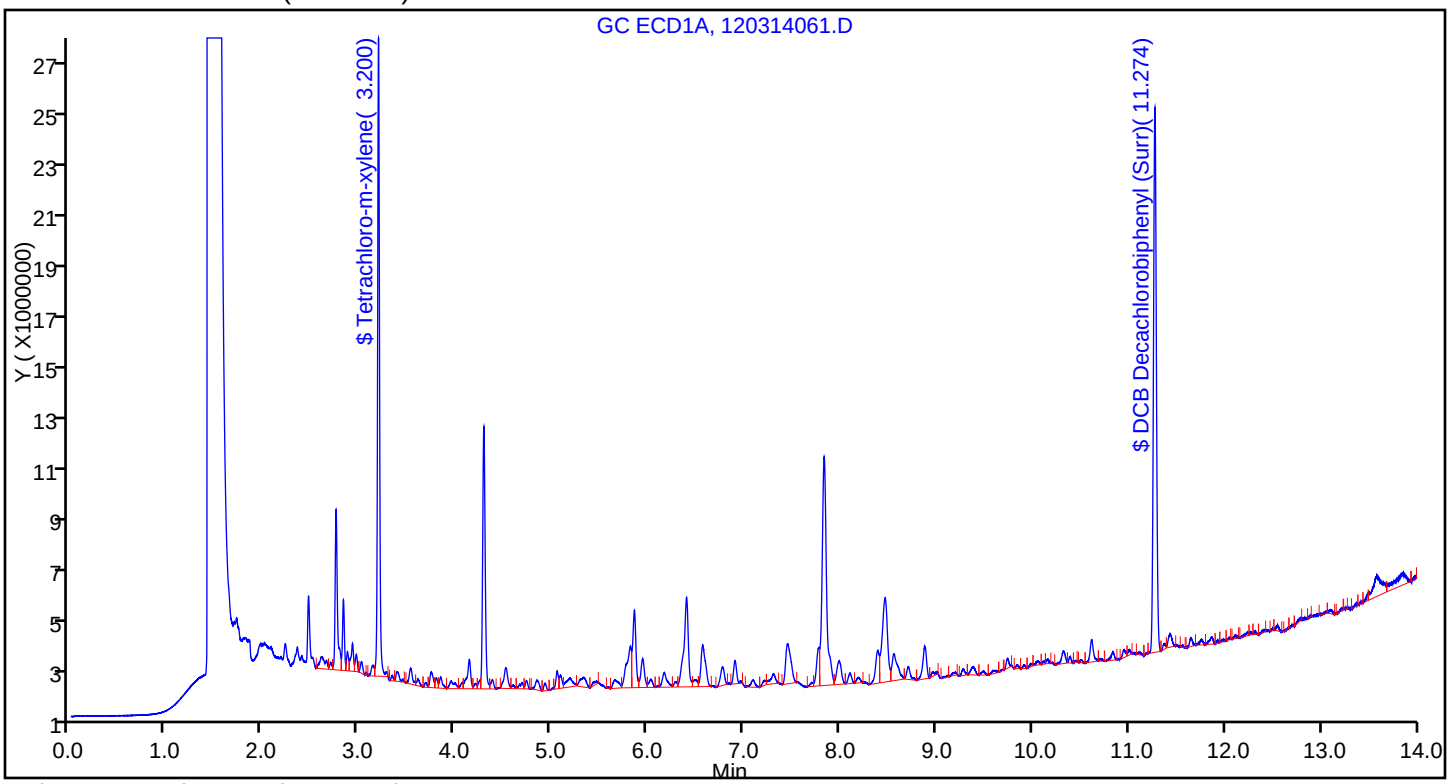
Report Date: 04-Dec-2014 14:12:26 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

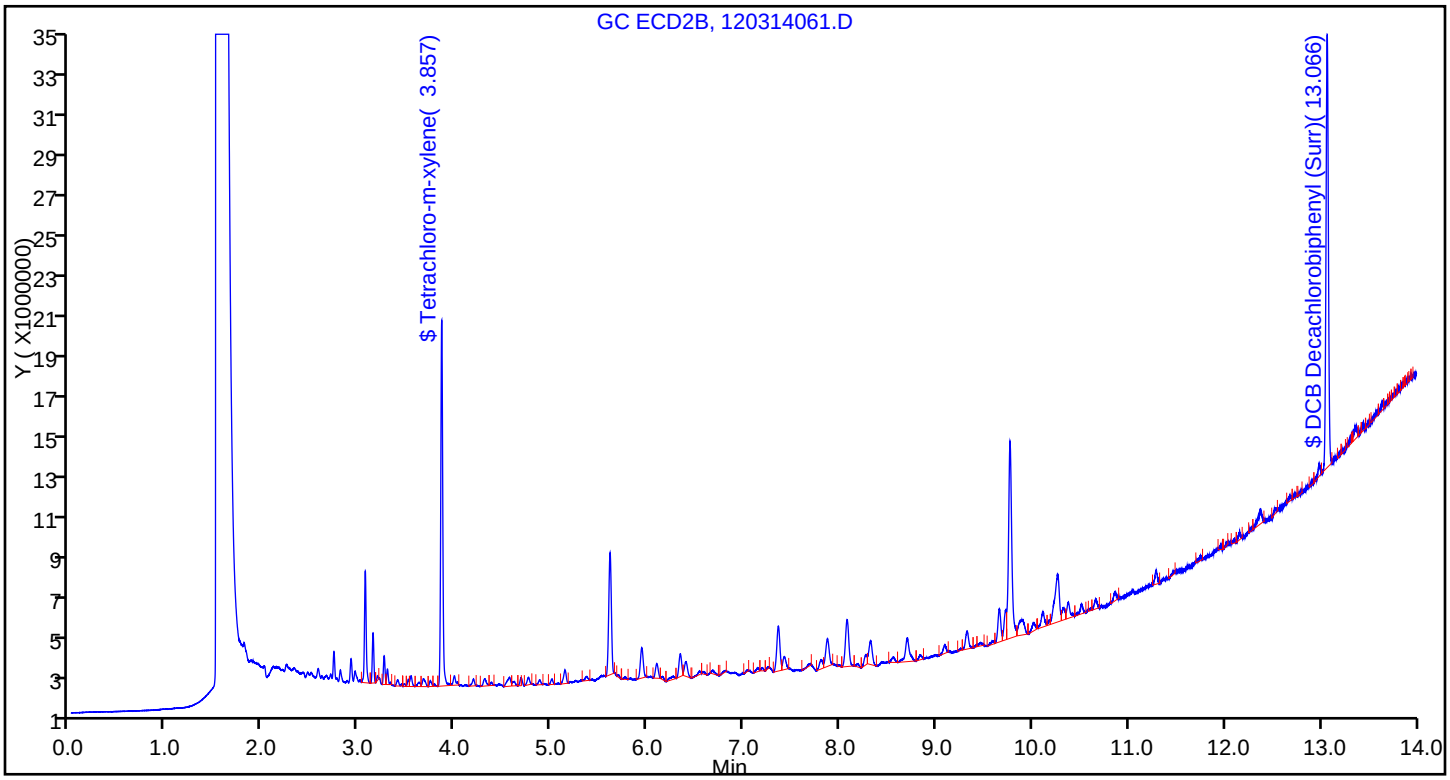
Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314061.D

Injection Date:	04-Dec-2014 06:36:47	Instrument ID:	CHGC16		
Lims ID:	180-39026-C-1-A	Lab Sample ID:	180-39026-1		
Client ID:	ST-018-111614				
Operator ID:	402331	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_CHGC16	Limit Group:	GCS 8082A ICAL		

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-018-111614 Lab Sample ID: 180-39026-1

Matrix: Water Lab File ID: 120314061.D

Analysis Method: 8082A Date Collected: 11/16/2014 18:08

Extraction Method: 3510C Date Extracted: 11/21/2014 16:15

Sample wt/vol: 1060(mL) Date Analyzed: 12/04/2014 06:36

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-CLP2 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 127055 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	128		60-135
877-09-8	Tetrachloro-m-xylene (Surr)	86		25-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314061.D
Lims ID: 180-39026-C-1-A Lab Sample ID: 180-39026-1
Client ID: ST-018-111614
Sample Type: Client
Inject. Date: 04-Dec-2014 06:36:47 ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004694-058
Operator ID: 402331 Instrument ID: CHGC16

Method: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 04-Dec-2014 14:10:22 Calib Date: 03-Dec-2014 02:40:17
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141202-4675.b\120214066.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: oravecj Date: 04-Dec-2014 14:09:23

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng	Flags
2 PCB-1221						
1		2.767			ND	
1		3.510				
1		3.342				
2		3.374				
2		4.170				
2		4.413				
$ 1 Tetrachloro-m-xylene						
1	3.200	3.202	-0.002	24613458	H 0.0174	
2	3.857	3.850	0.007	17841918	H 0.0173	
					RPD = 0.64	
5 PCB-1232						
1		3.343			ND	
1		3.511				
1		3.850				
1		4.332				
1		4.730				
2		4.171				
2		4.416				
2		4.935				
2		5.601				
2		5.810				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng	Flags
3 PCB-1242						
1		3.511			ND	
1		3.847				
1		4.331				
1		4.980				
1		5.589				
2		4.416				
2		4.935				
2		5.600				
2		6.588				
2		7.835				
4 PCB-1016						
1		3.515			ND	
1		3.854				
1		4.337				
1		4.487				
1		4.987				
2		4.923				
2		5.587				
2		5.796				
2		5.963				
2		7.342				
6 PCB-1248						
1		4.696			ND	
1		4.978				
1		5.548				
1		5.877				
1		6.505				
2		6.118				
2		6.586				
2		7.273				
2		7.363				
2		7.836				
7 PCB-1254						
1		5.498			ND	
1		5.871				
1		6.507				
1		6.980				
1		7.864				
2		7.355				
2		7.726				
2		8.667				
2		9.083				
2		10.009				

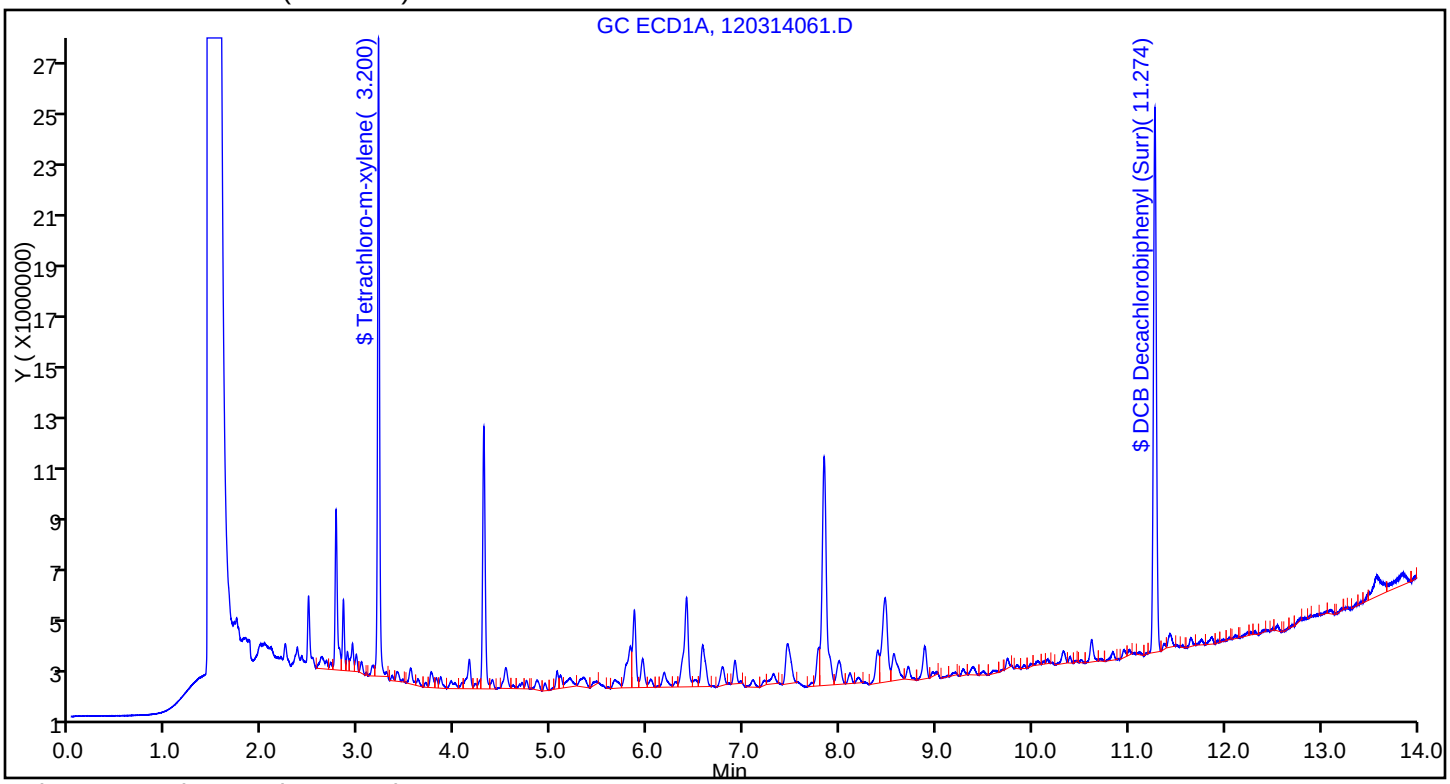
Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng	Flags
8 PCB-1260						
1		7.870			ND	
1		8.577				
1		9.135				
1		9.612				
1		10.589				
2		9.385				
2		9.999				
2		10.610				
2		10.985				
2		11.518				
$ 11 DCB Decachlorobiphenyl (Surr)						
1	11.274	11.279	-0.005	21018750H	0.0240	
2	13.066	13.064	0.002	21124863H	0.0256	
					RPD = 6.41	

Report Date: 04-Dec-2014 14:12:27 Chrom Revision: 2.2 06-Nov-2014 14:50:32

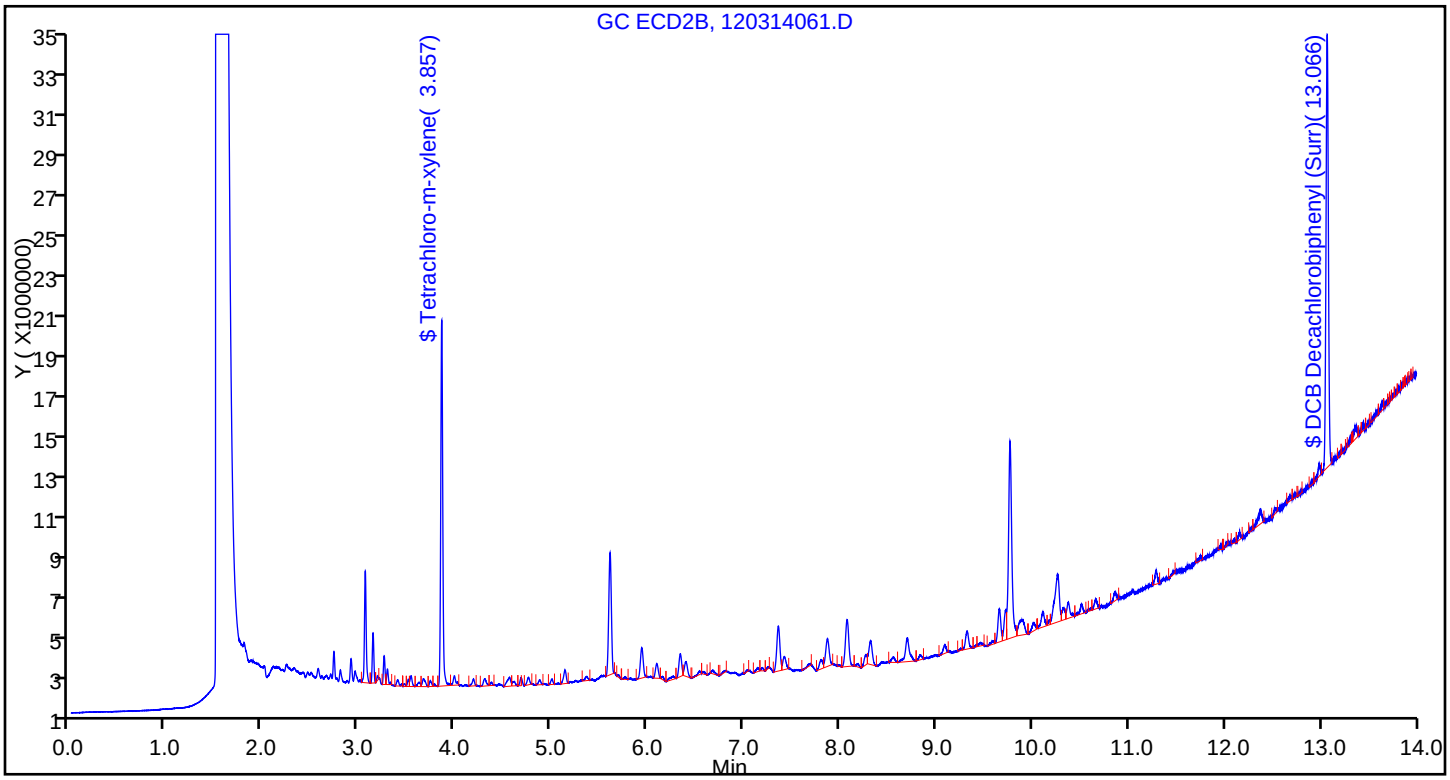
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314061.D				
Injection Date:	04-Dec-2014 06:36:47	Instrument ID:	CHGC16		
Lims ID:	180-39026-C-1-A	Lab Sample ID:	180-39026-1		
Client ID:	ST-018-111614				
Operator ID:	402331	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_CHGC16	Limit Group:	GCS 8082A ICAL		

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-UNNAMED-111614 Lab Sample ID: 180-39026-2

Matrix: Water Lab File ID: 120314062.D

Analysis Method: 8082A Date Collected: 11/16/2014 18:55

Extraction Method: 3510C Date Extracted: 11/21/2014 16:15

Sample wt/vol: 1060(mL) Date Analyzed: 12/04/2014 06:56

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-CLP1 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 127055 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	ND		0.0094	0.0024
11104-28-2	PCB-1221	ND		0.0094	0.0039
11141-16-5	PCB-1232	ND		0.0094	0.0037
53469-21-9	PCB-1242	ND		0.0094	0.0018
12672-29-6	PCB-1248	ND		0.0094	0.0025
11097-69-1	PCB-1254	ND		0.0094	0.0028
11096-82-5	PCB-1260	ND		0.0094	0.0016

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	112		60-135
877-09-8	Tetrachloro-m-xylene (Surr)	79		25-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314062.D
Lims ID: 180-39026-C-2-A Lab Sample ID: 180-39026-2
Client ID: ST-UNNAMED-111614
Sample Type: Client
Inject. Date: 04-Dec-2014 06:56:19 ALS Bottle#: 59 Worklist Smp#: 59
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004694-059
Operator ID: 402331 Instrument ID: CHGC16

Method: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 04-Dec-2014 14:10:22 Calib Date: 03-Dec-2014 02:40:17
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141202-4675.b\120214066.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: oravecj Date: 04-Dec-2014 14:08:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng	Flags
2 PCB-1221						
1		2.767			ND	
1		3.510				
1		3.342				
2		3.374				
2		4.170				
2		4.413				
$ 1 Tetrachloro-m-xylene						
1	3.199	3.202	-0.003	22233334	H 0.0157	
2	3.856	3.850	0.006	16136031	H 0.0156	
					RPD = 0.52	
5 PCB-1232						
1		3.343			ND	
1		3.511				
1		3.850				
1		4.332				
1		4.730				
2		4.171				
2		4.416				
2		4.935				
2		5.601				
2		5.810				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng	Flags
3 PCB-1242						
1		3.511			ND	
1		3.847				
1		4.331				
1		4.980				
1		5.589				
2		4.416				
2		4.935				
2		5.600				
2		6.588				
2		7.835				
4 PCB-1016						
1		3.515			ND	
1		3.854				
1		4.337				
1		4.487				
1		4.987				
2		4.923				
2		5.587				
2		5.796				
2		5.963				
2		7.342				
6 PCB-1248						
1		4.696			ND	
1		4.978				
1		5.548				
1		5.877				
1		6.505				
2		6.118				
2		6.586				
2		7.273				
2		7.363				
2		7.836				
7 PCB-1254						
1		5.498			ND	
1		5.871				
1		6.507				
1		6.980				
1		7.864				
2		7.355				
2		7.726				
2		8.667				
2		9.083				
2		10.009				

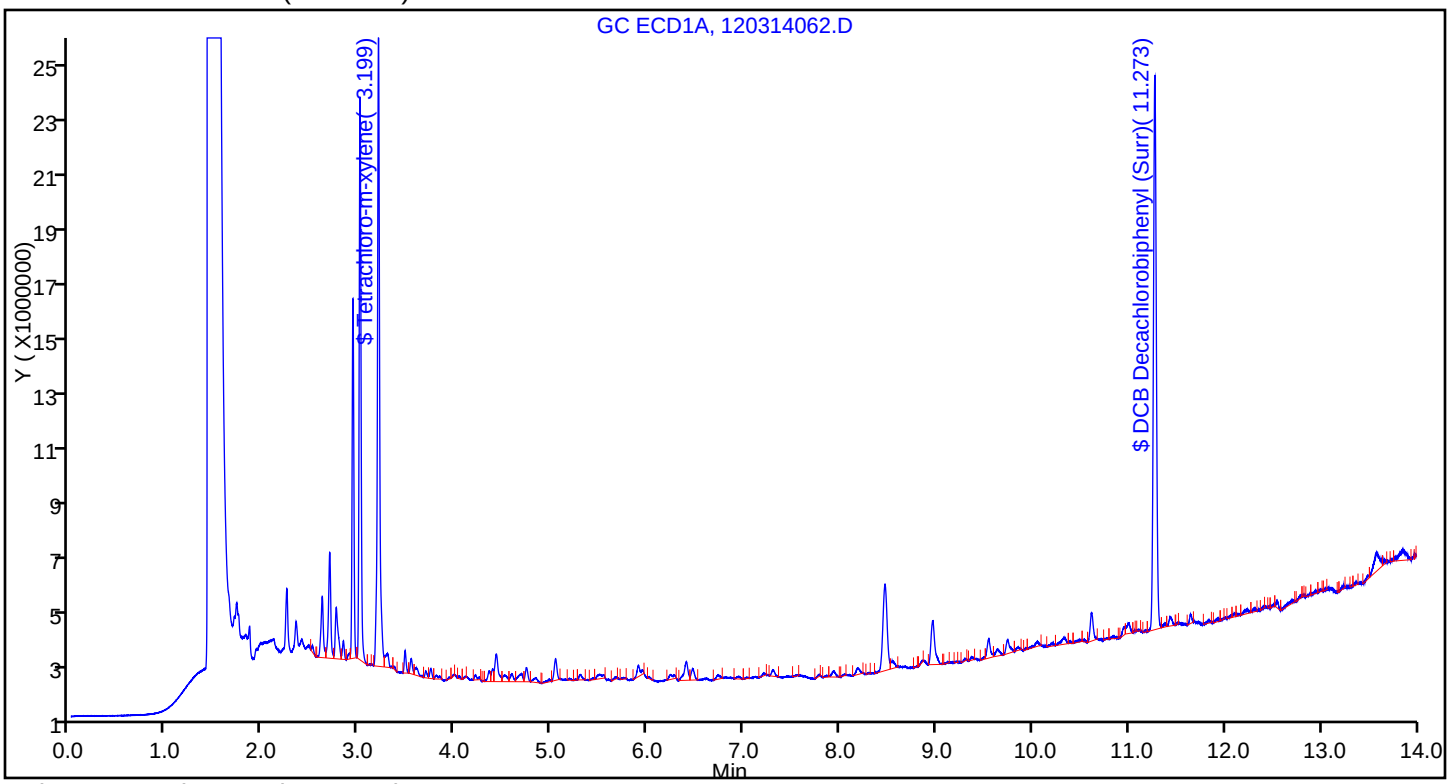
Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng	Flags
8 PCB-1260						
1		7.870			ND	
1		8.577				
1		9.135				
1		9.612				
1		10.589				
2		9.385				
2		9.999				
2		10.610				
2		10.985				
2		11.518				
$ 11 DCB Decachlorobiphenyl (Surr)						
1	11.273	11.279	-0.006	19613864	H 0.0224	
2	13.065	13.064	0.001	19846127	H 0.0240	
					RPD = 7.08	

Report Date: 04-Dec-2014 14:12:24 Chrom Revision: 2.2 06-Nov-2014 14:50:32

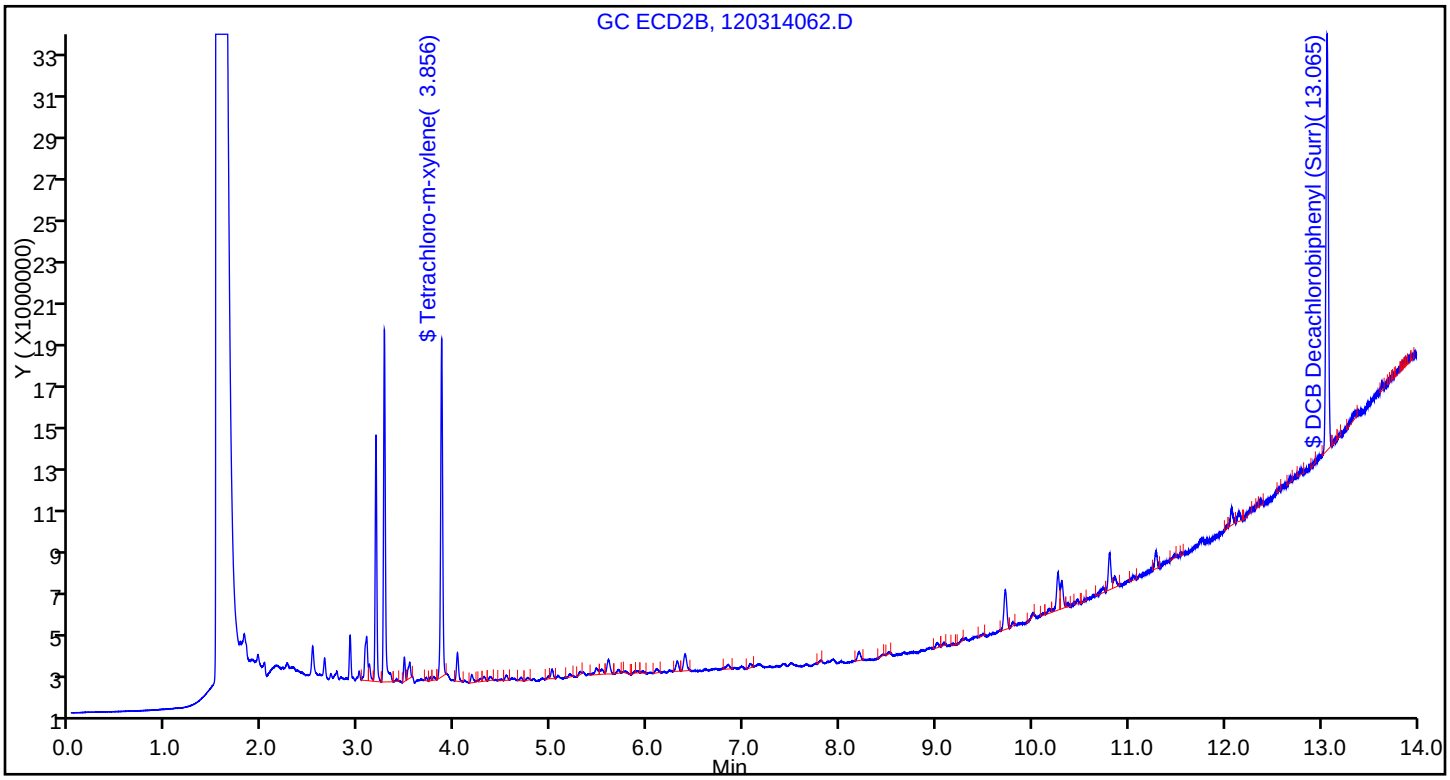
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314062.D				
Injection Date:	04-Dec-2014 06:56:19	Instrument ID:	CHGC16		
Lims ID:	180-39026-C-2-A	Lab Sample ID:	180-39026-2		
Client ID:	ST-UNNAMED-111614				
Operator ID:	402331	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_CHGC16	Limit Group:	GCS 8082A ICAL		

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-UNNAMED-111614 Lab Sample ID: 180-39026-2

Matrix: Water Lab File ID: 120314062.D

Analysis Method: 8082A Date Collected: 11/16/2014 18:55

Extraction Method: 3510C Date Extracted: 11/21/2014 16:15

Sample wt/vol: 1060(mL) Date Analyzed: 12/04/2014 06:56

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-CLP2 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 127055 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	120		60-135
877-09-8	Tetrachloro-m-xylene (Surr)	78		25-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314062.D
Lims ID: 180-39026-C-2-A Lab Sample ID: 180-39026-2
Client ID: ST-UNNAMED-111614
Sample Type: Client
Inject. Date: 04-Dec-2014 06:56:19 ALS Bottle#: 59 Worklist Smp#: 59
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004694-059
Operator ID: 402331 Instrument ID: CHGC16

Method: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 04-Dec-2014 14:10:22 Calib Date: 03-Dec-2014 02:40:17
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141202-4675.b\120214066.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: oravecj Date: 04-Dec-2014 14:08:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng	Flags
2 PCB-1221						
1		2.767			ND	
1		3.510				
1		3.342				
2		3.374				
2		4.170				
2		4.413				
$ 1 Tetrachloro-m-xylene						
1	3.199	3.202	-0.003	22233334	H 0.0157	
2	3.856	3.850	0.006	16136031	H 0.0156	
					RPD = 0.52	
5 PCB-1232						
1		3.343			ND	
1		3.511				
1		3.850				
1		4.332				
1		4.730				
2		4.171				
2		4.416				
2		4.935				
2		5.601				
2		5.810				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng	Flags
3 PCB-1242						
1		3.511			ND	
1		3.847				
1		4.331				
1		4.980				
1		5.589				
2		4.416				
2		4.935				
2		5.600				
2		6.588				
2		7.835				
4 PCB-1016						
1		3.515			ND	
1		3.854				
1		4.337				
1		4.487				
1		4.987				
2		4.923				
2		5.587				
2		5.796				
2		5.963				
2		7.342				
6 PCB-1248						
1		4.696			ND	
1		4.978				
1		5.548				
1		5.877				
1		6.505				
2		6.118				
2		6.586				
2		7.273				
2		7.363				
2		7.836				
7 PCB-1254						
1		5.498			ND	
1		5.871				
1		6.507				
1		6.980				
1		7.864				
2		7.355				
2		7.726				
2		8.667				
2		9.083				
2		10.009				

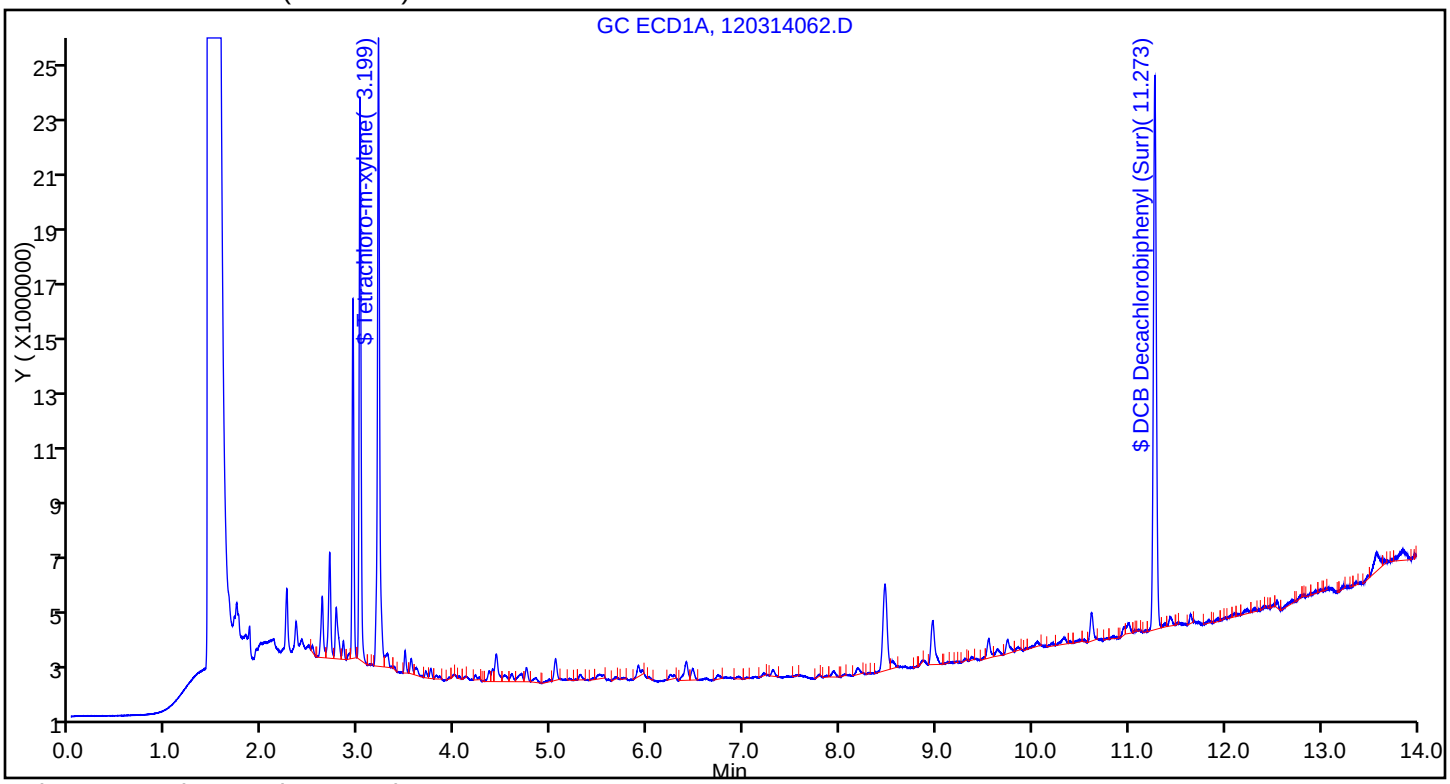
Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng	Flags
8 PCB-1260						
1		7.870			ND	
1		8.577				
1		9.135				
1		9.612				
1		10.589				
2		9.385				
2		9.999				
2		10.610				
2		10.985				
2		11.518				
$ 11 DCB Decachlorobiphenyl (Surr)						
1	11.273	11.279	-0.006	19613864	H 0.0224	
2	13.065	13.064	0.001	19846127	H 0.0240	
					RPD = 7.08	

Report Date: 04-Dec-2014 14:12:25 Chrom Revision: 2.2 06-Nov-2014 14:50:32

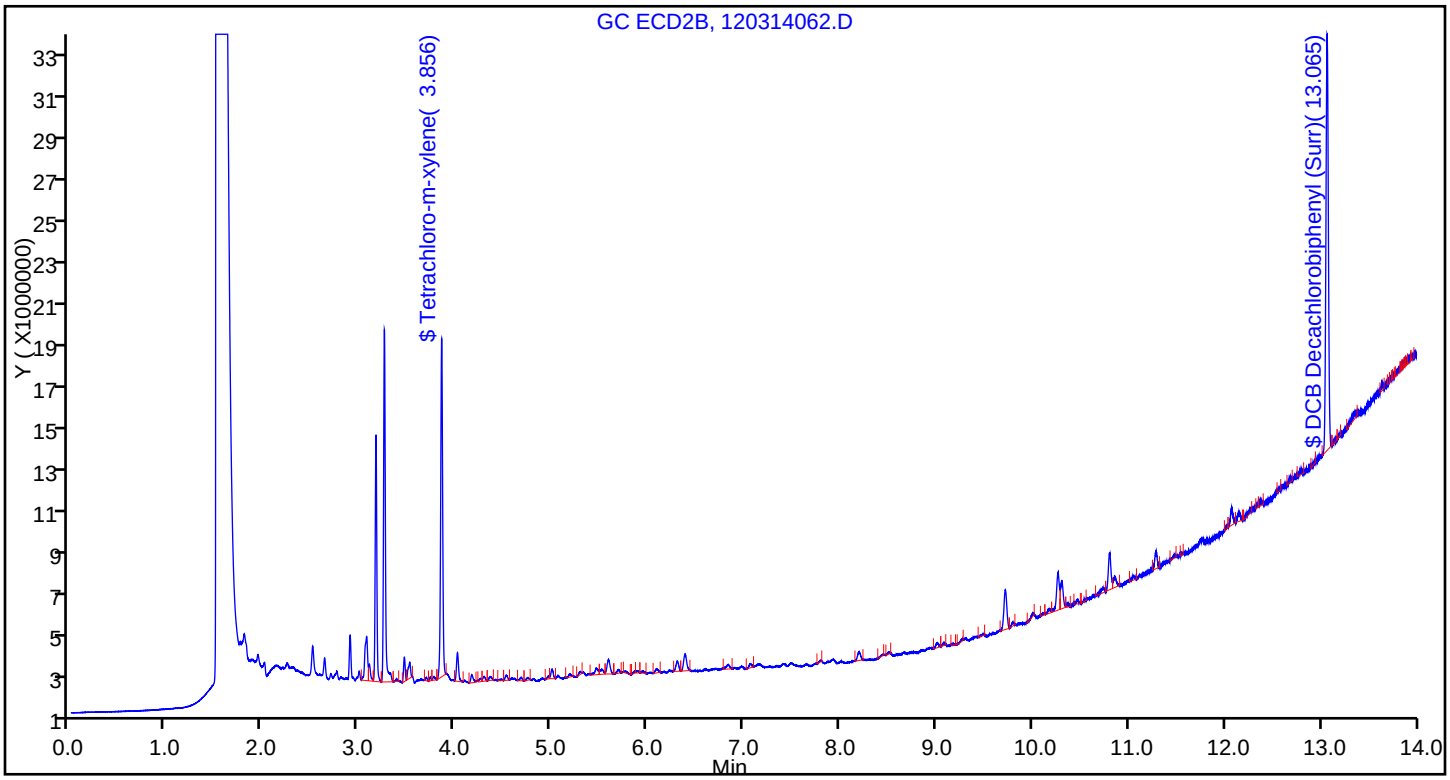
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314062.D				
Injection Date:	04-Dec-2014 06:56:19	Instrument ID:	CHGC16		
Lims ID:	180-39026-C-2-A	Lab Sample ID:	180-39026-2		
Client ID:	ST-UNNAMED-111614				
Operator ID:	402331	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_CHGC16	Limit Group:	GCS 8082A ICAL		

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-DUP1-111614 Lab Sample ID: 180-39026-3

Matrix: Water Lab File ID: 120314063.D

Analysis Method: 8082A Date Collected: 11/16/2014 00:00

Extraction Method: 3510C Date Extracted: 11/21/2014 16:15

Sample wt/vol: 1060(mL) Date Analyzed: 12/04/2014 07:15

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-CLP1 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 127055 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	ND		0.0094	0.0024
11104-28-2	PCB-1221	ND		0.0094	0.0039
11141-16-5	PCB-1232	ND		0.0094	0.0037
53469-21-9	PCB-1242	ND		0.0094	0.0018
12672-29-6	PCB-1248	ND		0.0094	0.0025
11097-69-1	PCB-1254	ND		0.0094	0.0028
11096-82-5	PCB-1260	ND		0.0094	0.0016

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	113		60-135
877-09-8	Tetrachloro-m-xylene (Surr)	93		25-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314063.D
Lims ID: 180-39026-C-3-A Lab Sample ID: 180-39026-3
Client ID: ST-DUP1-111614
Sample Type: Client
Inject. Date: 04-Dec-2014 07:15:44 ALS Bottle#: 60 Worklist Smp#: 60
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004694-060
Operator ID: 402331 Instrument ID: CHGC16

Method: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 04-Dec-2014 14:10:22 Calib Date: 03-Dec-2014 02:40:17
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141202-4675.b\120214066.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: oravecj Date: 04-Dec-2014 14:08:33

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng	Flags
2 PCB-1221						
1		2.767			ND	
1		3.510				
1		3.342				
2		3.374				
2		4.170				
2		4.413				
$ 1 Tetrachloro-m-xylene						
1	3.199	3.202	-0.003	26229845	H 0.0185	
2	3.856	3.850	0.006	18798580	H 0.0182	
					RPD = 1.77	
5 PCB-1232						
1		3.343			ND	
1		3.511				
1		3.850				
1		4.332				
1		4.730				
2		4.171				
2		4.416				
2		4.935				
2		5.601				
2		5.810				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng	Flags
3 PCB-1242						
1		3.511			ND	
1		3.847				
1		4.331				
1		4.980				
1		5.589				
2		4.416				
2		4.935				
2		5.600				
2		6.588				
2		7.835				
4 PCB-1016						
1		3.515			ND	
1		3.854				
1		4.337				
1		4.487				
1		4.987				
2		4.923				
2		5.587				
2		5.796				
2		5.963				
2		7.342				
6 PCB-1248						
1		4.696			ND	
1		4.978				
1		5.548				
1		5.877				
1		6.505				
2		6.118				
2		6.586				
2		7.273				
2		7.363				
2		7.836				
7 PCB-1254						
1		5.498			ND	
1		5.871				
1		6.507				
1		6.980				
1		7.864				
2		7.355				
2		7.726				
2		8.667				
2		9.083				
2		10.009				

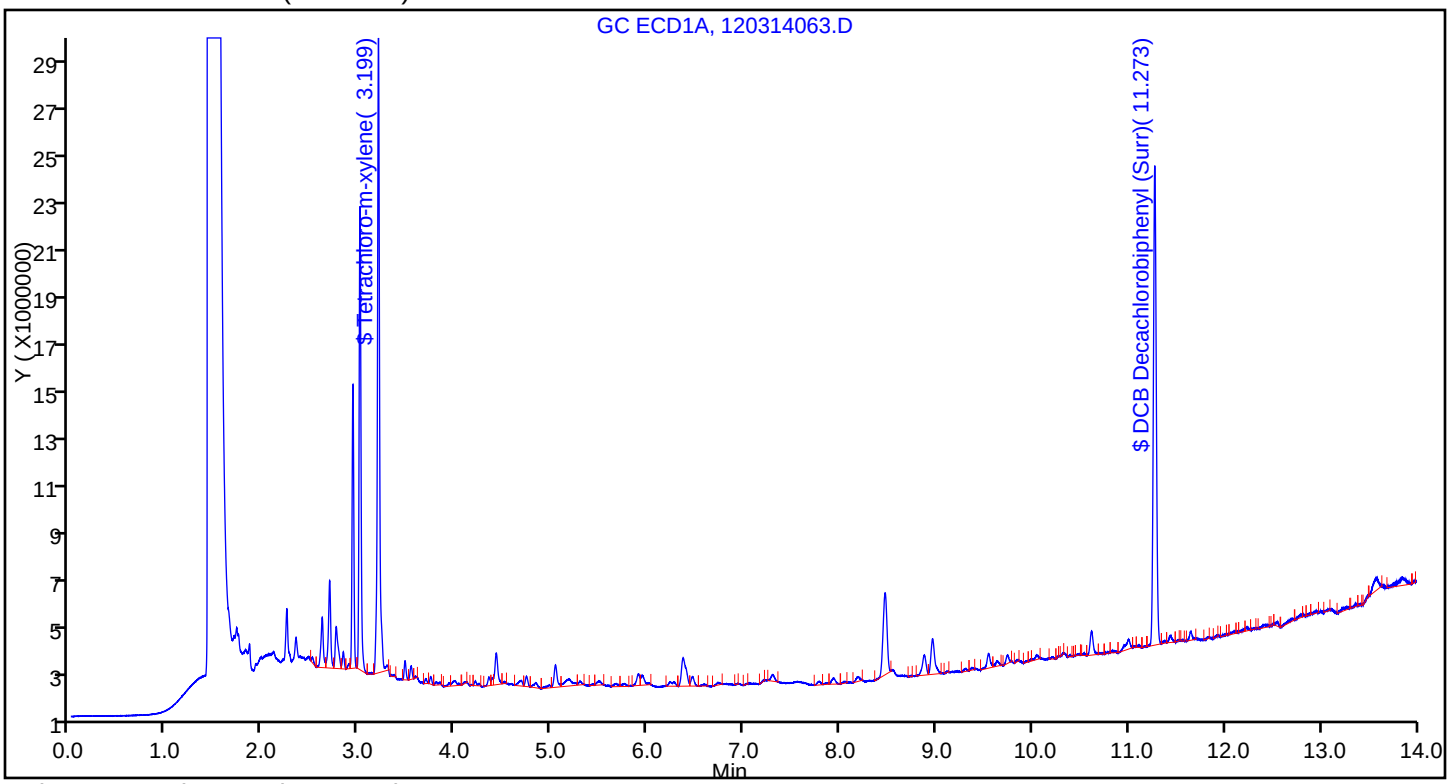
Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng	Flags
8 PCB-1260						
1		7.870			ND	
1		8.577				
1		9.135				
1		9.612				
1		10.589				
2		9.385				
2		9.999				
2		10.610				
2		10.985				
2		11.518				
$ 11 DCB Decachlorobiphenyl (Surr)						
1	11.273	11.279	-0.006	19811217H	0.0226	
2	13.064	13.064	0.000	20110623H	0.0244	
					RPD = 7.41	

Report Date: 04-Dec-2014 14:12:21 Chrom Revision: 2.2 06-Nov-2014 14:50:32

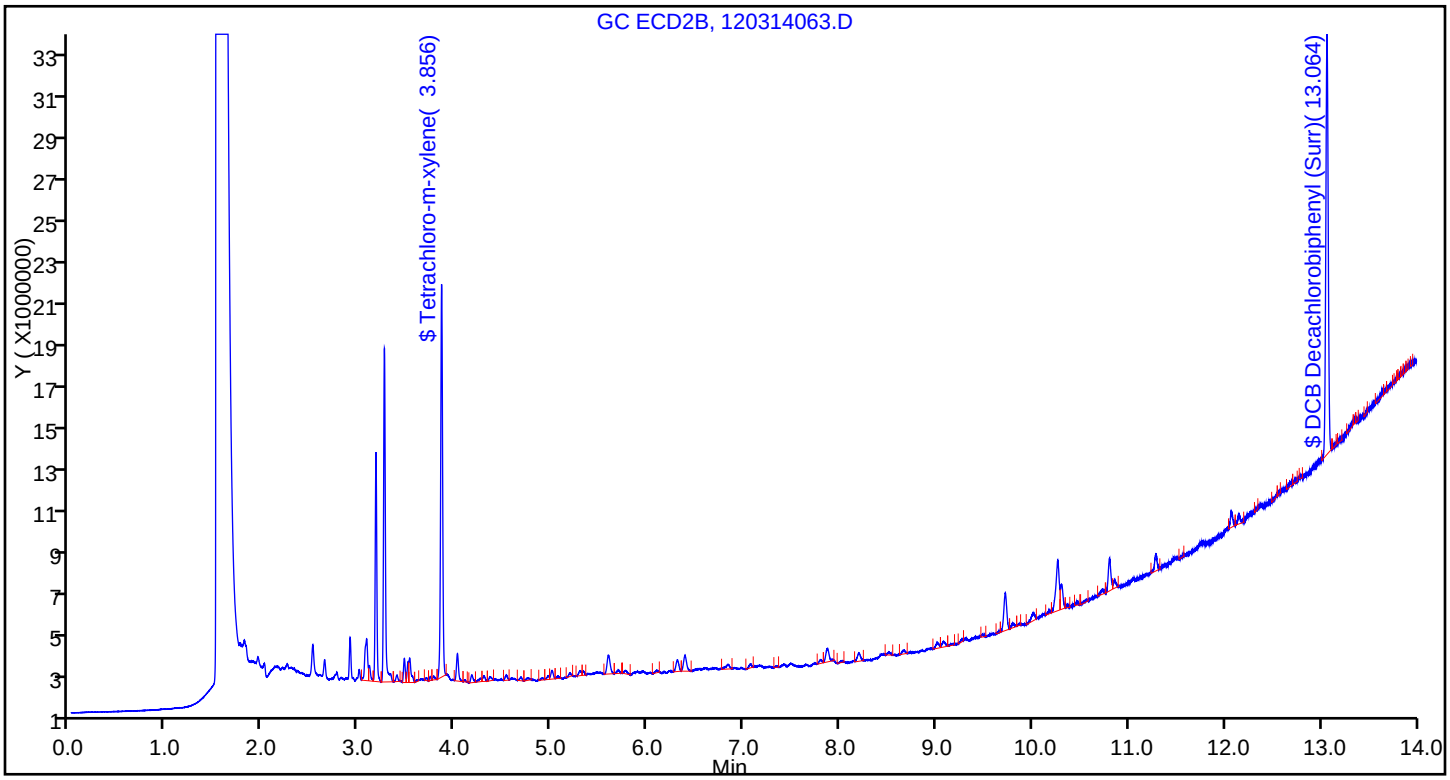
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314063.D				
Injection Date:	04-Dec-2014 07:15:44	Instrument ID:	CHGC16		
Lims ID:	180-39026-C-3-A	Lab Sample ID:	180-39026-3		
Client ID:	ST-DUP1-111614				
Operator ID:	402331	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_CHGC16	Limit Group:	GCS 8082A ICAL		

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-DUP1-111614 Lab Sample ID: 180-39026-3

Matrix: Water Lab File ID: 120314063.D

Analysis Method: 8082A Date Collected: 11/16/2014 00:00

Extraction Method: 3510C Date Extracted: 11/21/2014 16:15

Sample wt/vol: 1060(mL) Date Analyzed: 12/04/2014 07:15

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-CLP2 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 127055 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	122		60-135
877-09-8	Tetrachloro-m-xylene (Surr)	91		25-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314063.D
Lims ID: 180-39026-C-3-A Lab Sample ID: 180-39026-3
Client ID: ST-DUP1-111614
Sample Type: Client
Inject. Date: 04-Dec-2014 07:15:44 ALS Bottle#: 60 Worklist Smp#: 60
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004694-060
Operator ID: 402331 Instrument ID: CHGC16

Method: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 04-Dec-2014 14:10:22 Calib Date: 03-Dec-2014 02:40:17
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141202-4675.b\120214066.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: oravecj Date: 04-Dec-2014 14:08:33

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng	Flags
2 PCB-1221						
1		2.767			ND	
1		3.510				
1		3.342				
2		3.374				
2		4.170				
2		4.413				
$ 1 Tetrachloro-m-xylene						
1	3.199	3.202	-0.003	26229845	H 0.0185	
2	3.856	3.850	0.006	18798580	H 0.0182	
					RPD = 1.77	
5 PCB-1232						
1		3.343			ND	
1		3.511				
1		3.850				
1		4.332				
1		4.730				
2		4.171				
2		4.416				
2		4.935				
2		5.601				
2		5.810				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng	Flags
3 PCB-1242						
1		3.511			ND	
1		3.847				
1		4.331				
1		4.980				
1		5.589				
2		4.416				
2		4.935				
2		5.600				
2		6.588				
2		7.835				
4 PCB-1016						
1		3.515			ND	
1		3.854				
1		4.337				
1		4.487				
1		4.987				
2		4.923				
2		5.587				
2		5.796				
2		5.963				
2		7.342				
6 PCB-1248						
1		4.696			ND	
1		4.978				
1		5.548				
1		5.877				
1		6.505				
2		6.118				
2		6.586				
2		7.273				
2		7.363				
2		7.836				
7 PCB-1254						
1		5.498			ND	
1		5.871				
1		6.507				
1		6.980				
1		7.864				
2		7.355				
2		7.726				
2		8.667				
2		9.083				
2		10.009				

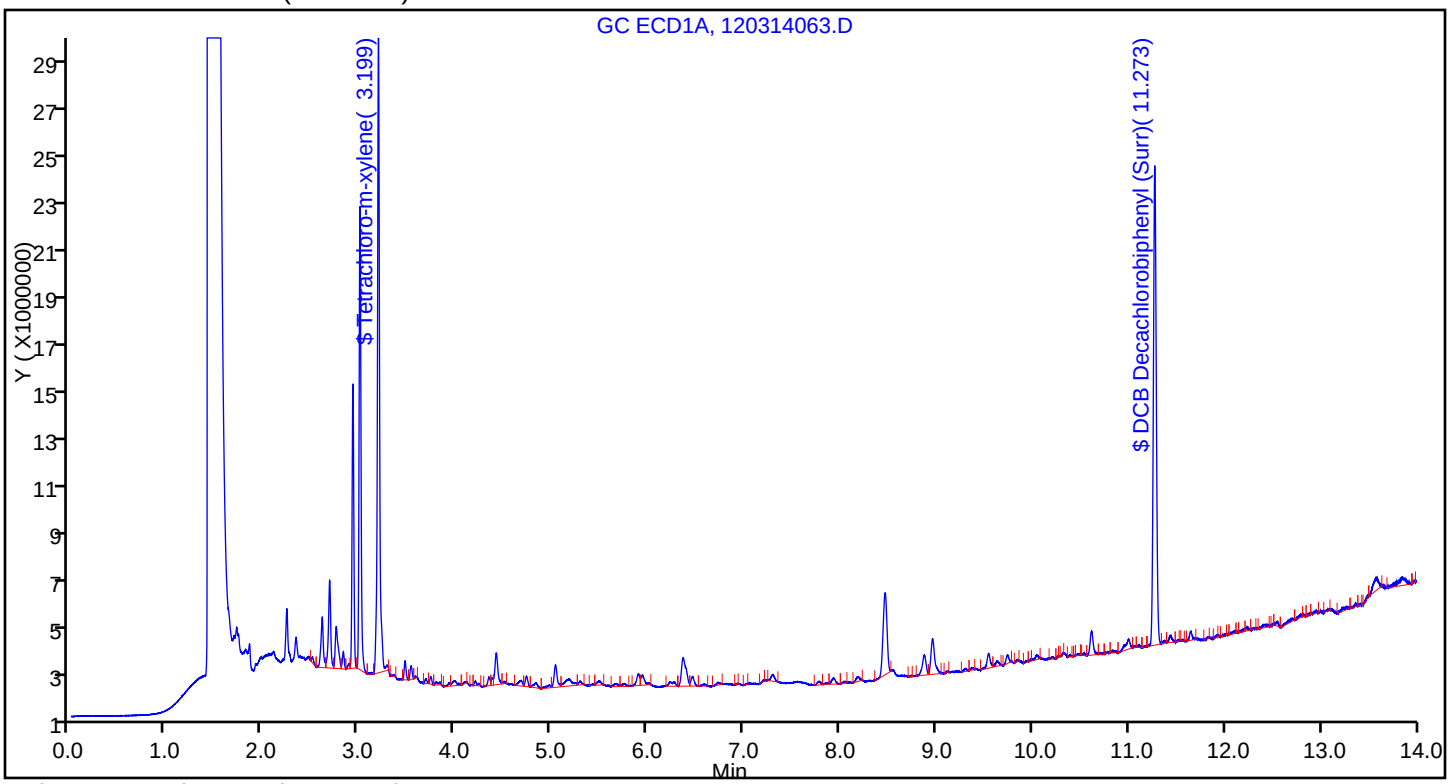
Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng	Flags
8 PCB-1260						
1		7.870			ND	
1		8.577				
1		9.135				
1		9.612				
1		10.589				
2		9.385				
2		9.999				
2		10.610				
2		10.985				
2		11.518				
$ 11 DCB Decachlorobiphenyl (Surr)						
1	11.273	11.279	-0.006	19811217H	0.0226	
2	13.064	13.064	0.000	20110623H	0.0244	
					RPD = 7.41	

Report Date: 04-Dec-2014 14:12:22 Chrom Revision: 2.2 06-Nov-2014 14:50:32

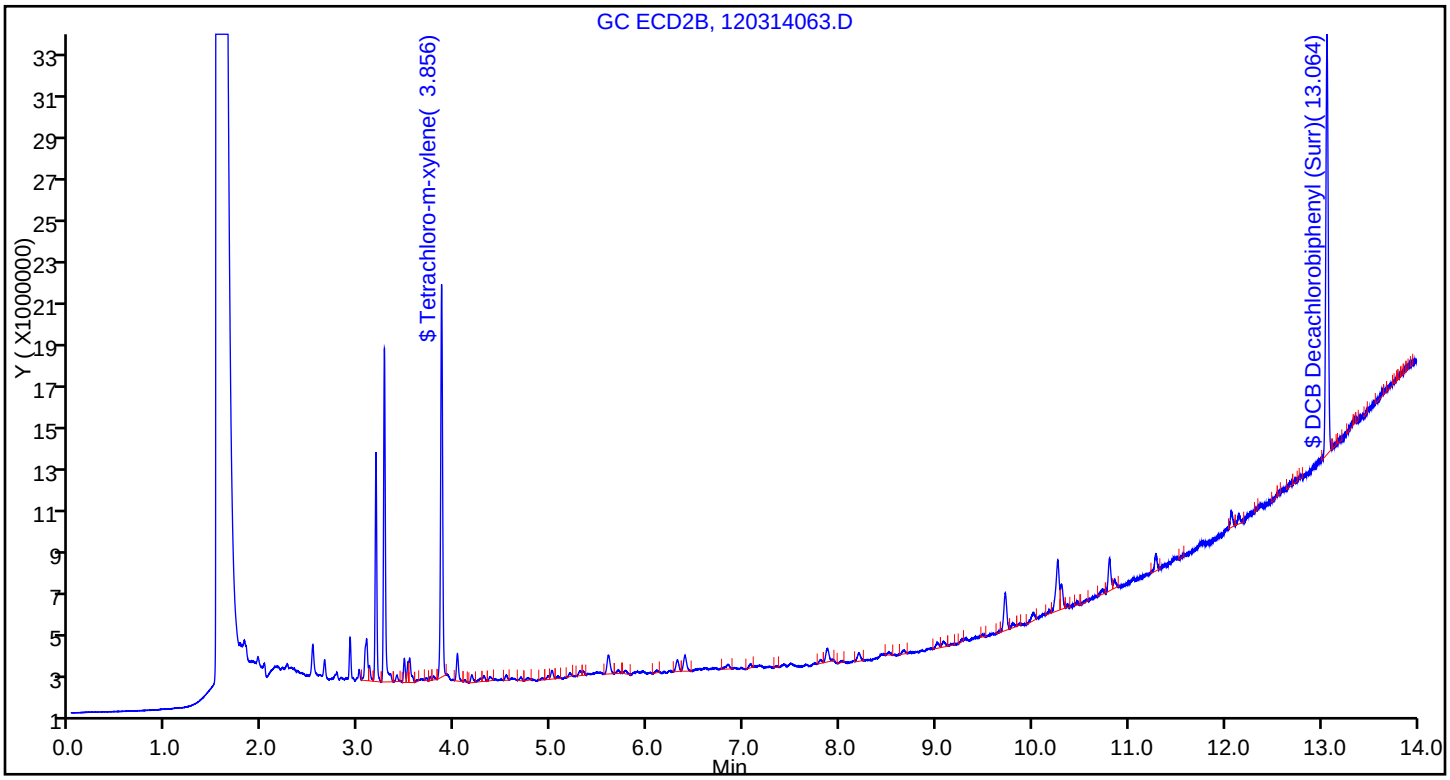
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314063.D				
Injection Date:	04-Dec-2014 07:15:44	Instrument ID:	CHGC16		
Lims ID:	180-39026-C-3-A	Lab Sample ID:	180-39026-3		
Client ID:	ST-DUP1-111614				
Operator ID:	402331	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_CHGC16	Limit Group:	GCS 8082A ICAL		

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-014-111614 Lab Sample ID: 180-39026-4

Matrix: Water Lab File ID: 120314064.D

Analysis Method: 8082A Date Collected: 11/16/2014 19:15

Extraction Method: 3510C Date Extracted: 11/21/2014 16:15

Sample wt/vol: 1060(mL) Date Analyzed: 12/04/2014 07:35

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-CLP1 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 127055 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	ND		0.0094	0.0024
11104-28-2	PCB-1221	ND		0.0094	0.0039
11141-16-5	PCB-1232	ND		0.0094	0.0037
53469-21-9	PCB-1242	ND		0.0094	0.0018
12672-29-6	PCB-1248	ND		0.0094	0.0025
11097-69-1	PCB-1254	ND		0.0094	0.0028
11096-82-5	PCB-1260	ND		0.0094	0.0016

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	117		60-135
877-09-8	Tetrachloro-m-xylene (Surr)	98		25-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314064.D
Lims ID: 180-39026-C-4-A Lab Sample ID: 180-39026-4
Client ID: ST-014-111614
Sample Type: Client
Inject. Date: 04-Dec-2014 07:35:03 ALS Bottle#: 61 Worklist Smp#: 61
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004694-061
Operator ID: 402331 Instrument ID: CHGC16

Method: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 04-Dec-2014 14:10:22 Calib Date: 03-Dec-2014 02:40:17
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141202-4675.b\120214066.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: oravecj Date: 04-Dec-2014 14:08:11

	Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng	Flags
	2 PCB-1221						
	1		2.767			ND	
	1		3.510				
	1		3.342				
	2		3.374				
	2		4.170				
	2		4.413				
$	1 Tetrachloro-m-xylene						
	1	3.200	3.202	-0.002	27889339	H 0.0197	
	2	3.856	3.850	0.006	20696163	H 0.0200	
						RPD = 1.71	
	5 PCB-1232						
	1		3.343			ND	
	1		3.511				
	1		3.850				
	1		4.332				
	1		4.730				
	2		4.171				
	2		4.416				
	2		4.935				
	2		5.601				
	2		5.810				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng	Flags
3 PCB-1242						
1		3.511			ND	
1		3.847				
1		4.331				
1		4.980				
1		5.589				
2		4.416				
2		4.935				
2		5.600				
2		6.588				
2		7.835				
4 PCB-1016						
1		3.515			ND	
1		3.854				
1		4.337				
1		4.487				
1		4.987				
2		4.923				
2		5.587				
2		5.796				
2		5.963				
2		7.342				
6 PCB-1248						
1		4.696			ND	
1		4.978				
1		5.548				
1		5.877				
1		6.505				
2		6.118				
2		6.586				
2		7.273				
2		7.363				
2		7.836				
7 PCB-1254						
1		5.498			ND	
1		5.871				
1		6.507				
1		6.980				
1		7.864				
2		7.355				
2		7.726				
2		8.667				
2		9.083				
2		10.009				

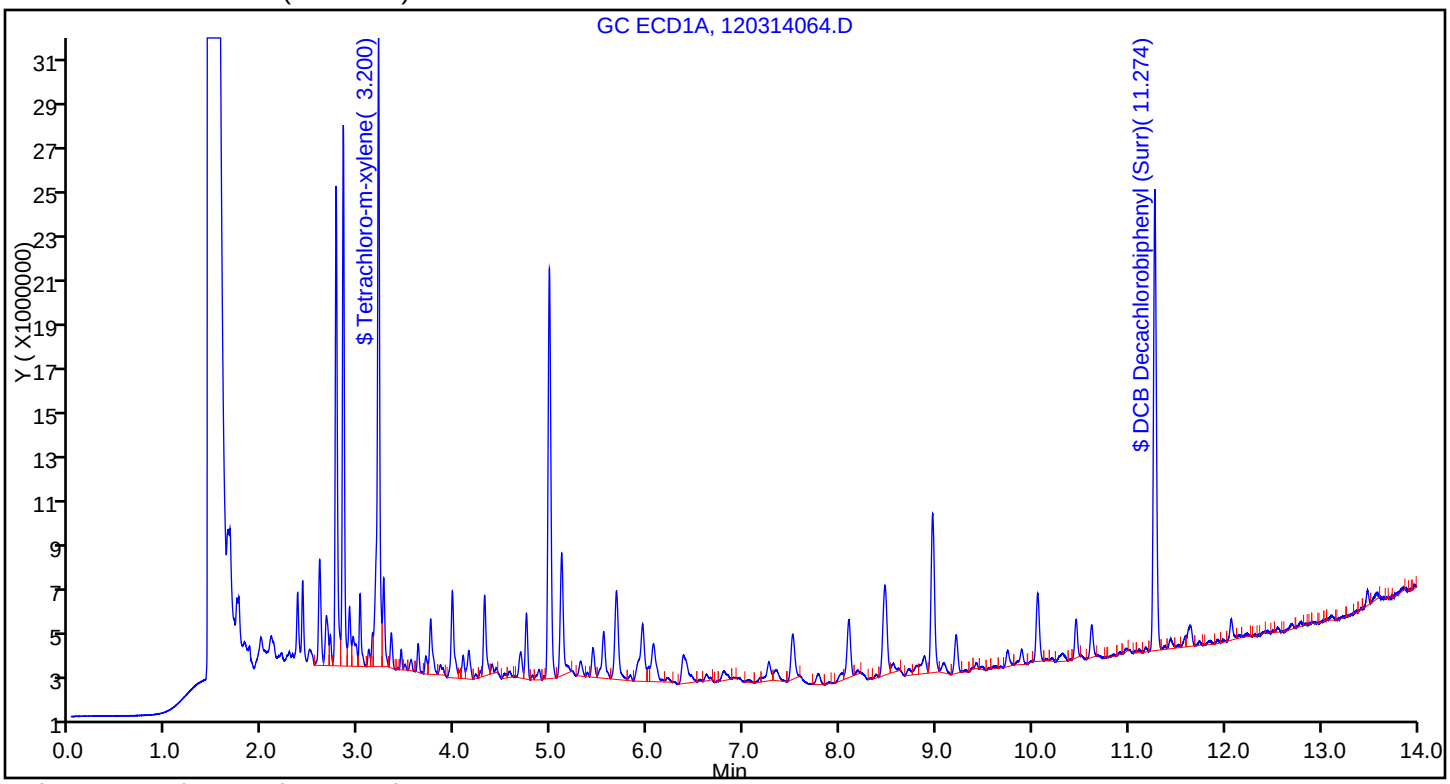
Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng	Flags
8 PCB-1260						
1		7.870			ND	
1		8.577				
1		9.135				
1		9.612				
1		10.589				
2		9.385				
2		9.999				
2		10.610				
2		10.985				
2		11.518				
$ 11 DCB Decachlorobiphenyl (Surr)						
1	11.274	11.279	-0.005	20469715H	0.0234	
2	13.067	13.064	0.003	20743629H	0.0251	
					RPD = 7.24	

Report Date: 04-Dec-2014 14:12:18 Chrom Revision: 2.2 06-Nov-2014 14:50:32

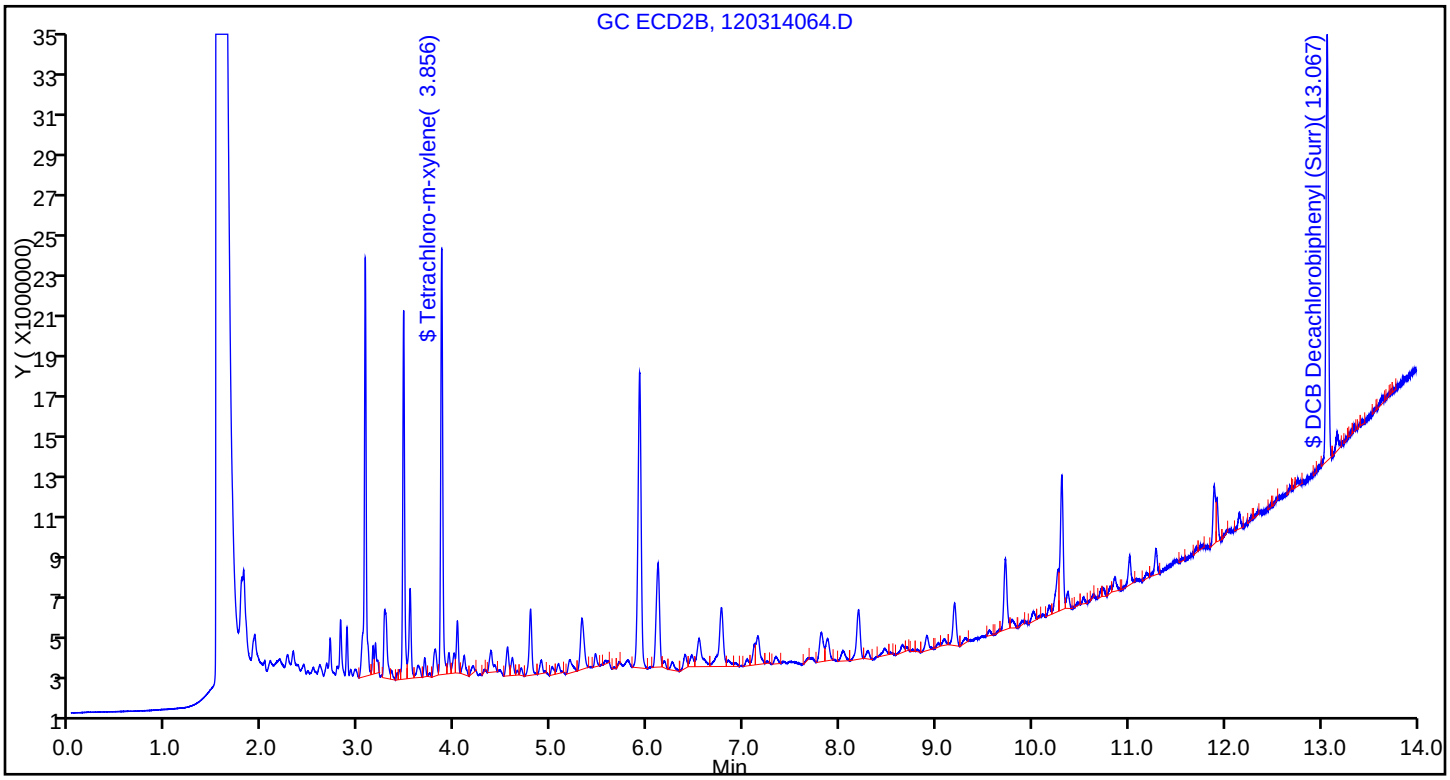
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314064.D				
Injection Date:	04-Dec-2014 07:35:03	Instrument ID:	CHGC16		
Lims ID:	180-39026-C-4-A	Lab Sample ID:	180-39026-4		
Client ID:	ST-014-111614				
Operator ID:	402331	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_CHGC16	Limit Group:	GCS 8082A ICAL		

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: ST-014-111614 Lab Sample ID: 180-39026-4

Matrix: Water Lab File ID: 120314064.D

Analysis Method: 8082A Date Collected: 11/16/2014 19:15

Extraction Method: 3510C Date Extracted: 11/21/2014 16:15

Sample wt/vol: 1060(mL) Date Analyzed: 12/04/2014 07:35

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-CLP2 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 127055 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	126		60-135
877-09-8	Tetrachloro-m-xylene (Surr)	100		25-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314064.D
Lims ID: 180-39026-C-4-A Lab Sample ID: 180-39026-4
Client ID: ST-014-111614
Sample Type: Client
Inject. Date: 04-Dec-2014 07:35:03 ALS Bottle#: 61 Worklist Smp#: 61
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004694-061
Operator ID: 402331 Instrument ID: CHGC16

Method: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 04-Dec-2014 14:10:22 Calib Date: 03-Dec-2014 02:40:17
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141202-4675.b\120214066.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: oravecj Date: 04-Dec-2014 14:08:11

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng	Flags
2 PCB-1221						
1		2.767			ND	
1		3.510				
1		3.342				
2		3.374				
2		4.170				
2		4.413				
$ 1 Tetrachloro-m-xylene						
1	3.200	3.202	-0.002	27889339	H 0.0197	
2	3.856	3.850	0.006	20696163	H 0.0200	
					RPD = 1.71	
5 PCB-1232						
1		3.343			ND	
1		3.511				
1		3.850				
1		4.332				
1		4.730				
2		4.171				
2		4.416				
2		4.935				
2		5.601				
2		5.810				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng	Flags
3 PCB-1242						
1		3.511			ND	
1		3.847				
1		4.331				
1		4.980				
1		5.589				
2		4.416				
2		4.935				
2		5.600				
2		6.588				
2		7.835				
4 PCB-1016						
1		3.515			ND	
1		3.854				
1		4.337				
1		4.487				
1		4.987				
2		4.923				
2		5.587				
2		5.796				
2		5.963				
2		7.342				
6 PCB-1248						
1		4.696			ND	
1		4.978				
1		5.548				
1		5.877				
1		6.505				
2		6.118				
2		6.586				
2		7.273				
2		7.363				
2		7.836				
7 PCB-1254						
1		5.498			ND	
1		5.871				
1		6.507				
1		6.980				
1		7.864				
2		7.355				
2		7.726				
2		8.667				
2		9.083				
2		10.009				

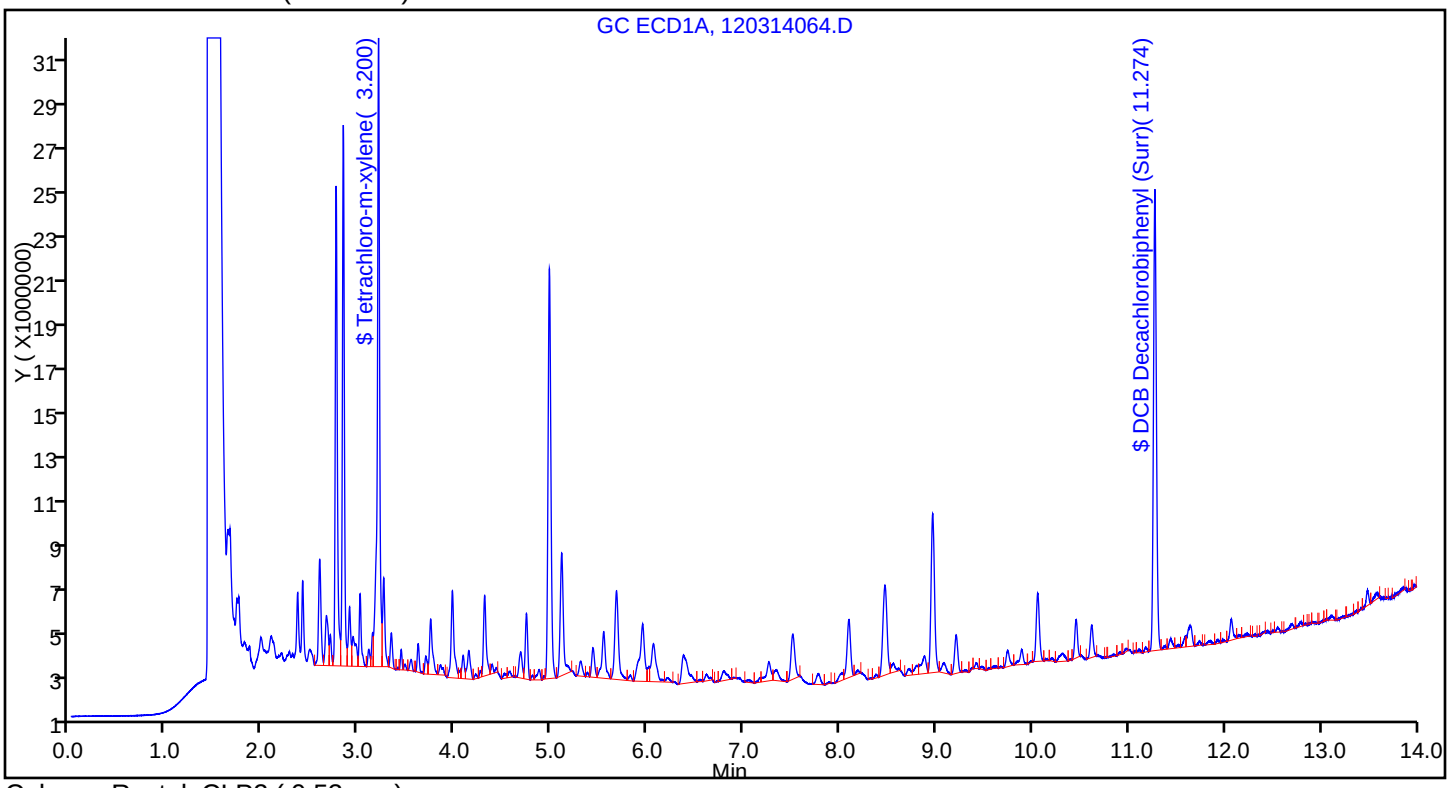
Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng	Flags
8 PCB-1260						
1		7.870			ND	
1		8.577				
1		9.135				
1		9.612				
1		10.589				
2		9.385				
2		9.999				
2		10.610				
2		10.985				
2		11.518				
$ 11 DCB Decachlorobiphenyl (Surr)						
1	11.274	11.279	-0.005	20469715H	0.0234	
2	13.067	13.064	0.003	20743629H	0.0251	
					RPD = 7.24	

Report Date: 04-Dec-2014 14:12:19 Chrom Revision: 2.2 06-Nov-2014 14:50:32

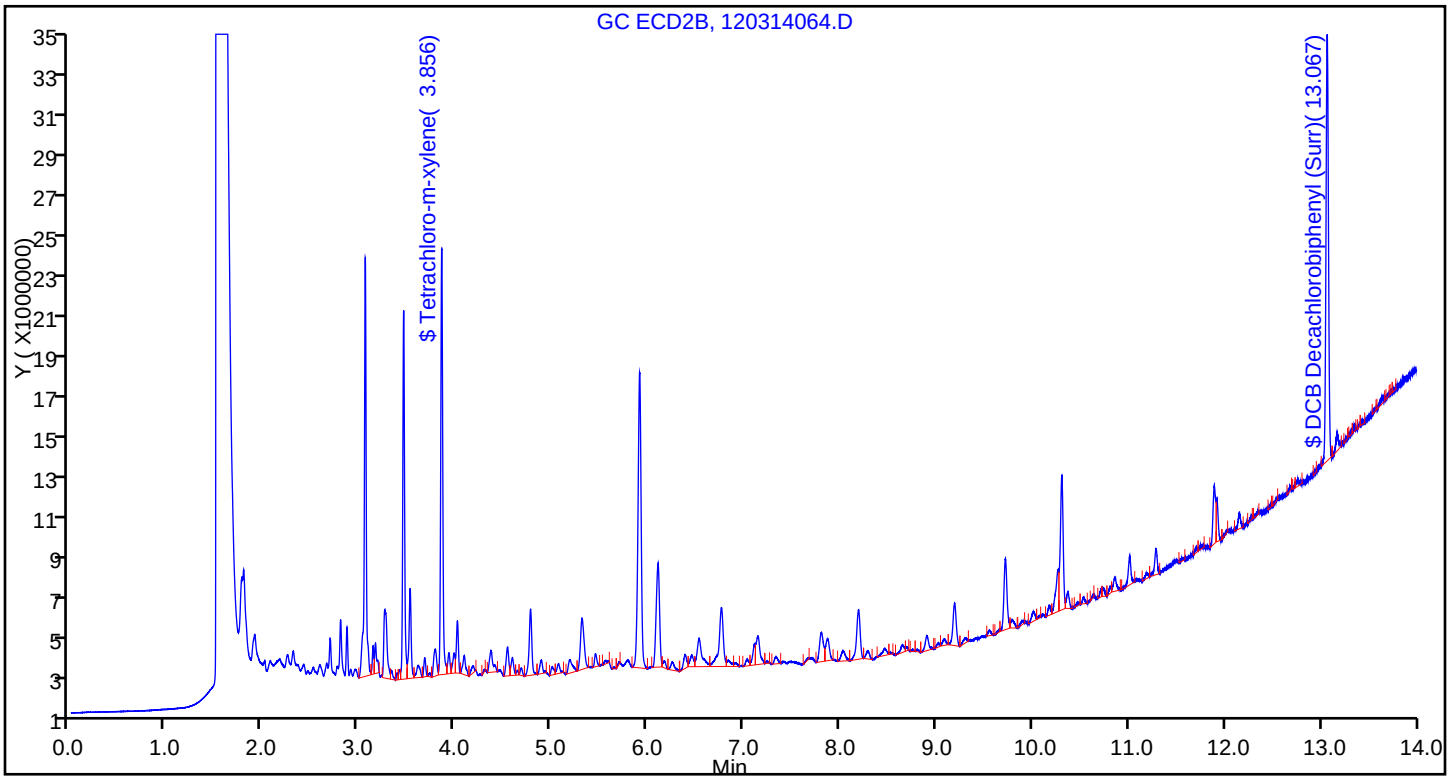
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314064.D				
Injection Date:	04-Dec-2014 07:35:03	Instrument ID:	CHGC16		
Lims ID:	180-39026-C-4-A	Lab Sample ID:	180-39026-4		
Client ID:	ST-014-111614				
Operator ID:	402331	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_CHGC16	Limit Group:	GCS 8082A ICAL		

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123130

SDG No.:

Instrument ID: CHGC16 GC Column: RTX-CLP1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2014 08:51 Calibration End Date: 10/29/2014 08:51 Calibration ID: 18839

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123130/2	102914004.D

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1232 Peak 1	3.391										3.341 - 3.441	3.391
PCB-1232 Peak 2	3.566										3.516 - 3.616	3.566
PCB-1232 Peak 3	3.916										3.866 - 3.966	3.916
PCB-1232 Peak 4	4.414										4.364 - 4.464	4.414
PCB-1232 Peak 5	4.826										4.776 - 4.876	4.826

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123130

SDG No.:

Instrument ID: CHGC16 GC Column: RTX-CLP1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2014 08:51 Calibration End Date: 10/29/2014 08:51 Calibration ID: 18839

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123130/2	102914004.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1232 Peak 1	10085090				Ave		10085090.0						20.0			
PCB-1232 Peak 2	27717494				Ave		27717494.0						20.0			
PCB-1232 Peak 3	15916280				Ave		15916280.0						20.0			
PCB-1232 Peak 4	25312400				Ave		25312400.0						20.0			
PCB-1232 Peak 5	7471520				Ave		7471520.00						20.0			

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

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123130

SDG No.:

Instrument ID: CHGC16 GC Column: RTX-CLP1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2014 08:51 Calibration End Date: 10/29/2014 08:51 Calibration ID: 18839

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123130/2	102914004.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1					LVL 1				
PCB-1232 Peak 1	Ave	5042545					0.500				
PCB-1232 Peak 2	Ave	13858747					0.500				
PCB-1232 Peak 3	Ave	7958140					0.500				
PCB-1232 Peak 4	Ave	12656200					0.500				
PCB-1232 Peak 5	Ave	3735760					0.500				

Curve Type Legend:
Ave = Average by Height

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914004.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 29-Oct-2014 08:51:09 ALS Bottle#: 3 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004073-002
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub2

Method: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 30-Oct-2014 05:58:30 Calib Date: 29-Oct-2014 12:22:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914015.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK015

First Level Reviewer: oravecj Date: 29-Oct-2014 09:50:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
5 PCB-1232							
1	3.391	3.391	0.000	5042545H	0.5000	0.5000	
1	3.566	3.566	0.000	13858747H	0.5000	0.5000	
1	3.916	3.916	0.000	7958140H	0.5000	0.5000	
1	4.414	4.414	0.000	12656200H	0.5000	0.5000	
1	4.826	4.826	0.000	3735760H	0.5000	0.5000	
		Average of Peak Amounts =				0.5000	
2	4.235	4.235	0.000	3547514H	0.5000	0.5000	
2	4.487	4.487	0.000	9062789H	0.5000	0.5000	
2	5.023	5.023	0.000	4919071H	0.5000	0.5000	
2	5.706	5.706	0.000	7917701H	0.5000	0.5000	
2	5.920	5.920	0.000	4477657H	0.5000	0.5000	
		Average of Peak Amounts =				0.5000	
						RPD = 0.00	

Reagents:

GCAR1232CALL4_00007 Amount Added: 1.00 Units: mL

Report Date: 30-Oct-2014 05:58:30 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914004.D

Injection Date: 29-Oct-2014 08:51:09 Instrument ID: CHGC16

Lims ID: IC

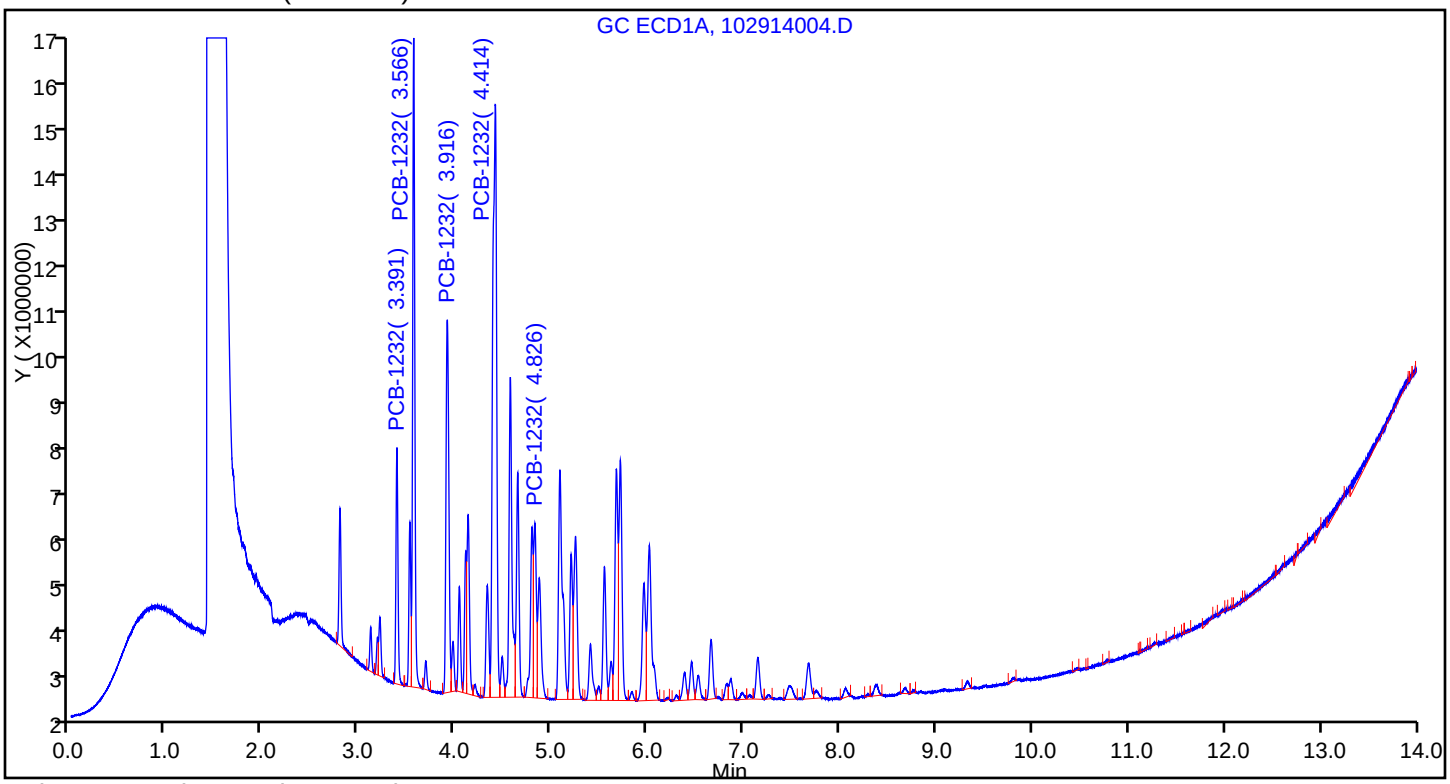
Client ID:

Operator ID: 402331 ALS Bottle#: 3 Worklist Smp#: 2

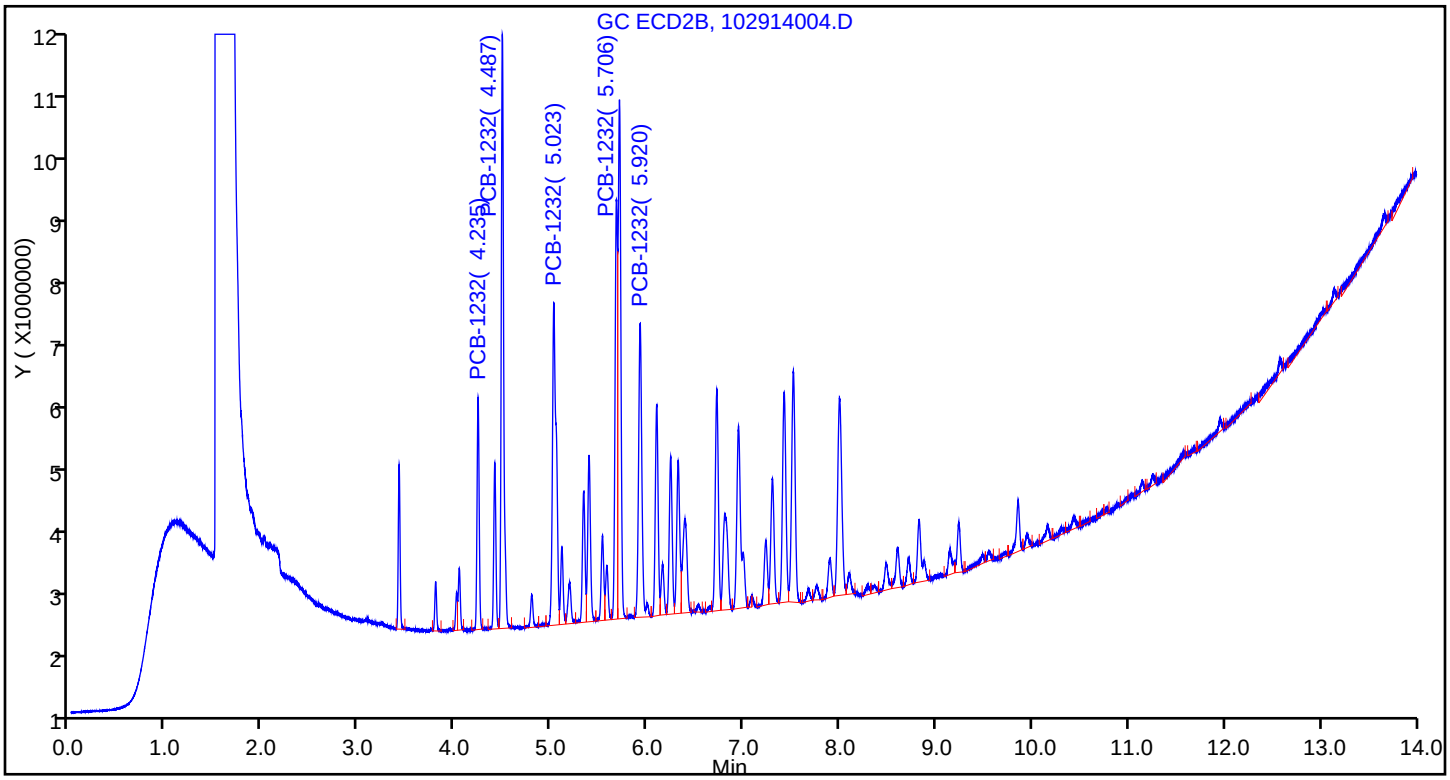
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123130

SDG No.:

Instrument ID: CHGC16 GC Column: RTX-CLP2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2014 08:51 Calibration End Date: 10/29/2014 08:51 Calibration ID: 18840

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123130/2	102914004.D

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1232 Peak 1	4.235										4.185 - 4.285	4.235
PCB-1232 Peak 2	4.487										4.437 - 4.537	4.487
PCB-1232 Peak 3	5.023										4.973 - 5.073	5.023
PCB-1232 Peak 4	5.706										5.656 - 5.756	5.706
PCB-1232 Peak 5	5.920										5.870 - 5.970	5.920

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123130

SDG No.:

Instrument ID: CHGC16 GC Column: RTX-CLP2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2014 08:51 Calibration End Date: 10/29/2014 08:51 Calibration ID: 18840

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123130/2	102914004.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1232 Peak 1	7095028				Ave		7095028.00						20.0			
PCB-1232 Peak 2	18125578				Ave		18125578.0						20.0			
PCB-1232 Peak 3	9838142				Ave		9838142.00						20.0			
PCB-1232 Peak 4	15835402				Ave		15835402.0						20.0			
PCB-1232 Peak 5	8955314				Ave		8955314.00						20.0			

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

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123130

SDG No.:

Instrument ID: CHGC16 GC Column: RTX-CLP2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2014 08:51 Calibration End Date: 10/29/2014 08:51 Calibration ID: 18840

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123130/2	102914004.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1					LVL 1				
PCB-1232 Peak 1	Ave	3547514					0.500				
PCB-1232 Peak 2	Ave	9062789					0.500				
PCB-1232 Peak 3	Ave	4919071					0.500				
PCB-1232 Peak 4	Ave	7917701					0.500				
PCB-1232 Peak 5	Ave	4477657					0.500				

Curve Type Legend:
Ave = Average by Height

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914004.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 29-Oct-2014 08:51:09 ALS Bottle#: 3 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004073-002
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub2

Method: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 30-Oct-2014 05:58:30 Calib Date: 29-Oct-2014 12:22:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914015.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK015

First Level Reviewer: oravecj Date: 29-Oct-2014 09:50:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
5 PCB-1232							
1	3.391	3.391	0.000	5042545H	0.5000	0.5000	
1	3.566	3.566	0.000	13858747H	0.5000	0.5000	
1	3.916	3.916	0.000	7958140H	0.5000	0.5000	
1	4.414	4.414	0.000	12656200H	0.5000	0.5000	
1	4.826	4.826	0.000	3735760H	0.5000	0.5000	
		Average of Peak Amounts =				0.5000	
2	4.235	4.235	0.000	3547514H	0.5000	0.5000	
2	4.487	4.487	0.000	9062789H	0.5000	0.5000	
2	5.023	5.023	0.000	4919071H	0.5000	0.5000	
2	5.706	5.706	0.000	7917701H	0.5000	0.5000	
2	5.920	5.920	0.000	4477657H	0.5000	0.5000	
		Average of Peak Amounts =				0.5000	
						RPD = 0.00	

Reagents:

GCAR1232CALL4_00007 Amount Added: 1.00 Units: mL

Report Date: 30-Oct-2014 05:58:31 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914004.D

Injection Date: 29-Oct-2014 08:51:09 Instrument ID: CHGC16

Lims ID: IC

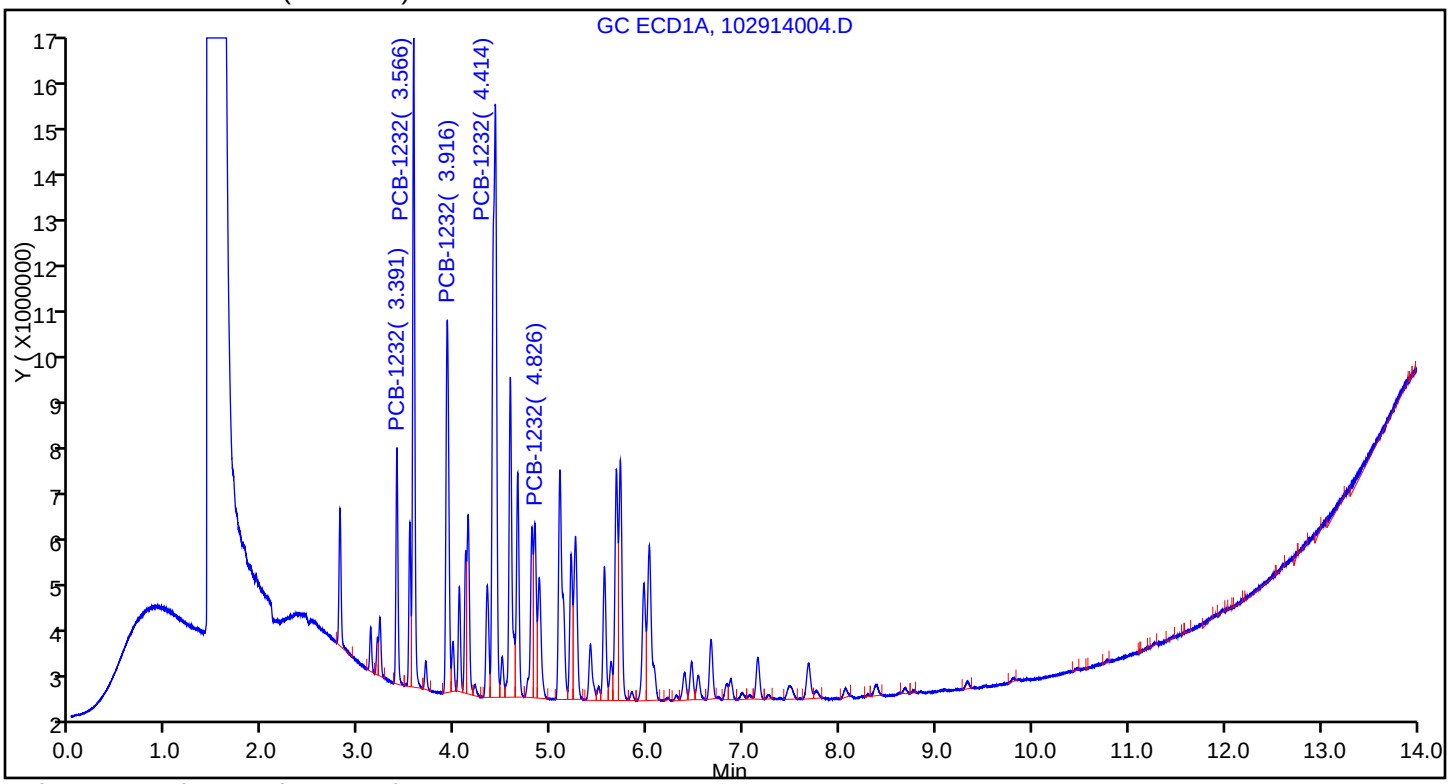
Client ID:

Operator ID: 402331 ALS Bottle#: 3 Worklist Smp#: 2

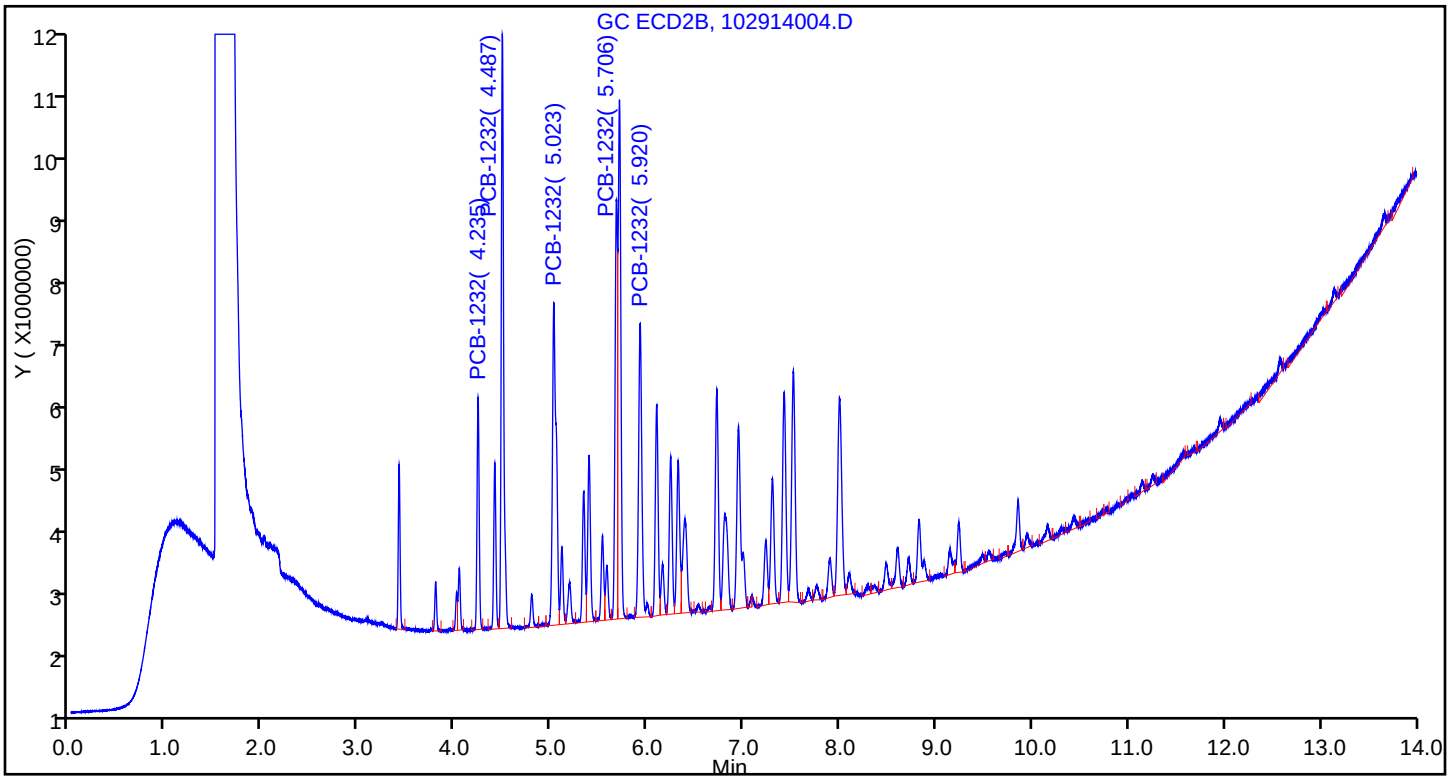
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123130

SDG No.:

Instrument ID: CHGC16 GC Column: RTX-CLP1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2014 09:10 Calibration End Date: 10/29/2014 09:10 Calibration ID: 18845

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123130/3	102914005.D

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1242 Peak 1	3.566										3.516 - 3.616	3.566
PCB-1242 Peak 2	3.915										3.865 - 3.965	3.915
PCB-1242 Peak 3	4.416										4.366 - 4.466	4.416
PCB-1242 Peak 4	5.088										5.038 - 5.138	5.088
PCB-1242 Peak 5	5.715										5.665 - 5.765	5.715

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123130

SDG No.:

Instrument ID: CHGC16 GC Column: RTX-CLP1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2014 09:10 Calibration End Date: 10/29/2014 09:10 Calibration ID: 18845

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123130/3	102914005.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1242 Peak 1	17249544				Ave		17249544.0						20.0			
PCB-1242 Peak 2	28133954				Ave		28133954.0						20.0			
PCB-1242 Peak 3	45268604				Ave		45268604.0						20.0			
PCB-1242 Peak 4	19852598				Ave		19852598.0						20.0			
PCB-1242 Peak 5	20368082				Ave		20368082.0						20.0			

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

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123130

SDG No.:

Instrument ID: CHGC16 GC Column: RTX-CLP1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2014 09:10 Calibration End Date: 10/29/2014 09:10 Calibration ID: 18845

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123130/3	102914005.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1					LVL 1				
PCB-1242 Peak 1	Ave	8624772					0.500				
PCB-1242 Peak 2	Ave	14066977					0.500				
PCB-1242 Peak 3	Ave	22634302					0.500				
PCB-1242 Peak 4	Ave	9926299					0.500				
PCB-1242 Peak 5	Ave	10184041					0.500				

Curve Type Legend:
Ave = Average by Height

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914005.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 29-Oct-2014 09:10:28 ALS Bottle#: 4 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004073-003
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub3

Method: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 30-Oct-2014 05:58:26 Calib Date: 29-Oct-2014 12:22:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914015.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK015

First Level Reviewer: oravecj Date: 29-Oct-2014 09:53:56

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
3 PCB-1242							
1	3.566	3.566	0.000	8624772H	0.5000	0.5000	
1	3.915	3.915	0.000	14066977H	0.5000	0.5000	
1	4.416	4.416	0.000	22634302H	0.5000	0.5000	
1	5.088	5.088	0.000	9926299H	0.5000	0.5000	
1	5.715	5.715	0.000	10184041H	0.5000	0.5000	
		Average of Peak Amounts =				0.5000	
2	4.489	4.489	0.000	6340712H	0.5000	0.5000	
2	5.025	5.025	0.000	8514710H	0.5000	0.5000	
2	5.708	5.708	0.000	14063369H	0.5000	0.5000	
2	6.719	6.719	0.000	6761132H	0.5000	0.5000	
2	7.997	7.997	0.000	6126389H	0.5000	0.5000	
		Average of Peak Amounts =				0.5000	
						RPD = 0.00	

Reagents:

GCAR1242CALL4_00007 Amount Added: 1.00 Units: mL

Report Date: 30-Oct-2014 05:58:26 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914005.D

Injection Date: 29-Oct-2014 09:10:28 Instrument ID: CHGC16

Lims ID: IC

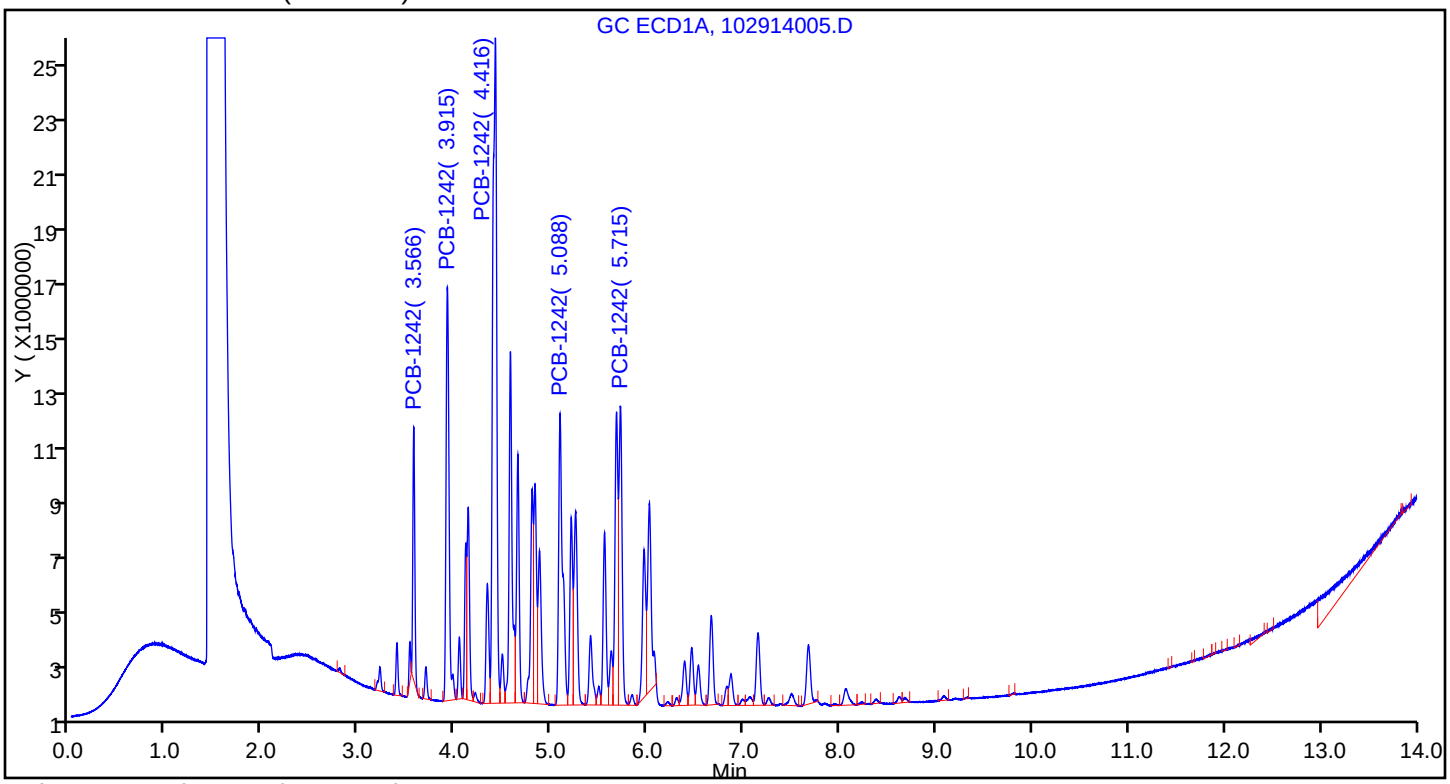
Client ID:

Operator ID: 402331 ALS Bottle#: 4 Worklist Smp#: 3

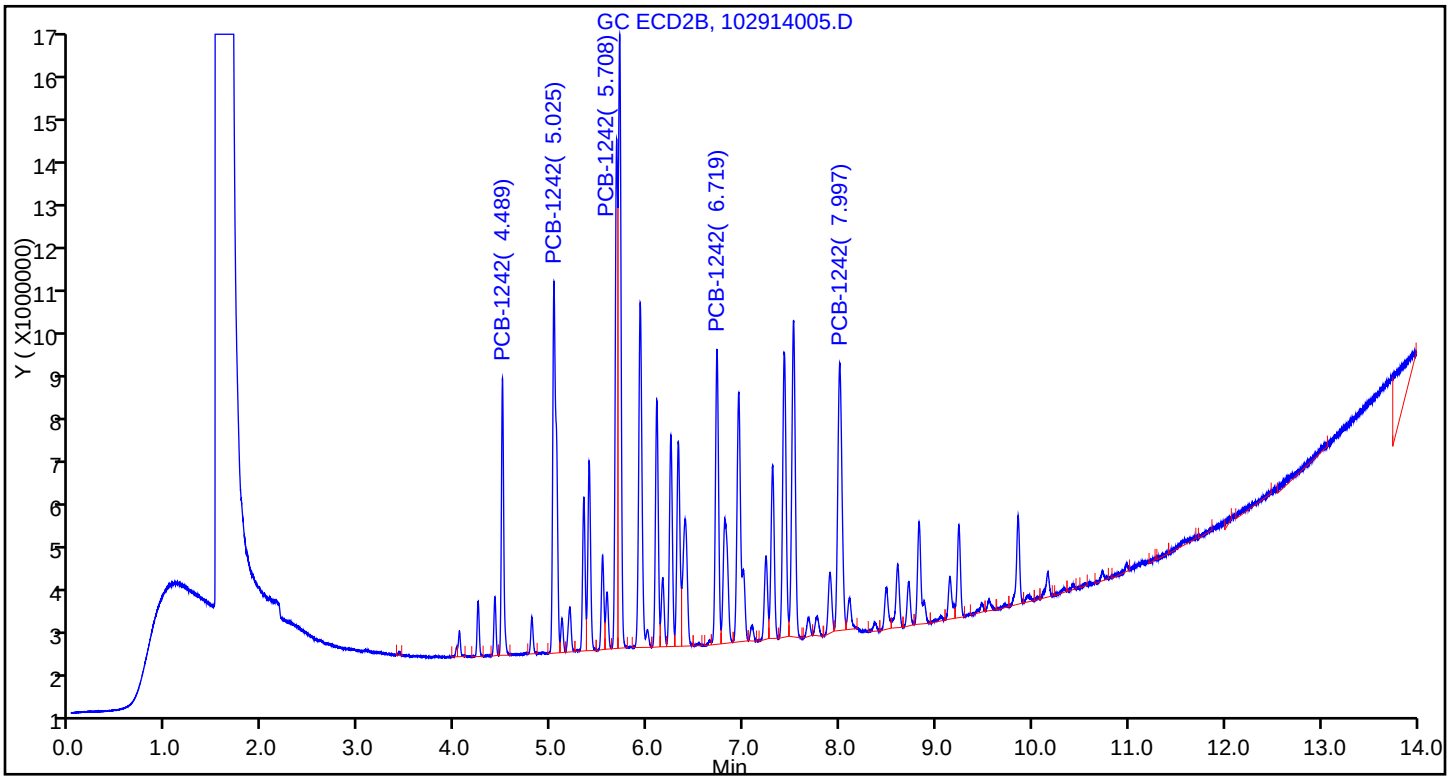
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123130

SDG No.:

Instrument ID: CHGC16 GC Column: RTX-CLP2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2014 09:10 Calibration End Date: 10/29/2014 09:10 Calibration ID: 18846

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123130/3	102914005.D

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1242 Peak 1	4.489										4.439 - 4.539	4.489
PCB-1242 Peak 2	5.025										4.975 - 5.075	5.025
PCB-1242 Peak 3	5.708										5.658 - 5.758	5.708
PCB-1242 Peak 4	6.719										6.669 - 6.769	6.719
PCB-1242 Peak 5	7.997										7.947 - 8.047	7.997

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123130

SDG No.:

Instrument ID: CHGC16 GC Column: RTX-CLP2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2014 09:10 Calibration End Date: 10/29/2014 09:10 Calibration ID: 18846

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123130/3	102914005.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1242 Peak 1	12681424				Ave		12681424.0						20.0			
PCB-1242 Peak 2	17029420				Ave		17029420.0						20.0			
PCB-1242 Peak 3	28126738				Ave		28126738.0						20.0			
PCB-1242 Peak 4	13522264				Ave		13522264.0						20.0			
PCB-1242 Peak 5	12252778				Ave		12252778.0						20.0			

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

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123130

SDG No.:

Instrument ID: CHGC16 GC Column: RTX-CLP2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2014 09:10 Calibration End Date: 10/29/2014 09:10 Calibration ID: 18846

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123130/3	102914005.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1					LVL 1				
PCB-1242 Peak 1	Ave	6340712					0.500				
PCB-1242 Peak 2	Ave	8514710					0.500				
PCB-1242 Peak 3	Ave	14063369					0.500				
PCB-1242 Peak 4	Ave	6761132					0.500				
PCB-1242 Peak 5	Ave	6126389					0.500				

Curve Type Legend:
Ave = Average by Height

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914005.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 29-Oct-2014 09:10:28 ALS Bottle#: 4 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004073-003
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub3

Method: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 30-Oct-2014 05:58:26 Calib Date: 29-Oct-2014 12:22:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914015.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK015

First Level Reviewer: oravecj Date: 29-Oct-2014 09:53:56

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
3 PCB-1242							
1	3.566	3.566	0.000	8624772H	0.5000	0.5000	
1	3.915	3.915	0.000	14066977H	0.5000	0.5000	
1	4.416	4.416	0.000	22634302H	0.5000	0.5000	
1	5.088	5.088	0.000	9926299H	0.5000	0.5000	
1	5.715	5.715	0.000	10184041H	0.5000	0.5000	
		Average of Peak Amounts =				0.5000	
2	4.489	4.489	0.000	6340712H	0.5000	0.5000	
2	5.025	5.025	0.000	8514710H	0.5000	0.5000	
2	5.708	5.708	0.000	14063369H	0.5000	0.5000	
2	6.719	6.719	0.000	6761132H	0.5000	0.5000	
2	7.997	7.997	0.000	6126389H	0.5000	0.5000	
		Average of Peak Amounts =				0.5000	
						RPD = 0.00	

Reagents:

GCAR1242CALL4_00007 Amount Added: 1.00 Units: mL

Report Date: 30-Oct-2014 05:58:27 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914005.D

Injection Date: 29-Oct-2014 09:10:28 Instrument ID: CHGC16

Lims ID: IC

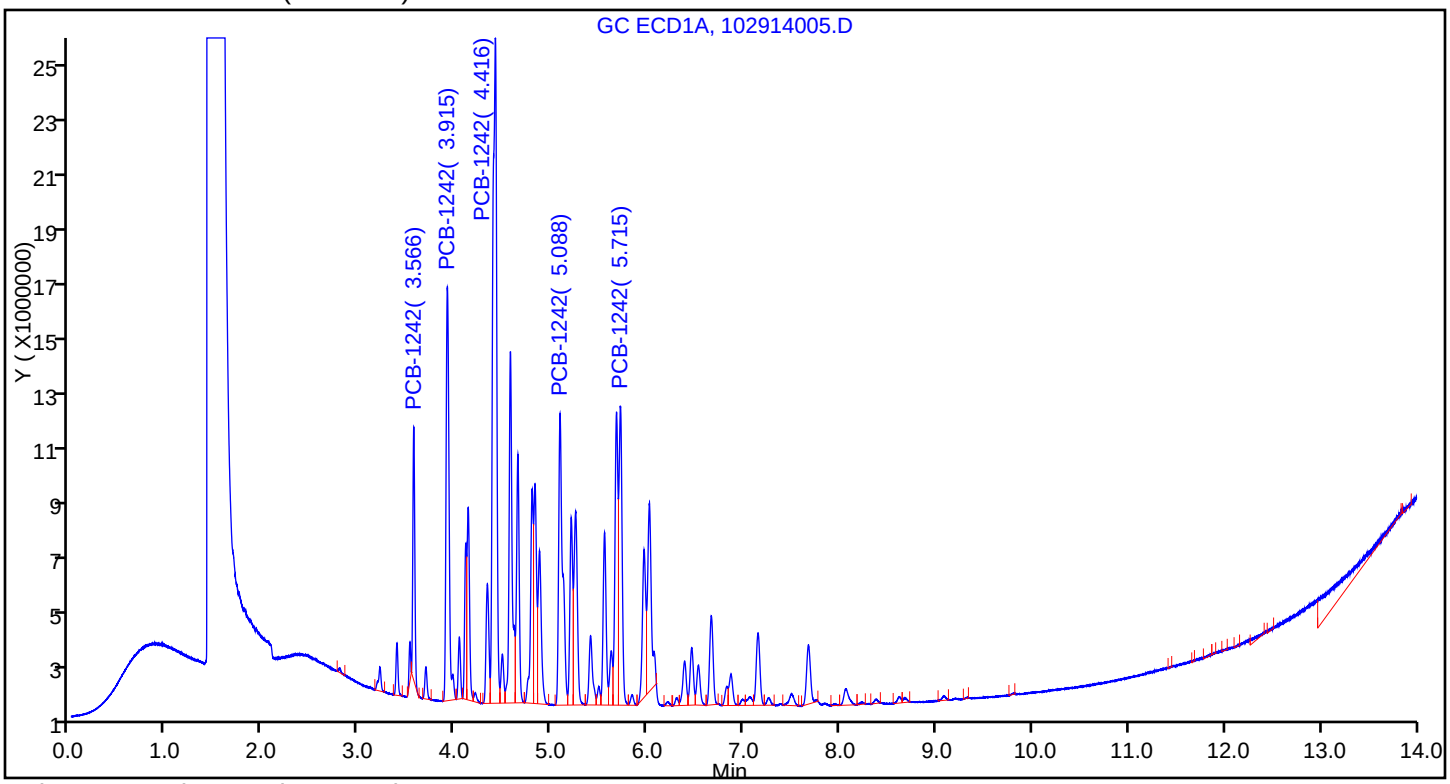
Client ID:

Operator ID: 402331 ALS Bottle#: 4 Worklist Smp#: 3

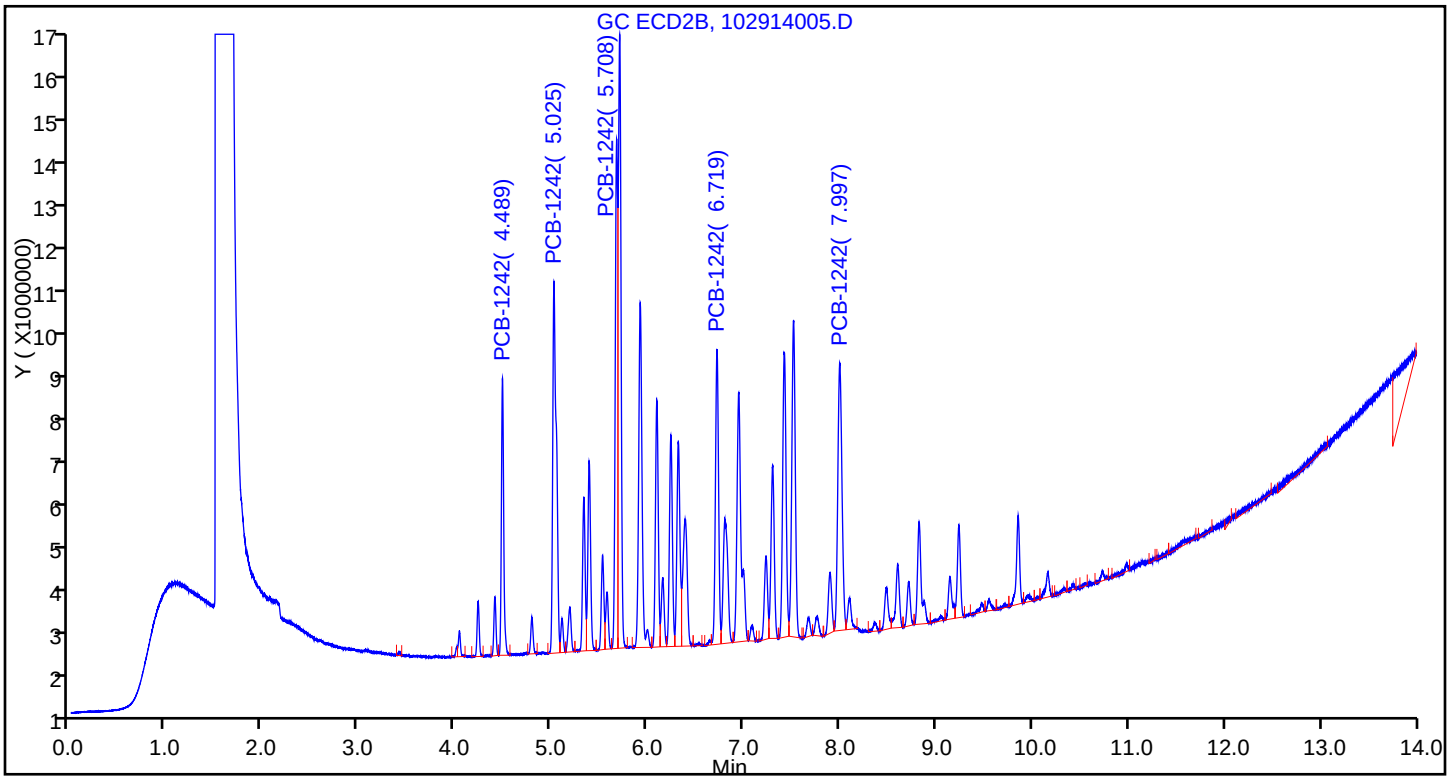
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123130

SDG No.:

Instrument ID: CHGC16 GC Column: RTX-CLP1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2014 09:29 Calibration End Date: 10/29/2014 09:29 Calibration ID: 18851

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123130/4	102914006.D

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1248 Peak 1	4.796										4.746 - 4.846	4.796
PCB-1248 Peak 2	5.087										5.037 - 5.137	5.087
PCB-1248 Peak 3	5.675										5.625 - 5.725	5.675
PCB-1248 Peak 4	6.015										5.965 - 6.065	6.015
PCB-1248 Peak 5	6.660										6.610 - 6.710	6.660

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123130

SDG No.:

Instrument ID: CHGC16 GC Column: RTX-CLP1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2014 09:29 Calibration End Date: 10/29/2014 09:29 Calibration ID: 18851

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123130/4	102914006.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1248 Peak 1	32726326				Ave		32726326.0						20.0			
PCB-1248 Peak 2	38993018				Ave		38993018.0						20.0			
PCB-1248 Peak 3	43176952				Ave		43176952.0						20.0			
PCB-1248 Peak 4	31455854				Ave		31455854.0						20.0			
PCB-1248 Peak 5	20570872				Ave		20570872.0						20.0			

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

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123130

SDG No.:

Instrument ID: CHGC16 GC Column: RTX-CLP1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2014 09:29 Calibration End Date: 10/29/2014 09:29 Calibration ID: 18851

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123130/4	102914006.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1					LVL 1				
PCB-1248 Peak 1	Ave	16363163					0.500				
PCB-1248 Peak 2	Ave	19496509					0.500				
PCB-1248 Peak 3	Ave	21588476					0.500				
PCB-1248 Peak 4	Ave	15727927					0.500				
PCB-1248 Peak 5	Ave	10285436					0.500				

Curve Type Legend:
Ave = Average by Height

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914006.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 29-Oct-2014 09:29:42 ALS Bottle#: 5 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004073-004
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub4

Method: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 30-Oct-2014 05:58:22 Calib Date: 29-Oct-2014 12:22:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914015.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK015

First Level Reviewer: oravecj Date: 29-Oct-2014 09:55:05

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
6 PCB-1248							
1	4.796	4.796	0.000	16363163H	0.5000	0.5000	
1	5.087	5.087	0.000	19496509H	0.5000	0.5000	
1	5.675	5.675	0.000	21588476H	0.5000	0.5000	
1	6.015	6.015	0.000	15727927H	0.5000	0.5000	
1	6.660	6.660	0.000	10285436H	0.5000	0.5000	
		Average of Peak Amounts =				0.5000	
2	6.241	6.241	0.000	10840015H	0.5000	0.5000	
2	6.719	6.719	0.000	13223870H	0.5000	0.5000	
2	7.419	7.419	0.000	14163770H	0.5000	0.5000	
2	7.515	7.515	0.000	15138321H	0.5000	0.5000	
2	7.999	7.999	0.000	11438786H	0.5000	0.5000	
		Average of Peak Amounts =				0.5000	
						RPD = 0.00	

Reagents:

GCAR1248CALL4_00008 Amount Added: 1.00 Units: mL

Report Date: 30-Oct-2014 05:58:22 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914006.D

Injection Date: 29-Oct-2014 09:29:42 Instrument ID: CHGC16

Lims ID: IC

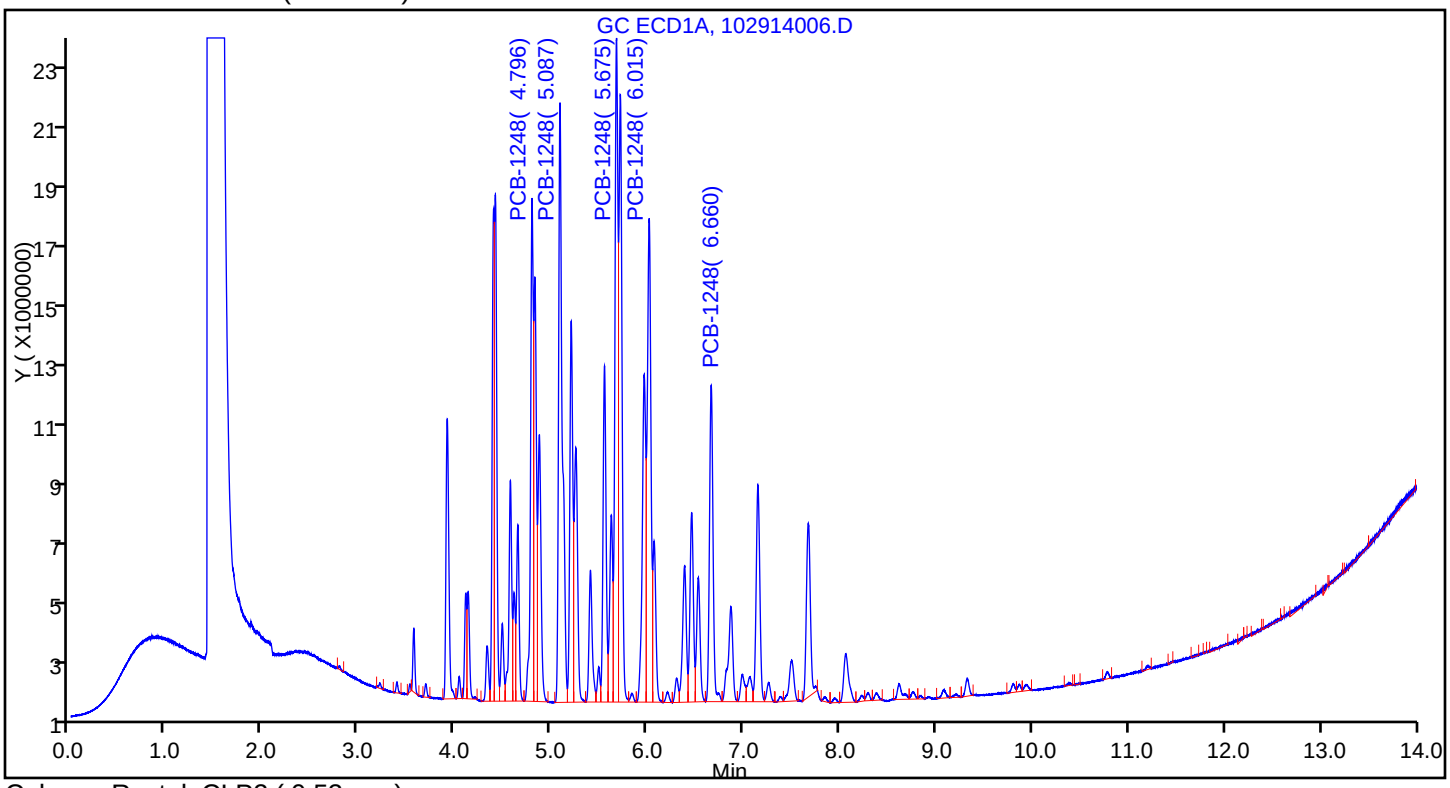
Client ID:

Operator ID: 402331 ALS Bottle#: 5 Worklist Smp#: 4

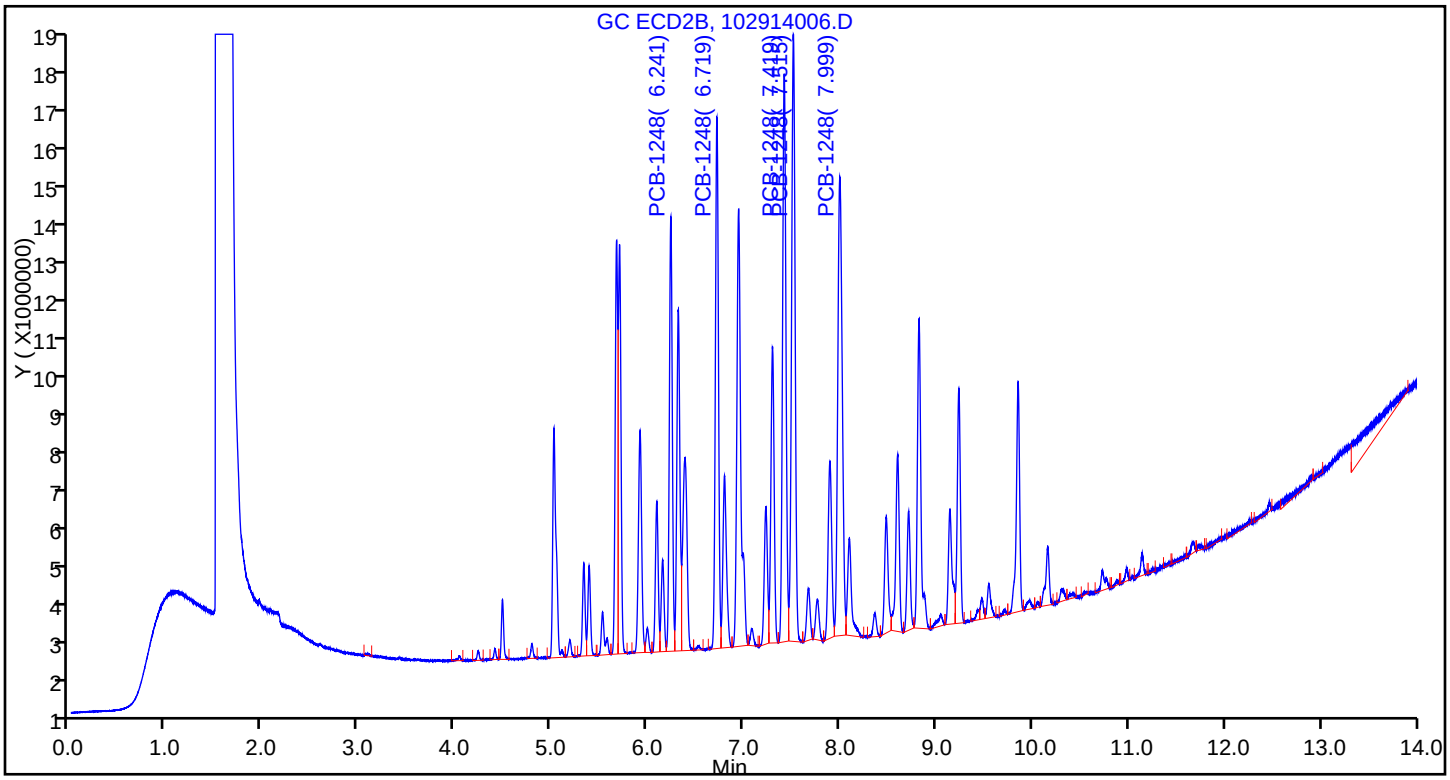
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123130

SDG No.:

Instrument ID: CHGC16 GC Column: RTX-CLP2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2014 09:29 Calibration End Date: 10/29/2014 09:29 Calibration ID: 18852

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123130/4	102914006.D

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1248 Peak 1	6.241										6.191 - 6.291	6.241
PCB-1248 Peak 2	6.719										6.669 - 6.769	6.719
PCB-1248 Peak 3	7.419										7.369 - 7.469	7.419
PCB-1248 Peak 4	7.515										7.465 - 7.565	7.515
PCB-1248 Peak 5	7.999										7.949 - 8.049	7.999

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123130

SDG No.:

Instrument ID: CHGC16 GC Column: RTX-CLP2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2014 09:29 Calibration End Date: 10/29/2014 09:29 Calibration ID: 18852

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123130/4	102914006.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1248 Peak 1	21680030				Ave		21680030.0						20.0			
PCB-1248 Peak 2	26447740				Ave		26447740.0						20.0			
PCB-1248 Peak 3	28327540				Ave		28327540.0						20.0			
PCB-1248 Peak 4	30276642				Ave		30276642.0						20.0			
PCB-1248 Peak 5	22877572				Ave		22877572.0						20.0			

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

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123130

SDG No.:

Instrument ID: CHGC16 GC Column: RTX-CLP2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2014 09:29 Calibration End Date: 10/29/2014 09:29 Calibration ID: 18852

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123130/4	102914006.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1					LVL 1				
PCB-1248 Peak 1	Ave	10840015					0.500				
PCB-1248 Peak 2	Ave	13223870					0.500				
PCB-1248 Peak 3	Ave	14163770					0.500				
PCB-1248 Peak 4	Ave	15138321					0.500				
PCB-1248 Peak 5	Ave	11438786					0.500				

Curve Type Legend:
Ave = Average by Height

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914006.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 29-Oct-2014 09:29:42 ALS Bottle#: 5 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004073-004
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub4

Method: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 30-Oct-2014 05:58:22 Calib Date: 29-Oct-2014 12:22:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914015.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK015

First Level Reviewer: oravecj Date: 29-Oct-2014 09:55:05

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
6 PCB-1248							
1	4.796	4.796	0.000	16363163H	0.5000	0.5000	
1	5.087	5.087	0.000	19496509H	0.5000	0.5000	
1	5.675	5.675	0.000	21588476H	0.5000	0.5000	
1	6.015	6.015	0.000	15727927H	0.5000	0.5000	
1	6.660	6.660	0.000	10285436H	0.5000	0.5000	
		Average of Peak Amounts =				0.5000	
2	6.241	6.241	0.000	10840015H	0.5000	0.5000	
2	6.719	6.719	0.000	13223870H	0.5000	0.5000	
2	7.419	7.419	0.000	14163770H	0.5000	0.5000	
2	7.515	7.515	0.000	15138321H	0.5000	0.5000	
2	7.999	7.999	0.000	11438786H	0.5000	0.5000	
		Average of Peak Amounts =				0.5000	
						RPD = 0.00	

Reagents:

GCAR1248CALL4_00008 Amount Added: 1.00 Units: mL

Report Date: 30-Oct-2014 05:58:23 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914006.D

Injection Date: 29-Oct-2014 09:29:42 Instrument ID: CHGC16

Lims ID: IC

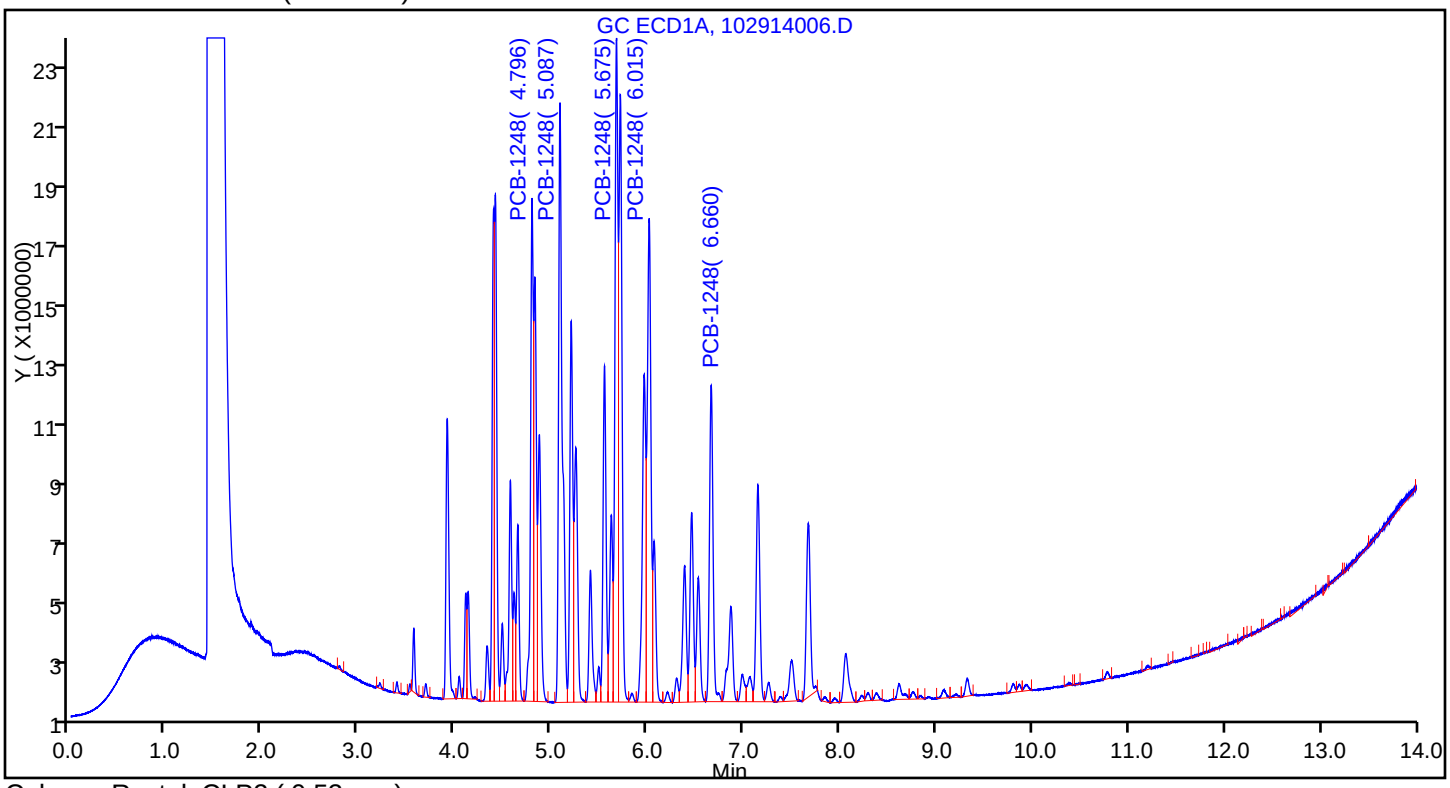
Client ID:

Operator ID: 402331 ALS Bottle#: 5 Worklist Smp#: 4

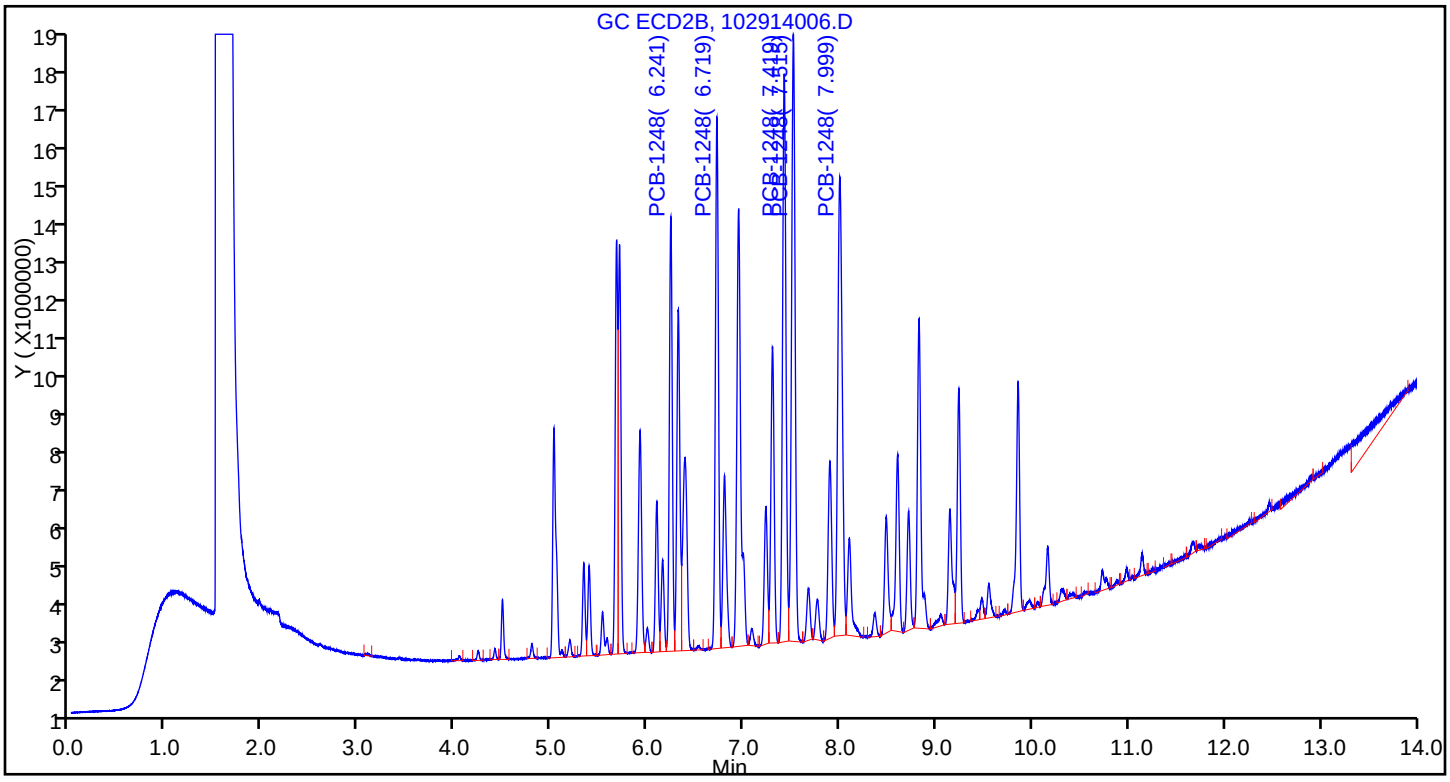
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123130

SDG No.:

Instrument ID: CHGC16 GC Column: RTX-CLP1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2014 10:27 Calibration End Date: 10/29/2014 12:22 Calibration ID: 18827

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123130/7	102914009.D
Level 2	IC 180-123130/8	102914010.D
Level 3	IC 180-123130/9	102914011.D
Level 4	ICRT 180-123130/10	102914012.D
Level 5	IC 180-123130/11	102914013.D
Level 6	IC 180-123130/12	102914014.D
Level 7	IC 180-123130/13	102914015.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
PCB-1016 Peak 1	3.567	3.566	3.565	3.566	3.566	3.564	3.570				3.516 - 3.616	3.566
PCB-1016 Peak 2	3.914	3.914	3.913	3.915	3.915	3.912	3.919				3.865 - 3.965	3.915
PCB-1016 Peak 3	4.416	4.414	4.414	4.414	4.415	4.411	4.417				4.364 - 4.464	4.414
PCB-1016 Peak 4	4.573	4.569	4.569	4.570	4.571	4.567	4.572				4.520 - 4.620	4.570
PCB-1016 Peak 5	5.089	5.086	5.084	5.086	5.087	5.082	5.086				5.036 - 5.136	5.086
PCB-1260 Peak 1	8.051	8.053	8.051	8.054	8.054	8.047	8.054				8.004 - 8.104	8.052
PCB-1260 Peak 2	8.757	8.758	8.757	8.757	8.756	8.751	8.757				8.707 - 8.807	8.756
PCB-1260 Peak 3	9.321	9.319	9.317	9.318	9.318	9.309	9.318				9.268 - 9.368	9.317
PCB-1260 Peak 4	9.800	9.800	9.798	9.799	9.799	9.793	9.798				9.749 - 9.849	9.798
PCB-1260 Peak 5	10.777	10.778	10.776	10.774	10.776	10.772	10.775				10.724 - 10.824	10.775
Tetrachloro-m-xylene (Surr)	3.242	3.241	3.240	3.242	3.243	3.241	3.246				3.192 - 3.292	3.242
DCB Decachlorobiphenyl (Surr)	11.468	11.468	11.465	11.469	11.466	11.464	11.466				11.399 - 11.539	11.467

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123130

SDG No.:

Instrument ID: CHGC16 GC Column: RTX-CLP1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2014 10:27 Calibration End Date: 10/29/2014 12:22 Calibration ID: 18827

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123130/7	102914009.D
Level 2	IC 180-123130/8	102914010.D
Level 3	IC 180-123130/9	102914011.D
Level 4	ICRT 180-123130/10	102914012.D
Level 5	IC 180-123130/11	102914013.D
Level 6	IC 180-123130/12	102914014.D
Level 7	IC 180-123130/13	102914015.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1016 Peak 1	21096700 23371843	25227320 23055604	23671760 21317744	23920464	Ave		23094490.8				6.3		20.0			
PCB-1016 Peak 2	35362100 35701307	40540060 34519102	36538625 32075487	36829626	Ave		35938043.9				7.2		20.0			
PCB-1016 Peak 3	50057900 57923745	61548100 56716924	56985820 52705187	59565980	Ave		56500522.3				7.0		20.0			
PCB-1016 Peak 4	25361900 30087864	33471120 29623639	30309955 27954532	31446574	Ave		29750797.6				8.6		20.0			
PCB-1016 Peak 5	18872400 24563315	27476460 23509246	24776660 22350447	25182436	Ave		23818709.1				11.0		20.0			
PCB-1260 Peak 1	36422600 47831940	49559720 47599000	47965410 43595634	49199030	Ave		46024761.9				10.0		20.0			
PCB-1260 Peak 2	33070900 37976261	40568600 37240042	36741680 32948133	39220852	Ave		36823781.1				7.9		20.0			
PCB-1260 Peak 3	82528100 89989024	94196000 91278781	84523490 81290599	90526678	Ave		87761810.2				5.6		20.0			
PCB-1260 Peak 4	45427400 49350068	51625180 48638414	46789305 46505081	49547328	Ave		48268968.0				4.4		20.0			
PCB-1260 Peak 5	26989700 28016177	30697040 27760412	27627495 26489219	27849518	Ave		27918508.8				4.8		20.0			
Tetrachloro-m-xylene (Surr)	1229388000 1458123440	1506386400 1442982220	1432647700 1328214285	1513970360	Ave		1415958915				7.2		20.0			
DCB Decachlorobiphenyl (Surr)	900106000 874642520	1000388800 828863560	856027200 793975210	876661840	Ave		875809304				7.4		20.0			

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

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123130

SDG No.:

Instrument ID: CHGC16 GC Column: RTX-CLP1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2014 10:27 Calibration End Date: 10/29/2014 12:22 Calibration ID: 18827

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123130/7	102914009.D
Level 2	IC 180-123130/8	102914010.D
Level 3	IC 180-123130/9	102914011.D
Level 4	ICRT 180-123130/10	102914012.D
Level 5	IC 180-123130/11	102914013.D
Level 6	IC 180-123130/12	102914014.D
Level 7	IC 180-123130/13	102914015.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1016 Peak 1	Ave	210967 46111208	1261366 85270977	4734352	11960232	23371843	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1016 Peak 2	Ave	353621 69038204	2027003 128301948	7307725	18414813	35701307	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1016 Peak 3	Ave	500579 113433848	3077405 210820749	11397164	29782990	57923745	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1016 Peak 4	Ave	253619 59247277	1673556 111818128	6061991	15723287	30087864	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1016 Peak 5	Ave	188724 47018491	1373823 89401788	4955332	12591218	24563315	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1260 Peak 1	Ave	364226 95198000	2477986 174382534	9593082	24599515	47831940	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1260 Peak 2	Ave	330709 74480083	2028430 131792532	7348336	19610426	37976261	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1260 Peak 3	Ave	825281 182557562	4709800 325162394	16904698	45263339	89989024	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1260 Peak 4	Ave	454274 97276827	2581259 186020325	9357861	24773664	49350068	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1260 Peak 5	Ave	269897 55520824	1534852 105956878	5525499	13924759	28016177	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
Tetrachloro-m-xylene (Surr)	Ave	614694 144298222	3765966 265642857	14326477	37849259	72906172	0.000500 0.100	0.00250 0.200	0.0100	0.0250	0.0500
DCB Decachlorobiphenyl (Surr)	Ave	450053 82886356	2500972 158795042	8560272	21916546	43732126	0.000500 0.100	0.00250 0.200	0.0100	0.0250	0.0500

Curve Type Legend:
Ave = Average by Height

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914009.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 29-Oct-2014 10:27:16 ALS Bottle#: 8 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004073-007
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub8

Method: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 30-Oct-2014 05:58:08 Calib Date: 29-Oct-2014 12:22:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914015.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK015

First Level Reviewer: oravecj Date: 29-Oct-2014 12:26:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.242	3.242	0.000	614694H	0.000500	0.000434	
2	3.911	3.911	0.000	466214H	0.000500	0.000451	
						RPD = 3.89	
4 PCB-1016							
1	3.567	3.566	0.001	210967H	0.0100	0.009135	
1	3.914	3.915	-0.001	353621H	0.0100	0.009840	
1	4.416	4.414	0.002	500579H	0.0100	0.008860	
1	4.573	4.570	0.003	253619H	0.0100	0.008525	
1	5.089	5.086	0.003	188724H	0.0100	0.007923	
		Average of Peak Amounts =				0.008857	
2	5.024	5.022	0.002	211979H	0.0100	0.0100	
2	5.674	5.705	-0.031	288472H	0.0100	0.008304	
2	5.921	5.920	0.001	217191H	0.0100	0.0107	
2	6.091	6.091	0.000	146773H	0.0100	0.0102	
2	7.505	7.505	0.000	138019H	0.0100	0.0107	
		Average of Peak Amounts =				0.0100	
						RPD = 11.93	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	8.051	8.054	-0.003	364226H	0.0100	0.007914	
1	8.757	8.757	0.000	330709H	0.0100	0.008981	
1	9.321	9.318	0.003	825281H	0.0100	0.009404	
1	9.800	9.799	0.001	454274H	0.0100	0.009411	
1	10.777	10.774	0.003	269897H	0.0100	0.009667	
		Average of Peak Amounts =				0.009075	
2	9.544	9.543	0.001	460209H	0.0100	0.0101	
2	10.156	10.155	0.001	354749H	0.0100	0.009632	
2	10.766	10.766	0.000	357613H	0.0100	0.009798	
2	11.140	11.139	0.001	831396H	0.0100	0.009045	
2	11.677	11.673	0.004	370412H	0.0100	0.008659	
		Average of Peak Amounts =				0.009453	
						RPD = 4.07	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.468	11.469	-0.001	450053H	0.000500	0.000514	
2	13.231	13.231	0.000	380860H	0.000500	0.000461	
						RPD = 10.77	

Reagents:

GCAR1660CALL1_00011 Amount Added: 1.00 Units: mL

Report Date: 30-Oct-2014 05:58:08 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914009.D

Injection Date: 29-Oct-2014 10:27:16 Instrument ID: CHGC16

Lims ID: IC

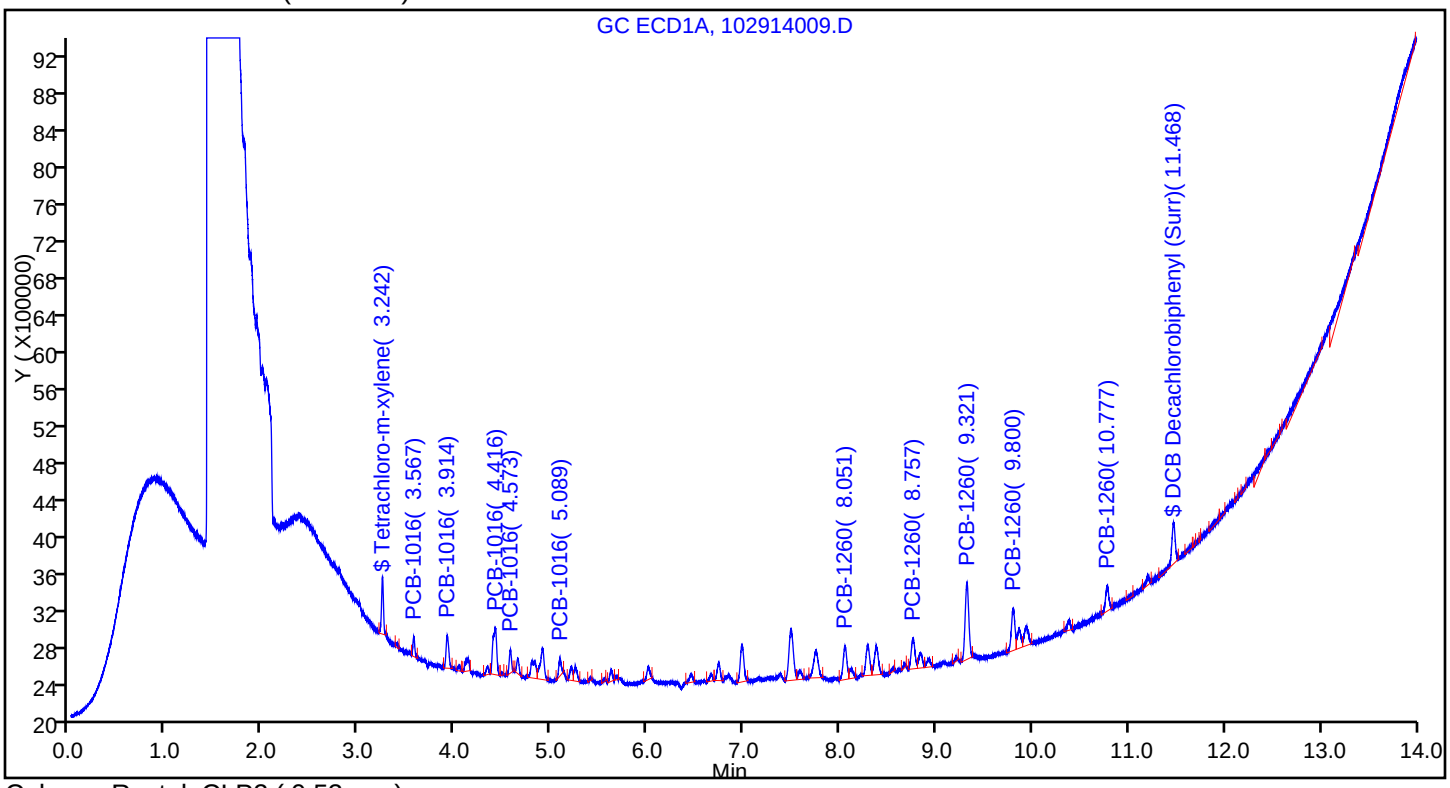
Client ID:

Operator ID: 402331 ALS Bottle#: 8 Worklist Smp#: 7

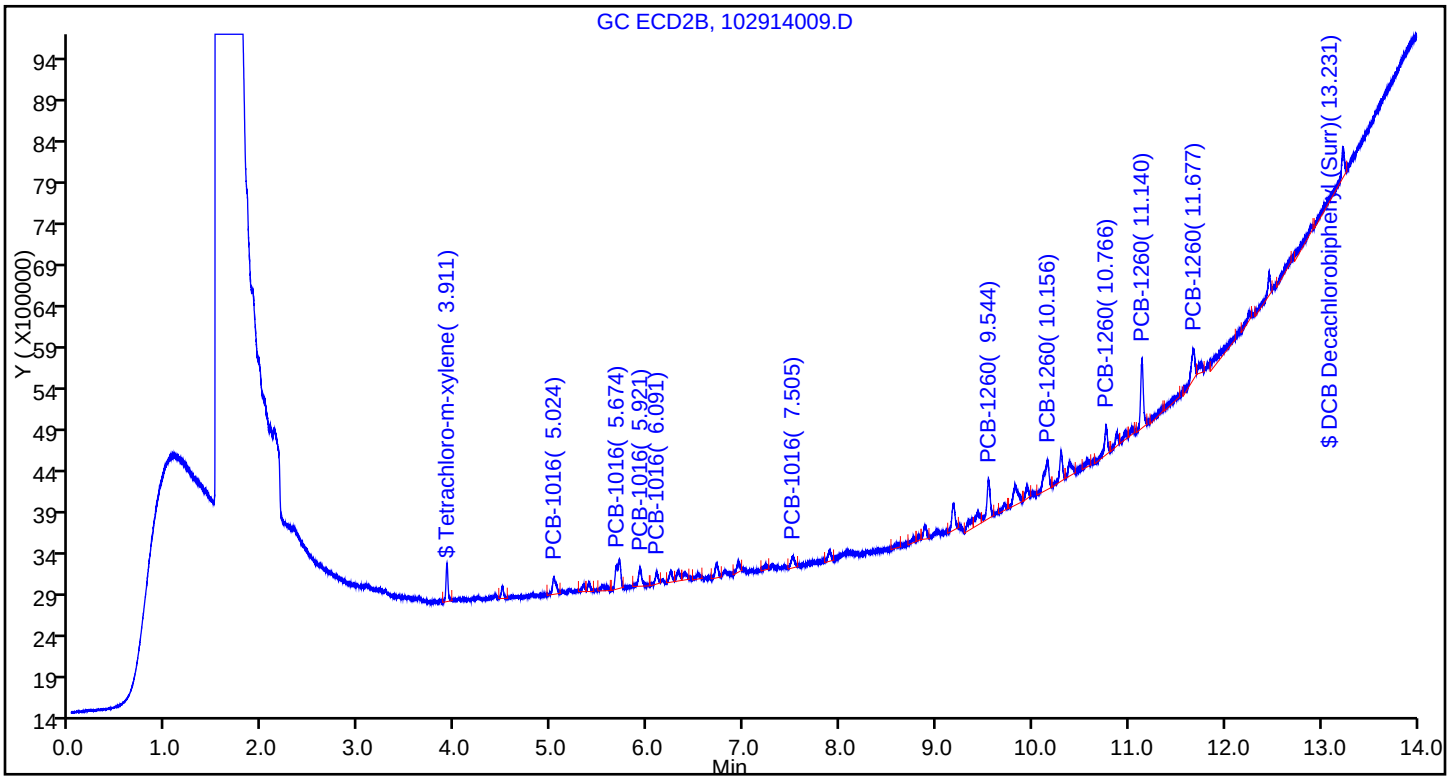
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914010.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 29-Oct-2014 10:46:31 ALS Bottle#: 9 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004073-008
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub8

Method: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 30-Oct-2014 05:58:03 Calib Date: 29-Oct-2014 12:22:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914015.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK015

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.241	3.242	-0.001	3765966H	0.002500	0.002660	
2	3.910	3.911	-0.001	2805961H	0.002500	0.002716	
						RPD = 2.11	
4 PCB-1016							
1	3.566	3.566	0.000	1261366H	0.0500	0.0546	
1	3.914	3.915	-0.001	2027003H	0.0500	0.0564	
1	4.414	4.414	0.000	3077405H	0.0500	0.0545	
1	4.569	4.570	-0.001	1673556H	0.0500	0.0563	
1	5.086	5.086	0.000	1373823H	0.0500	0.0577	
		Average of Peak Amounts =				0.0559	
2	5.022	5.022	0.000	1214997H	0.0500	0.0574	
2	5.705	5.705	0.000	1969081H	0.0500	0.0567	
2	5.918	5.920	-0.002	1138064H	0.0500	0.0561	
2	6.091	6.091	0.000	791483H	0.0500	0.0551	
2	7.506	7.505	0.001	719296H	0.0500	0.0555	
		Average of Peak Amounts =				0.0562	
						RPD = 0.50	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	8.053	8.054	-0.001	2477986H	0.0500	0.0538	
1	8.758	8.757	0.001	2028430H	0.0500	0.0551	
1	9.319	9.318	0.001	4709800H	0.0500	0.0537	
1	9.800	9.799	0.001	2581259H	0.0500	0.0535	
1	10.778	10.774	0.004	1534852H	0.0500	0.0550	
		Average of Peak Amounts =				0.0542	
2	9.545	9.543	0.002	2430336H	0.0500	0.0535	
2	10.154	10.155	-0.001	1951661H	0.0500	0.0530	
2	10.768	10.766	0.002	1907499H	0.0500	0.0523	
2	11.139	11.139	0.000	4776969H	0.0500	0.0520	
2	11.675	11.673	0.002	2042288H	0.0500	0.0477	
		Average of Peak Amounts =				0.0517	
						RPD = 4.75	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.468	11.469	-0.001	2500972H	0.002500	0.002856	
2	13.231	13.231	0.000	2110638H	0.002500	0.002557	
						RPD = 11.05	

Reagents:

GCAR1660CALL2_00009 Amount Added: 1.00 Units: mL

Report Date: 30-Oct-2014 05:58:03 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914010.D

Injection Date: 29-Oct-2014 10:46:31 Instrument ID: CHGC16

Lims ID: IC

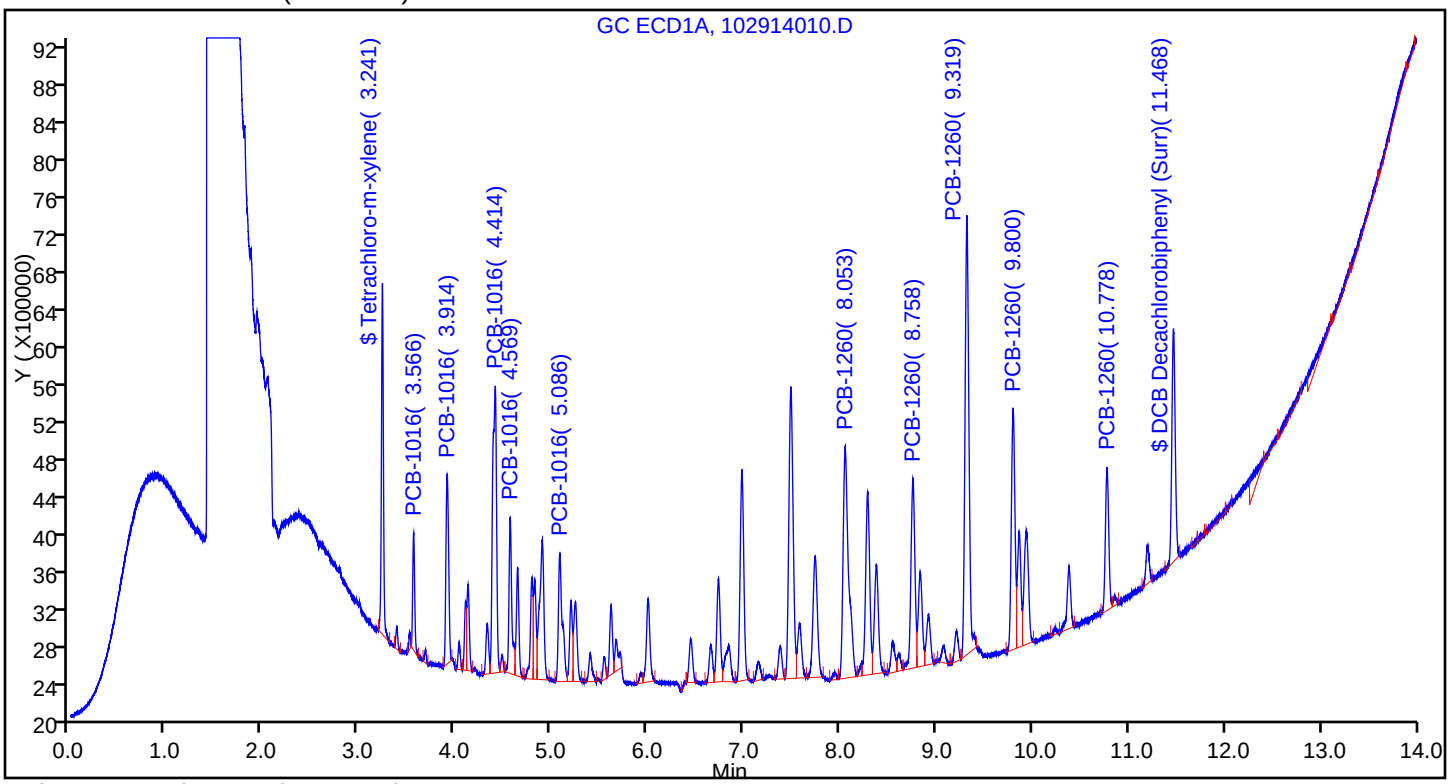
Client ID:

Operator ID: 402331 ALS Bottle#: 9 Worklist Smp#: 8

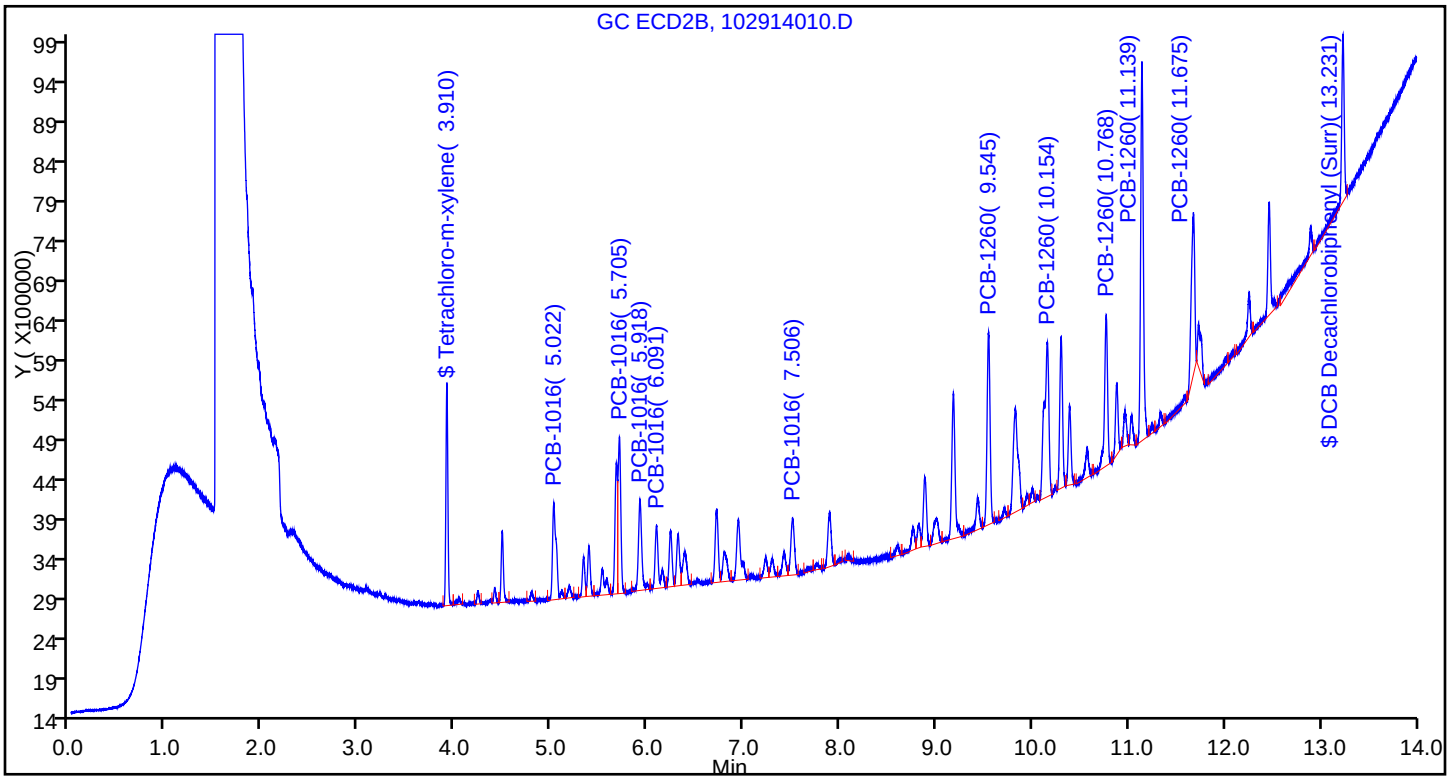
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914011.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 29-Oct-2014 11:05:47 ALS Bottle#: 10 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004073-009
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub8

Method: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 30-Oct-2014 05:57:59 Calib Date: 29-Oct-2014 12:22:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914015.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK015

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.240	3.242	-0.002	14326477H	0.0100	0.0101	
2	3.910	3.911	-0.001	10415058H	0.0100	0.0101	
						RPD = 0.35	
4 PCB-1016							
1	3.565	3.566	-0.001	4734352H	0.2000	0.2050	
1	3.913	3.915	-0.002	7307725H	0.2000	0.2033	
1	4.414	4.414	0.000	11397164H	0.2000	0.2017	
1	4.569	4.570	-0.001	6061991H	0.2000	0.2038	
1	5.084	5.086	-0.002	4955332H	0.2000	0.2080	
		Average of Peak Amounts =				0.2044	
2	5.021	5.022	-0.001	4300953H	0.2000	0.2032	
2	5.703	5.705	-0.002	7155774H	0.2000	0.2060	
2	5.917	5.920	-0.003	3993962H	0.2000	0.1968	
2	6.091	6.091	0.000	2849660H	0.2000	0.1985	
2	7.505	7.505	0.000	2577938H	0.2000	0.1991	
		Average of Peak Amounts =				0.2007	
						RPD = 1.81	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	8.051	8.054	-0.003	9593082H	0.2000	0.2084	
1	8.757	8.757	0.000	7348336H	0.2000	0.1996	
1	9.317	9.318	-0.001	16904698H	0.2000	0.1926	
1	9.798	9.799	-0.001	9357861H	0.2000	0.1939	
1	10.776	10.774	0.002	5525499H	0.2000	0.1979	
		Average of Peak Amounts =				0.1985	
2	9.544	9.543	0.001	8868091H	0.2000	0.1952	
2	10.155	10.155	0.000	7317851H	0.2000	0.1987	
2	10.766	10.766	0.000	7135468H	0.2000	0.1955	
2	11.139	11.139	0.000	17811670H	0.2000	0.1938	
2	11.673	11.673	0.000	8225830H	0.2000	0.1923	
		Average of Peak Amounts =				0.1951	
						RPD = 1.72	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.465	11.469	-0.004	8560272H	0.0100	0.009774	
2	13.230	13.231	-0.001	7926142H	0.0100	0.009601	
						RPD = 1.79	

Reagents:

GCAR1660CALL3_00008 Amount Added: 1.00 Units: mL

Report Date: 30-Oct-2014 05:57:59 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914011.D

Injection Date: 29-Oct-2014 11:05:47 Instrument ID: CHGC16

Lims ID: IC

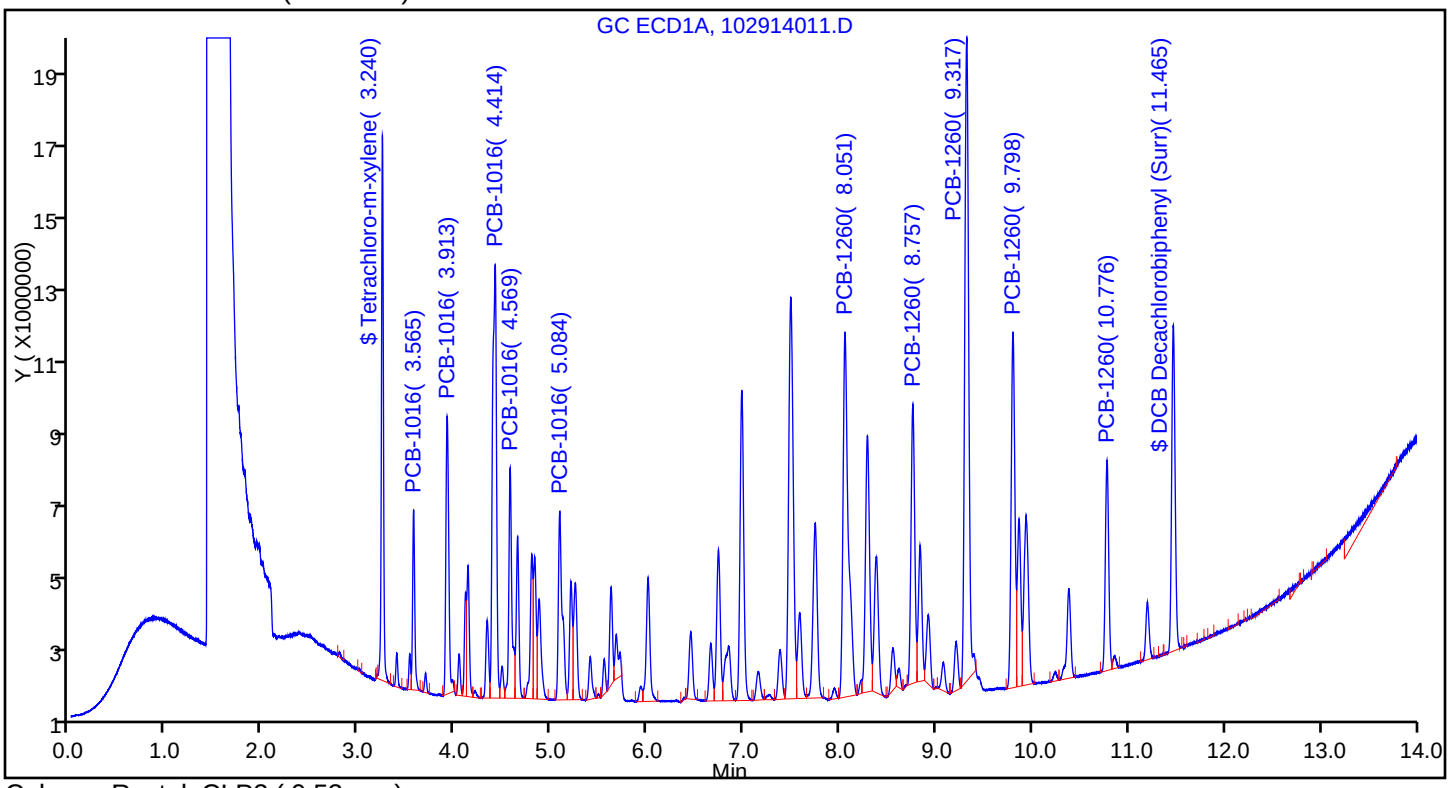
Client ID:

Operator ID: 402331 ALS Bottle#: 10 Worklist Smp#: 9

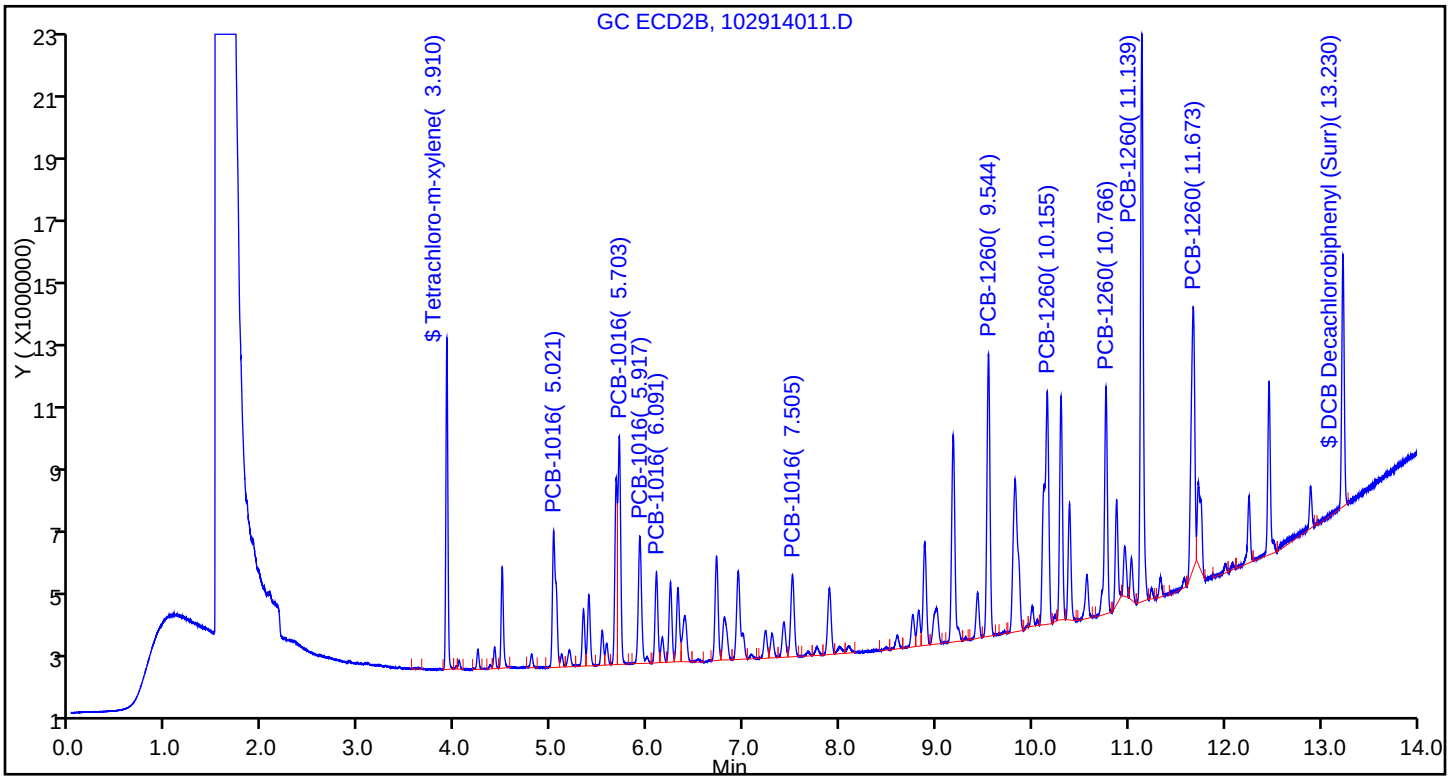
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914012.D
Lims ID: ICRT
Client ID:
Sample Type: ICRT Calib Level: 4
Inject. Date: 29-Oct-2014 11:25:06 ALS Bottle#: 11 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004073-010
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub8

Method: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 30-Oct-2014 05:57:55 Calib Date: 29-Oct-2014 12:22:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914015.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK015

First Level Reviewer: guptaa Date: 29-Oct-2014 15:16:51

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.242	3.242	0.000	37849259H	0.0250	0.0267	
2	3.911	3.911	0.000	27332769H	0.0250	0.0265	
						RPD = 1.01	
4 PCB-1016							
1	3.566	3.566	0.000	11960232H	0.5000	0.5179	
1	3.915	3.915	0.000	18414813H	0.5000	0.5124	
1	4.414	4.414	0.000	29782990H	0.5000	0.5271	
1	4.570	4.570	0.000	15723287H	0.5000	0.5285	
1	5.086	5.086	0.000	12591218H	0.5000	0.5286	
		Average of Peak Amounts =				0.5229	
2	5.022	5.022	0.000	10810335H	0.5000	0.5106	
2	5.705	5.705	0.000	18182027H	0.5000	0.5234	
2	5.920	5.920	0.000	10225761H	0.5000	0.5039	
2	6.091	6.091	0.000	7310314H	0.5000	0.5093	
2	7.505	7.505	0.000	6467792H	0.5000	0.4994	
		Average of Peak Amounts =				0.5093	
						RPD = 2.63	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	8.054	8.054	0.000	24599515H	0.5000	0.5345	
1	8.757	8.757	0.000	19610426H	0.5000	0.5325	
1	9.318	9.318	0.000	45263339H	0.5000	0.5158	
1	9.799	9.799	0.000	24773664H	0.5000	0.5132	
1	10.774	10.774	0.000	13924759H	0.5000	0.4988	
		Average of Peak Amounts =				0.5190	
2	9.543	9.543	0.000	23192539H	0.5000	0.5105	
2	10.155	10.155	0.000	18854044H	0.5000	0.5119	
2	10.766	10.766	0.000	18597564H	0.5000	0.5095	
2	11.139	11.139	0.000	47540557H	0.5000	0.5172	
2	11.673	11.673	0.000	22433809H	0.5000	0.5244	
		Average of Peak Amounts =				0.5147	
						RPD = 0.82	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.469	11.469	0.000	21916546H	0.0250	0.0250	
2	13.231	13.231	0.000	21136918H	0.0250	0.0256	
						RPD = 2.29	

Reagents:

GCAR1660CALL4_00008 Amount Added: 1.00 Units: mL

Report Date: 30-Oct-2014 05:57:55 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914012.D

Injection Date: 29-Oct-2014 11:25:06 Instrument ID: CHGC16

Lims ID: ICRT

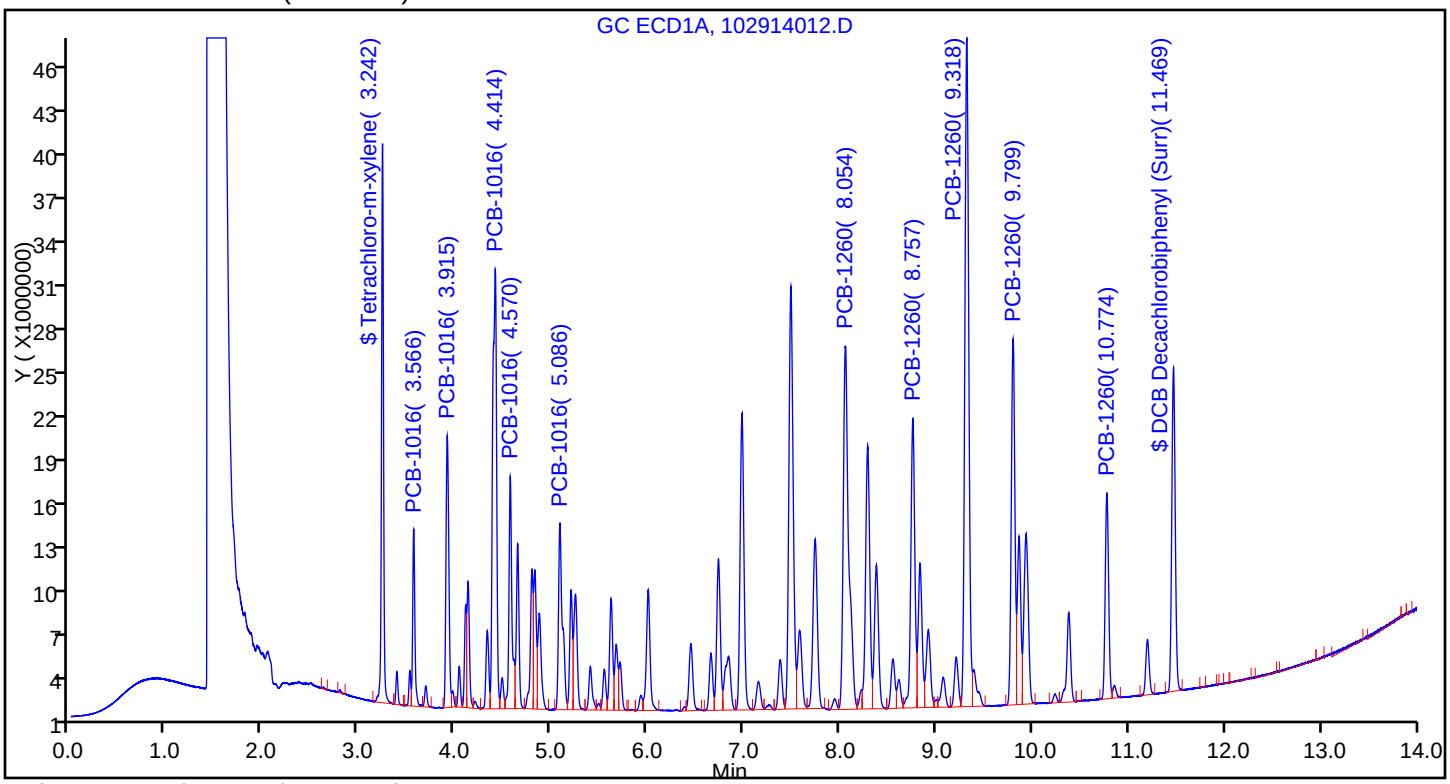
Client ID:

Operator ID: 402331 ALS Bottle#: 11 Worklist Smp#: 10

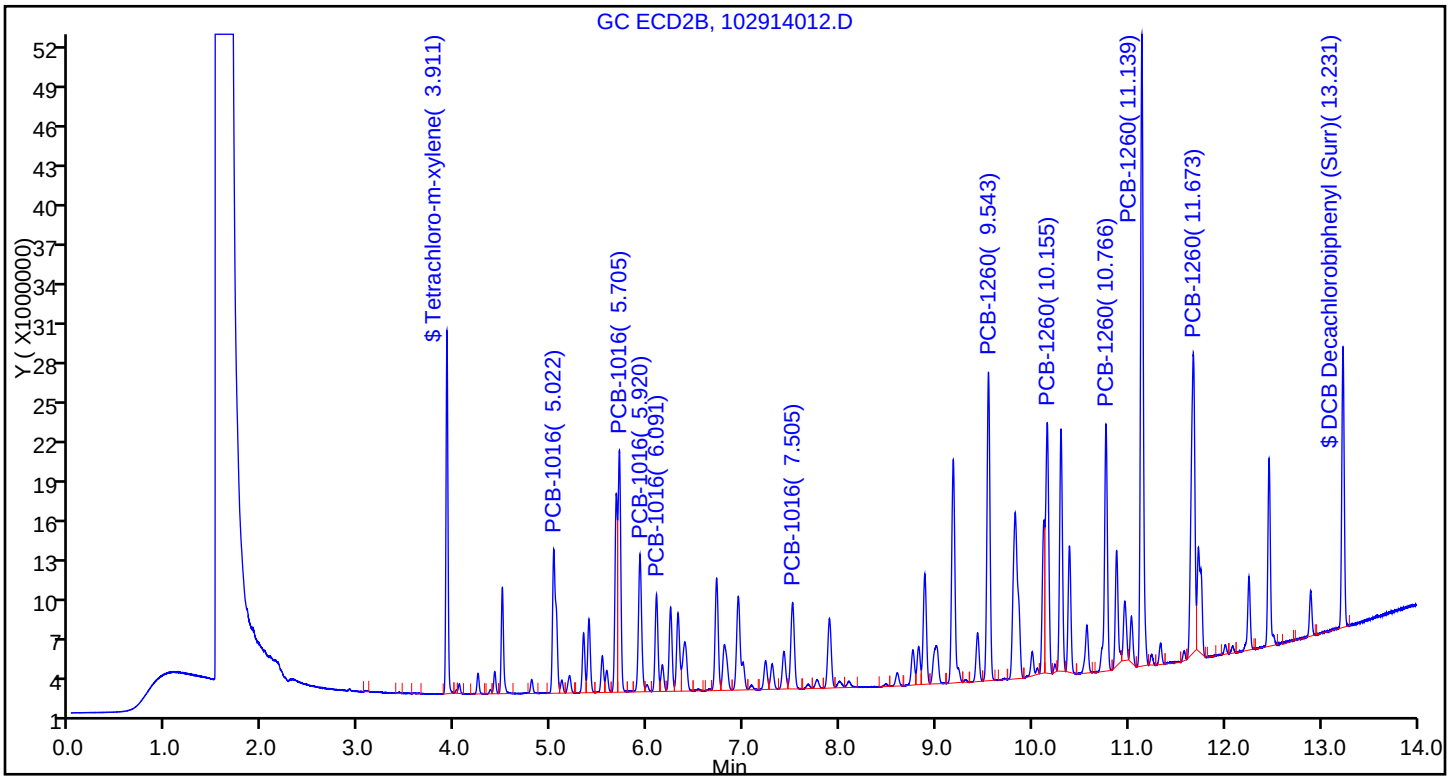
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914013.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 29-Oct-2014 11:44:23 ALS Bottle#: 12 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004073-011
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub8

Method: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 30-Oct-2014 05:57:51 Calib Date: 29-Oct-2014 12:22:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914015.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK015

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.243	3.242	0.001	72906172H	0.0500	0.0515	
2	3.912	3.911	0.001	52127794H	0.0500	0.0505	
						RPD = 2.01	
4 PCB-1016							
1	3.566	3.566	0.000	23371843H	1.00	1.01	
1	3.915	3.915	0.000	35701307H	1.00	0.99	
1	4.415	4.414	0.001	57923745H	1.00	1.03	
1	4.571	4.570	0.001	30087864H	1.00	1.01	
1	5.087	5.086	0.001	24563315H	1.00	1.03	
		Average of Peak Amounts =				1.01	
2	5.023	5.022	0.001	20565843H	1.00	0.9714	
2	5.706	5.705	0.001	35781753H	1.00	1.03	
2	5.920	5.920	0.000	19732383H	1.00	0.9723	
2	6.092	6.091	0.001	14229860H	1.00	0.99	
2	7.505	7.505	0.000	12775142H	1.00	0.9864	
		Average of Peak Amounts =				0.99	
						RPD = 2.43	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	8.054	8.054	0.000	47831940H	1.00	1.04	
1	8.756	8.757	-0.001	37976261H	1.00	1.03	
1	9.318	9.318	0.000	89989024H	1.00	1.03	
1	9.799	9.799	0.000	49350068H	1.00	1.02	
1	10.776	10.774	0.002	28016177H	1.00	1.00	
		Average of Peak Amounts =				1.02	
2	9.544	9.543	0.001	46154265H	1.00	1.02	
2	10.156	10.155	0.001	37114153H	1.00	1.01	
2	10.766	10.766	0.000	37879117H	1.00	1.04	
2	11.139	11.139	0.000	95239602H	1.00	1.04	
2	11.675	11.673	0.002	45217560H	1.00	1.06	
		Average of Peak Amounts =				1.03	
						RPD = 0.64	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.466	11.469	-0.003	43732126H	0.0500	0.0499	
2	13.230	13.231	-0.001	43232614H	0.0500	0.0524	
						RPD = 4.76	

Reagents:

GCAR1660CALL5_00009 Amount Added: 1.00 Units: mL

Report Date: 30-Oct-2014 05:57:51 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914013.D

Injection Date: 29-Oct-2014 11:44:23 Instrument ID: CHGC16

Lims ID: IC

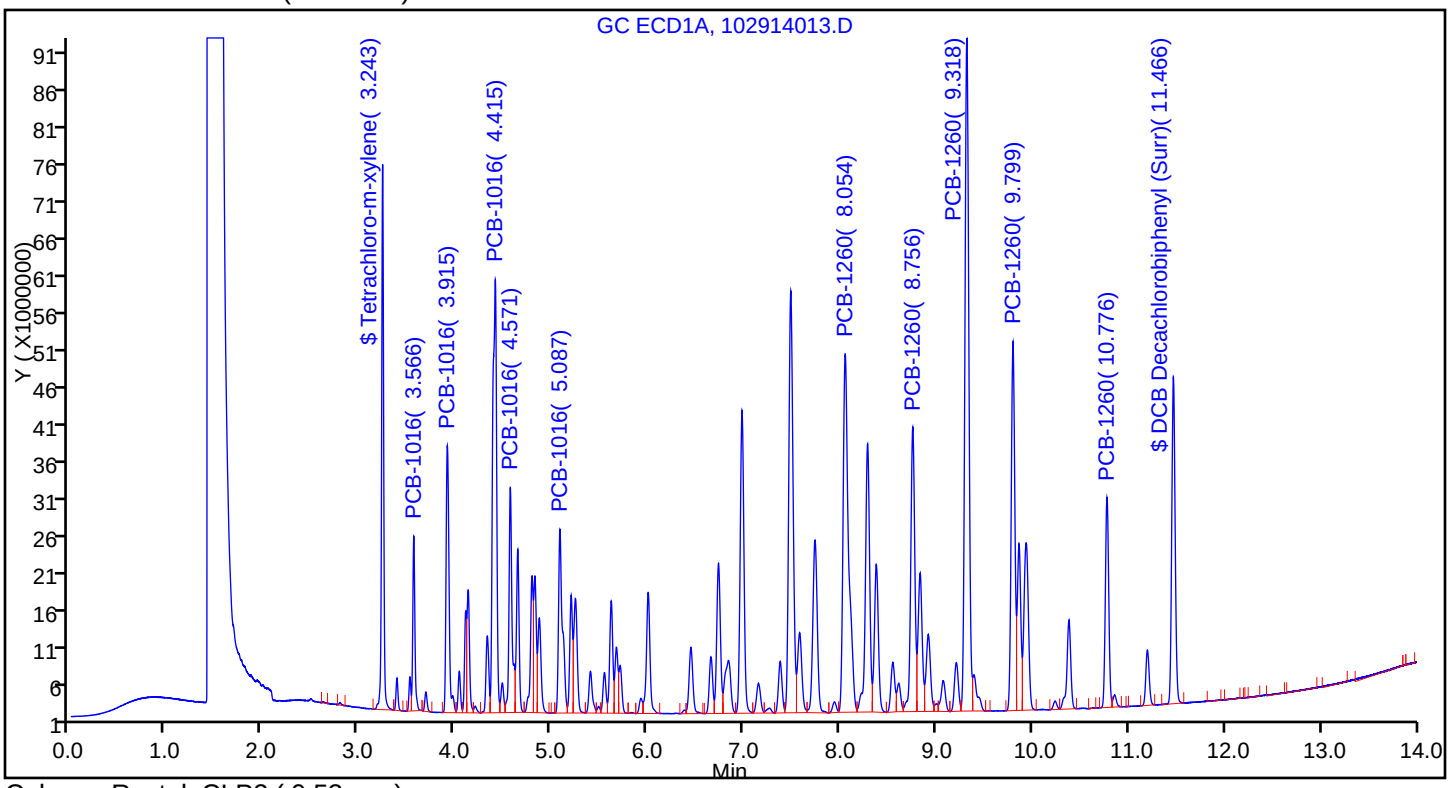
Client ID:

Operator ID: 402331 ALS Bottle#: 12 Worklist Smp#: 11

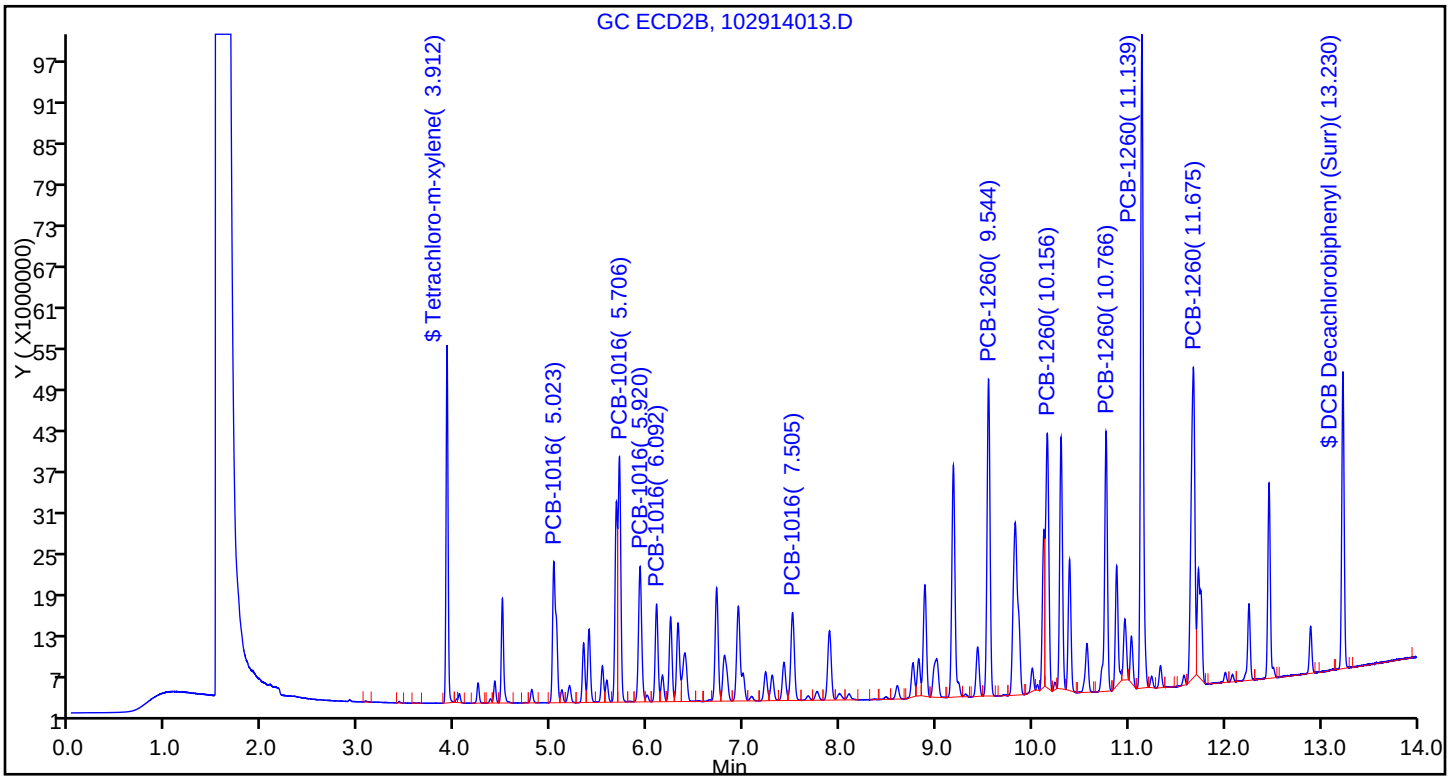
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914014.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 29-Oct-2014 12:03:08 ALS Bottle#: 13 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004073-012
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub8

Method: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 30-Oct-2014 05:57:47 Calib Date: 29-Oct-2014 12:22:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914015.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK015

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.241	3.242	-0.001	144298222H	0.1000	0.1019	
2	3.911	3.911	0.000	103286776H	0.1000	0.1000	
						RPD = 1.90	
4 PCB-1016							
1	3.564	3.566	-0.002	46111208H	2.00	2.00	
1	3.912	3.915	-0.003	69038204H	2.00	1.92	
1	4.411	4.414	-0.003	113433848H	2.00	2.01	
1	4.567	4.570	-0.003	59247277H	2.00	1.99	
1	5.082	5.086	-0.004	47018491H	2.00	1.97	
		Average of Peak Amounts =				1.98	
2	5.022	5.022	0.000	40343406H	2.00	1.91	
2	5.704	5.705	-0.001	69719138H	2.00	2.01	
2	5.917	5.920	-0.003	38991811H	2.00	1.92	
2	6.090	6.091	-0.001	27947119H	2.00	1.95	
2	7.503	7.505	-0.002	24714397H	2.00	1.91	
		Average of Peak Amounts =				1.94	
						RPD = 2.06	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	8.047	8.054	-0.007	95198000H	2.00	2.07	
1	8.751	8.757	-0.006	74480083H	2.00	2.02	
1	9.309	9.318	-0.009	182557562H	2.00	2.08	
1	9.793	9.799	-0.006	97276827H	2.00	2.02	
1	10.772	10.774	-0.002	55520824H	2.00	1.99	
		Average of Peak Amounts =				2.04	
2	9.542	9.543	-0.001	89815228H	2.00	1.98	
2	10.154	10.155	-0.001	73884140H	2.00	2.01	
2	10.765	10.766	-0.001	72862034H	2.00	2.00	
2	11.138	11.139	-0.001	189378660H	2.00	2.06	
2	11.674	11.673	0.001	92960126H	2.00	2.17	
		Average of Peak Amounts =				2.04	
						RPD = 0.37	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.464	11.469	-0.005	82886356H	0.1000	0.0946	
2	13.231	13.231	0.000	84452147H	0.1000	0.1023	
						RPD = 7.78	

Reagents:

GCAR1660CALL6_00007 Amount Added: 1.00 Units: mL

Report Date: 30-Oct-2014 05:57:47 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914014.D

Injection Date: 29-Oct-2014 12:03:08 Instrument ID: CHGC16

Lims ID: IC

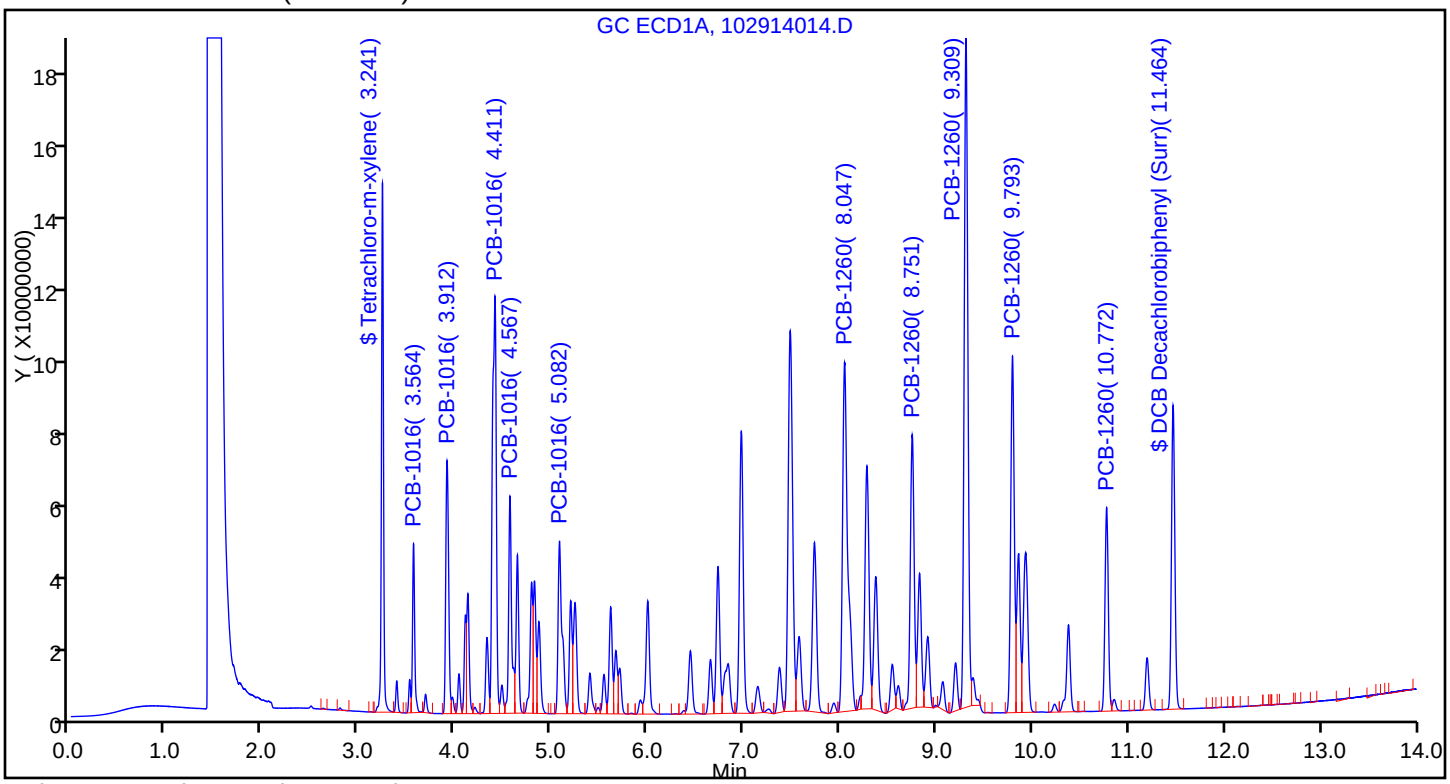
Client ID:

Operator ID: 402331 ALS Bottle#: 13 Worklist Smp#: 12

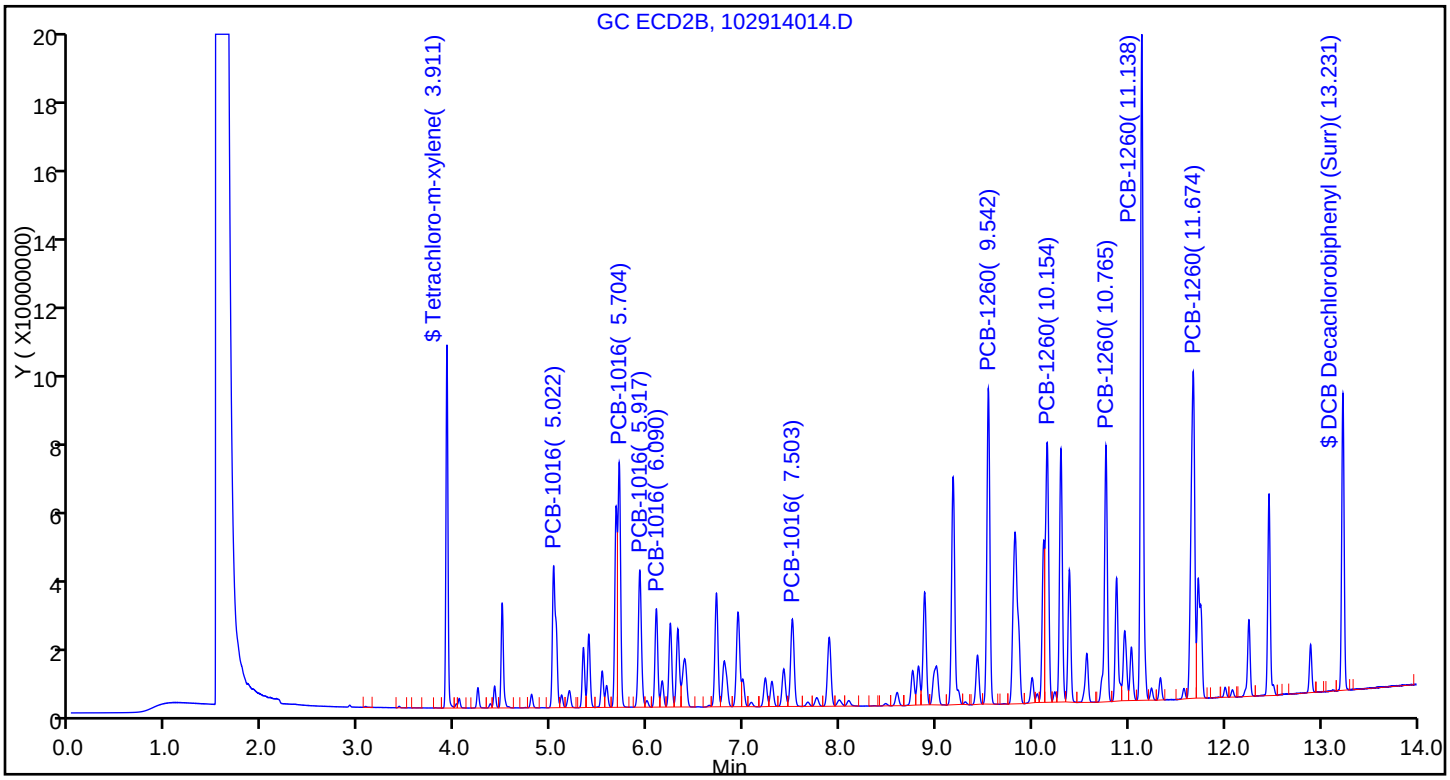
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914015.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 29-Oct-2014 12:22:21 ALS Bottle#: 14 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004073-013
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub8

Method: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 30-Oct-2014 05:57:43 Calib Date: 29-Oct-2014 12:22:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914015.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK015

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.246	3.242	0.004	265642857H	0.2000	0.1876	
2	3.915	3.911	0.004	193123897H	0.2000	0.1870	
						RPD = 0.34	
4 PCB-1016							
1	3.570	3.566	0.004	85270977H	4.00	3.69	
1	3.919	3.915	0.004	128301948H	4.00	3.57	
1	4.417	4.414	0.003	210820749H	4.00	3.73	
1	4.572	4.570	0.002	111818128H	4.00	3.76	
1	5.086	5.086	0.000	89401788H	4.00	3.75	
		Average of Peak Amounts =				3.70	
2	5.024	5.022	0.002	75349116H	4.00	3.56	
2	5.707	5.705	0.002	128620945H	4.00	3.70	
2	5.920	5.920	0.000	71736323H	4.00	3.53	
2	6.093	6.091	0.002	51591814H	4.00	3.59	
2	7.507	7.505	0.002	46048479H	4.00	3.56	
		Average of Peak Amounts =				3.59	
						RPD = 3.07	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	8.054	8.054	0.000	174382534H	4.00	3.79	
1	8.757	8.757	0.000	131792532H	4.00	3.58	
1	9.318	9.318	0.000	325162394H	4.00	3.71	
1	9.798	9.799	-0.001	186020325H	4.00	3.85	
1	10.775	10.774	0.001	105956878H	4.00	3.80	
		Average of Peak Amounts =				3.74	
2	9.545	9.543	0.002	166507106H	4.00	3.66	
2	10.155	10.155	0.000	139767676H	4.00	3.80	
2	10.768	10.766	0.002	137590198H	4.00	3.77	
2	11.140	11.139	0.001	362574247H	4.00	3.94	
2	11.676	11.673	0.003	175517622H	4.00	4.10	
		Average of Peak Amounts =				3.86	
						RPD = 2.92	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.466	11.469	-0.003	158795042H	0.2000	0.1813	
2	13.231	13.231	0.000	165125113H	0.2000	0.2000	
						RPD = 9.81	

Reagents:

GCAR1660CALL7_00008 Amount Added: 1.00 Units: mL

Report Date: 30-Oct-2014 05:57:43 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914015.D

Injection Date: 29-Oct-2014 12:22:21 Instrument ID: CHGC16

Lims ID: IC

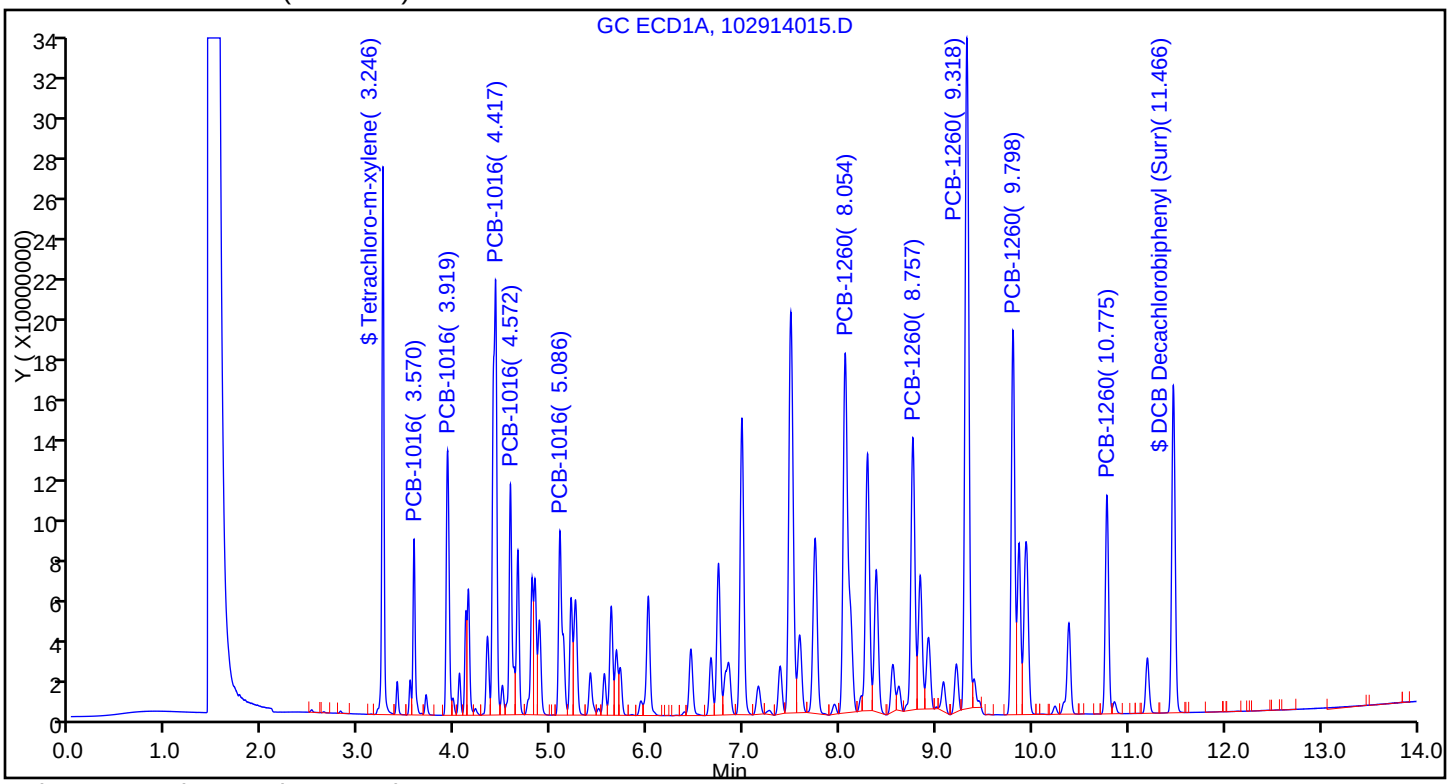
Client ID:

Operator ID: 402331 ALS Bottle#: 14 Worklist Smp#: 13

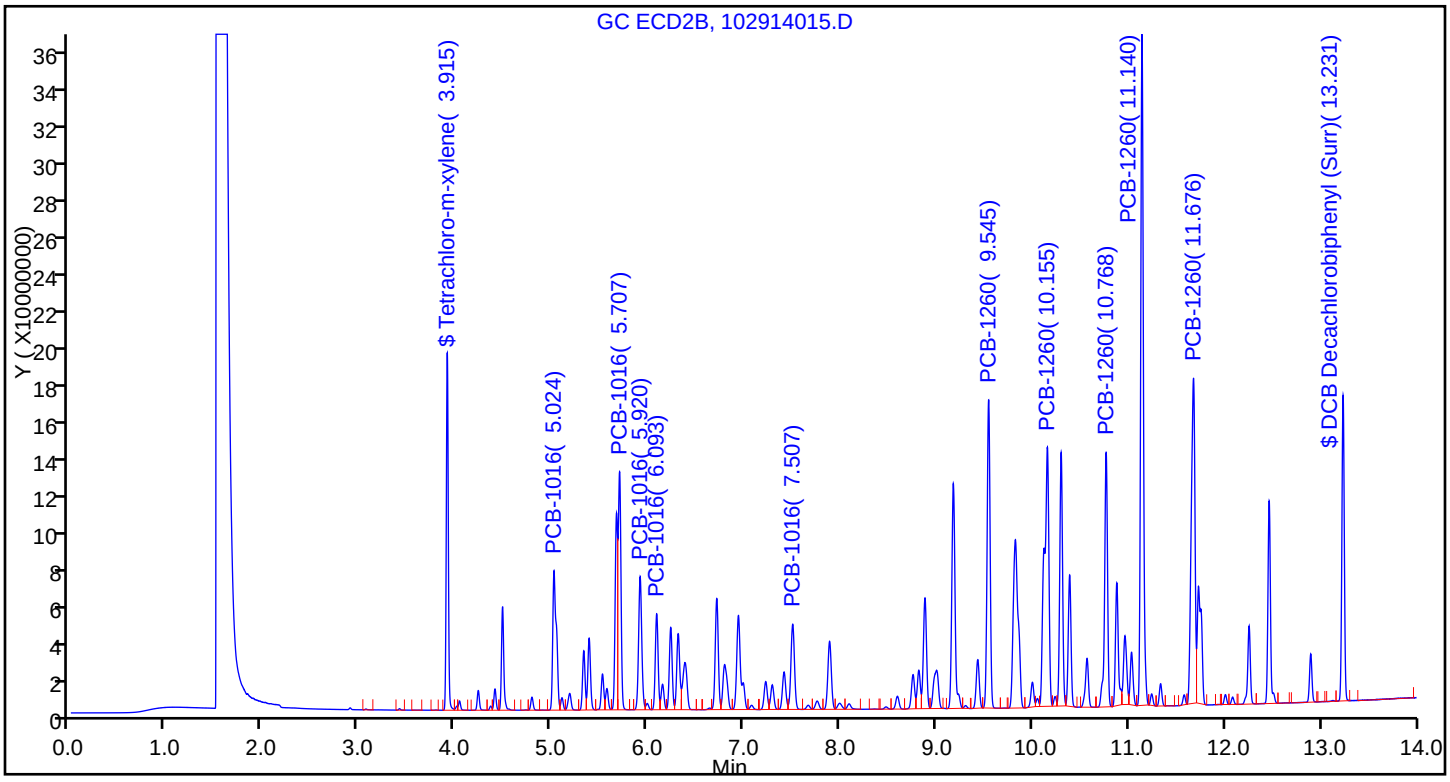
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123130

SDG No.:

Instrument ID: CHGC16 GC Column: RTX-CLP2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2014 10:27 Calibration End Date: 10/29/2014 12:22 Calibration ID: 18828

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123130/7	102914009.D
Level 2	IC 180-123130/8	102914010.D
Level 3	IC 180-123130/9	102914011.D
Level 4	ICRT 180-123130/10	102914012.D
Level 5	IC 180-123130/11	102914013.D
Level 6	IC 180-123130/12	102914014.D
Level 7	IC 180-123130/13	102914015.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
PCB-1016 Peak 1	5.024	5.022	5.021	5.022	5.023	5.022	5.024				4.972 - 5.072	5.023
PCB-1016 Peak 2	5.674	5.705	5.703	5.705	5.706	5.704	5.707				5.655 - 5.755	5.701
PCB-1016 Peak 3	5.921	5.918	5.917	5.920	5.920	5.917	5.920				5.870 - 5.970	5.919
PCB-1016 Peak 4	6.091	6.091	6.091	6.091	6.092	6.090	6.093				6.041 - 6.141	6.091
PCB-1016 Peak 5	7.505	7.506	7.505	7.505	7.505	7.503	7.507				7.455 - 7.555	7.505
PCB-1260 Peak 1	9.544	9.545	9.544	9.543	9.544	9.542	9.545				9.493 - 9.593	9.544
PCB-1260 Peak 2	10.156	10.154	10.155	10.155	10.156	10.154	10.155				10.105 - 10.205	10.155
PCB-1260 Peak 3	10.766	10.768	10.766	10.766	10.766	10.765	10.768				10.716 - 10.816	10.766
PCB-1260 Peak 4	11.140	11.139	11.139	11.139	11.139	11.138	11.140				11.089 - 11.189	11.139
PCB-1260 Peak 5	11.677	11.675	11.673	11.673	11.675	11.674	11.676				11.623 - 11.723	11.675
Tetrachloro-m-xylene (Surr)	3.911	3.910	3.910	3.911	3.912	3.911	3.915				3.861 - 3.961	3.911
DCB Decachlorobiphenyl (Surr)	13.231	13.231	13.230	13.231	13.230	13.231	13.231				13.161 - 13.301	13.231

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123130

SDG No.:

Instrument ID: CHGC16 GC Column: RTX-CLP2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2014 10:27 Calibration End Date: 10/29/2014 12:22 Calibration ID: 18828

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123130/7	102914009.D
Level 2	IC 180-123130/8	102914010.D
Level 3	IC 180-123130/9	102914011.D
Level 4	ICRT 180-123130/10	102914012.D
Level 5	IC 180-123130/11	102914013.D
Level 6	IC 180-123130/12	102914014.D
Level 7	IC 180-123130/13	102914015.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1016 Peak 1	21197900 20565843	24299940 20171703	21504765 18837279	21620670	Ave		21171157.1				7.9		20.0			
PCB-1016 Peak 2	28847200 35781753	39381620 34859569	35778870 32155236	36364054	Ave		34738328.9				9.7		20.0			
PCB-1016 Peak 3	21719100 19732383	22761280 19495906	19969810 17934081	20451522	Ave		20294868.8				7.7		20.0			
PCB-1016 Peak 4	14677300 14229860	15829660 13973560	14248300 12897954	14620628	Ave		14353894.4				6.1		20.0			
PCB-1016 Peak 5	13801900 12775142	14385920 12357199	12889690 11512120	12935584	Ave		12951079.2				7.2		20.0			
PCB-1260 Peak 1	46020900 46154265	48606720 44907614	44340455 41626777	46385078	Ave		45434544.1				4.7		20.0			
PCB-1260 Peak 2	35474900 37114153	39033220 36942070	36589255 34941919	37708088	Ave		36829086.4				3.7		20.0			
PCB-1260 Peak 3	35761300 37879117	38149980 36431017	35677340 34397550	37195128	Ave		36498775.9				3.7		20.0			
PCB-1260 Peak 4	83139600 95239602	95539380 94689330	89058350 90643562	95081114	Ave		91912991.1				5.0		20.0			
PCB-1260 Peak 5	37041200 45217560	40845760 46480063	41129150 43879406	44867618	Ave		42780108.1				7.7		20.0			
Tetrachloro-m-xylene (Surr)	932428000 1042555880	1122384400 1032867760	1041505800 965619485	1093310760	Ave		1032953155				6.4		20.0			
DCB Decachlorobiphenyl (Surr)	761720000 864652280	844255200 844521470	792614200 825625565	845476720	Ave		825552205				4.4		20.0			

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

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1 Analy Batch No.: 123130

SDG No.:

Instrument ID: CHGC16 GC Column: RTX-CLP2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/29/2014 10:27 Calibration End Date: 10/29/2014 12:22 Calibration ID: 18828

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-123130/7	102914009.D
Level 2	IC 180-123130/8	102914010.D
Level 3	IC 180-123130/9	102914011.D
Level 4	ICRT 180-123130/10	102914012.D
Level 5	IC 180-123130/11	102914013.D
Level 6	IC 180-123130/12	102914014.D
Level 7	IC 180-123130/13	102914015.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1016 Peak 1	Ave	211979 40343406	1214997 75349116	4300953	10810335	20565843	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1016 Peak 2	Ave	288472 69719138	1969081 128620945	7155774	18182027	35781753	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1016 Peak 3	Ave	217191 38991811	1138064 71736323	3993962	10225761	19732383	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1016 Peak 4	Ave	146773 27947119	791483 51591814	2849660	7310314	14229860	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1016 Peak 5	Ave	138019 24714397	719296 46048479	2577938	6467792	12775142	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1260 Peak 1	Ave	460209 89815228	2430336 166507106	8868091	23192539	46154265	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1260 Peak 2	Ave	354749 73884140	1951661 139767676	7317851	18854044	37114153	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1260 Peak 3	Ave	357613 72862034	1907499 137590198	7135468	18597564	37879117	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1260 Peak 4	Ave	831396 189378660	4776969 362574247	17811670	47540557	95239602	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1260 Peak 5	Ave	370412 92960126	2042288 175517622	8225830	22433809	45217560	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
Tetrachloro-m-xylene (Surr)	Ave	466214 103286776	2805961 193123897	10415058	27332769	52127794	0.000500 0.100	0.00250 0.200	0.0100	0.0250	0.0500
DCB Decachlorobiphenyl (Surr)	Ave	380860 84452147	2110638 165125113	7926142	21136918	43232614	0.000500 0.100	0.00250 0.200	0.0100	0.0250	0.0500

Curve Type Legend:
Ave = Average by Height

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914009.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 29-Oct-2014 10:27:16 ALS Bottle#: 8 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004073-007
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub8

Method: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 30-Oct-2014 05:58:08 Calib Date: 29-Oct-2014 12:22:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914015.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK015

First Level Reviewer: oravecj Date: 29-Oct-2014 12:26:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.242	3.242	0.000	614694H	0.000500	0.000434	
2	3.911	3.911	0.000	466214H	0.000500	0.000451	
						RPD = 3.89	
4 PCB-1016							
1	3.567	3.566	0.001	210967H	0.0100	0.009135	
1	3.914	3.915	-0.001	353621H	0.0100	0.009840	
1	4.416	4.414	0.002	500579H	0.0100	0.008860	
1	4.573	4.570	0.003	253619H	0.0100	0.008525	
1	5.089	5.086	0.003	188724H	0.0100	0.007923	
		Average of Peak Amounts =				0.008857	
2	5.024	5.022	0.002	211979H	0.0100	0.0100	
2	5.674	5.705	-0.031	288472H	0.0100	0.008304	
2	5.921	5.920	0.001	217191H	0.0100	0.0107	
2	6.091	6.091	0.000	146773H	0.0100	0.0102	
2	7.505	7.505	0.000	138019H	0.0100	0.0107	
		Average of Peak Amounts =				0.0100	
						RPD = 11.93	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	8.051	8.054	-0.003	364226H	0.0100	0.007914	
1	8.757	8.757	0.000	330709H	0.0100	0.008981	
1	9.321	9.318	0.003	825281H	0.0100	0.009404	
1	9.800	9.799	0.001	454274H	0.0100	0.009411	
1	10.777	10.774	0.003	269897H	0.0100	0.009667	
		Average of Peak Amounts =				0.009075	
2	9.544	9.543	0.001	460209H	0.0100	0.0101	
2	10.156	10.155	0.001	354749H	0.0100	0.009632	
2	10.766	10.766	0.000	357613H	0.0100	0.009798	
2	11.140	11.139	0.001	831396H	0.0100	0.009045	
2	11.677	11.673	0.004	370412H	0.0100	0.008659	
		Average of Peak Amounts =				0.009453	
						RPD = 4.07	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.468	11.469	-0.001	450053H	0.000500	0.000514	
2	13.231	13.231	0.000	380860H	0.000500	0.000461	
						RPD = 10.77	

Reagents:

GCAR1660CALL1_00011 Amount Added: 1.00 Units: mL

Report Date: 30-Oct-2014 05:58:08 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914009.D

Injection Date: 29-Oct-2014 10:27:16 Instrument ID: CHGC16

Lims ID: IC

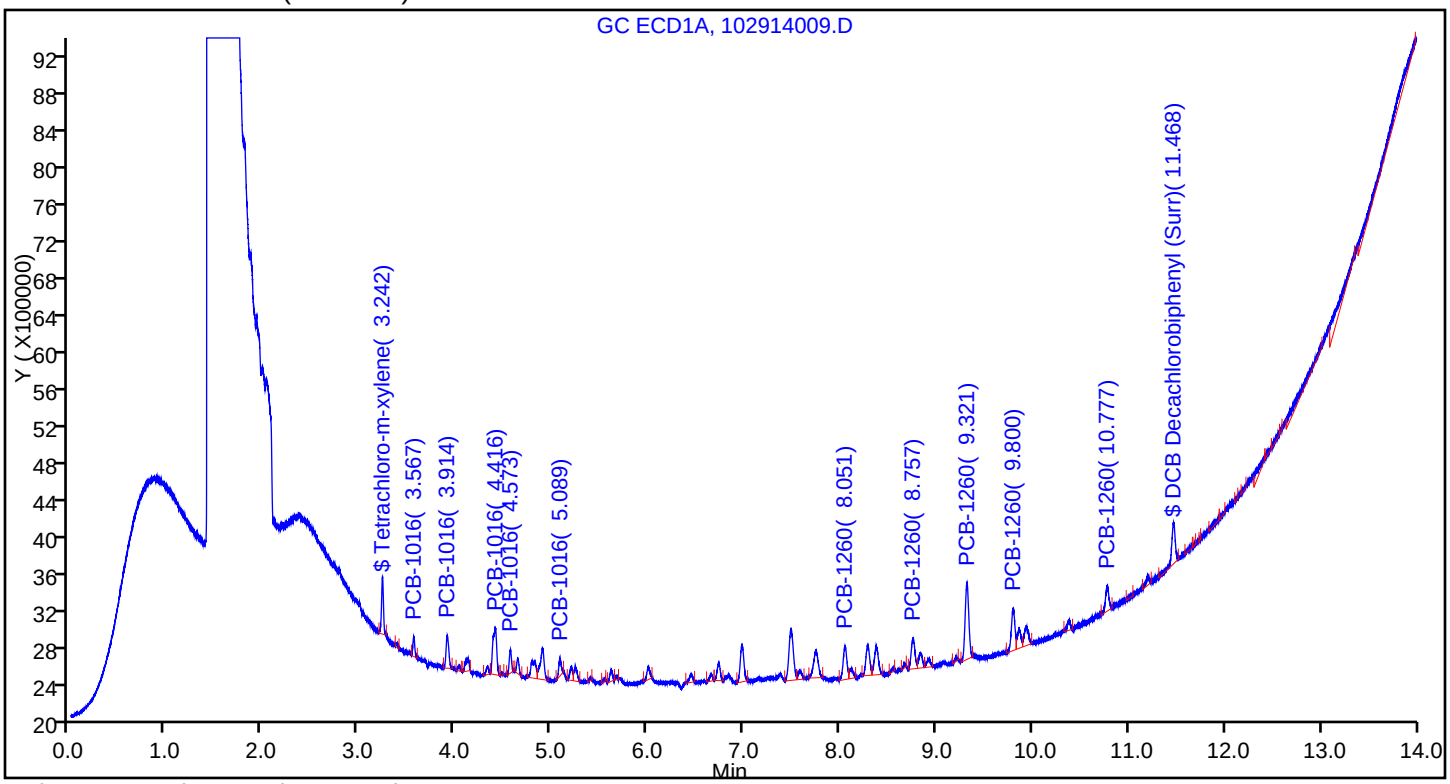
Client ID:

Operator ID: 402331 ALS Bottle#: 8 Worklist Smp#: 7

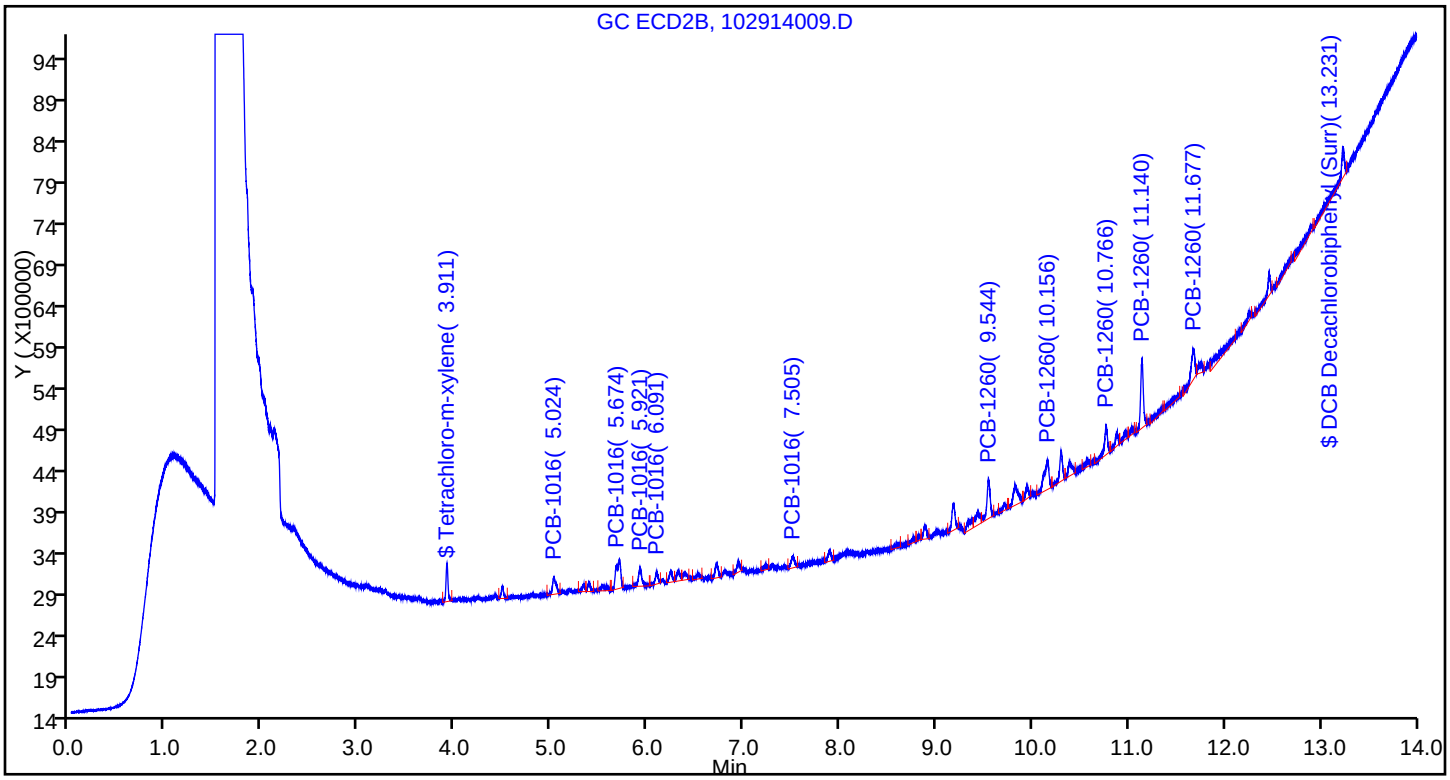
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914010.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 29-Oct-2014 10:46:31 ALS Bottle#: 9 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004073-008
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub8

Method: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 30-Oct-2014 05:58:03 Calib Date: 29-Oct-2014 12:22:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914015.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK015

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.241	3.242	-0.001	3765966H	0.002500	0.002660	
2	3.910	3.911	-0.001	2805961H	0.002500	0.002716	
						RPD = 2.11	
4 PCB-1016							
1	3.566	3.566	0.000	1261366H	0.0500	0.0546	
1	3.914	3.915	-0.001	2027003H	0.0500	0.0564	
1	4.414	4.414	0.000	3077405H	0.0500	0.0545	
1	4.569	4.570	-0.001	1673556H	0.0500	0.0563	
1	5.086	5.086	0.000	1373823H	0.0500	0.0577	
		Average of Peak Amounts =				0.0559	
2	5.022	5.022	0.000	1214997H	0.0500	0.0574	
2	5.705	5.705	0.000	1969081H	0.0500	0.0567	
2	5.918	5.920	-0.002	1138064H	0.0500	0.0561	
2	6.091	6.091	0.000	791483H	0.0500	0.0551	
2	7.506	7.505	0.001	719296H	0.0500	0.0555	
		Average of Peak Amounts =				0.0562	
						RPD = 0.50	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	8.053	8.054	-0.001	2477986H	0.0500	0.0538	
1	8.758	8.757	0.001	2028430H	0.0500	0.0551	
1	9.319	9.318	0.001	4709800H	0.0500	0.0537	
1	9.800	9.799	0.001	2581259H	0.0500	0.0535	
1	10.778	10.774	0.004	1534852H	0.0500	0.0550	
		Average of Peak Amounts =				0.0542	
2	9.545	9.543	0.002	2430336H	0.0500	0.0535	
2	10.154	10.155	-0.001	1951661H	0.0500	0.0530	
2	10.768	10.766	0.002	1907499H	0.0500	0.0523	
2	11.139	11.139	0.000	4776969H	0.0500	0.0520	
2	11.675	11.673	0.002	2042288H	0.0500	0.0477	
		Average of Peak Amounts =				0.0517	
						RPD = 4.75	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.468	11.469	-0.001	2500972H	0.002500	0.002856	
2	13.231	13.231	0.000	2110638H	0.002500	0.002557	
						RPD = 11.05	

Reagents:

GCAR1660CALL2_00009 Amount Added: 1.00 Units: mL

Report Date: 30-Oct-2014 05:58:04 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914010.D

Injection Date: 29-Oct-2014 10:46:31 Instrument ID: CHGC16

Lims ID: IC

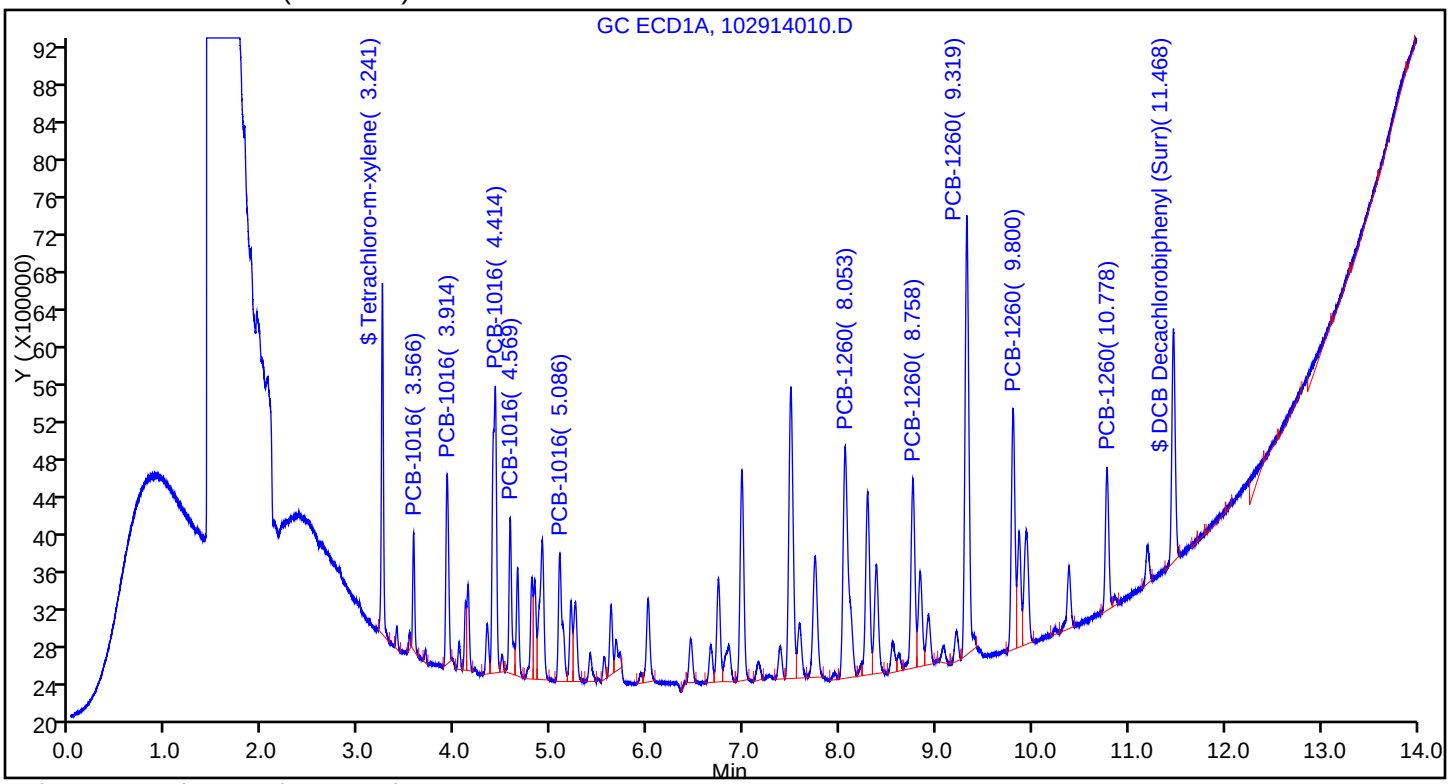
Client ID:

Operator ID: 402331 ALS Bottle#: 9 Worklist Smp#: 8

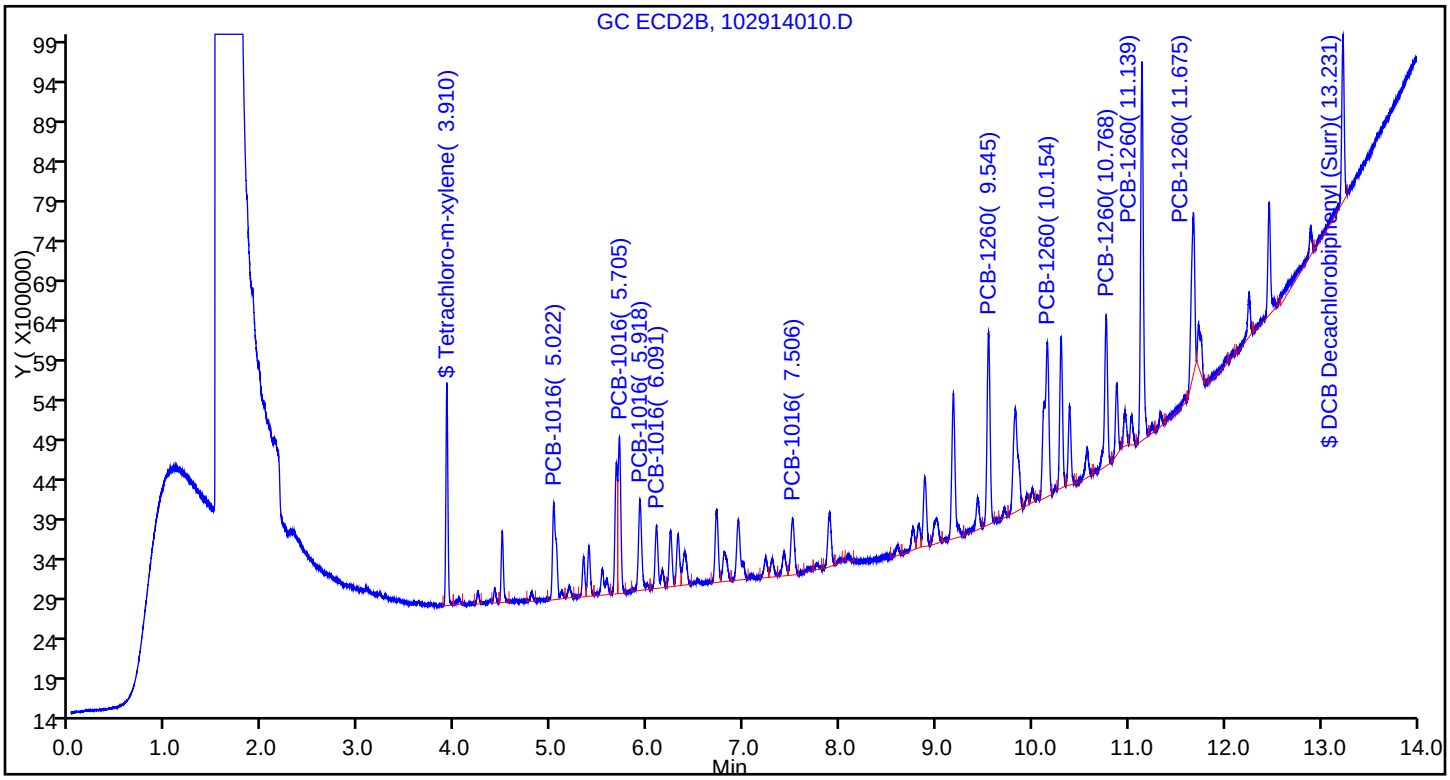
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914011.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 29-Oct-2014 11:05:47 ALS Bottle#: 10 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004073-009
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub8

Method: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 30-Oct-2014 05:57:59 Calib Date: 29-Oct-2014 12:22:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914015.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK015

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.240	3.242	-0.002	14326477H	0.0100	0.0101	
2	3.910	3.911	-0.001	10415058H	0.0100	0.0101	
						RPD = 0.35	
4 PCB-1016							
1	3.565	3.566	-0.001	4734352H	0.2000	0.2050	
1	3.913	3.915	-0.002	7307725H	0.2000	0.2033	
1	4.414	4.414	0.000	11397164H	0.2000	0.2017	
1	4.569	4.570	-0.001	6061991H	0.2000	0.2038	
1	5.084	5.086	-0.002	4955332H	0.2000	0.2080	
		Average of Peak Amounts =				0.2044	
2	5.021	5.022	-0.001	4300953H	0.2000	0.2032	
2	5.703	5.705	-0.002	7155774H	0.2000	0.2060	
2	5.917	5.920	-0.003	3993962H	0.2000	0.1968	
2	6.091	6.091	0.000	2849660H	0.2000	0.1985	
2	7.505	7.505	0.000	2577938H	0.2000	0.1991	
		Average of Peak Amounts =				0.2007	
						RPD = 1.81	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	8.051	8.054	-0.003	9593082H	0.2000	0.2084	
1	8.757	8.757	0.000	7348336H	0.2000	0.1996	
1	9.317	9.318	-0.001	16904698H	0.2000	0.1926	
1	9.798	9.799	-0.001	9357861H	0.2000	0.1939	
1	10.776	10.774	0.002	5525499H	0.2000	0.1979	
		Average of Peak Amounts =				0.1985	
2	9.544	9.543	0.001	8868091H	0.2000	0.1952	
2	10.155	10.155	0.000	7317851H	0.2000	0.1987	
2	10.766	10.766	0.000	7135468H	0.2000	0.1955	
2	11.139	11.139	0.000	17811670H	0.2000	0.1938	
2	11.673	11.673	0.000	8225830H	0.2000	0.1923	
		Average of Peak Amounts =				0.1951	
						RPD = 1.72	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.465	11.469	-0.004	8560272H	0.0100	0.009774	
2	13.230	13.231	-0.001	7926142H	0.0100	0.009601	
						RPD = 1.79	

Reagents:

GCAR1660CALL3_00008 Amount Added: 1.00 Units: mL

Report Date: 30-Oct-2014 05:58:00 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914011.D

Injection Date: 29-Oct-2014 11:05:47 Instrument ID: CHGC16

Lims ID: IC

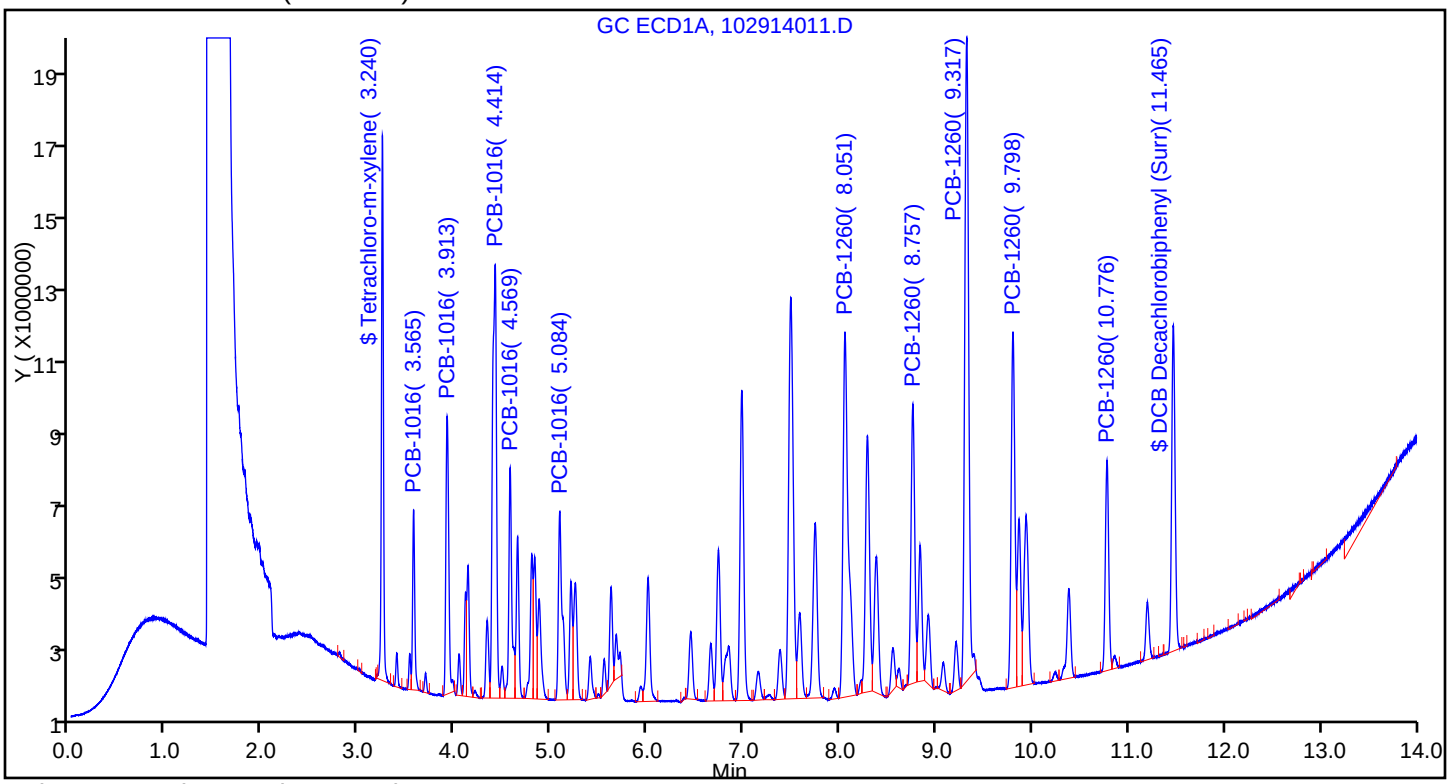
Client ID:

Operator ID: 402331 ALS Bottle#: 10 Worklist Smp#: 9

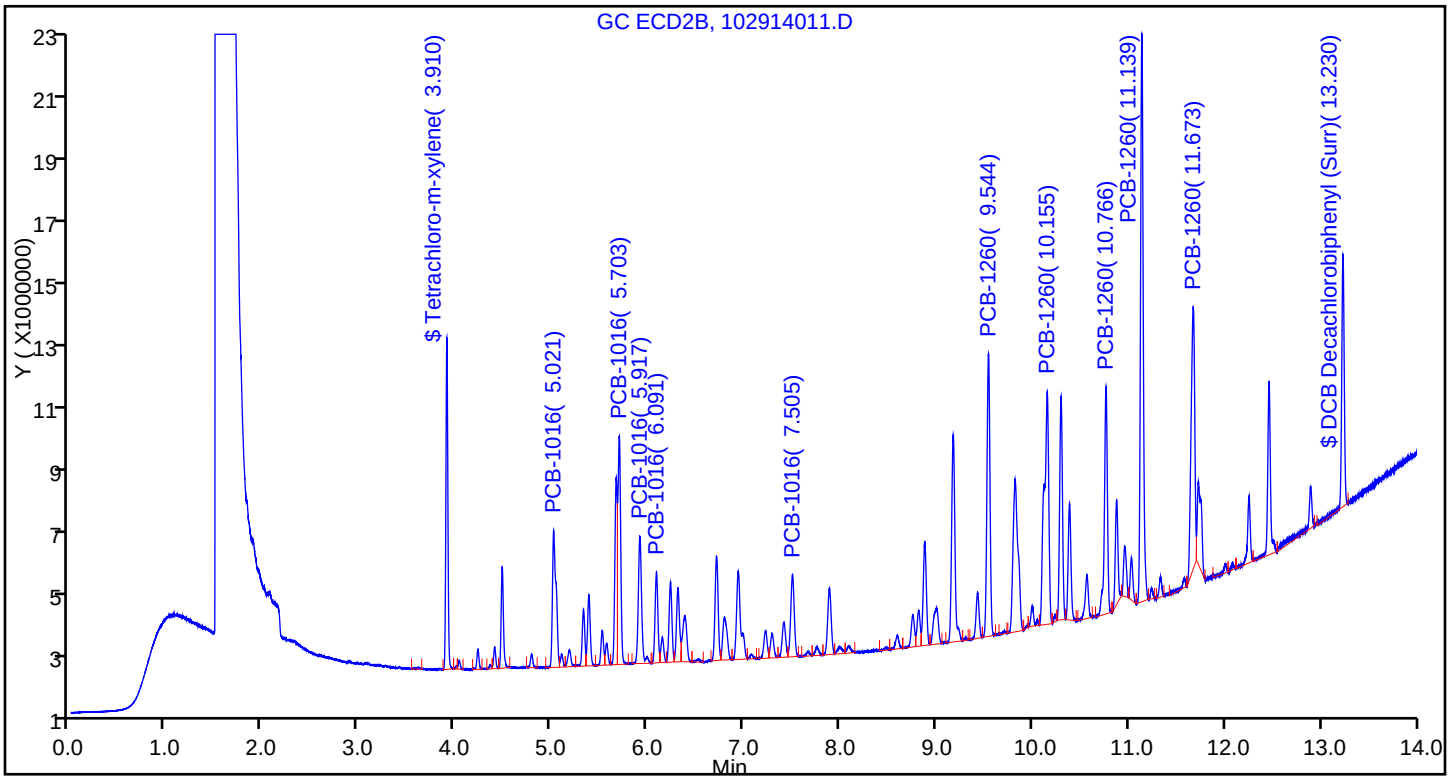
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914012.D
Lims ID: ICRT
Client ID:
Sample Type: ICRT Calib Level: 4
Inject. Date: 29-Oct-2014 11:25:06 ALS Bottle#: 11 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004073-010
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub8

Method: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 30-Oct-2014 05:57:55 Calib Date: 29-Oct-2014 12:22:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914015.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK015

First Level Reviewer: guptaa Date: 29-Oct-2014 15:16:51

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.242	3.242	0.000	37849259H	0.0250	0.0267	
2	3.911	3.911	0.000	27332769H	0.0250	0.0265	
						RPD = 1.01	
4 PCB-1016							
1	3.566	3.566	0.000	11960232H	0.5000	0.5179	
1	3.915	3.915	0.000	18414813H	0.5000	0.5124	
1	4.414	4.414	0.000	29782990H	0.5000	0.5271	
1	4.570	4.570	0.000	15723287H	0.5000	0.5285	
1	5.086	5.086	0.000	12591218H	0.5000	0.5286	
		Average of Peak Amounts =				0.5229	
2	5.022	5.022	0.000	10810335H	0.5000	0.5106	
2	5.705	5.705	0.000	18182027H	0.5000	0.5234	
2	5.920	5.920	0.000	10225761H	0.5000	0.5039	
2	6.091	6.091	0.000	7310314H	0.5000	0.5093	
2	7.505	7.505	0.000	6467792H	0.5000	0.4994	
		Average of Peak Amounts =				0.5093	
						RPD = 2.63	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	8.054	8.054	0.000	24599515H	0.5000	0.5345	
1	8.757	8.757	0.000	19610426H	0.5000	0.5325	
1	9.318	9.318	0.000	45263339H	0.5000	0.5158	
1	9.799	9.799	0.000	24773664H	0.5000	0.5132	
1	10.774	10.774	0.000	13924759H	0.5000	0.4988	
		Average of Peak Amounts =				0.5190	
2	9.543	9.543	0.000	23192539H	0.5000	0.5105	
2	10.155	10.155	0.000	18854044H	0.5000	0.5119	
2	10.766	10.766	0.000	18597564H	0.5000	0.5095	
2	11.139	11.139	0.000	47540557H	0.5000	0.5172	
2	11.673	11.673	0.000	22433809H	0.5000	0.5244	
		Average of Peak Amounts =				0.5147	
						RPD = 0.82	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.469	11.469	0.000	21916546H	0.0250	0.0250	
2	13.231	13.231	0.000	21136918H	0.0250	0.0256	
						RPD = 2.29	

Reagents:

GCAR1660CALL4_00008 Amount Added: 1.00 Units: mL

Report Date: 30-Oct-2014 05:57:56 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914012.D

Injection Date: 29-Oct-2014 11:25:06 Instrument ID: CHGC16

Lims ID: ICRT

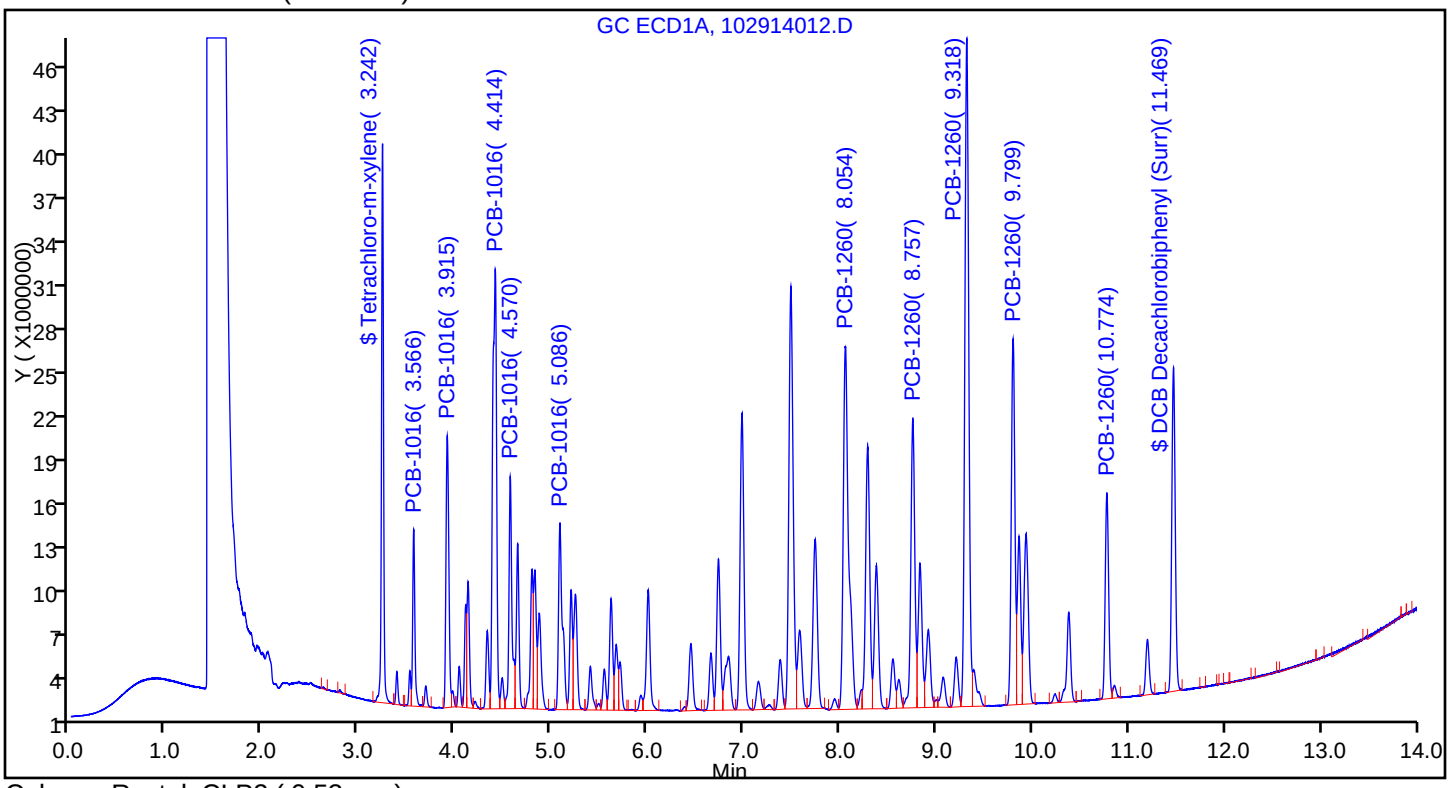
Client ID:

Operator ID: 402331 ALS Bottle#: 11 Worklist Smp#: 10

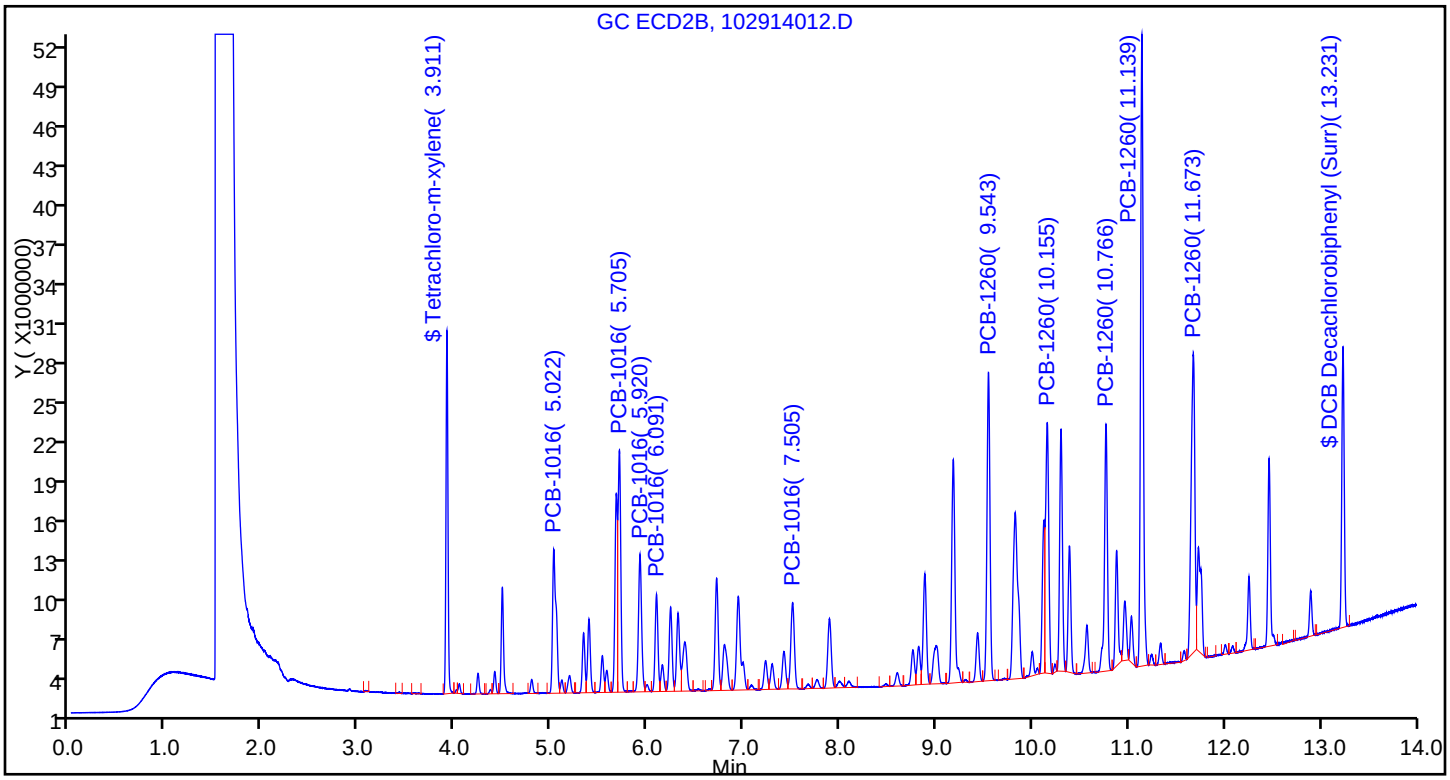
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914013.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 29-Oct-2014 11:44:23 ALS Bottle#: 12 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004073-011
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub8

Method: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 30-Oct-2014 05:57:51 Calib Date: 29-Oct-2014 12:22:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914015.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK015

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.243	3.242	0.001	72906172H	0.0500	0.0515	
2	3.912	3.911	0.001	52127794H	0.0500	0.0505	
						RPD = 2.01	
4 PCB-1016							
1	3.566	3.566	0.000	23371843H	1.00	1.01	
1	3.915	3.915	0.000	35701307H	1.00	0.99	
1	4.415	4.414	0.001	57923745H	1.00	1.03	
1	4.571	4.570	0.001	30087864H	1.00	1.01	
1	5.087	5.086	0.001	24563315H	1.00	1.03	
		Average of Peak Amounts =				1.01	
2	5.023	5.022	0.001	20565843H	1.00	0.9714	
2	5.706	5.705	0.001	35781753H	1.00	1.03	
2	5.920	5.920	0.000	19732383H	1.00	0.9723	
2	6.092	6.091	0.001	14229860H	1.00	0.99	
2	7.505	7.505	0.000	12775142H	1.00	0.9864	
		Average of Peak Amounts =				0.99	
						RPD = 2.43	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	8.054	8.054	0.000	47831940H	1.00	1.04	
1	8.756	8.757	-0.001	37976261H	1.00	1.03	
1	9.318	9.318	0.000	89989024H	1.00	1.03	
1	9.799	9.799	0.000	49350068H	1.00	1.02	
1	10.776	10.774	0.002	28016177H	1.00	1.00	
		Average of Peak Amounts =				1.02	
2	9.544	9.543	0.001	46154265H	1.00	1.02	
2	10.156	10.155	0.001	37114153H	1.00	1.01	
2	10.766	10.766	0.000	37879117H	1.00	1.04	
2	11.139	11.139	0.000	95239602H	1.00	1.04	
2	11.675	11.673	0.002	45217560H	1.00	1.06	
		Average of Peak Amounts =				1.03	
						RPD = 0.64	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.466	11.469	-0.003	43732126H	0.0500	0.0499	
2	13.230	13.231	-0.001	43232614H	0.0500	0.0524	
						RPD = 4.76	

Reagents:

GCAR1660CALL5_00009 Amount Added: 1.00 Units: mL

Report Date: 30-Oct-2014 05:57:52 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914013.D

Injection Date: 29-Oct-2014 11:44:23 Instrument ID: CHGC16

Lims ID: IC

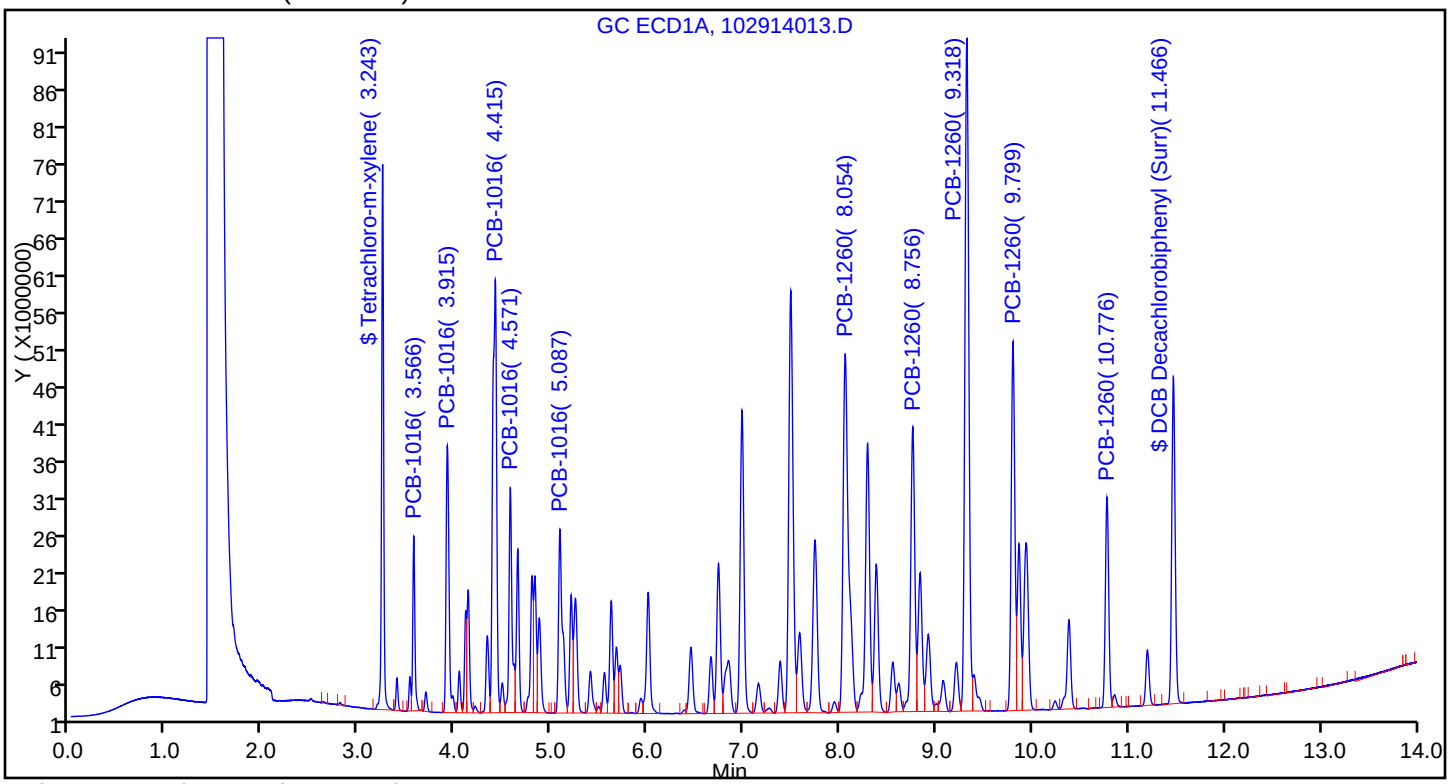
Client ID:

Operator ID: 402331 ALS Bottle#: 12 Worklist Smp#: 11

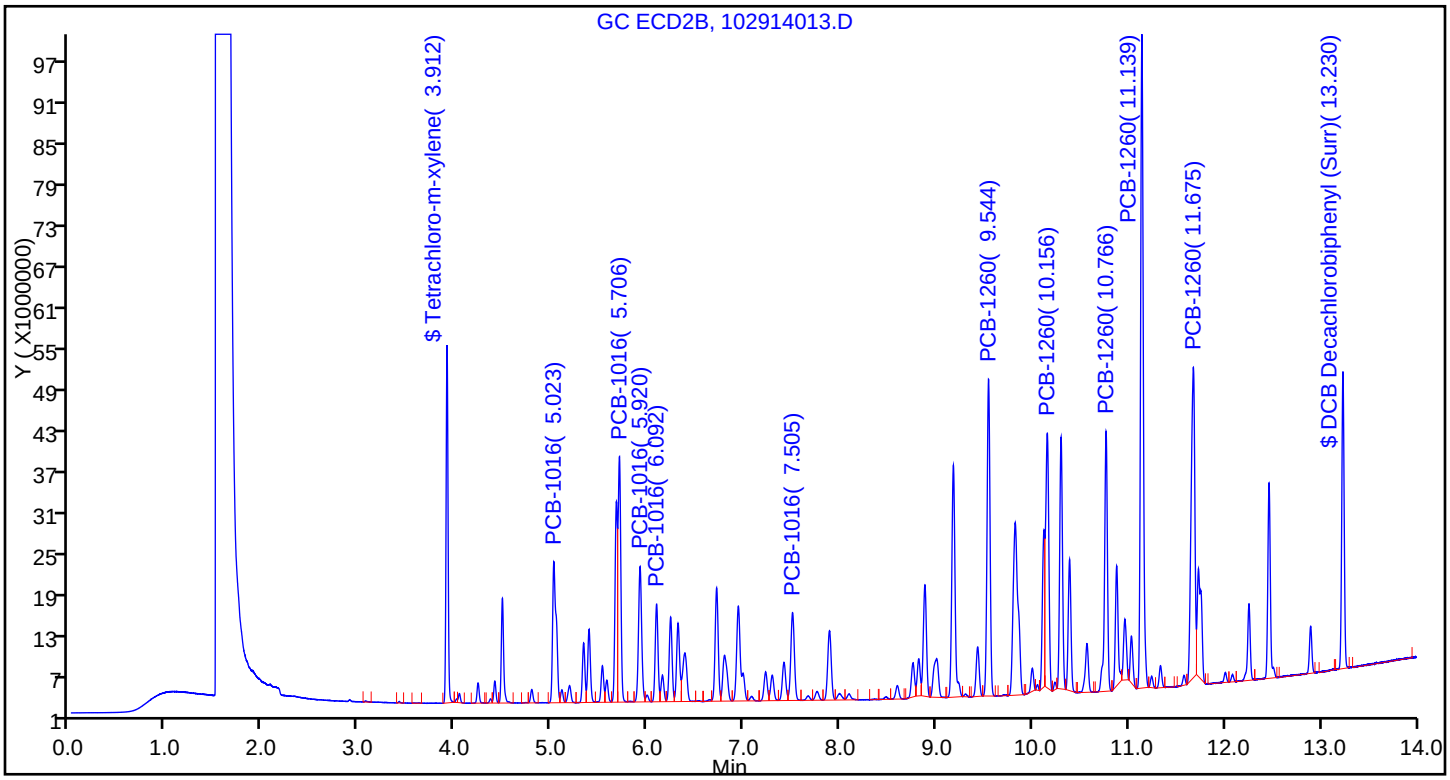
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914014.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 29-Oct-2014 12:03:08 ALS Bottle#: 13 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004073-012
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub8

Method: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 30-Oct-2014 05:57:47 Calib Date: 29-Oct-2014 12:22:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914015.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK015

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.241	3.242	-0.001	144298222H	0.1000	0.1019	
2	3.911	3.911	0.000	103286776H	0.1000	0.1000	
						RPD = 1.90	
4 PCB-1016							
1	3.564	3.566	-0.002	46111208H	2.00	2.00	
1	3.912	3.915	-0.003	69038204H	2.00	1.92	
1	4.411	4.414	-0.003	113433848H	2.00	2.01	
1	4.567	4.570	-0.003	59247277H	2.00	1.99	
1	5.082	5.086	-0.004	47018491H	2.00	1.97	
		Average of Peak Amounts =				1.98	
2	5.022	5.022	0.000	40343406H	2.00	1.91	
2	5.704	5.705	-0.001	69719138H	2.00	2.01	
2	5.917	5.920	-0.003	38991811H	2.00	1.92	
2	6.090	6.091	-0.001	27947119H	2.00	1.95	
2	7.503	7.505	-0.002	24714397H	2.00	1.91	
		Average of Peak Amounts =				1.94	
						RPD = 2.06	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	8.047	8.054	-0.007	95198000H	2.00	2.07	
1	8.751	8.757	-0.006	74480083H	2.00	2.02	
1	9.309	9.318	-0.009	182557562H	2.00	2.08	
1	9.793	9.799	-0.006	97276827H	2.00	2.02	
1	10.772	10.774	-0.002	55520824H	2.00	1.99	
		Average of Peak Amounts =				2.04	
2	9.542	9.543	-0.001	89815228H	2.00	1.98	
2	10.154	10.155	-0.001	73884140H	2.00	2.01	
2	10.765	10.766	-0.001	72862034H	2.00	2.00	
2	11.138	11.139	-0.001	189378660H	2.00	2.06	
2	11.674	11.673	0.001	92960126H	2.00	2.17	
		Average of Peak Amounts =				2.04	
						RPD = 0.37	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.464	11.469	-0.005	82886356H	0.1000	0.0946	
2	13.231	13.231	0.000	84452147H	0.1000	0.1023	
						RPD = 7.78	

Reagents:

GCAR1660CALL6_00007 Amount Added: 1.00 Units: mL

Report Date: 30-Oct-2014 05:57:48 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914014.D

Injection Date: 29-Oct-2014 12:03:08 Instrument ID: CHGC16

Lims ID: IC

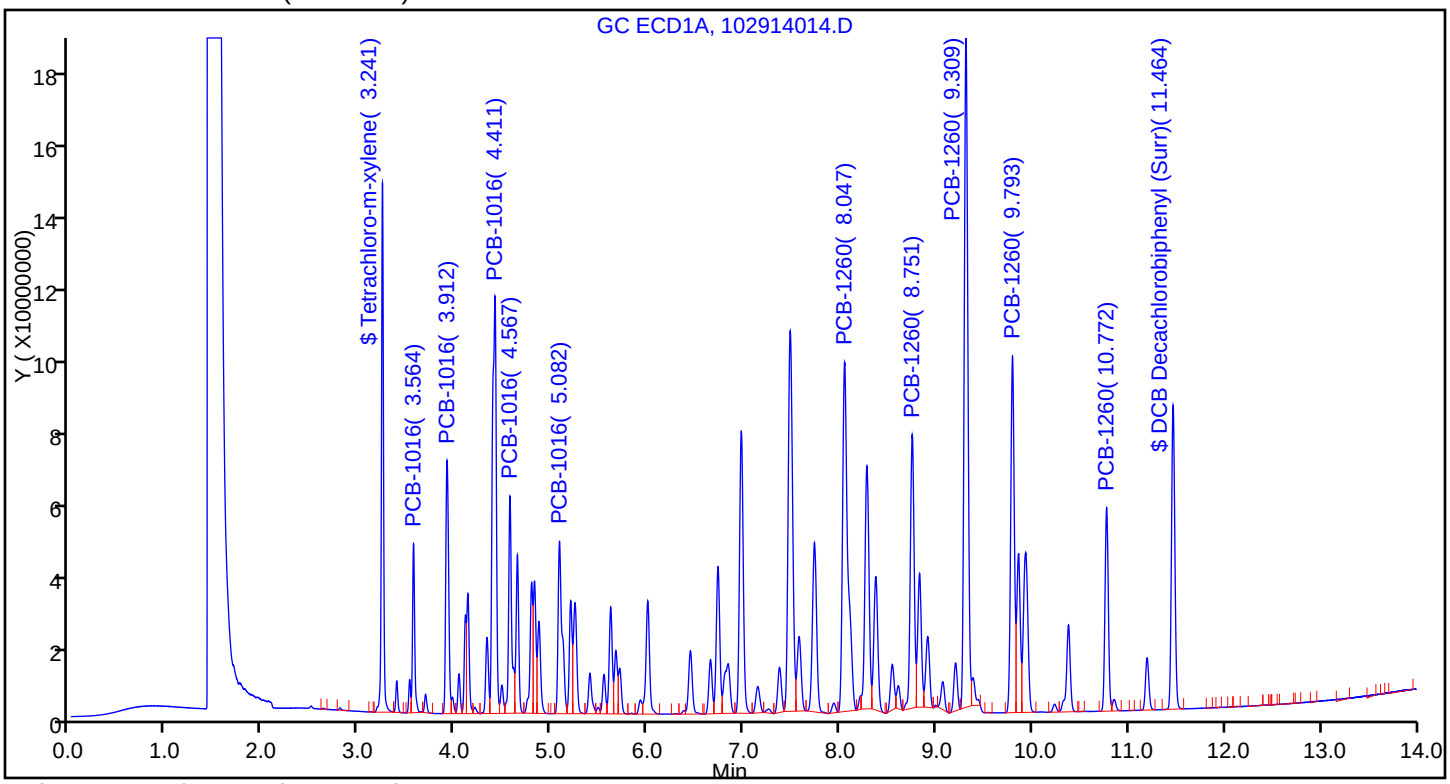
Client ID:

Operator ID: 402331 ALS Bottle#: 13 Worklist Smp#: 12

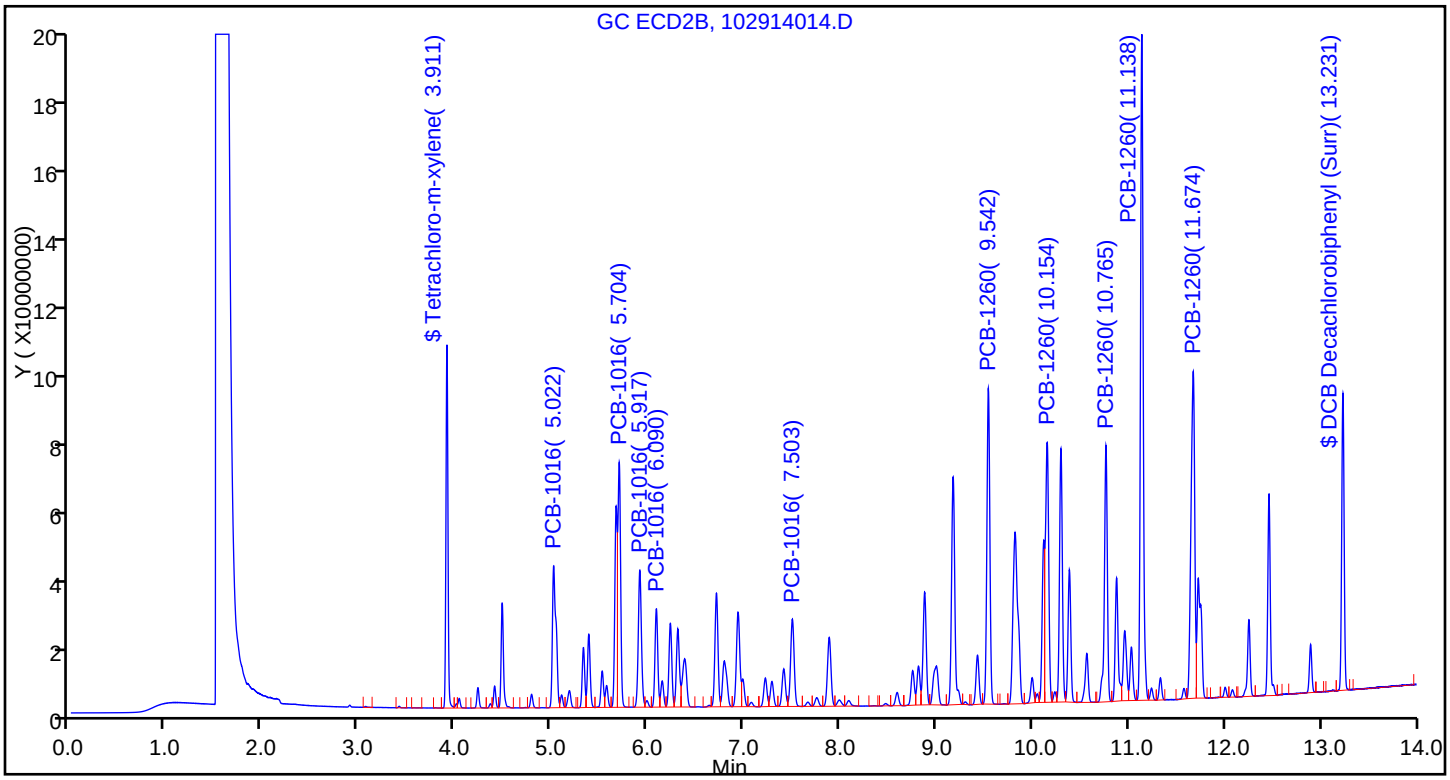
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914015.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 29-Oct-2014 12:22:21 ALS Bottle#: 14 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004073-013
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub8

Method: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 30-Oct-2014 05:57:43 Calib Date: 29-Oct-2014 12:22:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914015.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK015

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.246	3.242	0.004	265642857H	0.2000	0.1876	
2	3.915	3.911	0.004	193123897H	0.2000	0.1870	
						RPD = 0.34	
4 PCB-1016							
1	3.570	3.566	0.004	85270977H	4.00	3.69	
1	3.919	3.915	0.004	128301948H	4.00	3.57	
1	4.417	4.414	0.003	210820749H	4.00	3.73	
1	4.572	4.570	0.002	111818128H	4.00	3.76	
1	5.086	5.086	0.000	89401788H	4.00	3.75	
		Average of Peak Amounts =				3.70	
2	5.024	5.022	0.002	75349116H	4.00	3.56	
2	5.707	5.705	0.002	128620945H	4.00	3.70	
2	5.920	5.920	0.000	71736323H	4.00	3.53	
2	6.093	6.091	0.002	51591814H	4.00	3.59	
2	7.507	7.505	0.002	46048479H	4.00	3.56	
		Average of Peak Amounts =				3.59	
						RPD = 3.07	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	8.054	8.054	0.000	174382534H	4.00	3.79	
1	8.757	8.757	0.000	131792532H	4.00	3.58	
1	9.318	9.318	0.000	325162394H	4.00	3.71	
1	9.798	9.799	-0.001	186020325H	4.00	3.85	
1	10.775	10.774	0.001	105956878H	4.00	3.80	
		Average of Peak Amounts =				3.74	
2	9.545	9.543	0.002	166507106H	4.00	3.66	
2	10.155	10.155	0.000	139767676H	4.00	3.80	
2	10.768	10.766	0.002	137590198H	4.00	3.77	
2	11.140	11.139	0.001	362574247H	4.00	3.94	
2	11.676	11.673	0.003	175517622H	4.00	4.10	
		Average of Peak Amounts =				3.86	
						RPD = 2.92	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.466	11.469	-0.003	158795042H	0.2000	0.1813	
2	13.231	13.231	0.000	165125113H	0.2000	0.2000	
						RPD = 9.81	

Reagents:

GCAR1660CALL7_00008 Amount Added: 1.00 Units: mL

Report Date: 30-Oct-2014 05:57:44 Chrom Revision: 2.2 07-Oct-2014 12:16:06

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141029-4073.b\102914015.D

Injection Date: 29-Oct-2014 12:22:21 Instrument ID: CHGC16

Lims ID: IC

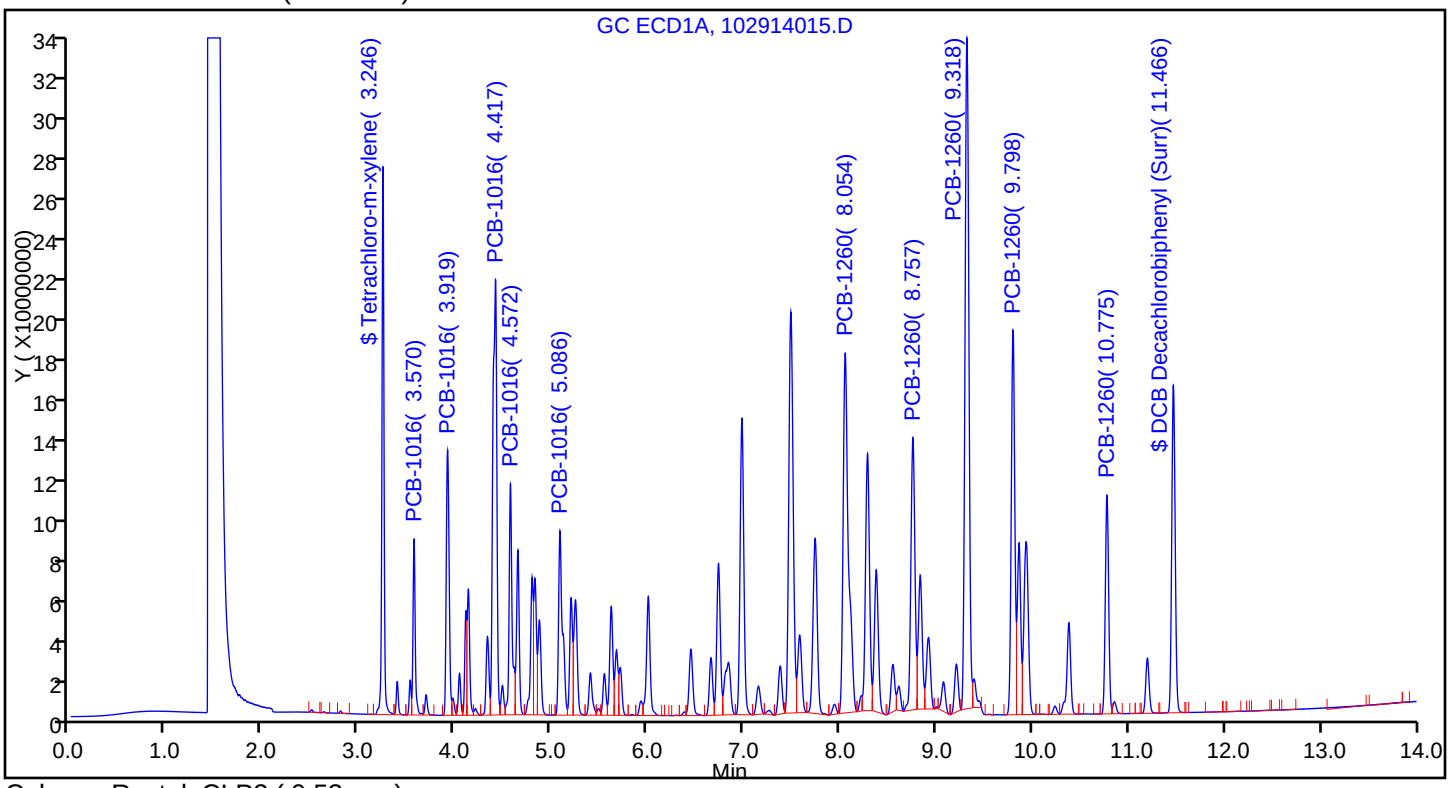
Client ID:

Operator ID: 402331 ALS Bottle#: 14 Worklist Smp#: 13

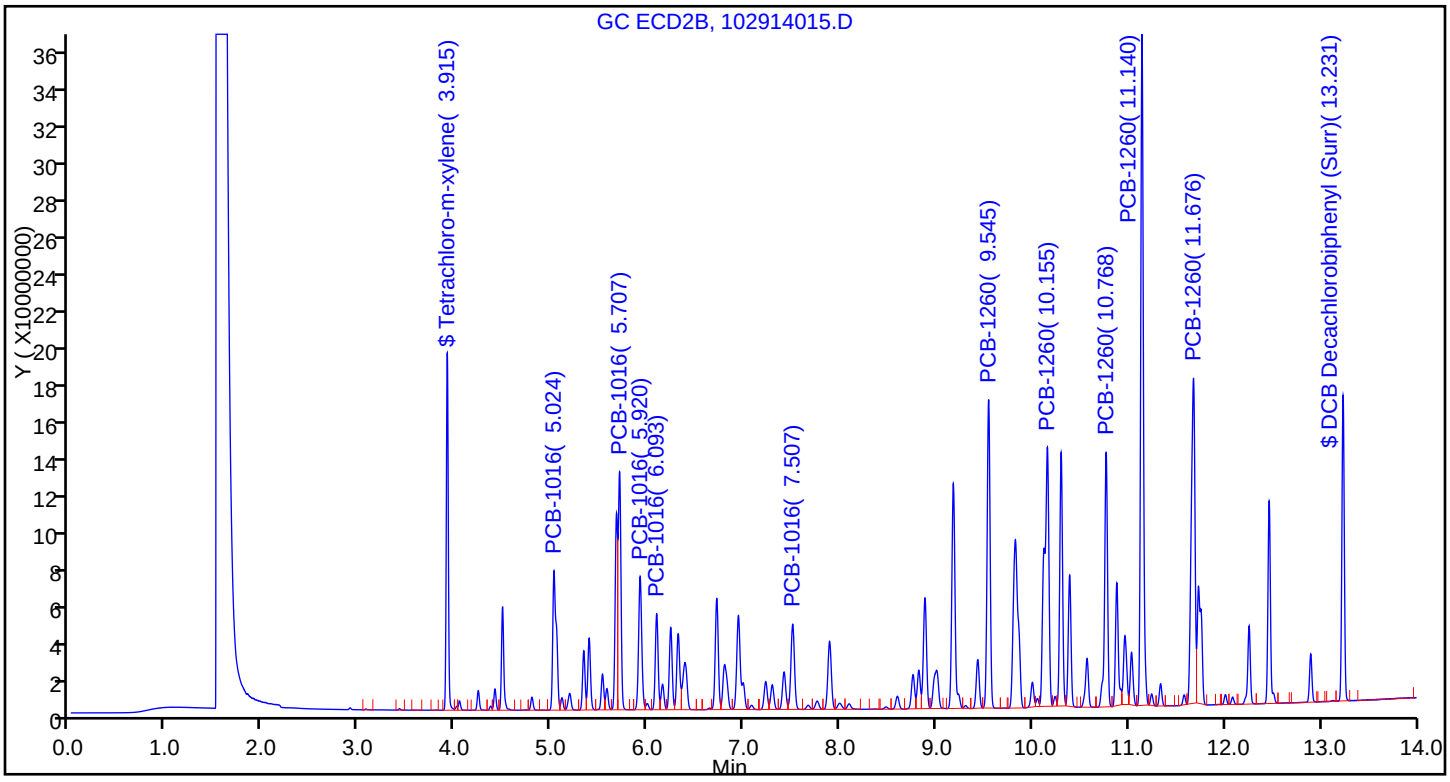
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCVRT 180-127055/1 Calibration Date: 12/03/2014 09:52

Instrument ID: CHGC16 Calib Start Date: 10/29/2014 10:27

GC Column: RTX-CLP1 ID: 0.53(mm) Calib End Date: 10/29/2014 12:22

Lab File ID: 120314001.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	23094491	21529693		0.932	1.00	-6.8	20.0
PCB-1016 Peak 2	Ave	35938044	32465871		0.903	1.00	-9.7	20.0
PCB-1016 Peak 3	Ave	56500522	53021938		0.938	1.00	-6.2	20.0
PCB-1016 Peak 4	Ave	29750798	27716491		0.932	1.00	-6.8	20.0
PCB-1016 Peak 5	Ave	23818709	22286215		0.936	1.00	-6.4	20.0
PCB-1260 Peak 1	Ave	46024762	46326329		1.01	1.00	0.7	20.0
PCB-1260 Peak 2	Ave	36823781	39665625		1.08	1.00	7.7	20.0
PCB-1260 Peak 3	Ave	87761810	102397786		1.17	1.00	16.7	20.0
PCB-1260 Peak 4	Ave	48268968	55587751		1.15	1.00	15.2	20.0
PCB-1260 Peak 5	Ave	27918509	31181247		1.12	1.00	11.7	20.0
Tetrachloro-m-xylene (Surr)	Ave	1415958915	1366163000		0.0482	0.0500	-3.5	20.0
DCB Decachlorobiphenyl (Surr)	Ave	875809304	914281780		0.0522	0.0500	4.4	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCVRT 180-127055/1 Calibration Date: 12/03/2014 09:52

Instrument ID: CHGC16 Calib Start Date: 10/29/2014 10:27

GC Column: RTX-CLP1 ID: 0.53(mm) Calib End Date: 10/29/2014 12:22

Lab File ID: 120314001.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.52	3.47	3.57
PCB-1016 Peak 2	3.85	3.80	3.90
PCB-1016 Peak 3	4.34	4.29	4.39
PCB-1016 Peak 4	4.49	4.44	4.54
PCB-1016 Peak 5	4.99	4.94	5.04
PCB-1260 Peak 1	7.87	7.82	7.92
PCB-1260 Peak 2	8.58	8.53	8.63
PCB-1260 Peak 3	9.13	9.08	9.18
PCB-1260 Peak 4	9.61	9.56	9.66
PCB-1260 Peak 5	10.59	10.54	10.64
Tetrachloro-m-xylene (Surr)	3.20	3.15	3.25
DCB Decachlorobiphenyl (Surr)	11.28	11.21	11.35

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314001.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 03-Dec-2014 09:52:12 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004694-001
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub8

Method: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 03-Dec-2014 14:29:13 Calib Date: 03-Dec-2014 02:40:17
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141202-4675.b\120214066.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK026

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.202	3.202	0.000	68308150H	0.0500	0.0482	
2	3.860	3.860	0.000	49705012H	0.0500	0.0481	
						RPD = 0.25	
4 PCB-1016							
1	3.515	3.515	0.000	21529693H	1.00	0.9322	
1	3.853	3.853	0.000	32465871H	1.00	0.9034	
1	4.336	4.336	0.000	53021938H	1.00	0.9384	
1	4.487	4.487	0.000	27716491H	1.00	0.9316	
1	4.986	4.986	0.000	22286215H	1.00	0.9357	
		Average of Peak Amounts =				0.9283	
2	4.935	4.935	0.000	19294935H	1.00	0.9114	
2	5.600	5.600	0.000	33039180H	1.00	0.9511	
2	5.810	5.810	0.000	18088355H	1.00	0.8913	
2	5.978	5.978	0.000	13071167H	1.00	0.9106	
2	7.358	7.358	0.000	12182933H	1.00	0.9407	
		Average of Peak Amounts =				0.9210	
						RPD = 0.78	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	7.868	7.868	0.000	46326329H	1.00	1.01	
1	8.575	8.575	0.000	39665625H	1.00	1.08	
1	9.134	9.134	0.000	102397786H	1.00	1.17	
1	9.611	9.611	0.000	55587751H	1.00	1.15	
1	10.589	10.589	0.000	31181247H	1.00	1.12	
		Average of Peak Amounts =				1.10	
2	9.398	9.398	0.000	46378763H	1.00	1.02	
2	10.010	10.010	0.000	38718864H	1.00	1.05	
2	10.621	10.621	0.000	39252103H	1.00	1.08	
2	10.993	10.993	0.000	105295487H	1.00	1.15	
2	11.526	11.526	0.000	51341151H	1.00	1.20	
		Average of Peak Amounts =				1.10	
						RPD = 0.47	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.279	11.279	0.000	45714089H	0.0500	0.0522	
2	13.069	13.069	0.000	46102441H	0.0500	0.0558	
						RPD = 6.75	

Reagents:

GCAR1660CALL5_00009 Amount Added: 1.00 Units: mL

Report Date: 03-Dec-2014 14:29:13 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314001.D

Injection Date: 03-Dec-2014 09:52:12 Instrument ID: CHGC16

Lims ID: CCVRT

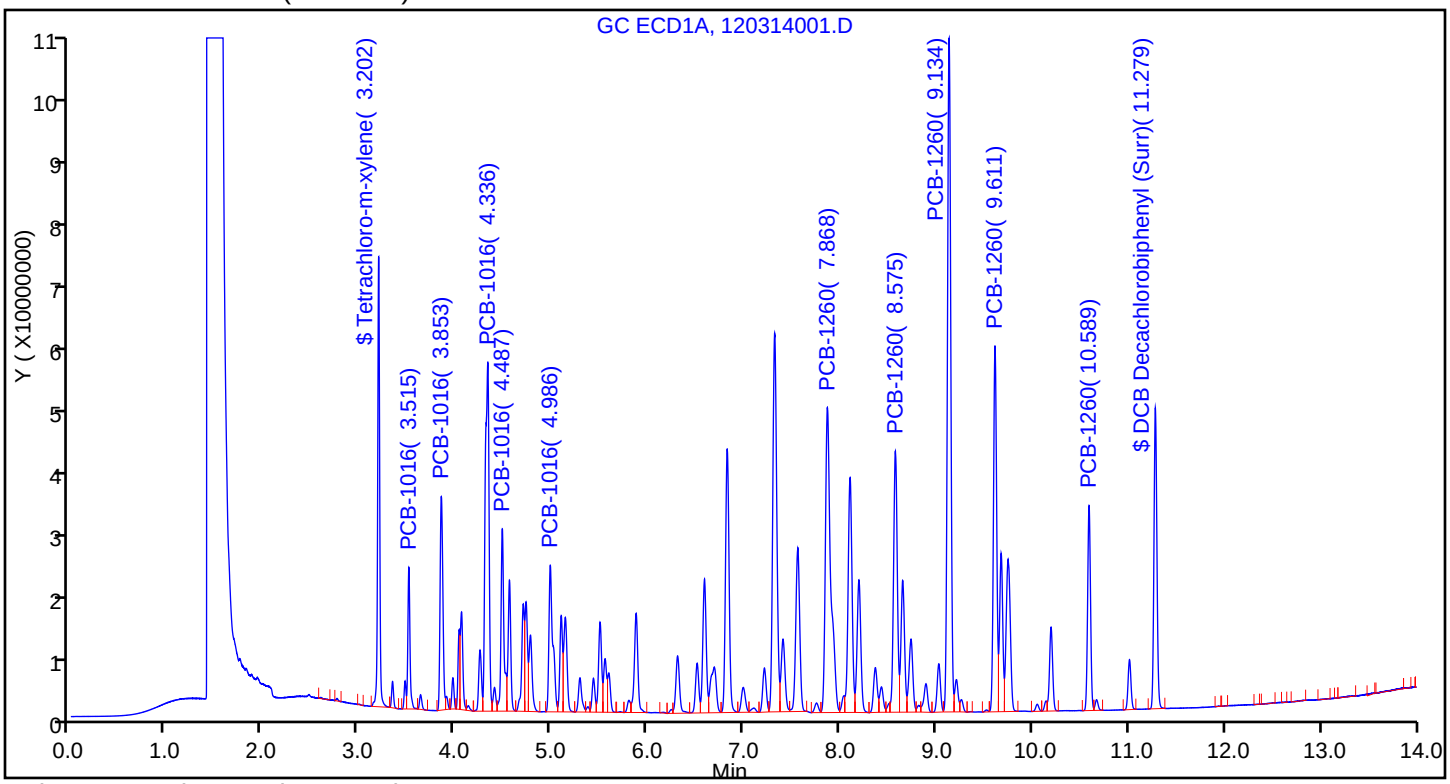
Client ID:

Operator ID: 402331 ALS Bottle#: 1 Worklist Smp#: 1

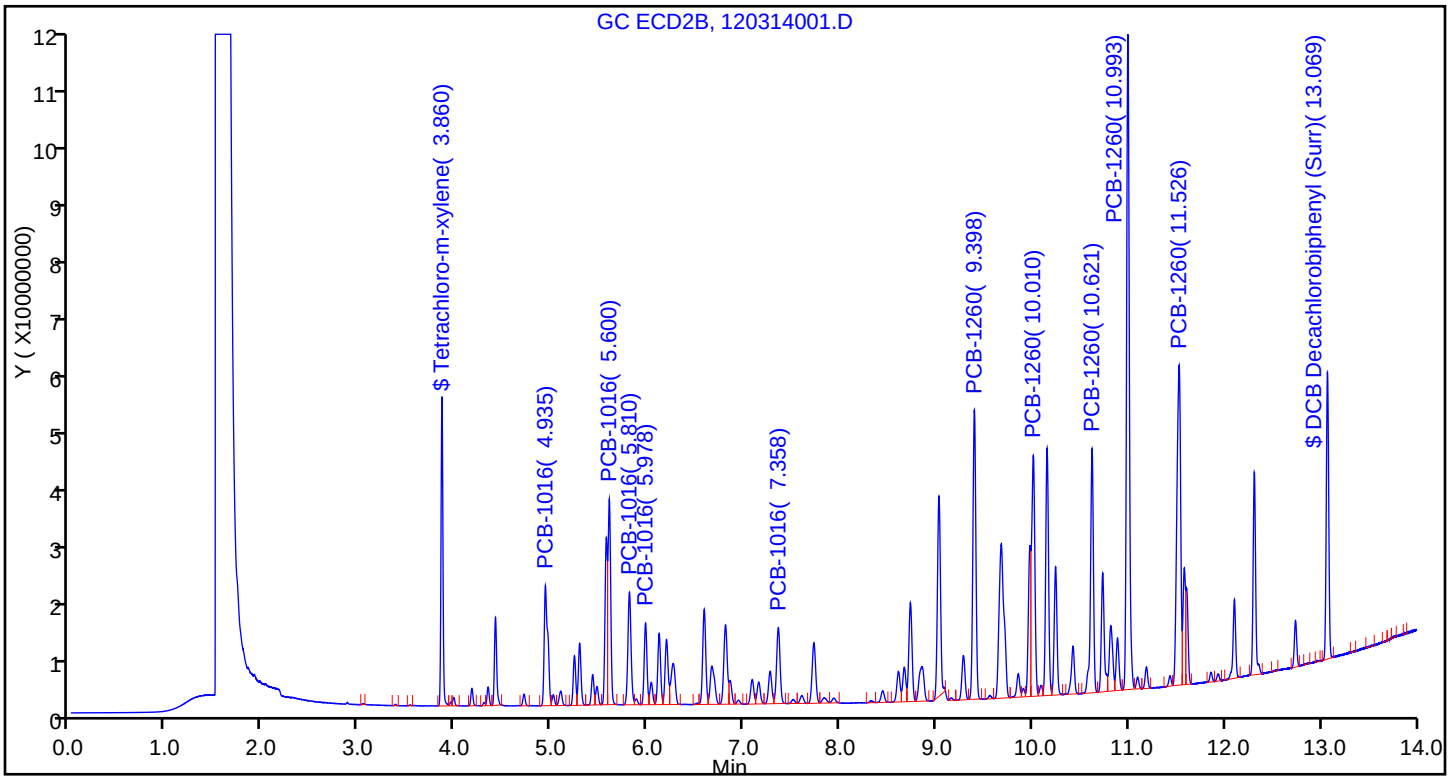
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCVRT 180-127055/1 Calibration Date: 12/03/2014 09:52

Instrument ID: CHGC16 Calib Start Date: 10/29/2014 10:27

GC Column: RTX-CLP2 ID: 0.53(mm) Calib End Date: 10/29/2014 12:22

Lab File ID: 120314001.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	21171157	19294935		0.911	1.00	-8.9	20.0
PCB-1016 Peak 2	Ave	34738329	33039180		0.951	1.00	-4.9	20.0
PCB-1016 Peak 3	Ave	20294869	18088355		0.891	1.00	-10.9	20.0
PCB-1016 Peak 4	Ave	14353894	13071167		0.911	1.00	-8.9	20.0
PCB-1016 Peak 5	Ave	12951079	12182933		0.941	1.00	-5.9	20.0
PCB-1260 Peak 1	Ave	45434544	46378763		1.02	1.00	2.1	20.0
PCB-1260 Peak 2	Ave	36829086	38718864		1.05	1.00	5.1	20.0
PCB-1260 Peak 3	Ave	36498776	39252103		1.08	1.00	7.5	20.0
PCB-1260 Peak 4	Ave	91912991	105295487		1.15	1.00	14.6	20.0
PCB-1260 Peak 5	Ave	42780108	51341151		1.20	1.00	20.0	20.0
Tetrachloro-m-xylene (Surr)	Ave	1032953155	994100240		0.0481	0.0500	-3.8	20.0
DCB Decachlorobiphenyl (Surr)	Ave	825552205	922048820		0.0558	0.0500	11.7	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCVRT 180-127055/1 Calibration Date: 12/03/2014 09:52

Instrument ID: CHGC16 Calib Start Date: 10/29/2014 10:27

GC Column: RTX-CLP2 ID: 0.53(mm) Calib End Date: 10/29/2014 12:22

Lab File ID: 120314001.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	4.94	4.89	4.99
PCB-1016 Peak 2	5.60	5.55	5.65
PCB-1016 Peak 3	5.81	5.76	5.86
PCB-1016 Peak 4	5.98	5.93	6.03
PCB-1016 Peak 5	7.36	7.31	7.41
PCB-1260 Peak 1	9.40	9.35	9.45
PCB-1260 Peak 2	10.01	9.96	10.06
PCB-1260 Peak 3	10.62	10.57	10.67
PCB-1260 Peak 4	10.99	10.94	11.04
PCB-1260 Peak 5	11.53	11.48	11.58
Tetrachloro-m-xylene (Surr)	3.86	3.81	3.91
DCB Decachlorobiphenyl (Surr)	13.07	13.00	13.14

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314001.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 03-Dec-2014 09:52:12 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004694-001
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub8

Method: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 03-Dec-2014 14:29:13 Calib Date: 03-Dec-2014 02:40:17
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141202-4675.b\120214066.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK026

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.202	3.202	0.000	68308150H	0.0500	0.0482	
2	3.860	3.860	0.000	49705012H	0.0500	0.0481	
						RPD = 0.25	
4 PCB-1016							
1	3.515	3.515	0.000	21529693H	1.00	0.9322	
1	3.853	3.853	0.000	32465871H	1.00	0.9034	
1	4.336	4.336	0.000	53021938H	1.00	0.9384	
1	4.487	4.487	0.000	27716491H	1.00	0.9316	
1	4.986	4.986	0.000	22286215H	1.00	0.9357	
		Average of Peak Amounts =				0.9283	
2	4.935	4.935	0.000	19294935H	1.00	0.9114	
2	5.600	5.600	0.000	33039180H	1.00	0.9511	
2	5.810	5.810	0.000	18088355H	1.00	0.8913	
2	5.978	5.978	0.000	13071167H	1.00	0.9106	
2	7.358	7.358	0.000	12182933H	1.00	0.9407	
		Average of Peak Amounts =				0.9210	
						RPD = 0.78	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	7.868	7.868	0.000	46326329H	1.00	1.01	
1	8.575	8.575	0.000	39665625H	1.00	1.08	
1	9.134	9.134	0.000	102397786H	1.00	1.17	
1	9.611	9.611	0.000	55587751H	1.00	1.15	
1	10.589	10.589	0.000	31181247H	1.00	1.12	
		Average of Peak Amounts =				1.10	
2	9.398	9.398	0.000	46378763H	1.00	1.02	
2	10.010	10.010	0.000	38718864H	1.00	1.05	
2	10.621	10.621	0.000	39252103H	1.00	1.08	
2	10.993	10.993	0.000	105295487H	1.00	1.15	
2	11.526	11.526	0.000	51341151H	1.00	1.20	
		Average of Peak Amounts =				1.10	
						RPD = 0.47	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.279	11.279	0.000	45714089H	0.0500	0.0522	
2	13.069	13.069	0.000	46102441H	0.0500	0.0558	
						RPD = 6.75	

Reagents:

GCAR1660CALL5_00009 Amount Added: 1.00 Units: mL

Report Date: 03-Dec-2014 14:29:14 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314001.D

Injection Date: 03-Dec-2014 09:52:12 Instrument ID: CHGC16

Lims ID: CCVRT

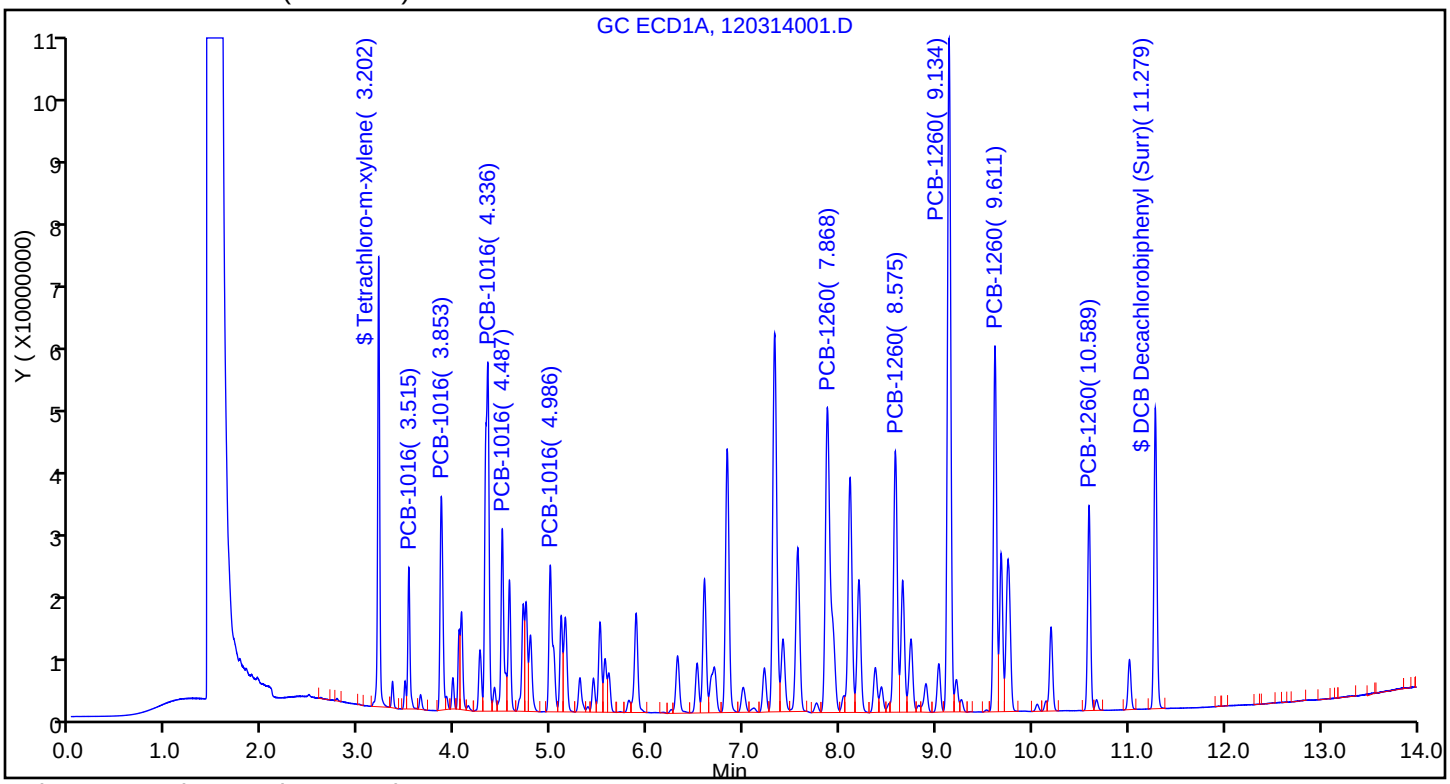
Client ID:

Operator ID: 402331 ALS Bottle#: 1 Worklist Smp#: 1

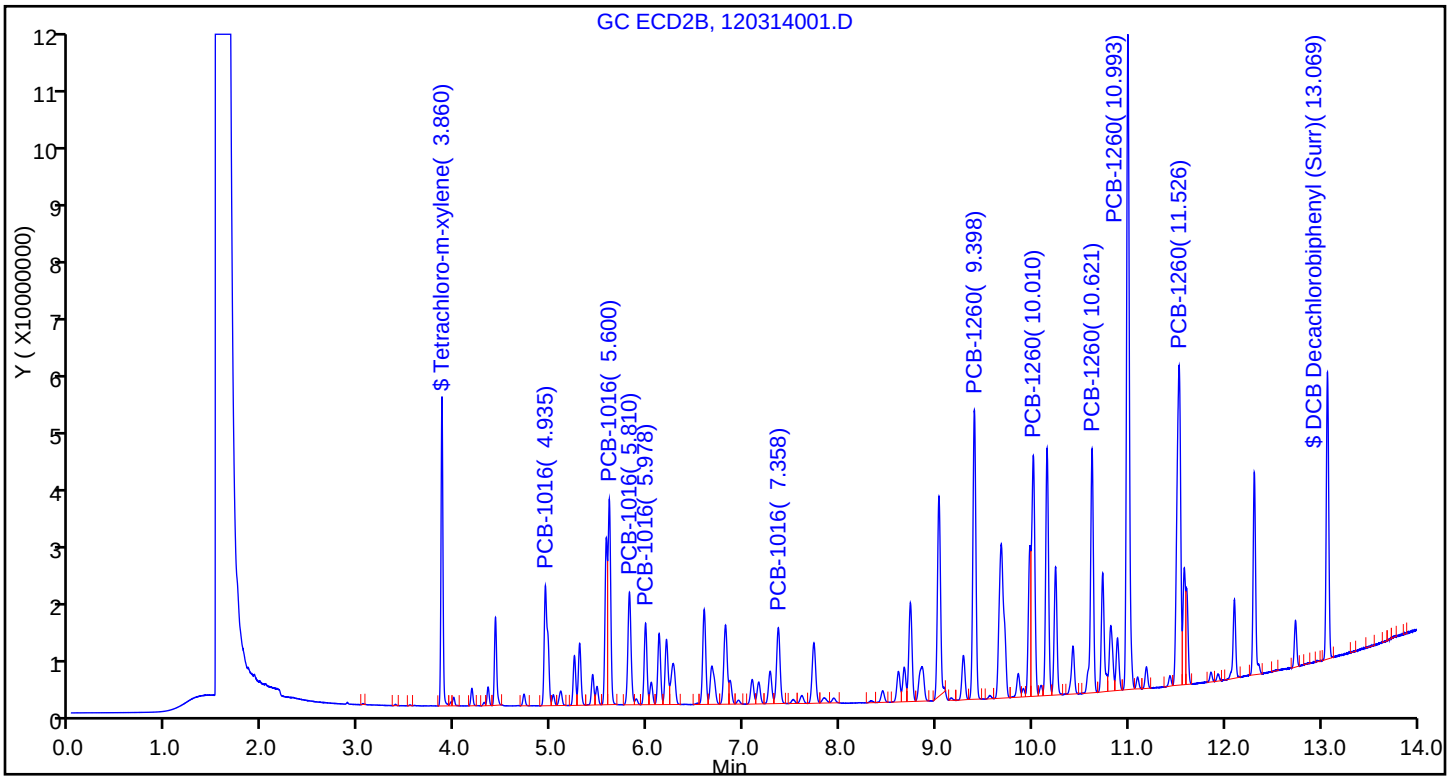
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCV 180-127055/35 Calibration Date: 12/03/2014 21:32

Instrument ID: CHGC16 Calib Start Date: 10/29/2014 10:27

GC Column: RTX-CLP1 ID: 0.53(mm) Calib End Date: 10/29/2014 12:22

Lab File ID: 120314038.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	23094491	21585703		0.935	1.00	-6.5	20.0
PCB-1016 Peak 2	Ave	35938044	32682799		0.909	1.00	-9.1	20.0
PCB-1016 Peak 3	Ave	56500522	55855188		0.989	1.00	-1.1	20.0
PCB-1016 Peak 4	Ave	29750798	29422661		0.989	1.00	-1.1	20.0
PCB-1016 Peak 5	Ave	23818709	24295979		1.02	1.00	2.0	20.0
PCB-1260 Peak 1	Ave	46024762	49668392		1.08	1.00	7.9	20.0
PCB-1260 Peak 2	Ave	36823781	42839413		1.16	1.00	16.3	20.0
PCB-1260 Peak 3	Ave	87761810	106284882		1.21	1.00	21.1*	20.0
PCB-1260 Peak 4	Ave	48268968	55681976		1.15	1.00	15.4	20.0
PCB-1260 Peak 5	Ave	27918509	30862208		1.11	1.00	10.5	20.0
Tetrachloro-m-xylene (Surr)	Ave	1415958915	1365928040		0.0482	0.0500	-3.5	20.0
DCB Decachlorobiphenyl (Surr)	Ave	875809304	889919800		0.0508	0.0500	1.6	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCV 180-127055/35 Calibration Date: 12/03/2014 21:32

Instrument ID: CHGC16 Calib Start Date: 10/29/2014 10:27

GC Column: RTX-CLP1 ID: 0.53(mm) Calib End Date: 10/29/2014 12:22

Lab File ID: 120314038.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.51	3.46	3.56
PCB-1016 Peak 2	3.85	3.80	3.90
PCB-1016 Peak 3	4.33	4.28	4.38
PCB-1016 Peak 4	4.48	4.43	4.53
PCB-1016 Peak 5	4.98	4.93	5.03
PCB-1260 Peak 1	7.86	7.81	7.91
PCB-1260 Peak 2	8.57	8.52	8.62
PCB-1260 Peak 3	9.13	9.08	9.18
PCB-1260 Peak 4	9.61	9.56	9.66
PCB-1260 Peak 5	10.59	10.54	10.64
Tetrachloro-m-xylene (Surr)	3.20	3.15	3.25
DCB Decachlorobiphenyl (Surr)	11.28	11.21	11.35

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314038.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 03-Dec-2014 21:32:26 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004694-035
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub8

Method: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 04-Dec-2014 14:13:52 Calib Date: 03-Dec-2014 02:40:17
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141202-4675.b\120214066.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK004

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.200	3.200	0.000	68296402H	0.0500	0.0482	
2	3.860	3.860	0.000	49543836H	0.0500	0.0480	
						RPD = 0.56	
4 PCB-1016							
1	3.513	3.513	0.000	21585703H	1.00	0.9347	
1	3.851	3.851	0.000	32682799H	1.00	0.9094	
1	4.333	4.333	0.000	55855188H	1.00	0.9886	
1	4.484	4.484	0.000	29422661H	1.00	0.9890	
1	4.983	4.983	0.000	24295979H	1.00	1.02	
		Average of Peak Amounts =				0.9683	
2	4.936	4.936	0.000	19470802H	1.00	0.9197	
2	5.601	5.601	0.000	33858659H	1.00	0.9747	
2	5.810	5.810	0.000	18472330H	1.00	0.9102	
2	5.978	5.978	0.000	13410852H	1.00	0.9343	
2	7.359	7.359	0.000	12717305H	1.00	0.9819	
		Average of Peak Amounts =				0.9442	
						RPD = 2.53	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	7.864	7.864	0.000	49668392H	1.00	1.08	
1	8.571	8.571	0.000	42839413H	1.00	1.16	
1	9.129	9.129	0.000	106284882H	1.00	1.21	
1	9.610	9.610	0.000	55681976H	1.00	1.15	
1	10.586	10.586	0.000	30862208H	1.00	1.11	
		Average of Peak Amounts =				1.14	
2	9.398	9.398	0.000	46898815H	1.00	1.03	
2	10.012	10.012	0.000	37322779H	1.00	1.01	
2	10.622	10.622	0.000	36041248H	1.00	0.9875	
2	10.995	10.995	0.000	105101216H	1.00	1.14	
2	11.527	11.527	0.000	45291430H	1.00	1.06	
		Average of Peak Amounts =				1.05	
						RPD = 8.72	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.276	11.276	0.000	44495990H	0.0500	0.0508	
2	13.070	13.070	0.000	44988722H	0.0500	0.0545	
						RPD = 7.01	

Reagents:

GCAR1660CALL5_00009 Amount Added: 1.00 Units: mL

Report Date: 04-Dec-2014 14:13:55 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314038.D

Injection Date: 03-Dec-2014 21:32:26 Instrument ID: CHGC16

Lims ID: CCV

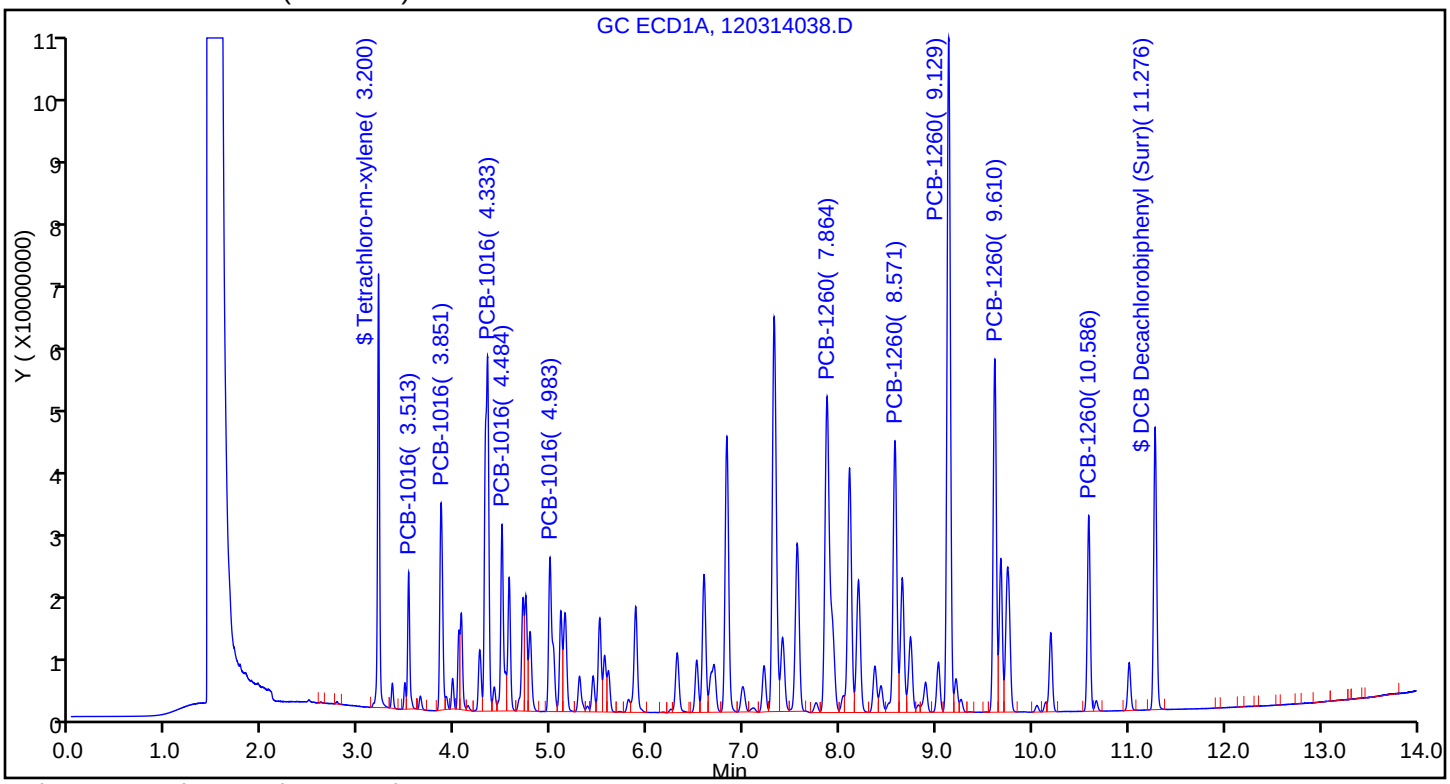
Client ID:

Operator ID: 402331 ALS Bottle#: 35 Worklist Smp#: 35

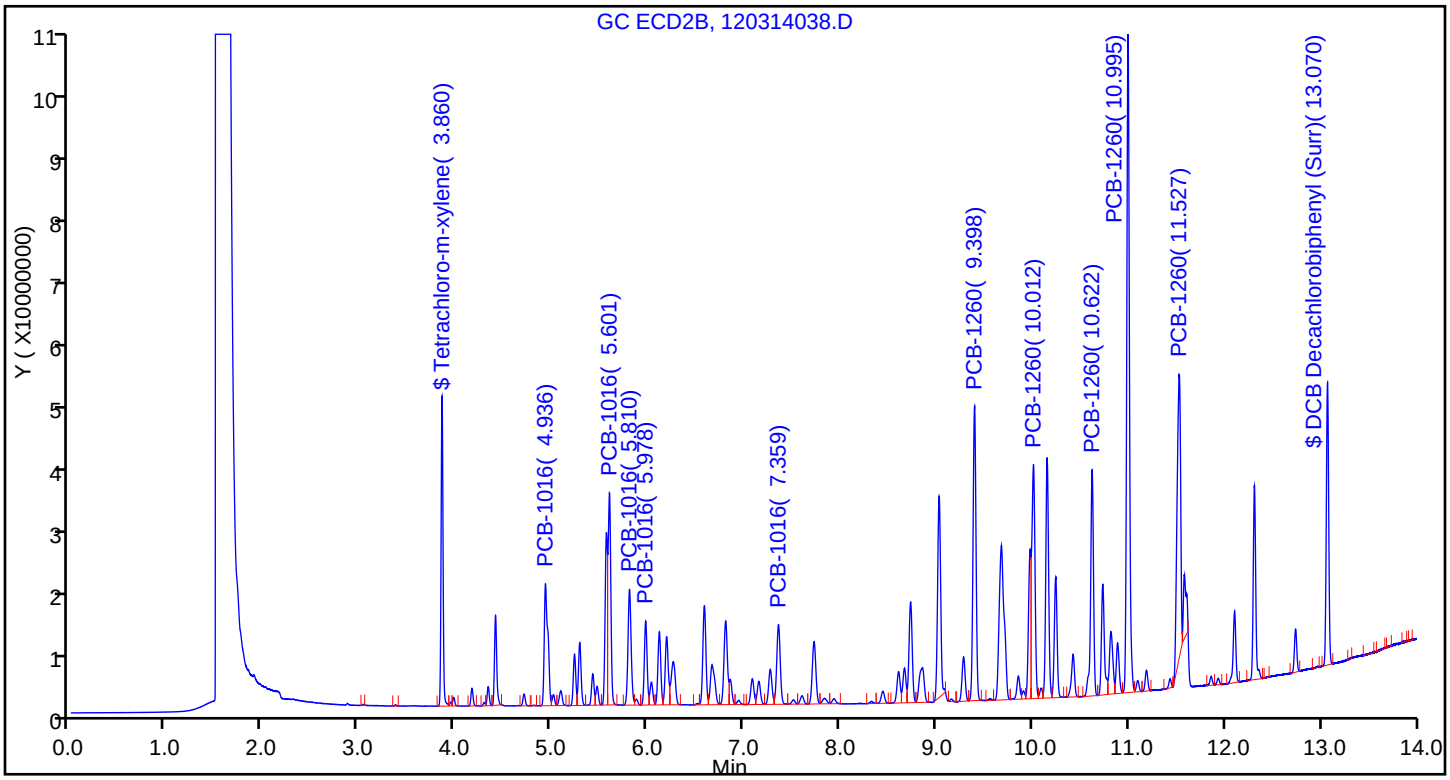
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCV 180-127055/35 Calibration Date: 12/03/2014 21:32

Instrument ID: CHGC16 Calib Start Date: 10/29/2014 10:27

GC Column: RTX-CLP2 ID: 0.53(mm) Calib End Date: 10/29/2014 12:22

Lab File ID: 120314038.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	21171157	19470802		0.920	1.00	-8.0	20.0
PCB-1016 Peak 2	Ave	34738329	33858659		0.975	1.00	-2.5	20.0
PCB-1016 Peak 3	Ave	20294869	18472330		0.910	1.00	-9.0	20.0
PCB-1016 Peak 4	Ave	14353894	13410852		0.934	1.00	-6.6	20.0
PCB-1016 Peak 5	Ave	12951079	12717305		0.982	1.00	-1.8	20.0
PCB-1260 Peak 1	Ave	45434544	46898815		1.03	1.00	3.2	20.0
PCB-1260 Peak 2	Ave	36829086	37322779		1.01	1.00	1.3	20.0
PCB-1260 Peak 3	Ave	36498776	36041248		0.987	1.00	-1.3	20.0
PCB-1260 Peak 4	Ave	91912991	105101216		1.14	1.00	14.3	20.0
PCB-1260 Peak 5	Ave	42780108	45291430		1.06	1.00	5.9	20.0
Tetrachloro-m-xylene (Surr)	Ave	1032953155	990876720		0.0480	0.0500	-4.1	20.0
DCB Decachlorobiphenyl (Surr)	Ave	825552205	899774440		0.0545	0.0500	9.0	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCV 180-127055/35 Calibration Date: 12/03/2014 21:32

Instrument ID: CHGC16 Calib Start Date: 10/29/2014 10:27

GC Column: RTX-CLP2 ID: 0.53(mm) Calib End Date: 10/29/2014 12:22

Lab File ID: 120314038.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	4.94	4.89	4.99
PCB-1016 Peak 2	5.60	5.55	5.65
PCB-1016 Peak 3	5.81	5.76	5.86
PCB-1016 Peak 4	5.98	5.93	6.03
PCB-1016 Peak 5	7.36	7.31	7.41
PCB-1260 Peak 1	9.40	9.35	9.45
PCB-1260 Peak 2	10.01	9.96	10.06
PCB-1260 Peak 3	10.62	10.57	10.67
PCB-1260 Peak 4	11.00	10.95	11.05
PCB-1260 Peak 5	11.53	11.48	11.58
Tetrachloro-m-xylene (Surr)	3.86	3.81	3.91
DCB Decachlorobiphenyl (Surr)	13.07	13.00	13.14

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314038.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 03-Dec-2014 21:32:26 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004694-035
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub8

Method: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 04-Dec-2014 14:13:52 Calib Date: 03-Dec-2014 02:40:17
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141202-4675.b\120214066.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK004

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.200	3.200	0.000	68296402H	0.0500	0.0482	
2	3.860	3.860	0.000	49543836H	0.0500	0.0480	
						RPD = 0.56	
4 PCB-1016							
1	3.513	3.513	0.000	21585703H	1.00	0.9347	
1	3.851	3.851	0.000	32682799H	1.00	0.9094	
1	4.333	4.333	0.000	55855188H	1.00	0.9886	
1	4.484	4.484	0.000	29422661H	1.00	0.9890	
1	4.983	4.983	0.000	24295979H	1.00	1.02	
		Average of Peak Amounts =				0.9683	
2	4.936	4.936	0.000	19470802H	1.00	0.9197	
2	5.601	5.601	0.000	33858659H	1.00	0.9747	
2	5.810	5.810	0.000	18472330H	1.00	0.9102	
2	5.978	5.978	0.000	13410852H	1.00	0.9343	
2	7.359	7.359	0.000	12717305H	1.00	0.9819	
		Average of Peak Amounts =				0.9442	
						RPD = 2.53	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	7.864	7.864	0.000	49668392H	1.00	1.08	
1	8.571	8.571	0.000	42839413H	1.00	1.16	
1	9.129	9.129	0.000	106284882H	1.00	1.21	
1	9.610	9.610	0.000	55681976H	1.00	1.15	
1	10.586	10.586	0.000	30862208H	1.00	1.11	
		Average of Peak Amounts =				1.14	
2	9.398	9.398	0.000	46898815H	1.00	1.03	
2	10.012	10.012	0.000	37322779H	1.00	1.01	
2	10.622	10.622	0.000	36041248H	1.00	0.9875	
2	10.995	10.995	0.000	105101216H	1.00	1.14	
2	11.527	11.527	0.000	45291430H	1.00	1.06	
		Average of Peak Amounts =				1.05	
						RPD = 8.72	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.276	11.276	0.000	44495990H	0.0500	0.0508	
2	13.070	13.070	0.000	44988722H	0.0500	0.0545	
						RPD = 7.01	

Reagents:

GCAR1660CALL5_00009 Amount Added: 1.00 Units: mL

Report Date: 04-Dec-2014 14:13:56 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314038.D

Injection Date: 03-Dec-2014 21:32:26 Instrument ID: CHGC16

Lims ID: CCV

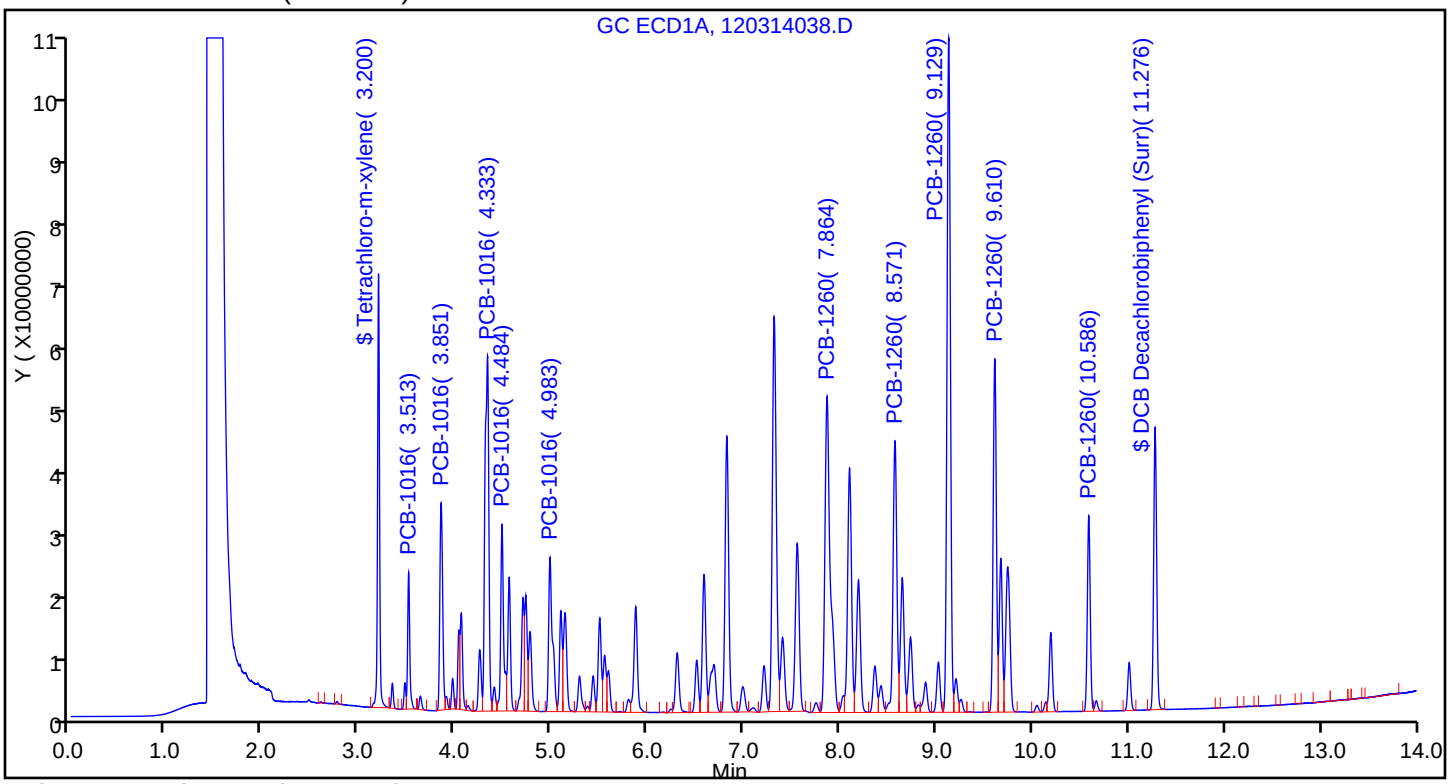
Client ID:

Operator ID: 402331 ALS Bottle#: 35 Worklist Smp#: 35

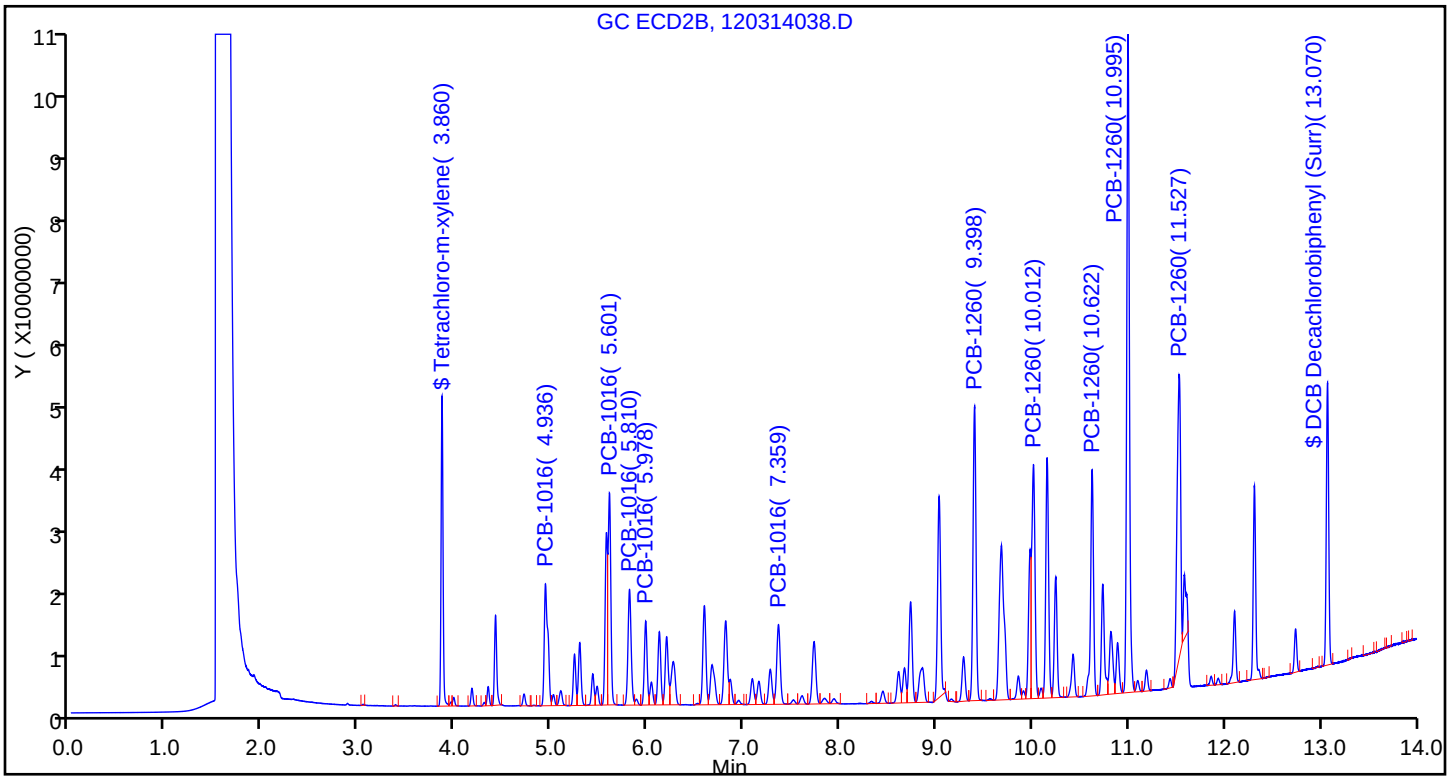
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCV 180-127055/53 Calibration Date: 12/04/2014 05:00

Instrument ID: CHGC16 Calib Start Date: 10/29/2014 10:27

GC Column: RTX-CLP1 ID: 0.53(mm) Calib End Date: 10/29/2014 12:22

Lab File ID: 120314056.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	23094491	22428396		0.971	1.00	-2.9	20.0
PCB-1016 Peak 2	Ave	35938044	34501265		0.960	1.00	-4.0	20.0
PCB-1016 Peak 3	Ave	56500522	59298383		1.05	1.00	5.0	20.0
PCB-1016 Peak 4	Ave	29750798	31032043		1.04	1.00	4.3	20.0
PCB-1016 Peak 5	Ave	23818709	24604755		1.03	1.00	3.3	20.0
PCB-1260 Peak 1	Ave	46024762	45299880		0.984	1.00	-1.6	20.0
PCB-1260 Peak 2	Ave	36823781	35780590		0.972	1.00	-2.8	20.0
PCB-1260 Peak 3	Ave	87761810	88662196		1.01	1.00	1.0	20.0
PCB-1260 Peak 4	Ave	48268968	47858746		0.992	1.00	-0.8	20.0
PCB-1260 Peak 5	Ave	27918509	27360170		0.980	1.00	-2.0	20.0
Tetrachloro-m-xylene (Surr)	Ave	1415958915	1389583160		0.0491	0.0500	-1.9	20.0
DCB Decachlorobiphenyl (Surr)	Ave	875809304	775738240		0.0443	0.0500	-11.4	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCV 180-127055/53 Calibration Date: 12/04/2014 05:00

Instrument ID: CHGC16 Calib Start Date: 10/29/2014 10:27

GC Column: RTX-CLP1 ID: 0.53(mm) Calib End Date: 10/29/2014 12:22

Lab File ID: 120314056.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.52	3.47	3.57
PCB-1016 Peak 2	3.85	3.80	3.90
PCB-1016 Peak 3	4.34	4.29	4.39
PCB-1016 Peak 4	4.49	4.44	4.54
PCB-1016 Peak 5	4.99	4.94	5.04
PCB-1260 Peak 1	7.87	7.82	7.92
PCB-1260 Peak 2	8.58	8.53	8.63
PCB-1260 Peak 3	9.14	9.09	9.19
PCB-1260 Peak 4	9.61	9.56	9.66
PCB-1260 Peak 5	10.59	10.54	10.64
Tetrachloro-m-xylene (Surr)	3.20	3.15	3.25
DCB Decachlorobiphenyl (Surr)	11.28	11.21	11.35

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314056.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 04-Dec-2014 05:00:28 ALS Bottle#: 53 Worklist Smp#: 53
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004694-053
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub8

Method: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 04-Dec-2014 14:12:45 Calib Date: 03-Dec-2014 02:40:17
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141202-4675.b\120214066.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK004

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.202	3.202	0.000	69479158H	0.0500	0.0491	
2	3.850	3.850	0.000	47876294H	0.0500	0.0463	
						RPD = 5.70	
4 PCB-1016							
1	3.515	3.515	0.000	22428396H	1.00	0.9712	
1	3.854	3.854	0.000	34501265H	1.00	0.9600	
1	4.337	4.337	0.000	59298383H	1.00	1.05	
1	4.487	4.487	0.000	31032043H	1.00	1.04	
1	4.987	4.987	0.000	24604755H	1.00	1.03	
		Average of Peak Amounts =				1.01	
2	4.923	4.923	0.000	19069484H	1.00	0.9007	
2	5.587	5.587	0.000	33733984H	1.00	0.9711	
2	5.796	5.796	0.000	18345674H	1.00	0.9040	
2	5.963	5.963	0.000	13161460H	1.00	0.9169	
2	7.342	7.342	0.000	12179760H	1.00	0.9404	
		Average of Peak Amounts =				0.9266	
						RPD = 8.74	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	7.870	7.870	0.000	45299880H	1.00	0.9843	
1	8.577	8.577	0.000	35780590H	1.00	0.9717	
1	9.135	9.135	0.000	88662196H	1.00	1.01	
1	9.612	9.612	0.000	47858746H	1.00	0.99	
1	10.589	10.589	0.000	27360170H	1.00	0.9800	
		Average of Peak Amounts =				0.9875	
2	9.385	9.385	0.000	43255829H	1.00	0.9520	
2	9.999	9.999	0.000	35147719H	1.00	0.9543	
2	10.610	10.610	0.000	37150092H	1.00	1.02	
2	10.985	10.985	0.000	101064306H	1.00	1.10	
2	11.518	11.518	0.000	48307000H	1.00	1.13	
		Average of Peak Amounts =				1.03	
						RPD = 4.27	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.279	11.279	0.000	38786912H	0.0500	0.0443	
2	13.064	13.064	0.000	46411461H	0.0500	0.0562	
						RPD = 23.74	

Reagents:

GCAR1660CALL5_00009 Amount Added: 1.00 Units: mL

Report Date: 04-Dec-2014 14:12:45 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314056.D

Injection Date: 04-Dec-2014 05:00:28 Instrument ID: CHGC16

Lims ID: CCV

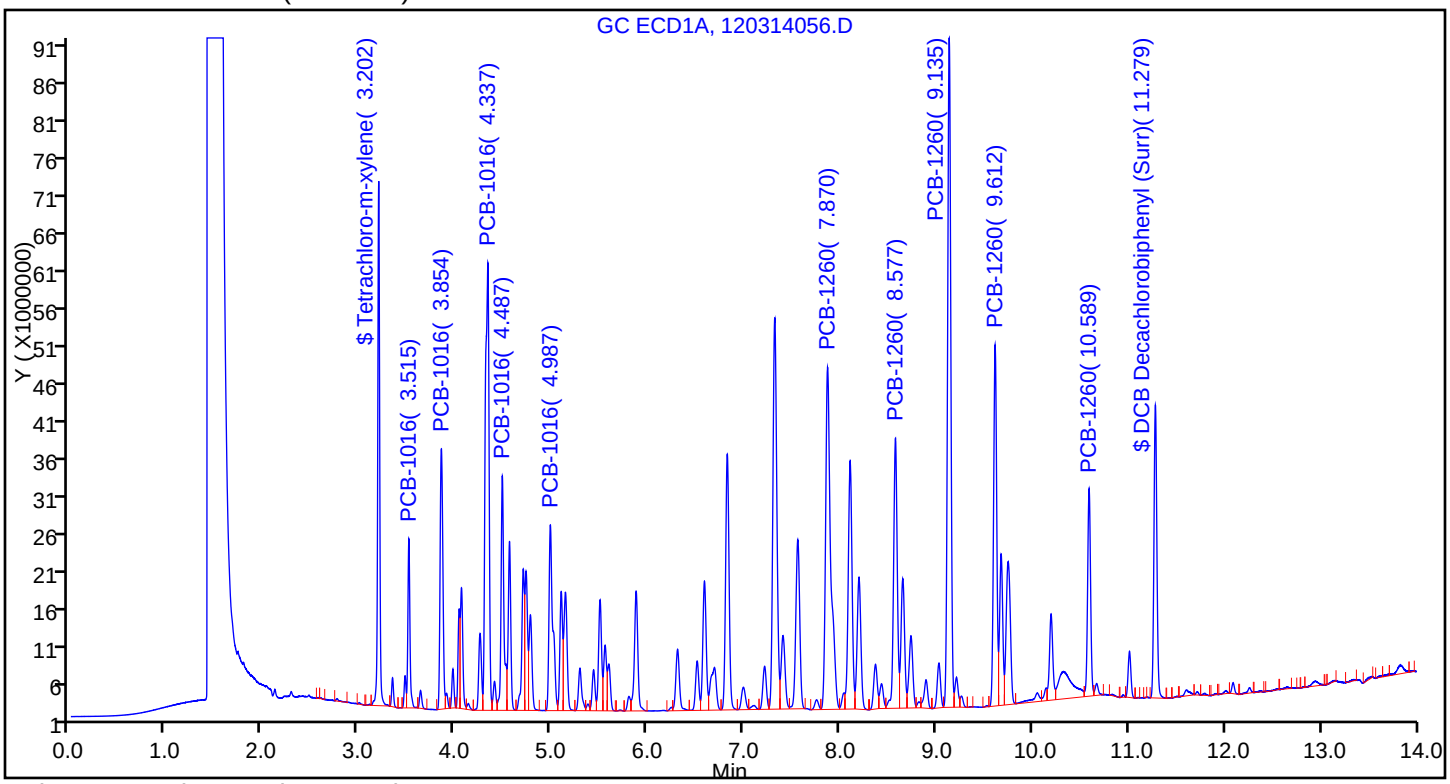
Client ID:

Operator ID: 402331 ALS Bottle#: 53 Worklist Smp#: 53

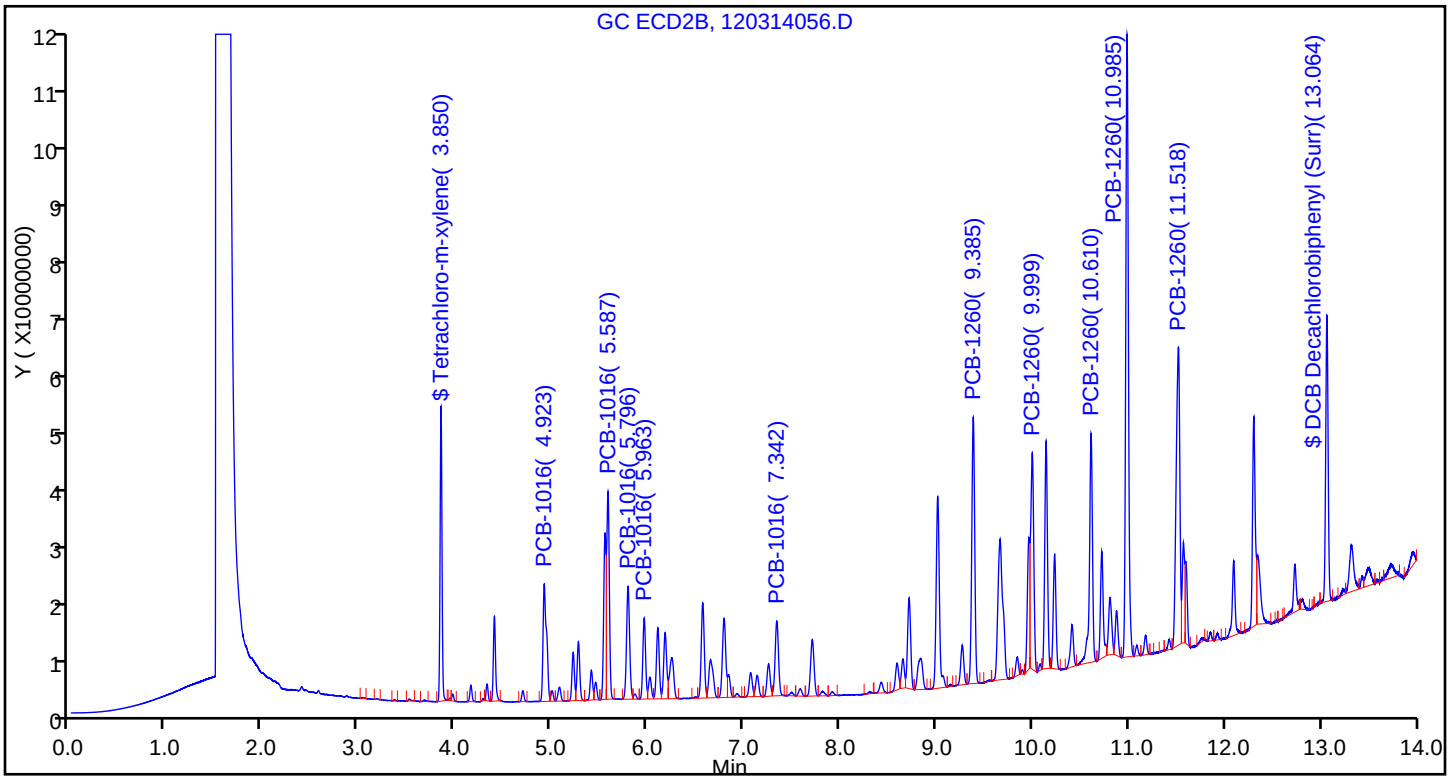
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCV 180-127055/53 Calibration Date: 12/04/2014 05:00

Instrument ID: CHGC16 Calib Start Date: 10/29/2014 10:27

GC Column: RTX-CLP2 ID: 0.53(mm) Calib End Date: 10/29/2014 12:22

Lab File ID: 120314056.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	21171157	19069484		0.901	1.00	-9.9	20.0
PCB-1016 Peak 2	Ave	34738329	33733984		0.971	1.00	-2.9	20.0
PCB-1016 Peak 3	Ave	20294869	18345674		0.904	1.00	-9.6	20.0
PCB-1016 Peak 4	Ave	14353894	13161460		0.917	1.00	-8.3	20.0
PCB-1016 Peak 5	Ave	12951079	12179760		0.940	1.00	-6.0	20.0
PCB-1260 Peak 1	Ave	45434544	43255829		0.952	1.00	-4.8	20.0
PCB-1260 Peak 2	Ave	36829086	35147719		0.954	1.00	-4.6	20.0
PCB-1260 Peak 3	Ave	36498776	37150092		1.02	1.00	1.8	20.0
PCB-1260 Peak 4	Ave	91912991	101064306		1.10	1.00	10.0	20.0
PCB-1260 Peak 5	Ave	42780108	48307000		1.13	1.00	12.9	20.0
Tetrachloro-m-xylene (Surr)	Ave	1032953155	957525880		0.0463	0.0500	-7.3	20.0
DCB Decachlorobiphenyl (Surr)	Ave	825552205	928229220		0.0562	0.0500	12.4	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCV 180-127055/53 Calibration Date: 12/04/2014 05:00

Instrument ID: CHGC16 Calib Start Date: 10/29/2014 10:27

GC Column: RTX-CLP2 ID: 0.53(mm) Calib End Date: 10/29/2014 12:22

Lab File ID: 120314056.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	4.92	4.87	4.97
PCB-1016 Peak 2	5.59	5.54	5.64
PCB-1016 Peak 3	5.80	5.75	5.85
PCB-1016 Peak 4	5.96	5.91	6.01
PCB-1016 Peak 5	7.34	7.29	7.39
PCB-1260 Peak 1	9.39	9.34	9.44
PCB-1260 Peak 2	10.00	9.95	10.05
PCB-1260 Peak 3	10.61	10.56	10.66
PCB-1260 Peak 4	10.99	10.94	11.04
PCB-1260 Peak 5	11.52	11.47	11.57
Tetrachloro-m-xylene (Surr)	3.85	3.80	3.90
DCB Decachlorobiphenyl (Surr)	13.06	12.99	13.13

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314056.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 04-Dec-2014 05:00:28 ALS Bottle#: 53 Worklist Smp#: 53
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004694-053
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub8

Method: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 04-Dec-2014 14:12:45 Calib Date: 03-Dec-2014 02:40:17
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141202-4675.b\120214066.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK004

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.202	3.202	0.000	69479158H	0.0500	0.0491	
2	3.850	3.850	0.000	47876294H	0.0500	0.0463	
						RPD = 5.70	
4 PCB-1016							
1	3.515	3.515	0.000	22428396H	1.00	0.9712	
1	3.854	3.854	0.000	34501265H	1.00	0.9600	
1	4.337	4.337	0.000	59298383H	1.00	1.05	
1	4.487	4.487	0.000	31032043H	1.00	1.04	
1	4.987	4.987	0.000	24604755H	1.00	1.03	
		Average of Peak Amounts =				1.01	
2	4.923	4.923	0.000	19069484H	1.00	0.9007	
2	5.587	5.587	0.000	33733984H	1.00	0.9711	
2	5.796	5.796	0.000	18345674H	1.00	0.9040	
2	5.963	5.963	0.000	13161460H	1.00	0.9169	
2	7.342	7.342	0.000	12179760H	1.00	0.9404	
		Average of Peak Amounts =				0.9266	
						RPD = 8.74	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	7.870	7.870	0.000	45299880H	1.00	0.9843	
1	8.577	8.577	0.000	35780590H	1.00	0.9717	
1	9.135	9.135	0.000	88662196H	1.00	1.01	
1	9.612	9.612	0.000	47858746H	1.00	0.99	
1	10.589	10.589	0.000	27360170H	1.00	0.9800	
		Average of Peak Amounts =				0.9875	
2	9.385	9.385	0.000	43255829H	1.00	0.9520	
2	9.999	9.999	0.000	35147719H	1.00	0.9543	
2	10.610	10.610	0.000	37150092H	1.00	1.02	
2	10.985	10.985	0.000	101064306H	1.00	1.10	
2	11.518	11.518	0.000	48307000H	1.00	1.13	
		Average of Peak Amounts =				1.03	
						RPD = 4.27	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.279	11.279	0.000	38786912H	0.0500	0.0443	
2	13.064	13.064	0.000	46411461H	0.0500	0.0562	
						RPD = 23.74	

Reagents:

GCAR1660CALL5_00009 Amount Added: 1.00 Units: mL

Report Date: 04-Dec-2014 14:12:47 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314056.D

Injection Date: 04-Dec-2014 05:00:28 Instrument ID: CHGC16

Lims ID: CCV

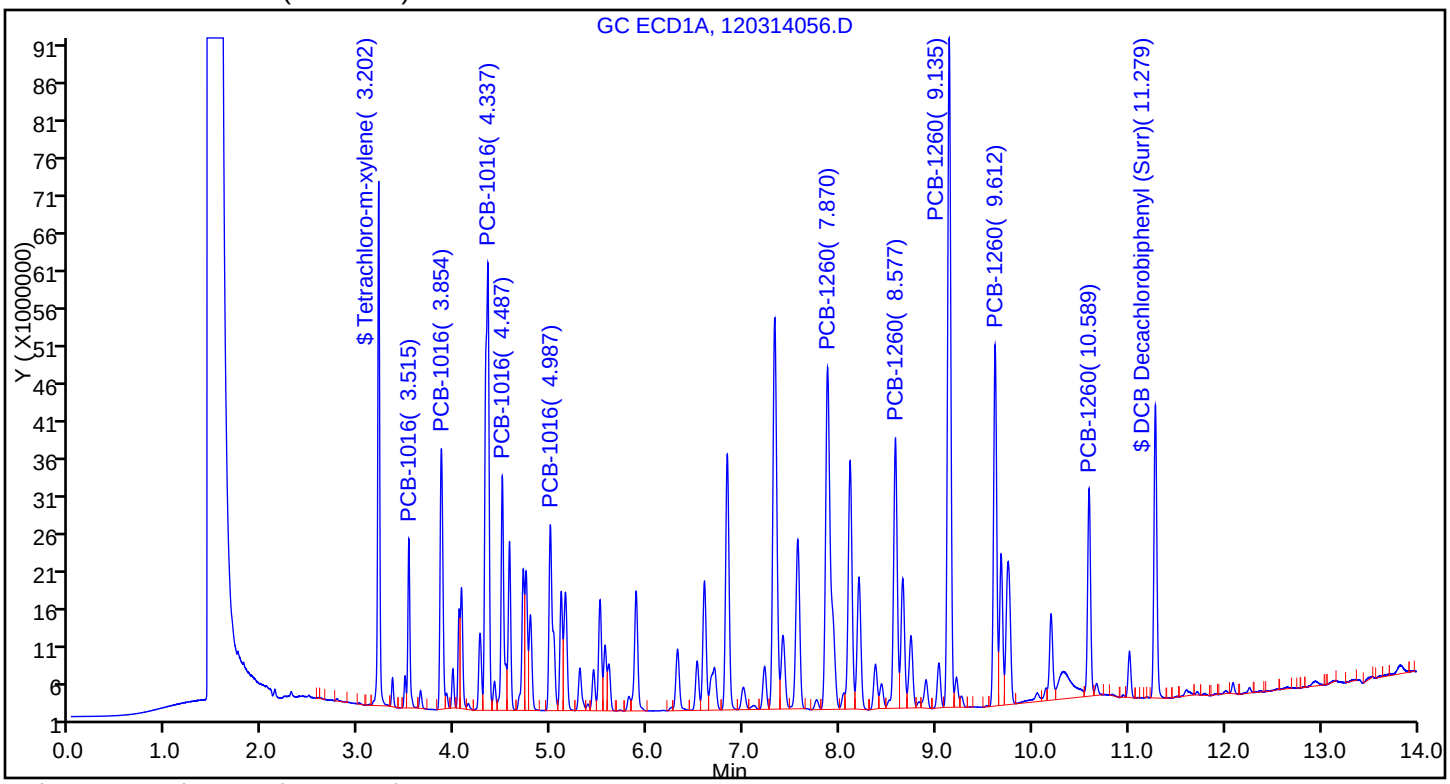
Client ID:

Operator ID: 402331 ALS Bottle#: 53 Worklist Smp#: 53

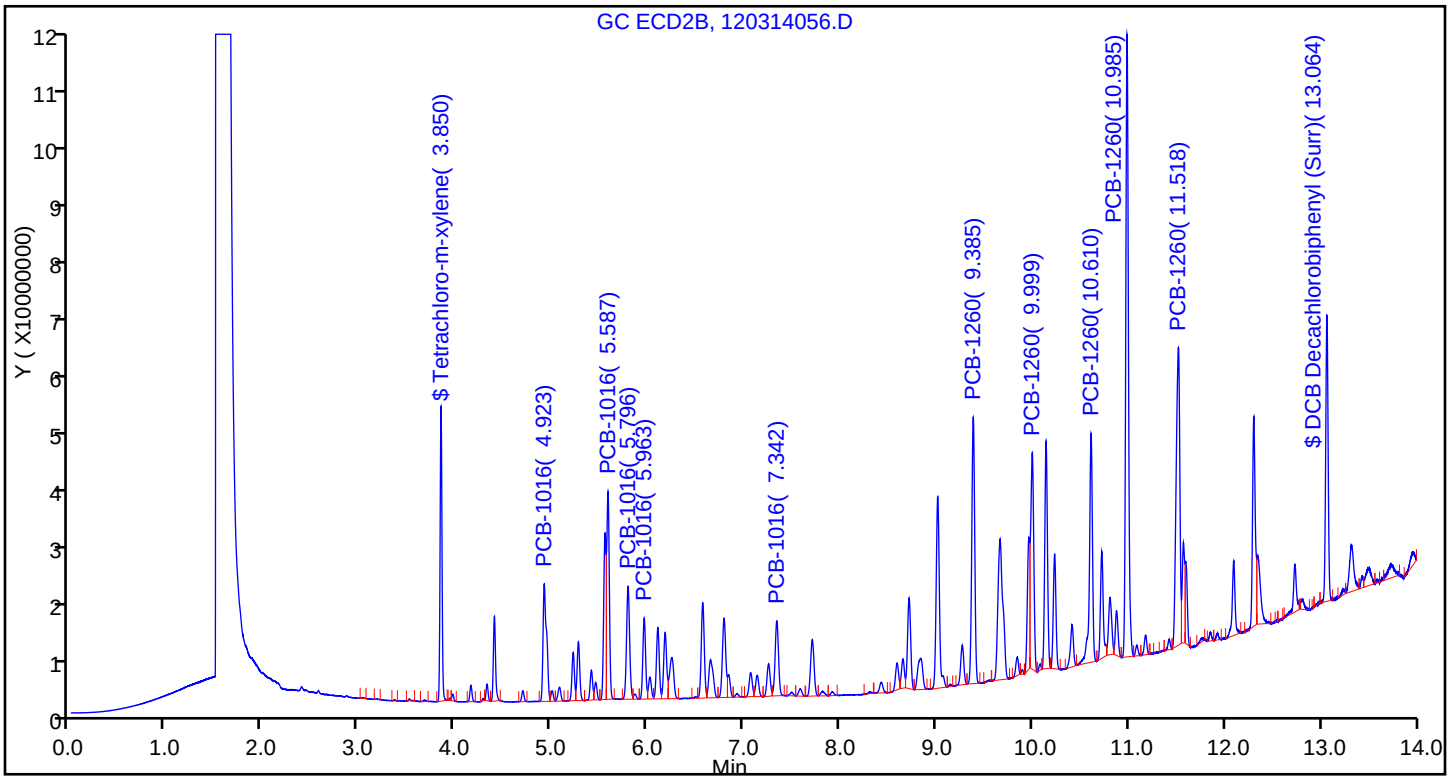
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCV 180-127055/74 Calibration Date: 12/04/2014 13:58

Instrument ID: CHGC16 Calib Start Date: 10/29/2014 10:27

GC Column: RTX-CLP1 ID: 0.53(mm) Calib End Date: 10/29/2014 12:22

Lab File ID: 120314077.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	23094491	20161496		0.873	1.00	-12.7	20.0
PCB-1016 Peak 2	Ave	35938044	30678710		0.854	1.00	-14.6	20.0
PCB-1016 Peak 3	Ave	56500522	52703009		0.933	1.00	-6.7	20.0
PCB-1016 Peak 4	Ave	29750798	27705299		0.931	1.00	-6.9	20.0
PCB-1016 Peak 5	Ave	23818709	23066263		0.968	1.00	-3.2	20.0
PCB-1260 Peak 1	Ave	46024762	45603321		0.991	1.00	-0.9	20.0
PCB-1260 Peak 2	Ave	36823781	42329970		1.15	1.00	15.0	20.0
PCB-1260 Peak 3	Ave	87761810	107631232		1.23	1.00	22.6*	20.0
PCB-1260 Peak 4	Ave	48268968	55185185		1.14	1.00	14.3	20.0
PCB-1260 Peak 5	Ave	27918509	31547545		1.13	1.00	13.0	20.0
Tetrachloro-m-xylene (Surr)	Ave	1415958915	1282606040		0.0453	0.0500	-9.4	20.0
DCB Decachlorobiphenyl (Surr)	Ave	875809304	919654920		0.0525	0.0500	5.0	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCV 180-127055/74 Calibration Date: 12/04/2014 13:58

Instrument ID: CHGC16 Calib Start Date: 10/29/2014 10:27

GC Column: RTX-CLP1 ID: 0.53(mm) Calib End Date: 10/29/2014 12:22

Lab File ID: 120314077.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.52	3.47	3.57
PCB-1016 Peak 2	3.85	3.80	3.90
PCB-1016 Peak 3	4.34	4.29	4.39
PCB-1016 Peak 4	4.49	4.44	4.54
PCB-1016 Peak 5	4.99	4.94	5.04
PCB-1260 Peak 1	7.87	7.82	7.92
PCB-1260 Peak 2	8.58	8.53	8.63
PCB-1260 Peak 3	9.14	9.09	9.19
PCB-1260 Peak 4	9.61	9.56	9.66
PCB-1260 Peak 5	10.59	10.54	10.64
Tetrachloro-m-xylene (Surr)	3.20	3.15	3.25
DCB Decachlorobiphenyl (Surr)	11.28	11.21	11.35

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314077.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 04-Dec-2014 13:58:59 ALS Bottle#: 74 Worklist Smp#: 74
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004694-074
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub8

Method: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 04-Dec-2014 14:15:52 Calib Date: 03-Dec-2014 02:40:17
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141202-4675.b\120214066.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK004

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.202	3.202	0.000	64130302H	0.0500	0.0453	
2	3.853	3.853	0.000	44542228H	0.0500	0.0431	
						RPD = 4.91	
4 PCB-1016							
1	3.515	3.515	0.000	20161496H	1.00	0.8730	
1	3.854	3.854	0.000	30678710H	1.00	0.8537	
1	4.337	4.337	0.000	52703009H	1.00	0.9328	
1	4.487	4.487	0.000	27705299H	1.00	0.9312	
1	4.986	4.986	0.000	23066263H	1.00	0.9684	
		Average of Peak Amounts =				0.9118	
2	4.927	4.927	0.000	17695606H	1.00	0.8358	
2	5.591	5.591	0.000	30974052H	1.00	0.8916	
2	5.798	5.798	0.000	17323836H	1.00	0.8536	
2	5.967	5.967	0.000	12354272H	1.00	0.8607	
2	7.346	7.346	0.000	12081141H	1.00	0.9328	
		Average of Peak Amounts =				0.8749	
						RPD = 4.13	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	7.871	7.871	0.000	45603321H	1.00	0.99	
1	8.575	8.575	0.000	42329970H	1.00	1.15	
1	9.135	9.135	0.000	107631232H	1.00	1.23	
1	9.612	9.612	0.000	55185185H	1.00	1.14	
1	10.591	10.591	0.000	31547545H	1.00	1.13	
		Average of Peak Amounts =				1.13	
2	9.386	9.386	0.000	45251248H	1.00	1.00	
2	10.002	10.002	0.000	37541256H	1.00	1.02	
2	10.612	10.612	0.000	37777579H	1.00	1.04	
2	10.986	10.986	0.000	100912712H	1.00	1.10	
2	11.519	11.519	0.000	44476698H	1.00	1.04	
		Average of Peak Amounts =				1.04	
						RPD = 8.35	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.280	11.280	0.000	45982746H	0.0500	0.0525	
2	13.063	13.063	0.000	44258165H	0.0500	0.0536	
						RPD = 2.09	

Reagents:

GCAR1660CALL5_00009 Amount Added: 1.00 Units: mL

Report Date: 04-Dec-2014 14:15:54 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314077.D

Injection Date: 04-Dec-2014 13:58:59 Instrument ID: CHGC16

Lims ID: CCV

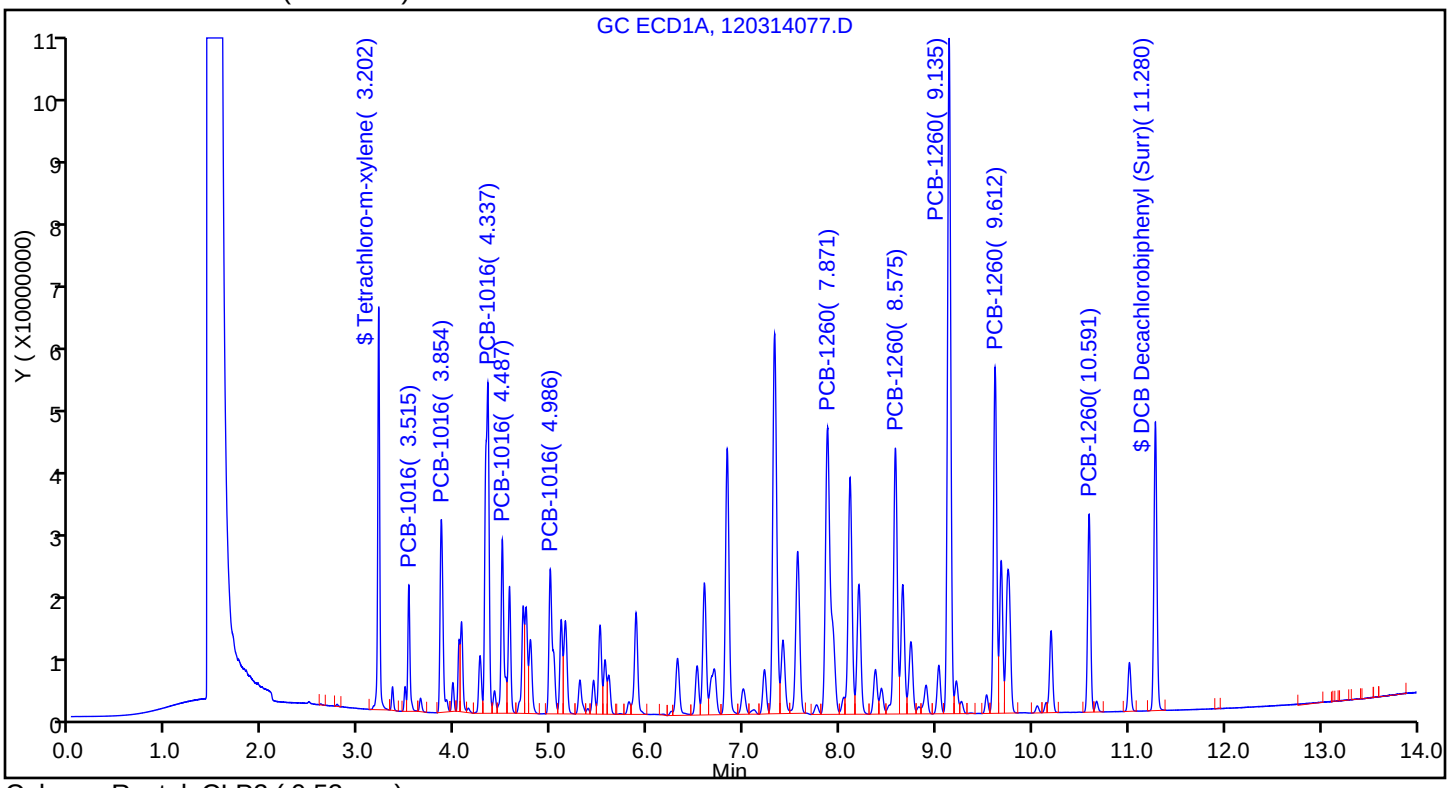
Client ID:

Operator ID: 402331 ALS Bottle#: 74 Worklist Smp#: 74

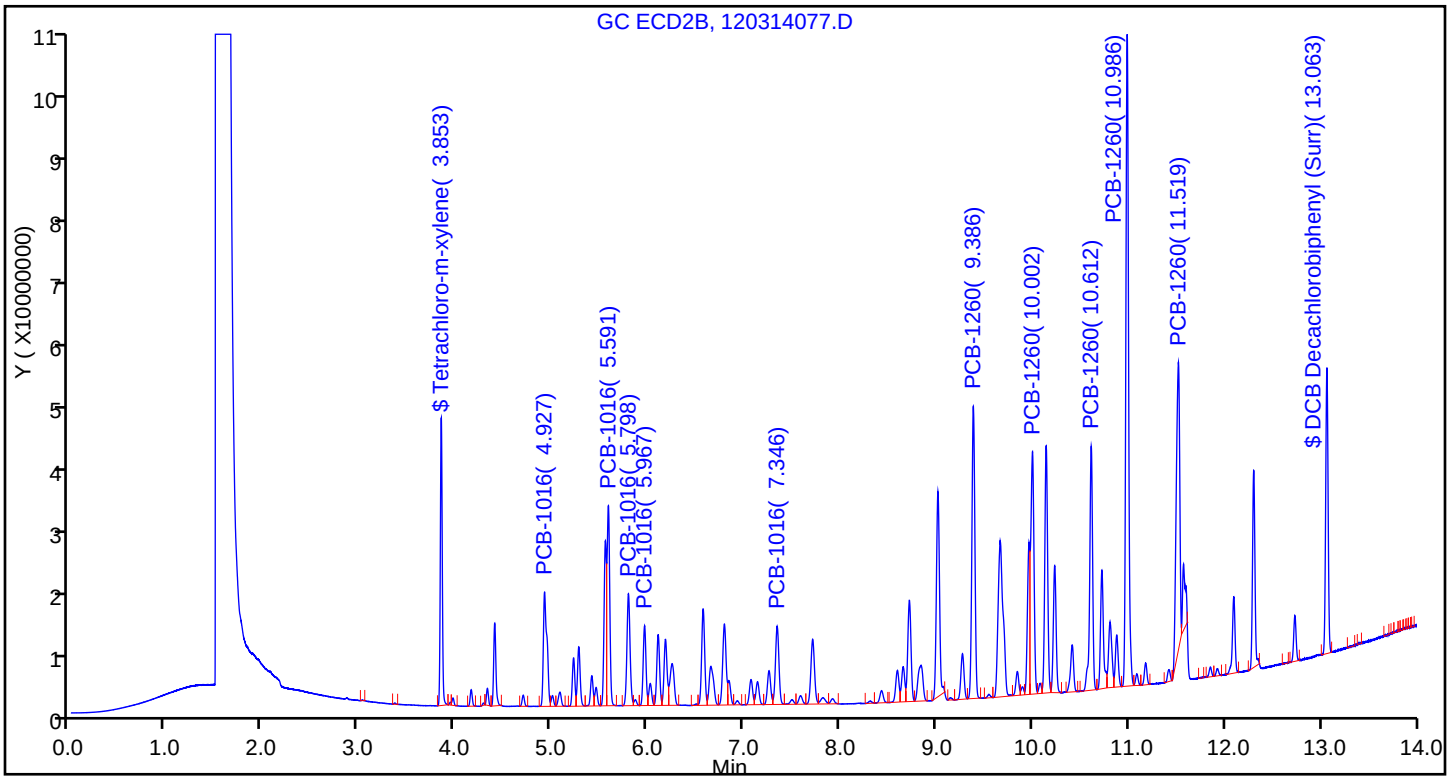
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCV 180-127055/74 Calibration Date: 12/04/2014 13:58

Instrument ID: CHGC16 Calib Start Date: 10/29/2014 10:27

GC Column: RTX-CLP2 ID: 0.53(mm) Calib End Date: 10/29/2014 12:22

Lab File ID: 120314077.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	21171157	17695606		0.836	1.00	-16.4	20.0
PCB-1016 Peak 2	Ave	34738329	30974052		0.892	1.00	-10.8	20.0
PCB-1016 Peak 3	Ave	20294869	17323836		0.854	1.00	-14.6	20.0
PCB-1016 Peak 4	Ave	14353894	12354272		0.861	1.00	-13.9	20.0
PCB-1016 Peak 5	Ave	12951079	12081141		0.933	1.00	-6.7	20.0
PCB-1260 Peak 1	Ave	45434544	45251248		0.996	1.00	-0.4	20.0
PCB-1260 Peak 2	Ave	36829086	37541256		1.02	1.00	1.9	20.0
PCB-1260 Peak 3	Ave	36498776	37777579		1.04	1.00	3.5	20.0
PCB-1260 Peak 4	Ave	91912991	100912712		1.10	1.00	9.8	20.0
PCB-1260 Peak 5	Ave	42780108	44476698		1.04	1.00	4.0	20.0
Tetrachloro-m-xylene (Surr)	Ave	1032953155	890844560		0.0431	0.0500	-13.8	20.0
DCB Decachlorobiphenyl (Surr)	Ave	825552205	885163300		0.0536	0.0500	7.2	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: CCV 180-127055/74 Calibration Date: 12/04/2014 13:58

Instrument ID: CHGC16 Calib Start Date: 10/29/2014 10:27

GC Column: RTX-CLP2 ID: 0.53(mm) Calib End Date: 10/29/2014 12:22

Lab File ID: 120314077.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	4.93	4.88	4.98
PCB-1016 Peak 2	5.59	5.54	5.64
PCB-1016 Peak 3	5.80	5.75	5.85
PCB-1016 Peak 4	5.97	5.92	6.02
PCB-1016 Peak 5	7.35	7.30	7.40
PCB-1260 Peak 1	9.39	9.34	9.44
PCB-1260 Peak 2	10.00	9.95	10.05
PCB-1260 Peak 3	10.61	10.56	10.66
PCB-1260 Peak 4	10.99	10.94	11.04
PCB-1260 Peak 5	11.52	11.47	11.57
Tetrachloro-m-xylene (Surr)	3.85	3.80	3.90
DCB Decachlorobiphenyl (Surr)	13.06	12.99	13.13

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314077.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 04-Dec-2014 13:58:59 ALS Bottle#: 74 Worklist Smp#: 74
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004694-074
Operator ID: 402331 Instrument ID: CHGC16
Sublist: chrom-PCB_CHGC16*sub8

Method: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 04-Dec-2014 14:15:52 Calib Date: 03-Dec-2014 02:40:17
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141202-4675.b\120214066.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK004

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.202	3.202	0.000	64130302H	0.0500	0.0453	
2	3.853	3.853	0.000	44542228H	0.0500	0.0431	
						RPD = 4.91	
4 PCB-1016							
1	3.515	3.515	0.000	20161496H	1.00	0.8730	
1	3.854	3.854	0.000	30678710H	1.00	0.8537	
1	4.337	4.337	0.000	52703009H	1.00	0.9328	
1	4.487	4.487	0.000	27705299H	1.00	0.9312	
1	4.986	4.986	0.000	23066263H	1.00	0.9684	
		Average of Peak Amounts =				0.9118	
2	4.927	4.927	0.000	17695606H	1.00	0.8358	
2	5.591	5.591	0.000	30974052H	1.00	0.8916	
2	5.798	5.798	0.000	17323836H	1.00	0.8536	
2	5.967	5.967	0.000	12354272H	1.00	0.8607	
2	7.346	7.346	0.000	12081141H	1.00	0.9328	
		Average of Peak Amounts =				0.8749	
						RPD = 4.13	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	7.871	7.871	0.000	45603321H	1.00	0.99	
1	8.575	8.575	0.000	42329970H	1.00	1.15	
1	9.135	9.135	0.000	107631232H	1.00	1.23	
1	9.612	9.612	0.000	55185185H	1.00	1.14	
1	10.591	10.591	0.000	31547545H	1.00	1.13	
		Average of Peak Amounts =				1.13	
2	9.386	9.386	0.000	45251248H	1.00	1.00	
2	10.002	10.002	0.000	37541256H	1.00	1.02	
2	10.612	10.612	0.000	37777579H	1.00	1.04	
2	10.986	10.986	0.000	100912712H	1.00	1.10	
2	11.519	11.519	0.000	44476698H	1.00	1.04	
		Average of Peak Amounts =				1.04	
						RPD = 8.35	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.280	11.280	0.000	45982746H	0.0500	0.0525	
2	13.063	13.063	0.000	44258165H	0.0500	0.0536	
						RPD = 2.09	

Reagents:

GCAR1660CALL5_00009 Amount Added: 1.00 Units: mL

Report Date: 04-Dec-2014 14:15:55 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314077.D

Injection Date: 04-Dec-2014 13:58:59 Instrument ID: CHGC16

Lims ID: CCV

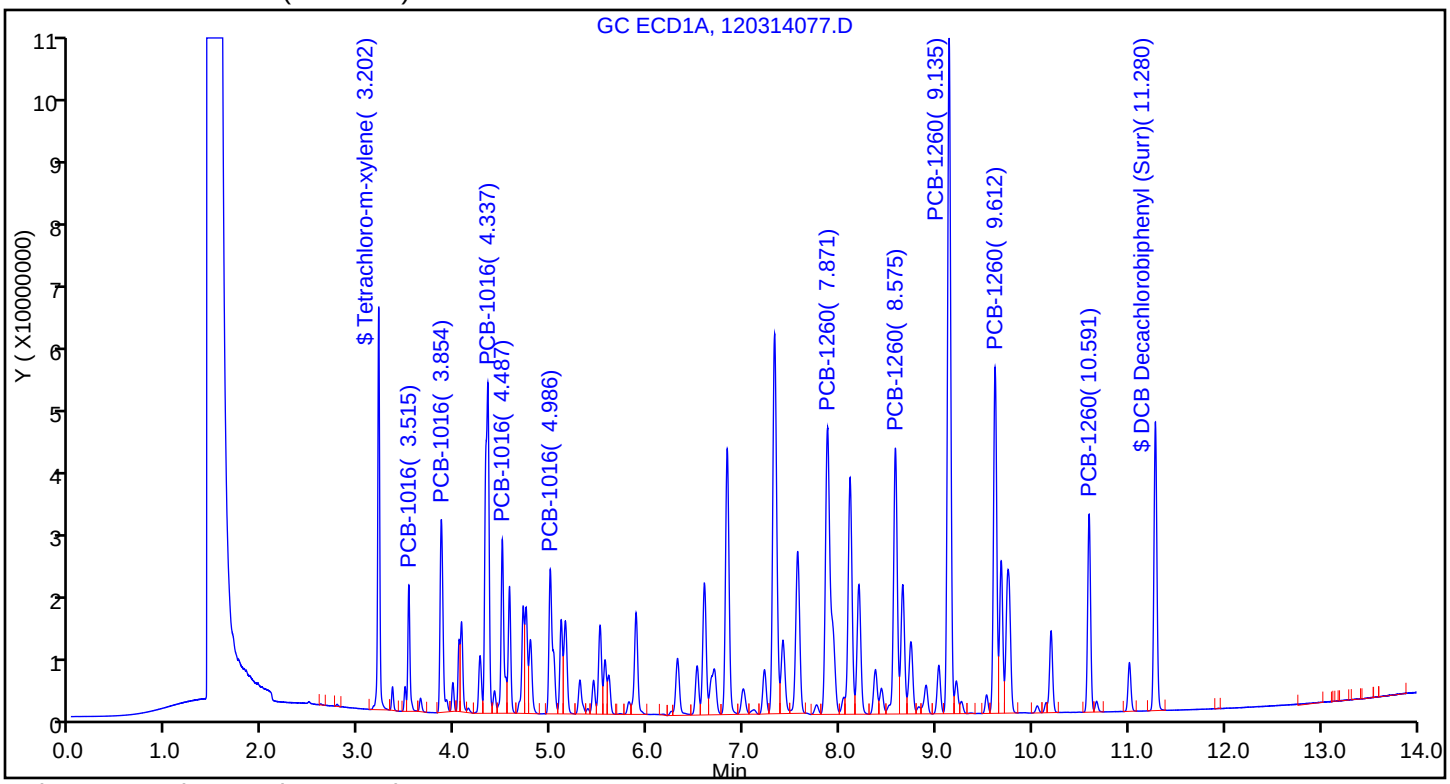
Client ID:

Operator ID: 402331 ALS Bottle#: 74 Worklist Smp#: 74

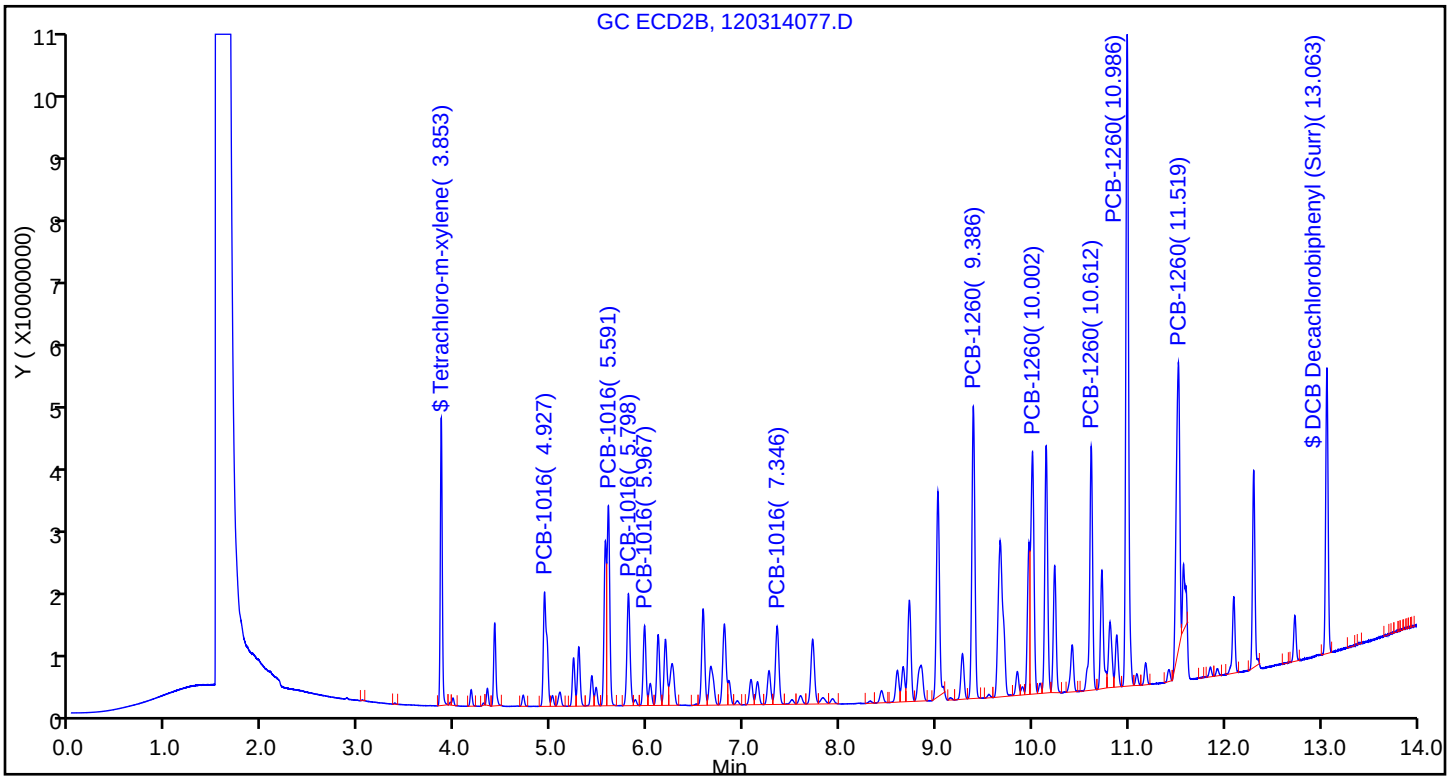
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-126039/1-A

Matrix: Water Lab File ID: 120314057.D

Analysis Method: 8082A Date Collected:

Extraction Method: 3510C Date Extracted: 11/21/2014 16:15

Sample wt/vol: 1000(mL) Date Analyzed: 12/04/2014 05:19

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-CLP1 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 127055 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	ND		0.010	0.0025
11104-28-2	PCB-1221	ND		0.010	0.0041
11141-16-5	PCB-1232	ND		0.010	0.0039
53469-21-9	PCB-1242	ND		0.010	0.0019
12672-29-6	PCB-1248	ND		0.010	0.0027
11097-69-1	PCB-1254	ND		0.010	0.0030
11096-82-5	PCB-1260	ND		0.010	0.0017

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	93		60-135
877-09-8	Tetrachloro-m-xylene (Surr)	85		25-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314057.D
Lims ID: MB 180-126039/1-A
Client ID:
Sample Type: MB
Inject. Date: 04-Dec-2014 05:19:41 ALS Bottle#: 54 Worklist Smp#: 54
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004694-054
Operator ID: 402331 Instrument ID: CHGC16

Method: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 04-Dec-2014 14:10:22 Calib Date: 03-Dec-2014 02:40:17
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141202-4675.b\120214066.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK004

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
2 PCB-1221							
1		2.767				ND	
1		3.510					
1		3.342					
2		3.374					
2		4.170					
2		4.413					
$ 1 Tetrachloro-m-xylene							
1	3.201	3.202	-0.001	24074216H	0.0200	0.0170	
2	3.856	3.850	0.006	16958870H	0.0200	0.0164	
						RPD = 3.50	
5 PCB-1232							
1		3.343				ND	
1		3.511					
1		3.850					
1		4.332					
1		4.730					
2		4.171					
2		4.416					
2		4.935					
2		5.601					
2		5.810					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
3 PCB-1242							
1		3.511				ND	
1		3.847					
1		4.331					
1		4.980					
1		5.589					
2		4.416					
2		4.935					
2		5.600					
2		6.588					
2		7.835					
4 PCB-1016							
1		3.515				ND	
1		3.854					
1		4.337					
1		4.487					
1		4.987					
2		4.923					
2		5.587					
2		5.796					
2		5.963					
2		7.342					
6 PCB-1248							
1		4.696				ND	
1		4.978					
1		5.548					
1		5.877					
1		6.505					
2		6.118					
2		6.586					
2		7.273					
2		7.363					
2		7.836					
7 PCB-1254							
1		5.498				ND	
1		5.871					
1		6.507					
1		6.980					
1		7.864					
2		7.355					
2		7.726					
2		8.667					
2		9.083					
2		10.009					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1		7.870				ND	
1		8.577					
1		9.135					
1		9.612					
1		10.589					
2		9.385					
2		9.999					
2		10.610					
2		10.985					
2		11.518					
9 PCB-1262							
1		8.096				ND	
1		8.569					
1		9.126					
1		9.668					
1		10.583					
2		10.155					
2		10.623					
2		10.995					
2		11.517					
2		12.309					
10 PCB-1268							
1		9.669				ND	
1		10.044					
1		10.584					
1		11.004					
2		11.514					
2		11.933					
2		12.309					
2		12.738					
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.276	11.279	-0.003	16357420H	0.0200	0.0187	
2	13.067	13.064	0.003	17702798H	0.0200	0.0214	
						RPD = 13.79	

Report Date: 04-Dec-2014 14:12:43 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314057.D

Injection Date: 04-Dec-2014 05:19:41 Instrument ID: CHGC16

Lims ID: MB 180-126039/1-A

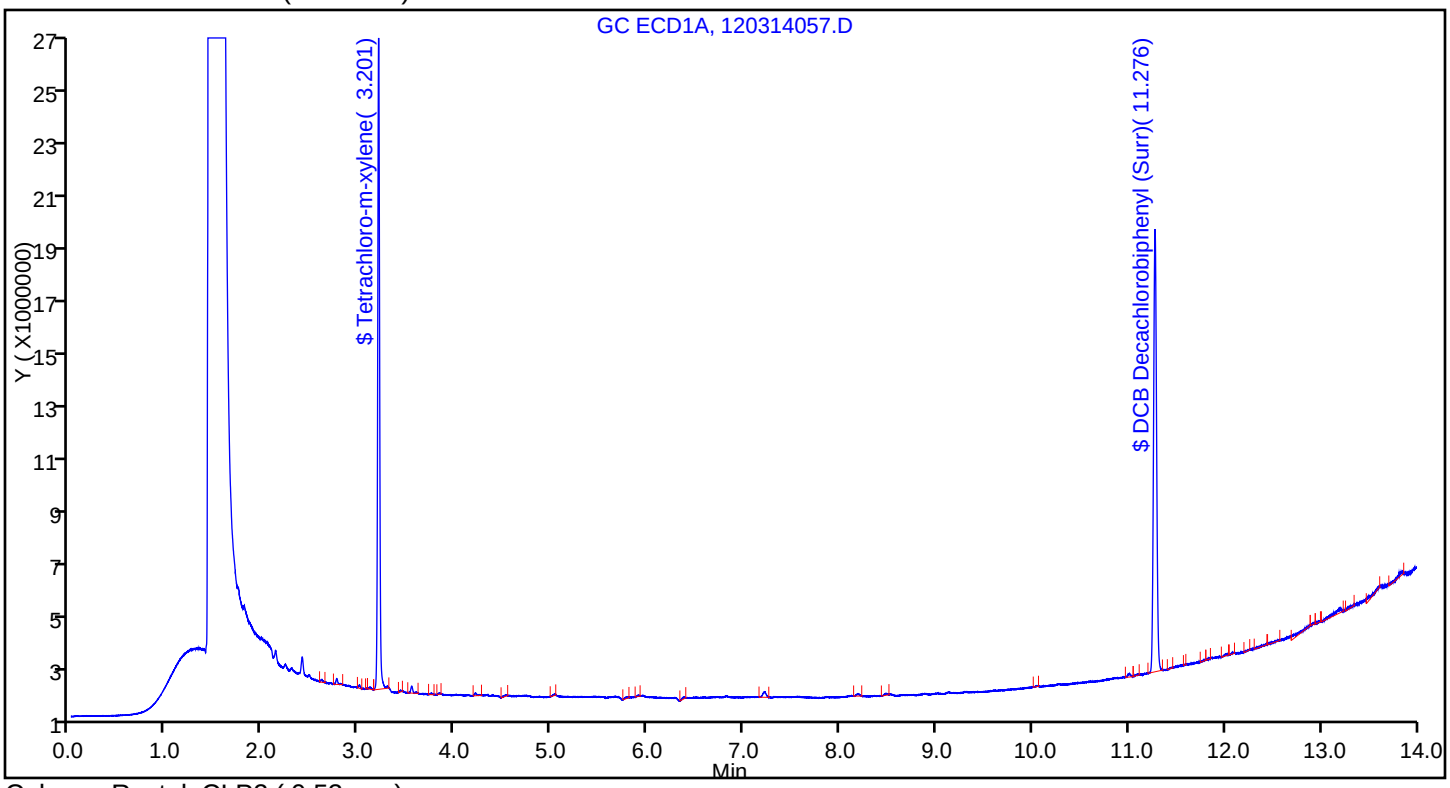
Client ID:

Operator ID: 402331 ALS Bottle#: 54 Worklist Smp#: 54

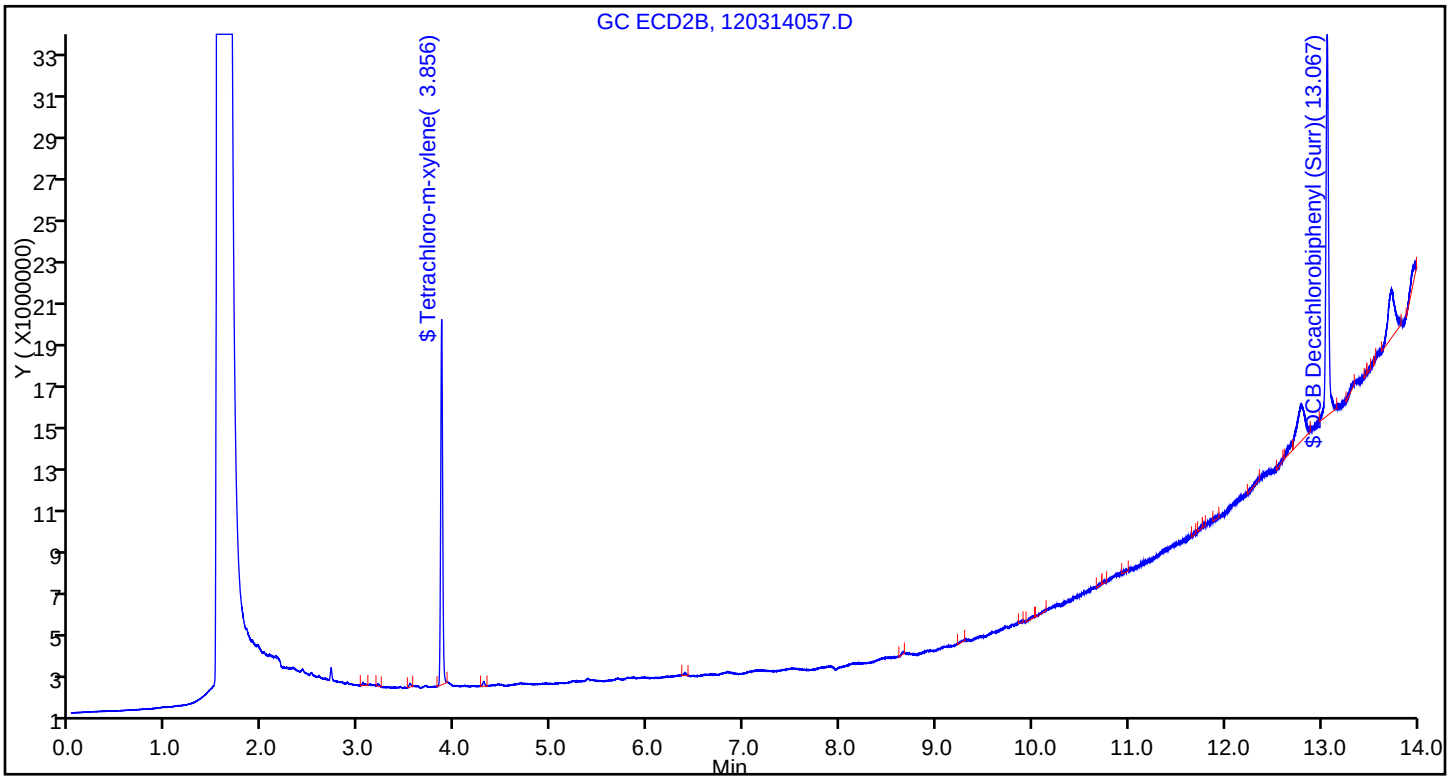
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-126039/1-A

Matrix: Water Lab File ID: 120314057.D

Analysis Method: 8082A Date Collected:

Extraction Method: 3510C Date Extracted: 11/21/2014 16:15

Sample wt/vol: 1000(mL) Date Analyzed: 12/04/2014 05:19

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-CLP2 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 127055 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	107		60-135
877-09-8	Tetrachloro-m-xylene (Surr)	82		25-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314057.D
Lims ID: MB 180-126039/1-A
Client ID:
Sample Type: MB
Inject. Date: 04-Dec-2014 05:19:41 ALS Bottle#: 54 Worklist Smp#: 54
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004694-054
Operator ID: 402331 Instrument ID: CHGC16

Method: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 04-Dec-2014 14:10:22 Calib Date: 03-Dec-2014 02:40:17
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141202-4675.b\120214066.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK004

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
2 PCB-1221							
1		2.767				ND	
1		3.510					
1		3.342					
2		3.374					
2		4.170					
2		4.413					
$ 1 Tetrachloro-m-xylene							
1	3.201	3.202	-0.001	24074216H	0.0200	0.0170	
2	3.856	3.850	0.006	16958870H	0.0200	0.0164	
						RPD = 3.50	
5 PCB-1232							
1		3.343				ND	
1		3.511					
1		3.850					
1		4.332					
1		4.730					
2		4.171					
2		4.416					
2		4.935					
2		5.601					
2		5.810					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
3 PCB-1242							
1		3.511				ND	
1		3.847					
1		4.331					
1		4.980					
1		5.589					
2		4.416					
2		4.935					
2		5.600					
2		6.588					
2		7.835					
4 PCB-1016							
1		3.515				ND	
1		3.854					
1		4.337					
1		4.487					
1		4.987					
2		4.923					
2		5.587					
2		5.796					
2		5.963					
2		7.342					
6 PCB-1248							
1		4.696				ND	
1		4.978					
1		5.548					
1		5.877					
1		6.505					
2		6.118					
2		6.586					
2		7.273					
2		7.363					
2		7.836					
7 PCB-1254							
1		5.498				ND	
1		5.871					
1		6.507					
1		6.980					
1		7.864					
2		7.355					
2		7.726					
2		8.667					
2		9.083					
2		10.009					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1		7.870				ND	
1		8.577					
1		9.135					
1		9.612					
1		10.589					
2		9.385					
2		9.999					
2		10.610					
2		10.985					
2		11.518					
9 PCB-1262							
1		8.096				ND	
1		8.569					
1		9.126					
1		9.668					
1		10.583					
2		10.155					
2		10.623					
2		10.995					
2		11.517					
2		12.309					
10 PCB-1268							
1		9.669				ND	
1		10.044					
1		10.584					
1		11.004					
2		11.514					
2		11.933					
2		12.309					
2		12.738					
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.276	11.279	-0.003	16357420H	0.0200	0.0187	
2	13.067	13.064	0.003	17702798H	0.0200	0.0214	
						RPD = 13.79	

Report Date: 04-Dec-2014 14:12:43 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314057.D

Injection Date: 04-Dec-2014 05:19:41 Instrument ID: CHGC16

Lims ID: MB 180-126039/1-A

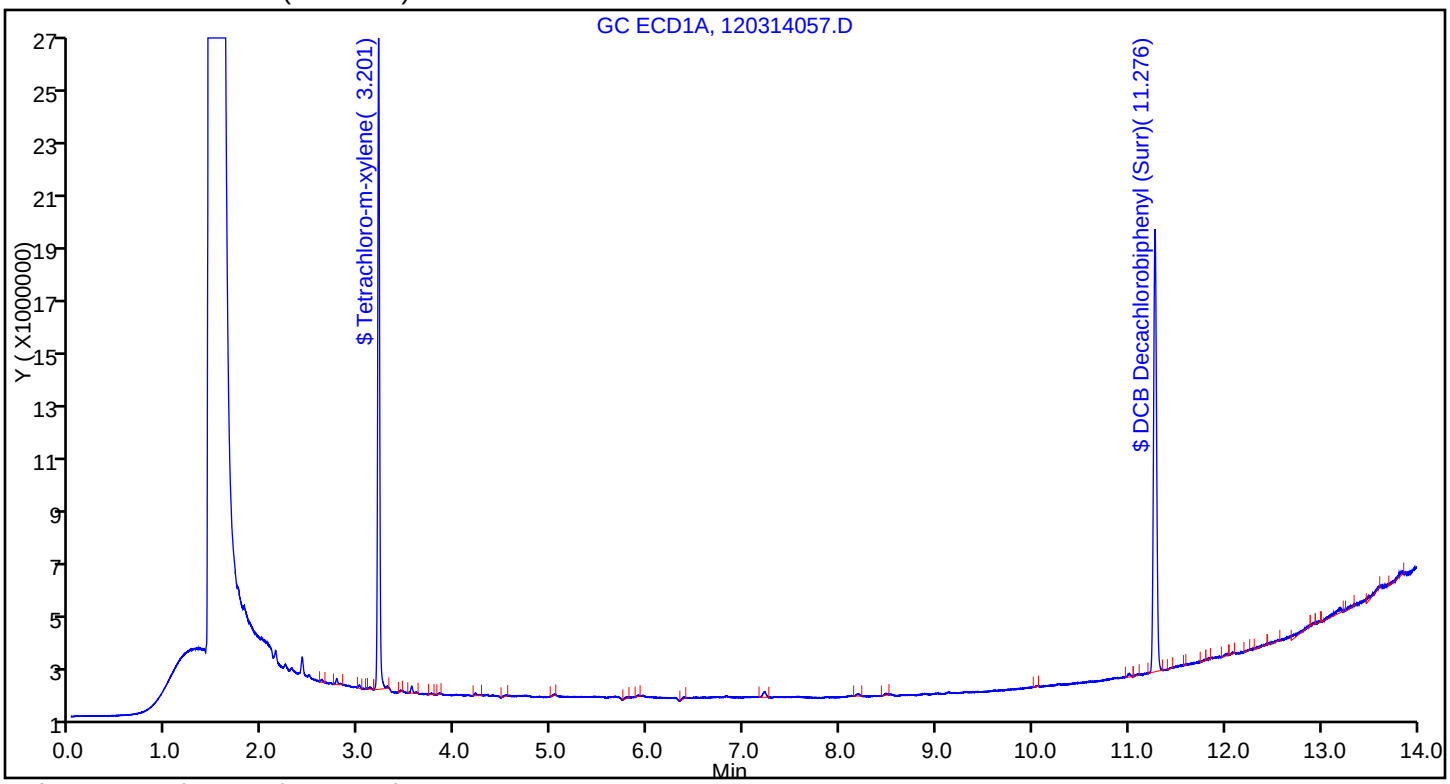
Client ID:

Operator ID: 402331 ALS Bottle#: 54 Worklist Smp#: 54

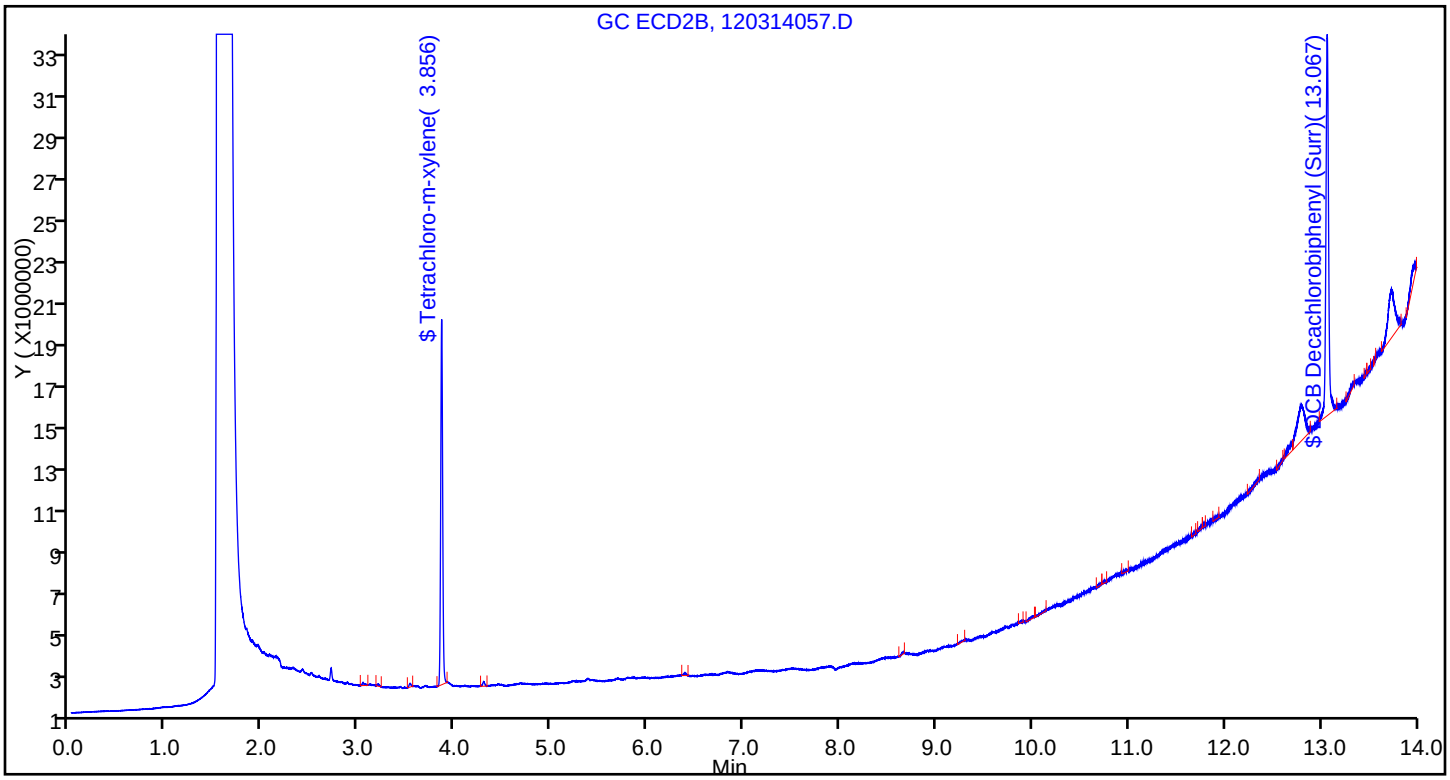
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-126039/4-A

Matrix: Water Lab File ID: 120314075.D

Analysis Method: 8082A Date Collected:

Extraction Method: 3510C Date Extracted: 11/21/2014 16:15

Sample wt/vol: 1000(mL) Date Analyzed: 12/04/2014 11:04

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-CLP1 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 127055 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	0.902		0.010	0.0025
11096-82-5	PCB-1260	1.05		0.010	0.0017

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	105		60-135
877-09-8	Tetrachloro-m-xylene (Surr)	96		25-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314075.D
Lims ID: LCS 180-126039/4-A
Client ID:
Sample Type: LCS
Inject. Date: 04-Dec-2014 11:04:19 ALS Bottle#: 72 Worklist Smp#: 72
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004694-072
Operator ID: 402331 Instrument ID: CHGC16

Method: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 04-Dec-2014 14:10:22 Calib Date: 03-Dec-2014 02:40:17
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141202-4675.b\120214066.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK004

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.201	3.202	-0.001	27086551H	0.0200	0.0191	
2	3.858	3.850	0.008	18807219H	0.0200	0.0182	
						RPD = 4.94	
4 PCB-1016							
1	3.513	3.515	-0.002	19274208H	1.00	0.8346	
1	3.850	3.854	-0.004	30159220H	1.00	0.8392	
1	4.332	4.337	-0.005	53248326H	1.00	0.9424	
1	4.482	4.487	-0.005	27292497H	1.00	0.9174	
1	4.979	4.987	-0.008	23267419H	1.00	0.9769	
		Average of Peak Amounts =				0.9021	
2	4.932	4.923	0.009	18084825H	1.00	0.8542	
2	5.596	5.587	0.009	32537247H	1.00	0.9366	
2	5.804	5.796	0.008	17923395H	1.00	0.8831	
2	5.973	5.963	0.010	12789554H	1.00	0.8910	
2	7.351	7.342	0.009	12142739H	1.00	0.9376	
		Average of Peak Amounts =				0.9005	
						RPD = 0.17	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	7.859	7.870	-0.011	47288512H	1.00	1.03	
1	8.564	8.577	-0.013	37815461H	1.00	1.03	
1	9.125	9.135	-0.010	96677368H	1.00	1.10	
1	9.602	9.612	-0.010	51116373H	1.00	1.06	
1	10.581	10.589	-0.008	28344903H	1.00	1.02	
		Average of Peak Amounts =				1.05	
2	9.392	9.385	0.007	42399092H	1.00	0.9332	
2	10.003	9.999	0.004	34734281H	1.00	0.9431	
2	10.614	10.610	0.004	34266236H	1.00	0.9388	
2	10.987	10.985	0.002	93122499H	1.00	1.01	
2	11.520	11.518	0.002	40660155H	1.00	0.9504	
		Average of Peak Amounts =				0.9557	
						RPD = 9.02	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.271	11.279	-0.008	18338039H	0.0200	0.0209	
2	13.062	13.064	-0.002	17702790H	0.0200	0.0214	
						RPD = 2.38	

Report Date: 04-Dec-2014 14:11:33 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314075.D

Injection Date: 04-Dec-2014 11:04:19 Instrument ID: CHGC16

Lims ID: LCS 180-126039/4-A

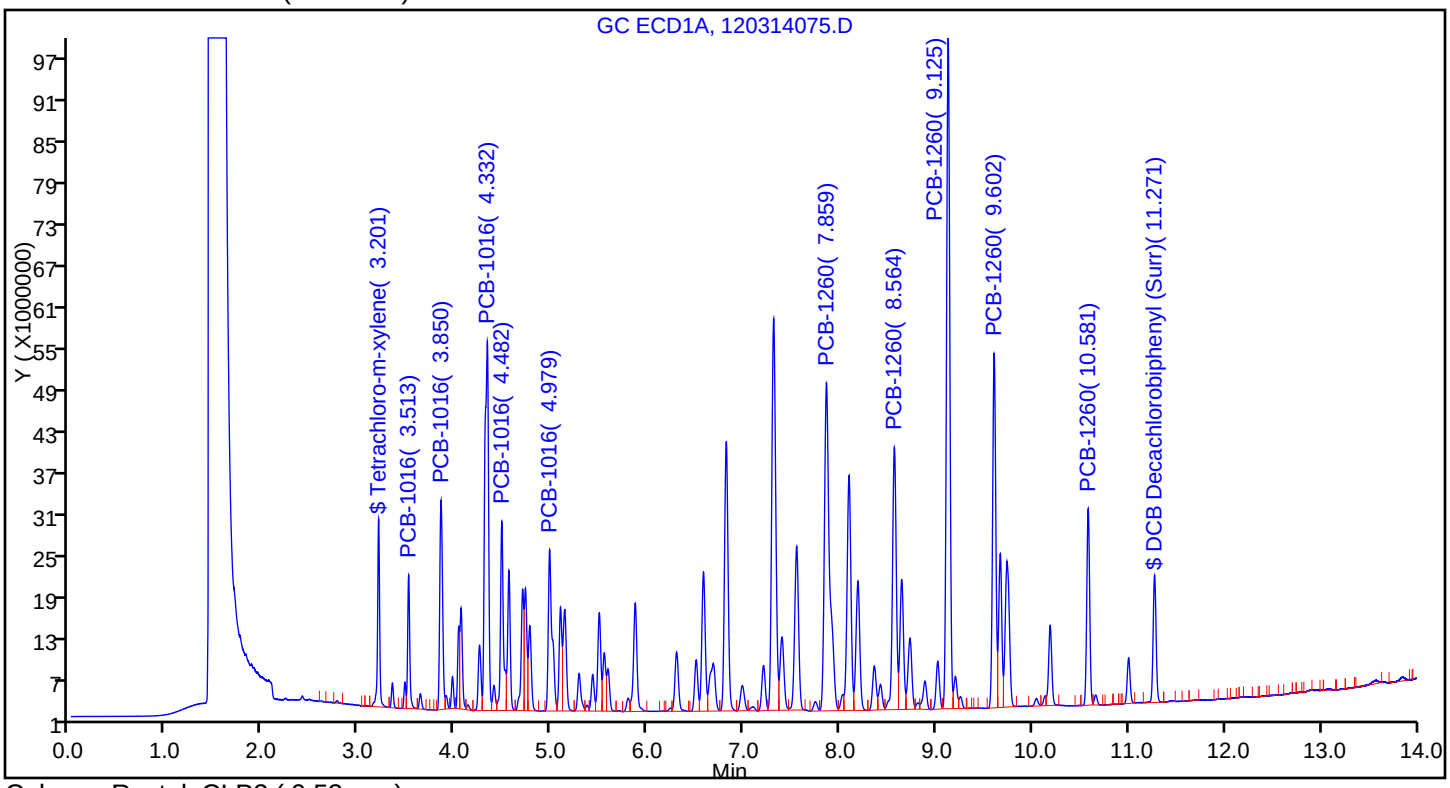
Client ID:

Operator ID: 402331 ALS Bottle#: 72 Worklist Smp#: 72

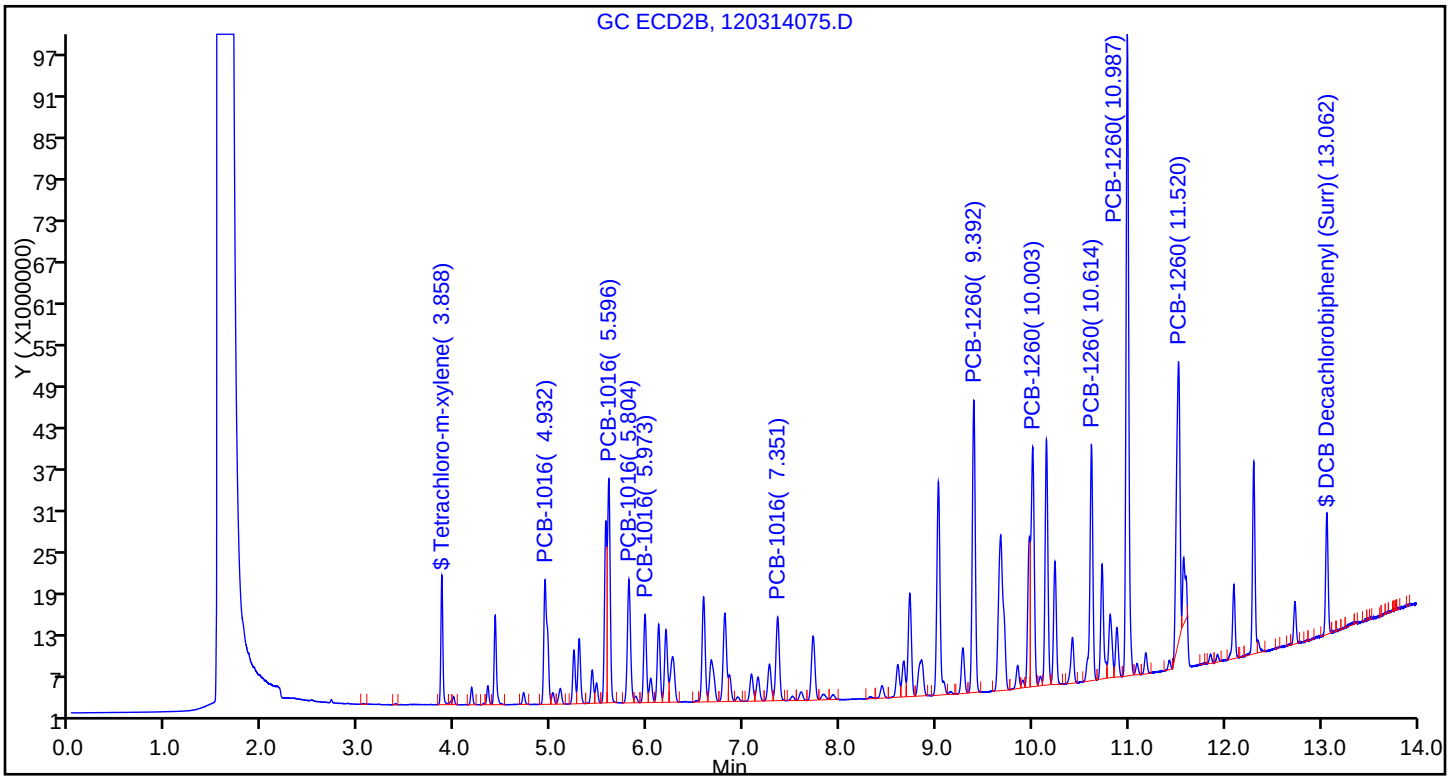
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



Report Date: 04-Dec-2014 14:11:34 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314075.D

Injection Date: 04-Dec-2014 11:04:19 Instrument ID: CHGC16

Lims ID: LCS 180-126039/4-A

Client ID:

Operator ID: 402331 ALS Bottle#: 72 Worklist Smp#: 72

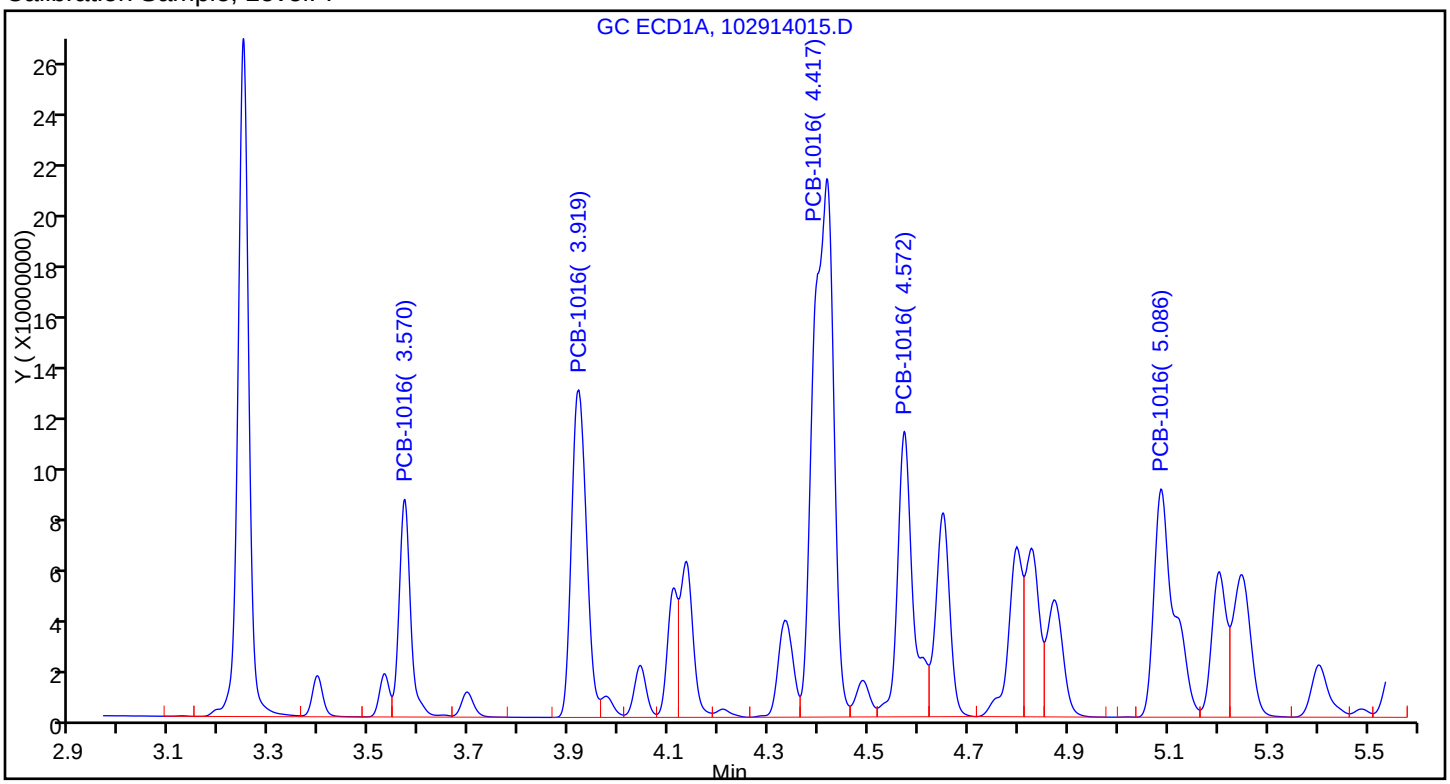
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

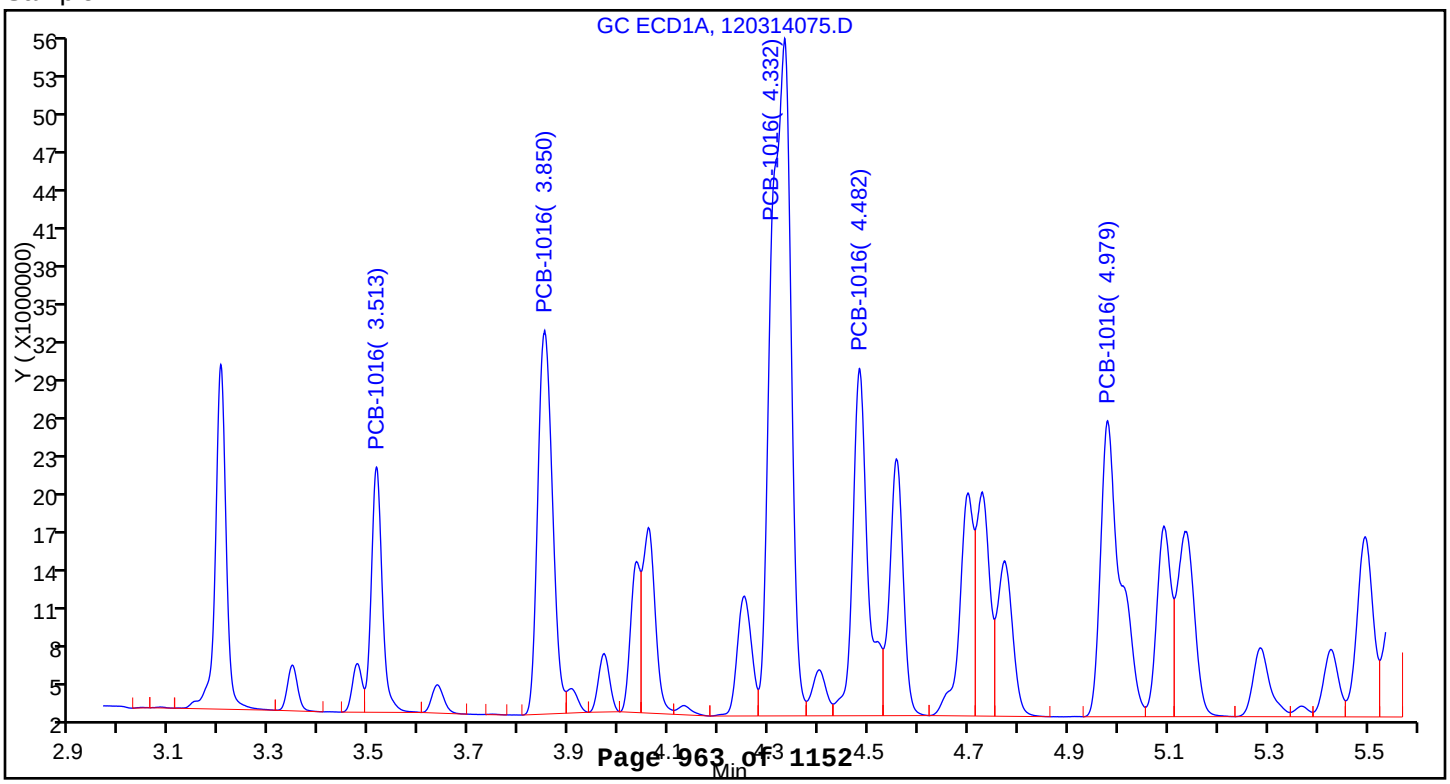
Column: Restek CLP 1 (0.53 mm) Detector GC ECD1A

4 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 7



Sample



Report Date: 04-Dec-2014 14:11:34 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314075.D

Injection Date: 04-Dec-2014 11:04:19 Instrument ID: CHGC16

Lims ID: LCS 180-126039/4-A

Client ID:

Operator ID: 402331 ALS Bottle#: 72 Worklist Smp#: 72

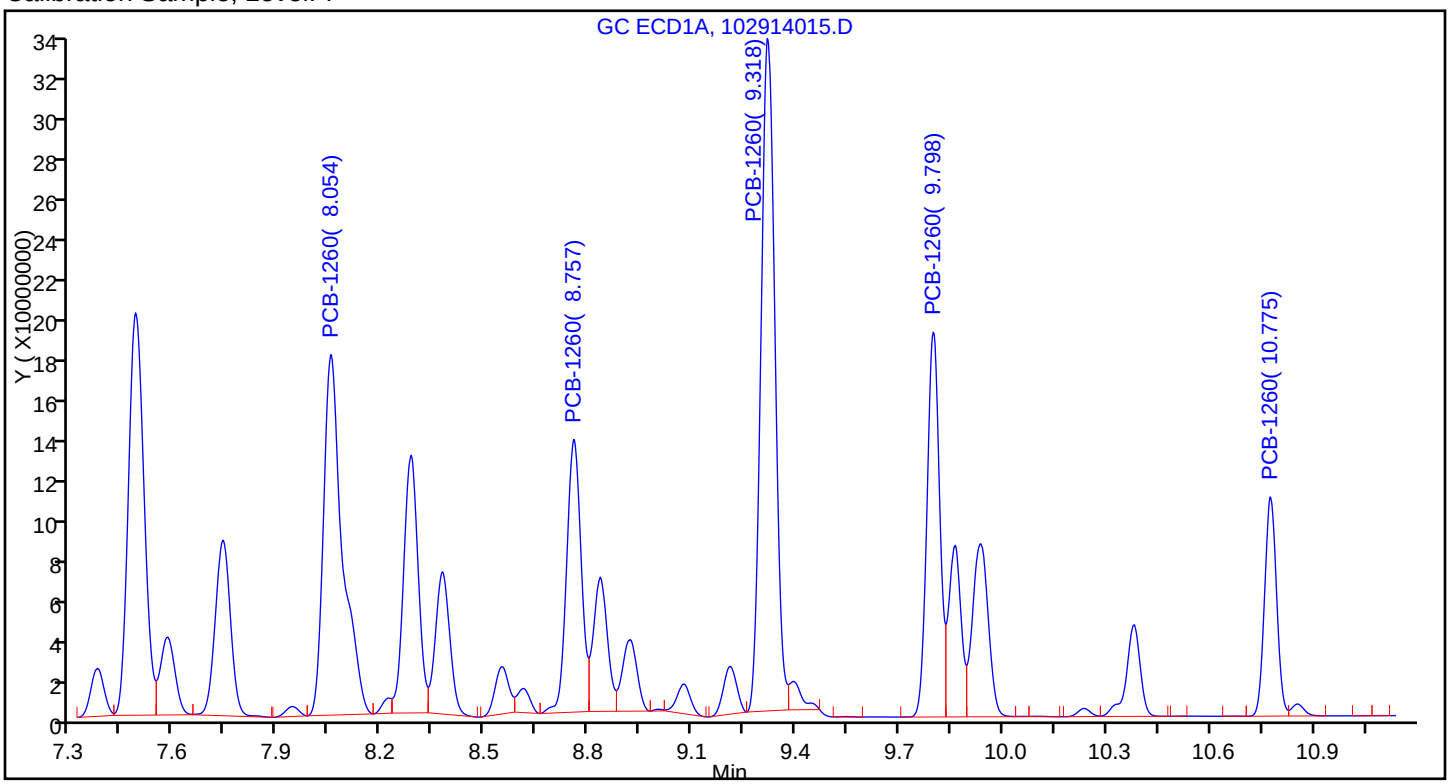
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

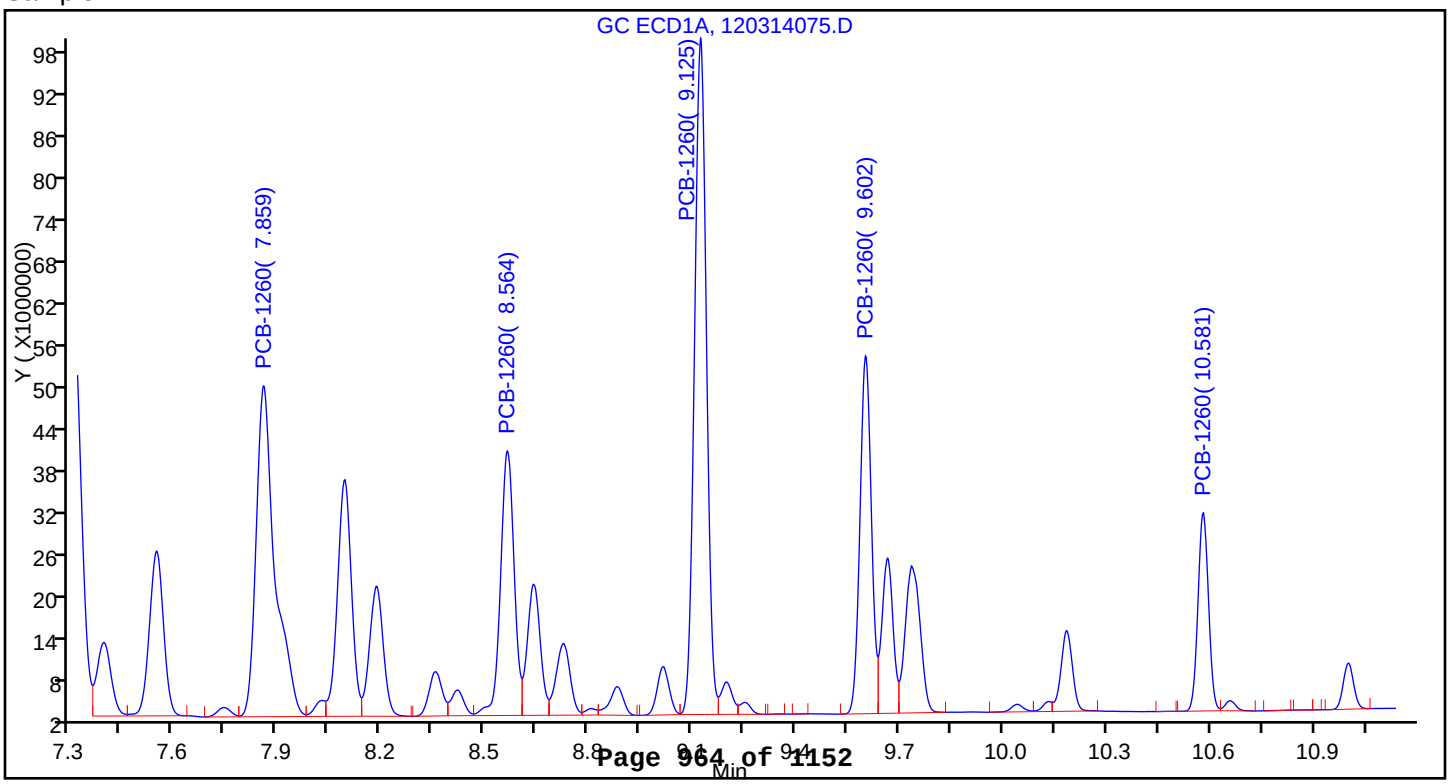
Column: Restek CLP 1 (0.53 mm) Detector GC ECD1A

8 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



Sample



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-126039/4-A

Matrix: Water Lab File ID: 120314075.D

Analysis Method: 8082A Date Collected:

Extraction Method: 3510C Date Extracted: 11/21/2014 16:15

Sample wt/vol: 1000(mL) Date Analyzed: 12/04/2014 11:04

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-CLP2 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 127055 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	107		60-135
877-09-8	Tetrachloro-m-xylene (Surr)	91		25-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314075.D
Lims ID: LCS 180-126039/4-A
Client ID:
Sample Type: LCS
Inject. Date: 04-Dec-2014 11:04:19 ALS Bottle#: 72 Worklist Smp#: 72
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004694-072
Operator ID: 402331 Instrument ID: CHGC16

Method: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 04-Dec-2014 14:10:22 Calib Date: 03-Dec-2014 02:40:17
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141202-4675.b\120214066.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK004

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.201	3.202	-0.001	27086551H	0.0200	0.0191	
2	3.858	3.850	0.008	18807219H	0.0200	0.0182	
						RPD = 4.94	
4 PCB-1016							
1	3.513	3.515	-0.002	19274208H	1.00	0.8346	
1	3.850	3.854	-0.004	30159220H	1.00	0.8392	
1	4.332	4.337	-0.005	53248326H	1.00	0.9424	
1	4.482	4.487	-0.005	27292497H	1.00	0.9174	
1	4.979	4.987	-0.008	23267419H	1.00	0.9769	
		Average of Peak Amounts =				0.9021	
2	4.932	4.923	0.009	18084825H	1.00	0.8542	
2	5.596	5.587	0.009	32537247H	1.00	0.9366	
2	5.804	5.796	0.008	17923395H	1.00	0.8831	
2	5.973	5.963	0.010	12789554H	1.00	0.8910	
2	7.351	7.342	0.009	12142739H	1.00	0.9376	
		Average of Peak Amounts =				0.9005	
						RPD = 0.17	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	7.859	7.870	-0.011	47288512H	1.00	1.03	
1	8.564	8.577	-0.013	37815461H	1.00	1.03	
1	9.125	9.135	-0.010	96677368H	1.00	1.10	
1	9.602	9.612	-0.010	51116373H	1.00	1.06	
1	10.581	10.589	-0.008	28344903H	1.00	1.02	
		Average of Peak Amounts =				1.05	
2	9.392	9.385	0.007	42399092H	1.00	0.9332	
2	10.003	9.999	0.004	34734281H	1.00	0.9431	
2	10.614	10.610	0.004	34266236H	1.00	0.9388	
2	10.987	10.985	0.002	93122499H	1.00	1.01	
2	11.520	11.518	0.002	40660155H	1.00	0.9504	
		Average of Peak Amounts =				0.9557	
						RPD = 9.02	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.271	11.279	-0.008	18338039H	0.0200	0.0209	
2	13.062	13.064	-0.002	17702790H	0.0200	0.0214	
						RPD = 2.38	

Report Date: 04-Dec-2014 14:11:35 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314075.D

Injection Date: 04-Dec-2014 11:04:19 Instrument ID: CHGC16

Lims ID: LCS 180-126039/4-A

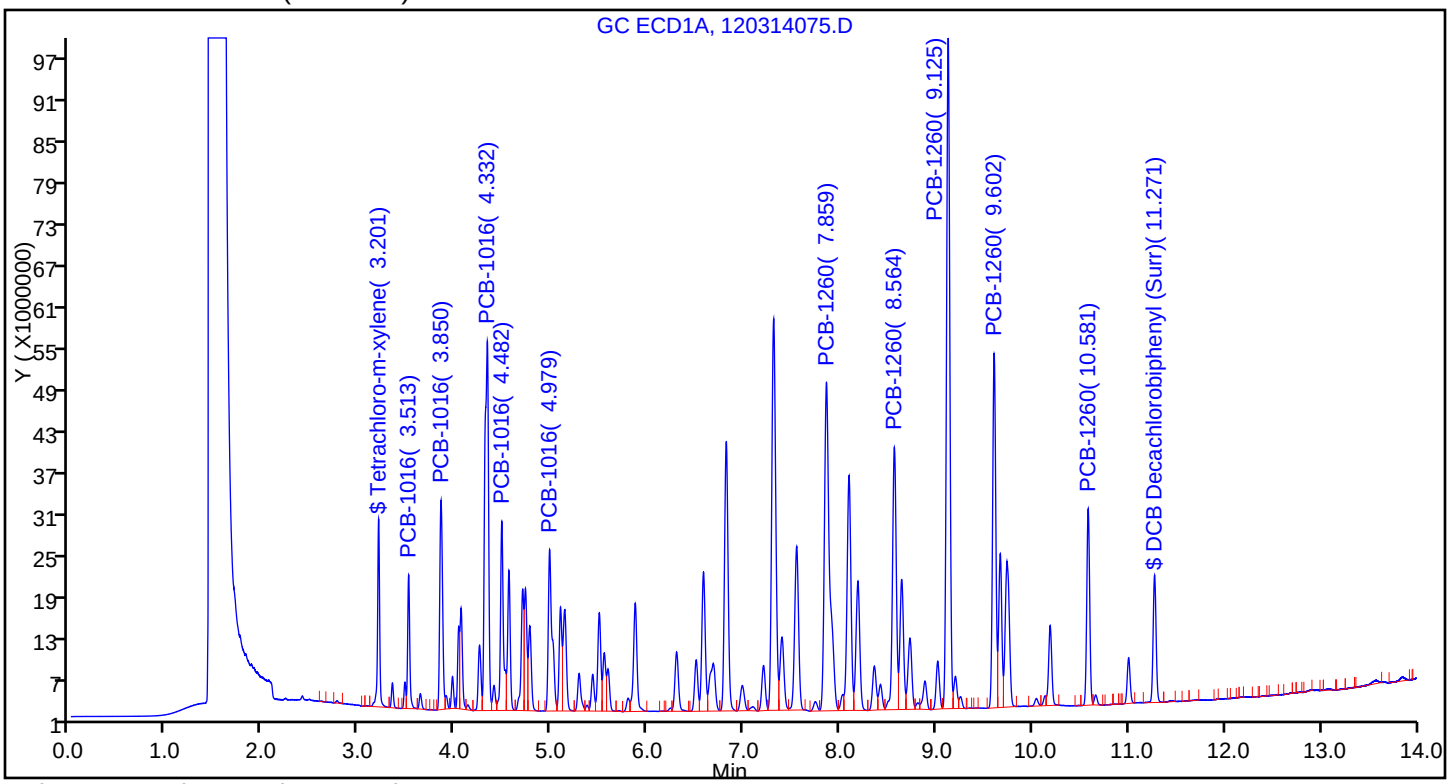
Client ID:

Operator ID: 402331 ALS Bottle#: 72 Worklist Smp#: 72

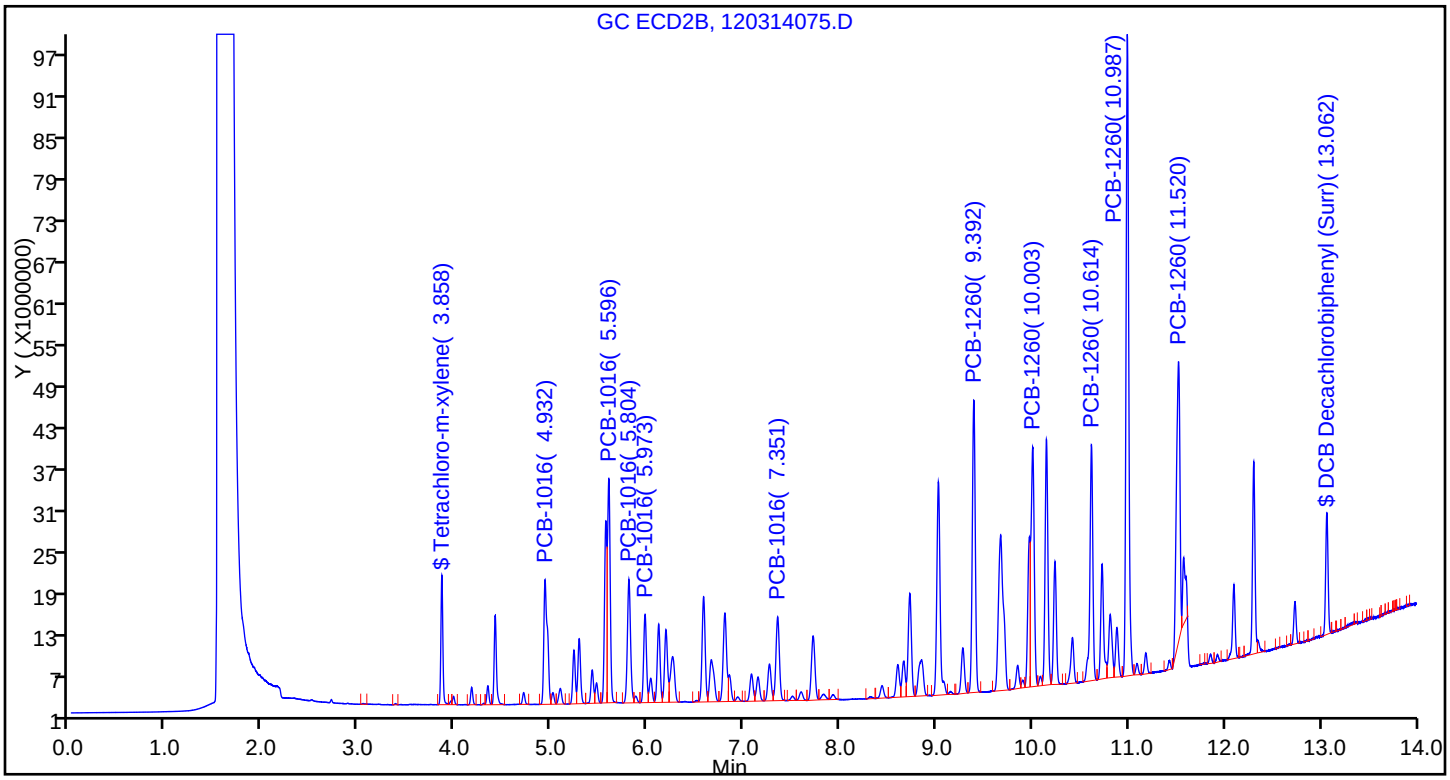
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



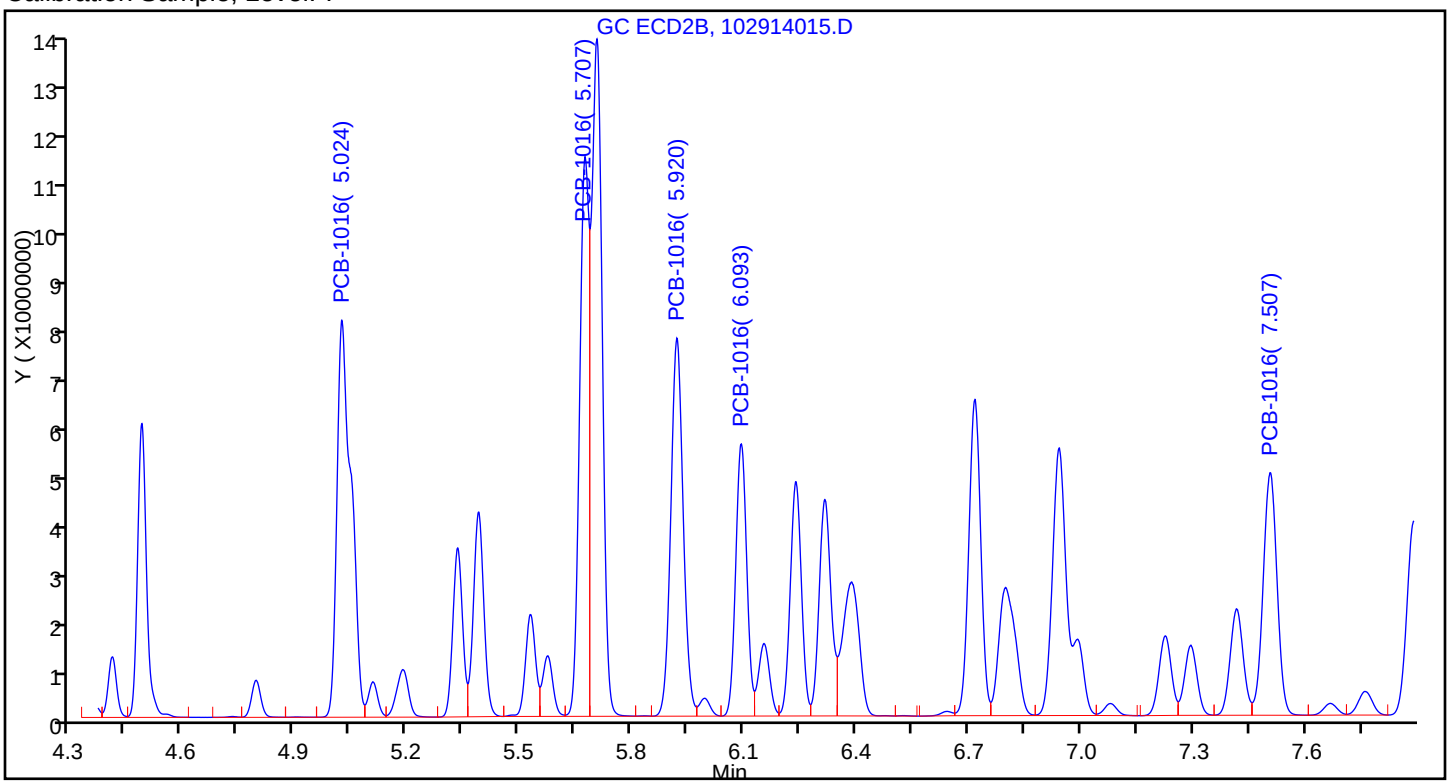
Report Date: 04-Dec-2014 14:11:35 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

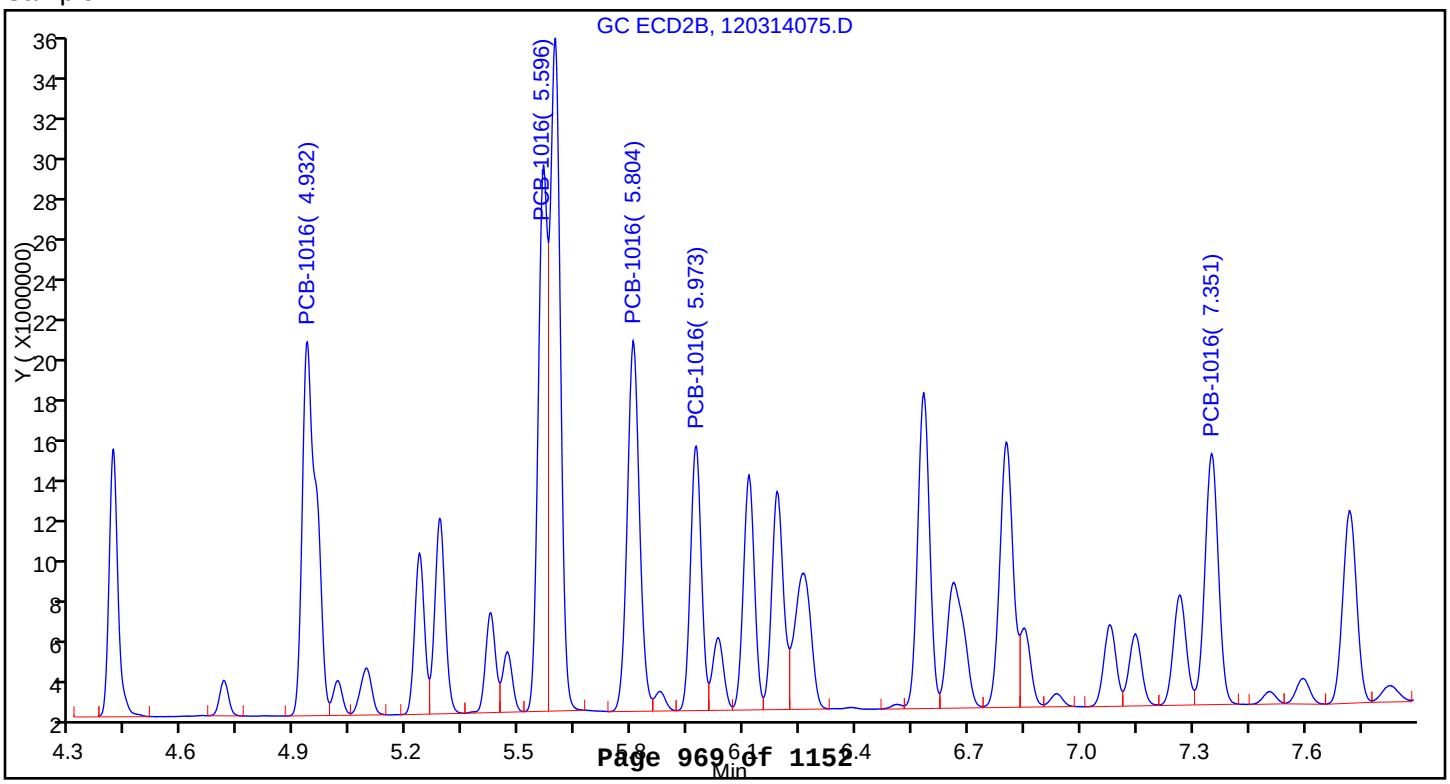
Data File:	\\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314075.D				
Injection Date:	04-Dec-2014 11:04:19	Instrument ID:	CHGC16		
Lims ID:	LCS 180-126039/4-A				
Client ID:					
Operator ID:	402331	ALS Bottle#:	72	Worklist Smp#:	72
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_CHGC16	Limit Group:	GCS 8082A ICAL		
Column:	Restek CLP2 (0.53 mm)	Detector	GC ECD2B		

4 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 7



Sample



Report Date: 04-Dec-2014 14:11:35 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314075.D

Injection Date: 04-Dec-2014 11:04:19 Instrument ID: CHGC16

Lims ID: LCS 180-126039/4-A

Client ID:

Operator ID: 402331 ALS Bottle#: 72 Worklist Smp#: 72

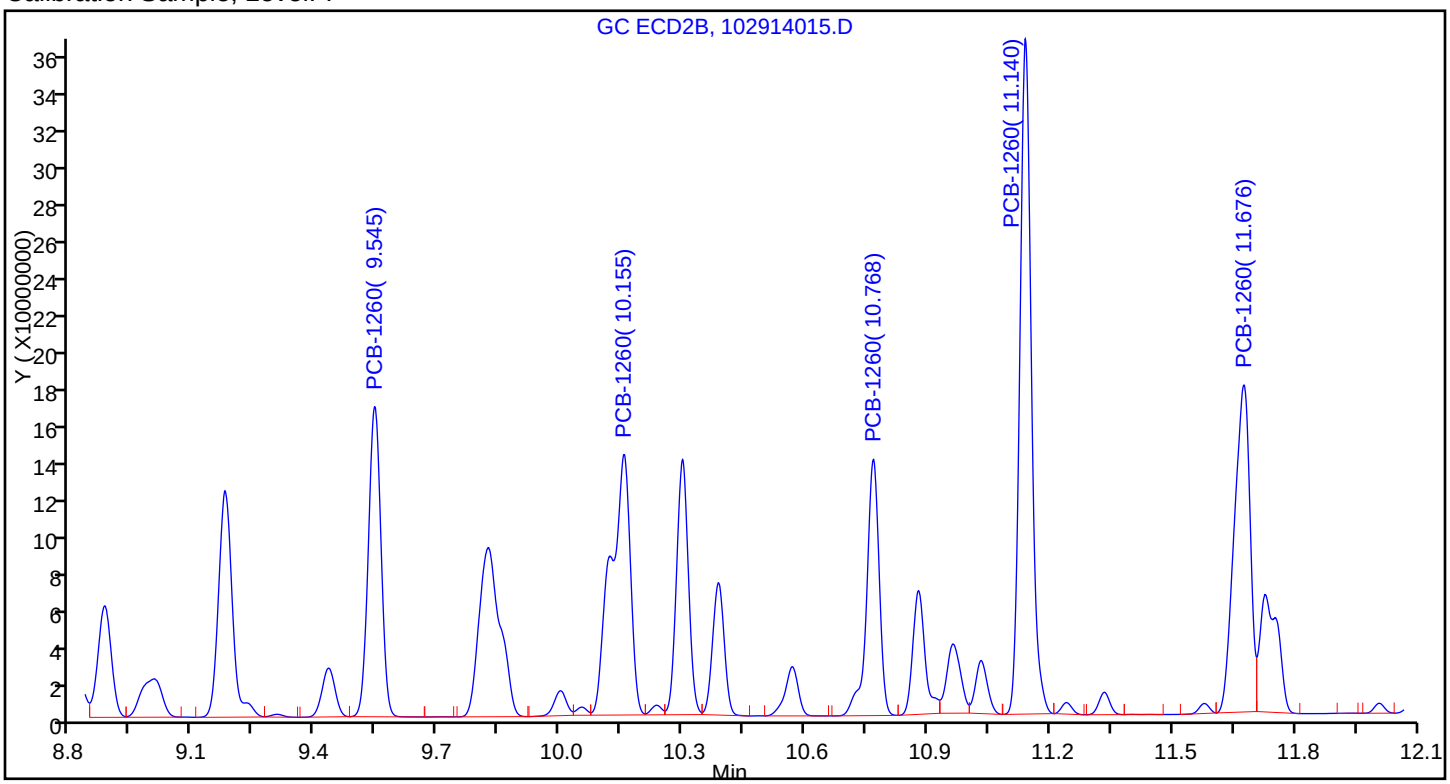
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

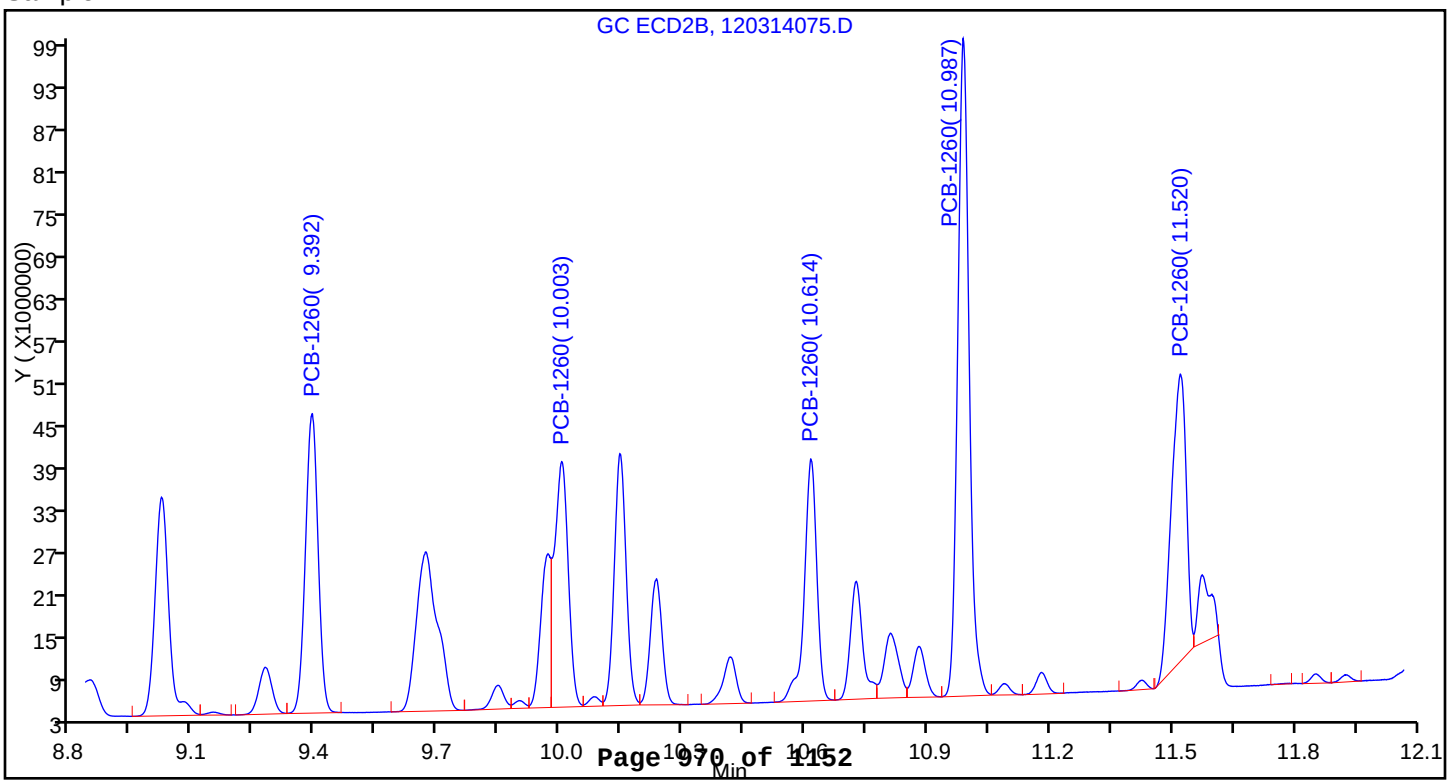
Column: Restek CLP2 (0.53 mm) Detector GC ECD2B

8 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



Sample



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 180-126039/5-A

Matrix: Water Lab File ID: 120314076.D

Analysis Method: 8082A Date Collected:

Extraction Method: 3510C Date Extracted: 11/21/2014 16:15

Sample wt/vol: 1000(mL) Date Analyzed: 12/04/2014 11:23

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-CLP1 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 127055 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	0.861		0.010	0.0025
11096-82-5	PCB-1260	1.04		0.010	0.0017

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	105		60-135
877-09-8	Tetrachloro-m-xylene (Surr)	91		25-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314076.D
Lims ID: LCSD 180-126039/5-A
Client ID:
Sample Type: LCSD
Inject. Date: 04-Dec-2014 11:23:09 ALS Bottle#: 73 Worklist Smp#: 73
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004694-073
Operator ID: 402331 Instrument ID: CHGC16

Method: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 04-Dec-2014 14:15:21 Calib Date: 03-Dec-2014 02:40:17
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141202-4675.b\120214066.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: oravecj Date: 04-Dec-2014 14:15:47

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.200	3.202	-0.002	25854837H	0.0200	0.0183	
2	3.857	3.850	0.007	17788971H	0.0200	0.0172	
						RPD = 5.85	
4 PCB-1016							
1	3.513	3.515	-0.002	18571267H	1.00	0.8041	
1	3.849	3.854	-0.005	29314434H	1.00	0.8157	
1	4.331	4.337	-0.006	50270164H	1.00	0.8897	
1	4.482	4.487	-0.005	25921938H	1.00	0.8713	
1	4.980	4.987	-0.007	22016117H	1.00	0.9243	
		Average of Peak Amounts =				0.8610	
2	4.932	4.923	0.009	17298151H	1.00	0.8171	
2	5.596	5.587	0.009	30502392H	1.00	0.8781	
2	5.804	5.796	0.008	16986051H	1.00	0.8370	
2	5.972	5.963	0.009	12068476H	1.00	0.8408	
2	7.352	7.342	0.010	11681408H	1.00	0.9020	
		Average of Peak Amounts =				0.8550	
						RPD = 0.71	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	7.860	7.870	-0.010	46291899H	1.00	1.01	
1	8.566	8.577	-0.011	38154114H	1.00	1.04	
1	9.124	9.135	-0.011	96208365H	1.00	1.10	
1	9.604	9.612	-0.008	50510785H	1.00	1.05	
1	10.582	10.589	-0.007	28780893H	1.00	1.03	
		Average of Peak Amounts =				1.04	
2	9.390	9.385	0.005	41378492H	1.00	0.9107	
2	10.005	9.999	0.006	34045719H	1.00	0.9244	
2	10.615	10.610	0.005	33949007H	1.00	0.9301	
2	10.988	10.985	0.003	90969623H	1.00	0.9897	
2	11.521	11.518	0.003	43125139H	1.00	1.01	
		Average of Peak Amounts =				0.9526	
						RPD = 9.07	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.271	11.279	-0.008	18396957H	0.0200	0.0210	
2	13.063	13.064	-0.001	16838653H	0.0200	0.0204	
						RPD = 2.94	

Report Date: 04-Dec-2014 14:15:47 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314076.D

Injection Date: 04-Dec-2014 11:23:09 Instrument ID: CHGC16

Lims ID: LCSD 180-126039/5-A

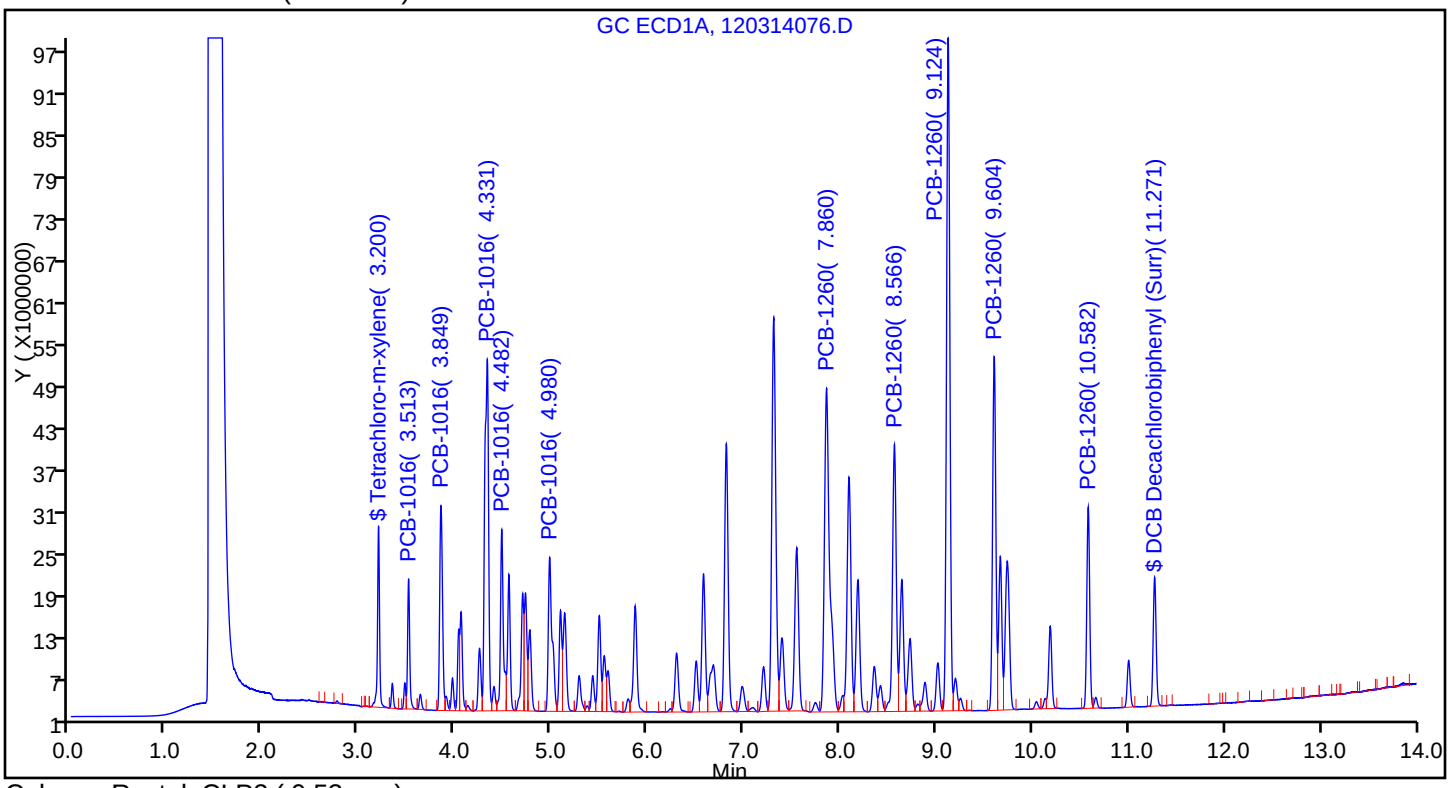
Client ID:

Operator ID: 402331 ALS Bottle#: 73 Worklist Smp#: 73

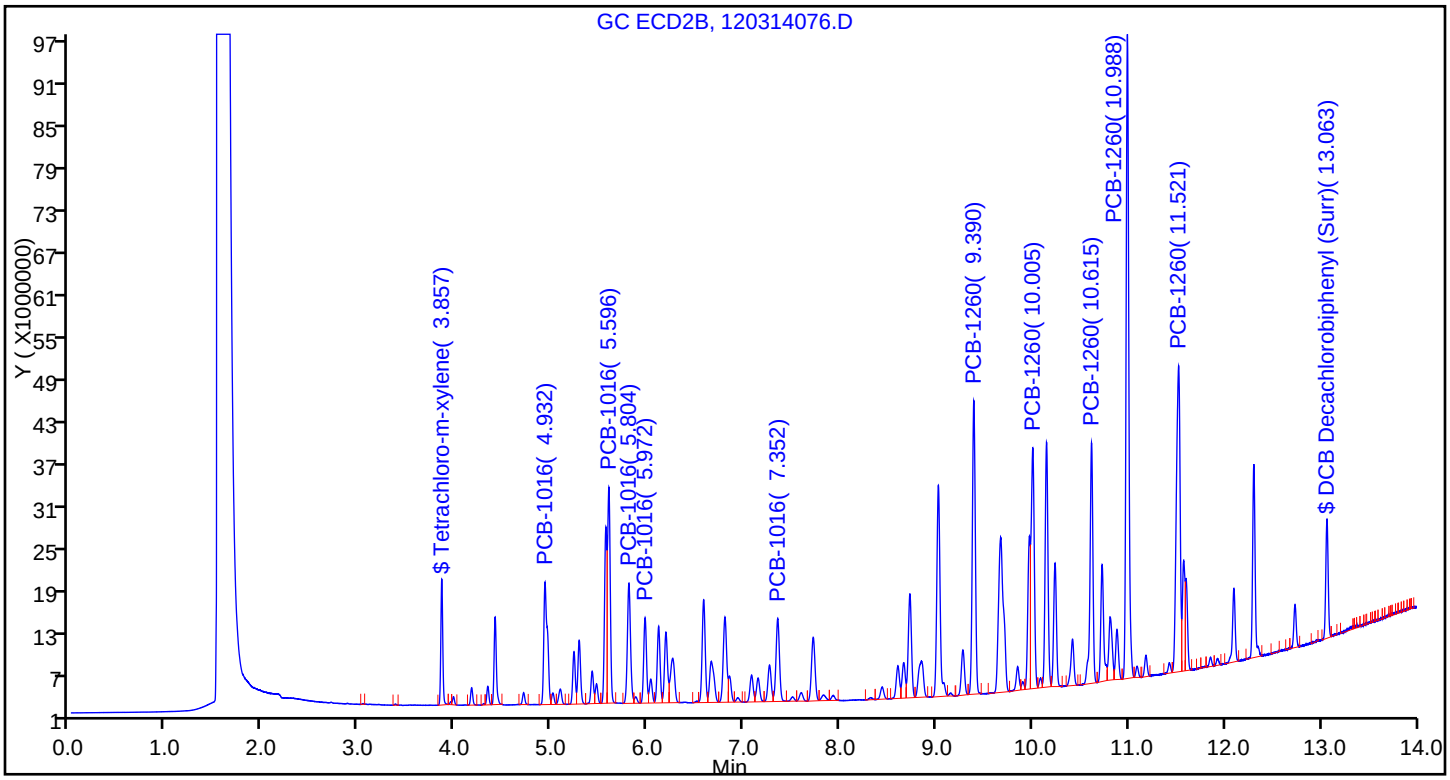
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



Report Date: 04-Dec-2014 14:15:48 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314076.D

Injection Date: 04-Dec-2014 11:23:09 Instrument ID: CHGC16

Lims ID: LCSD 180-126039/5-A

Client ID:

Operator ID: 402331 ALS Bottle#: 73 Worklist Smp#: 73

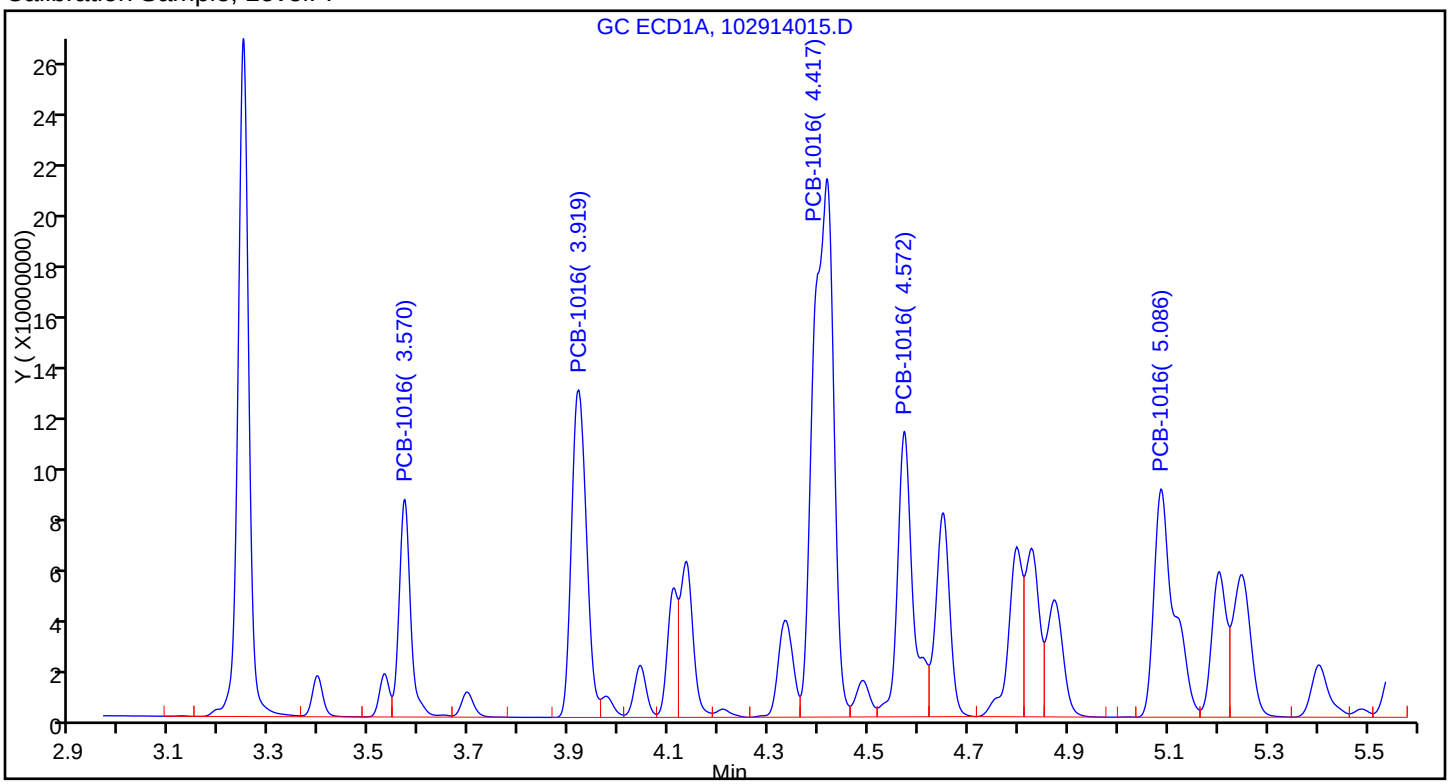
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

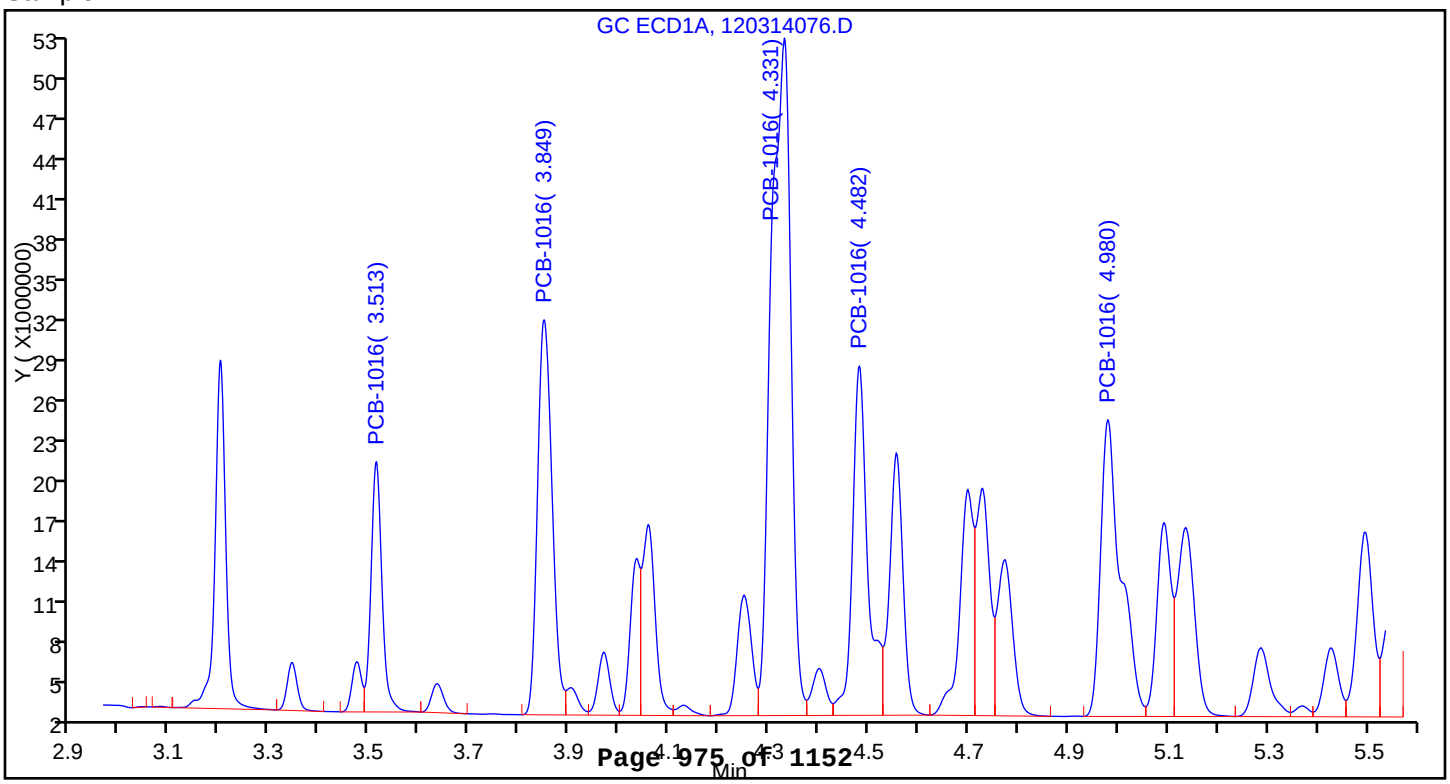
Column: Restek CLP 1 (0.53 mm) Detector GC ECD1A

4 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 7



Sample



Report Date: 04-Dec-2014 14:15:48 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314076.D

Injection Date: 04-Dec-2014 11:23:09 Instrument ID: CHGC16

Lims ID: LCSD 180-126039/5-A

Client ID:

Operator ID: 402331 ALS Bottle#: 73 Worklist Smp#: 73

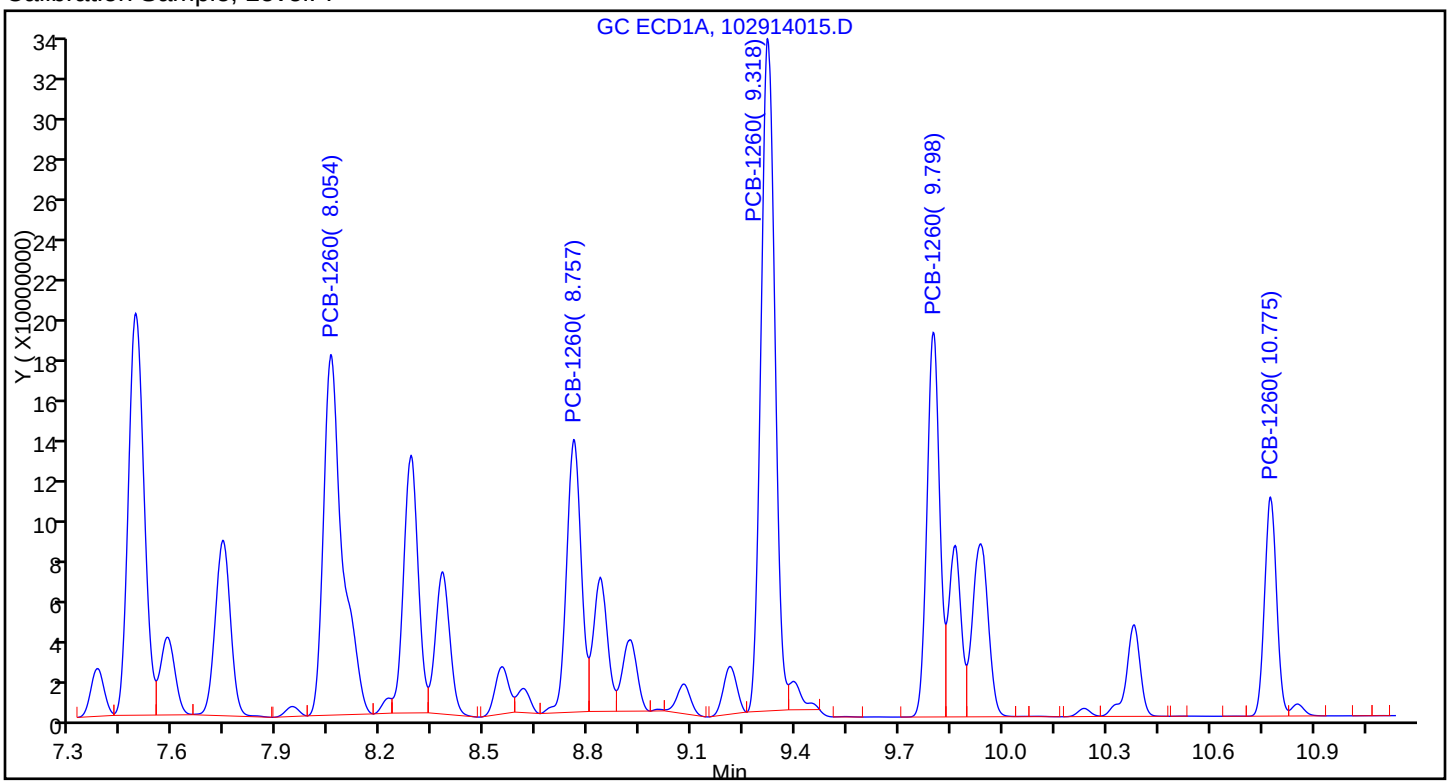
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

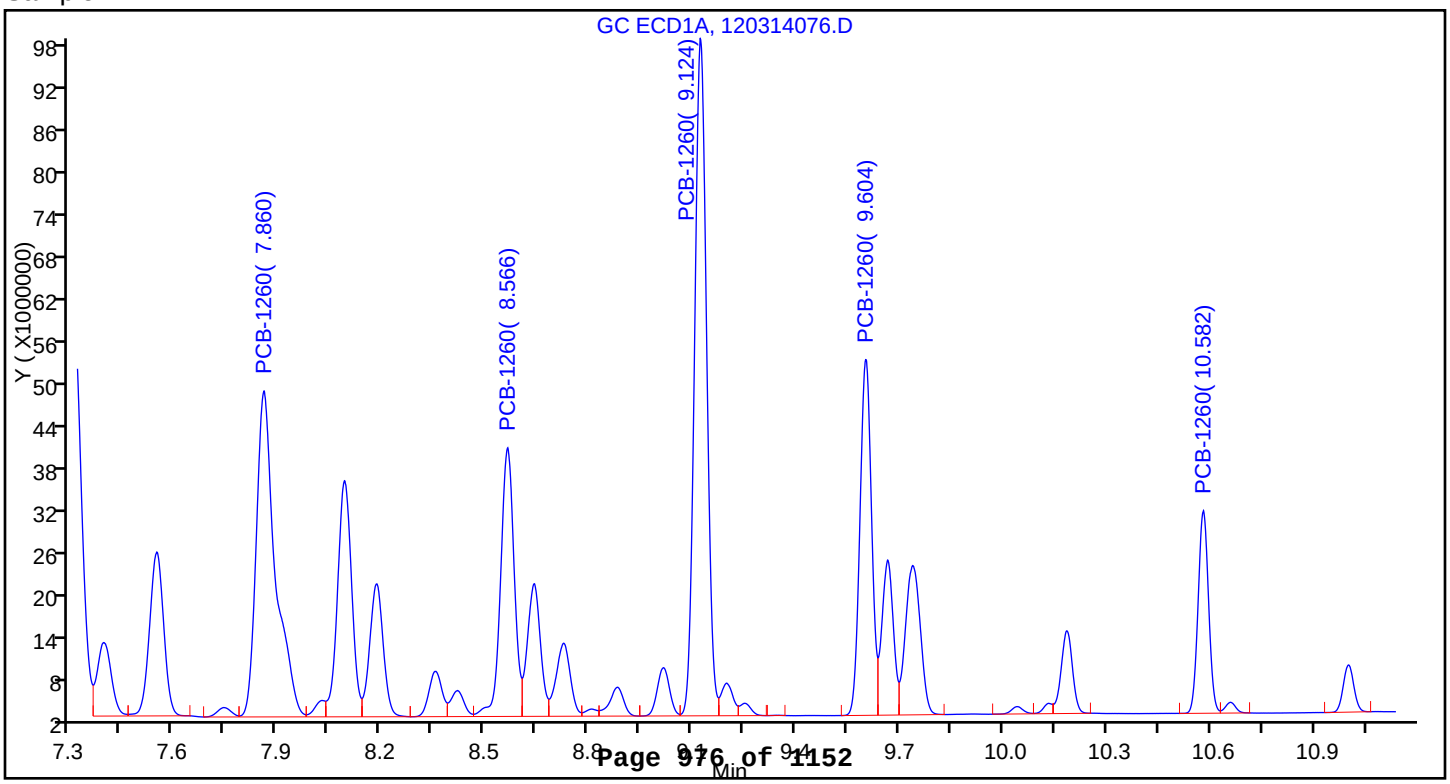
Column: Restek CLP 1 (0.53 mm) Detector GC ECD1A

8 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



Sample



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 180-126039/5-A

Matrix: Water Lab File ID: 120314076.D

Analysis Method: 8082A Date Collected:

Extraction Method: 3510C Date Extracted: 11/21/2014 16:15

Sample wt/vol: 1000(mL) Date Analyzed: 12/04/2014 11:23

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-CLP2 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 127055 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	102		60-135
877-09-8	Tetrachloro-m-xylene (Surr)	86		25-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314076.D
Lims ID: LCSD 180-126039/5-A
Client ID:
Sample Type: LCSD
Inject. Date: 04-Dec-2014 11:23:09 ALS Bottle#: 73 Worklist Smp#: 73
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 180-0004694-073
Operator ID: 402331 Instrument ID: CHGC16

Method: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\PCB_CHGC16.m
Limit Group: GCS 8082A ICAL
Last Update: 04-Dec-2014 14:15:21 Calib Date: 03-Dec-2014 02:40:17
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHGC16\20141202-4675.b\120214066.D

Column 1 : Restek CLP 1 (0.53 mm) Det: GC ECD1A
Column 2 : Restek CLP2 (0.53 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: oravecj Date: 04-Dec-2014 14:15:47

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 1 Tetrachloro-m-xylene							
1	3.200	3.202	-0.002	25854837H	0.0200	0.0183	
2	3.857	3.850	0.007	17788971H	0.0200	0.0172	
						RPD = 5.85	
4 PCB-1016							
1	3.513	3.515	-0.002	18571267H	1.00	0.8041	
1	3.849	3.854	-0.005	29314434H	1.00	0.8157	
1	4.331	4.337	-0.006	50270164H	1.00	0.8897	
1	4.482	4.487	-0.005	25921938H	1.00	0.8713	
1	4.980	4.987	-0.007	22016117H	1.00	0.9243	
		Average of Peak Amounts =				0.8610	
2	4.932	4.923	0.009	17298151H	1.00	0.8171	
2	5.596	5.587	0.009	30502392H	1.00	0.8781	
2	5.804	5.796	0.008	16986051H	1.00	0.8370	
2	5.972	5.963	0.009	12068476H	1.00	0.8408	
2	7.352	7.342	0.010	11681408H	1.00	0.9020	
		Average of Peak Amounts =				0.8550	
						RPD = 0.71	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng	OnCol Amt ng	Flags
8 PCB-1260							
1	7.860	7.870	-0.010	46291899H	1.00	1.01	
1	8.566	8.577	-0.011	38154114H	1.00	1.04	
1	9.124	9.135	-0.011	96208365H	1.00	1.10	
1	9.604	9.612	-0.008	50510785H	1.00	1.05	
1	10.582	10.589	-0.007	28780893H	1.00	1.03	
		Average of Peak Amounts =				1.04	
2	9.390	9.385	0.005	41378492H	1.00	0.9107	
2	10.005	9.999	0.006	34045719H	1.00	0.9244	
2	10.615	10.610	0.005	33949007H	1.00	0.9301	
2	10.988	10.985	0.003	90969623H	1.00	0.9897	
2	11.521	11.518	0.003	43125139H	1.00	1.01	
		Average of Peak Amounts =				0.9526	
						RPD = 9.07	
$ 11 DCB Decachlorobiphenyl (Surr)							
1	11.271	11.279	-0.008	18396957H	0.0200	0.0210	
2	13.063	13.064	-0.001	16838653H	0.0200	0.0204	
						RPD = 2.94	

Report Date: 04-Dec-2014 14:15:48 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314076.D

Injection Date: 04-Dec-2014 11:23:09 Instrument ID: CHGC16

Lims ID: LCSD 180-126039/5-A

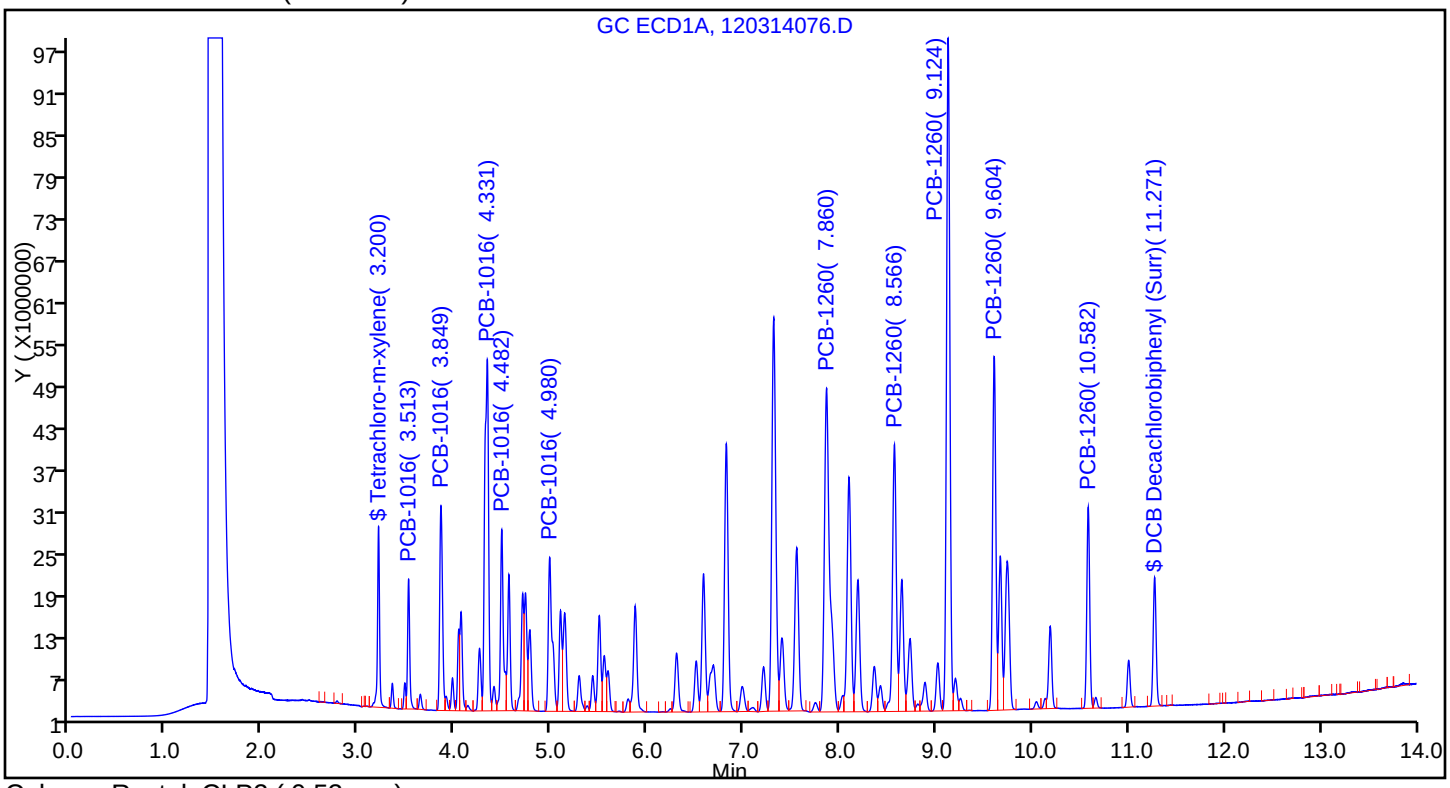
Client ID:

Operator ID: 402331 ALS Bottle#: 73 Worklist Smp#: 73

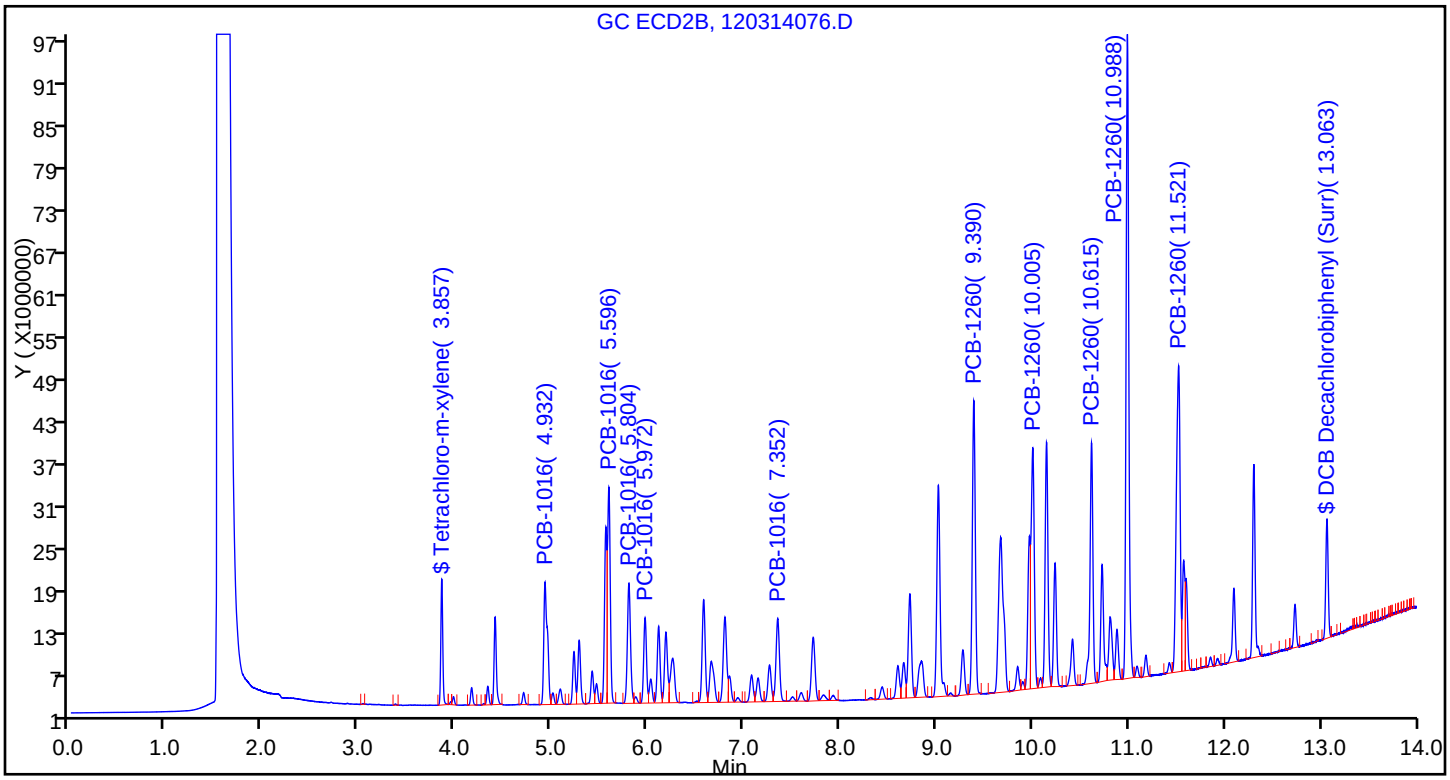
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

Column: Restek CLP 1 (0.53 mm)



Column: Restek CLP2 (0.53 mm)



Report Date: 04-Dec-2014 14:15:49 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314076.D

Injection Date: 04-Dec-2014 11:23:09 Instrument ID: CHGC16

Lims ID: LCSD 180-126039/5-A

Client ID:

Operator ID: 402331 ALS Bottle#: 73 Worklist Smp#: 73

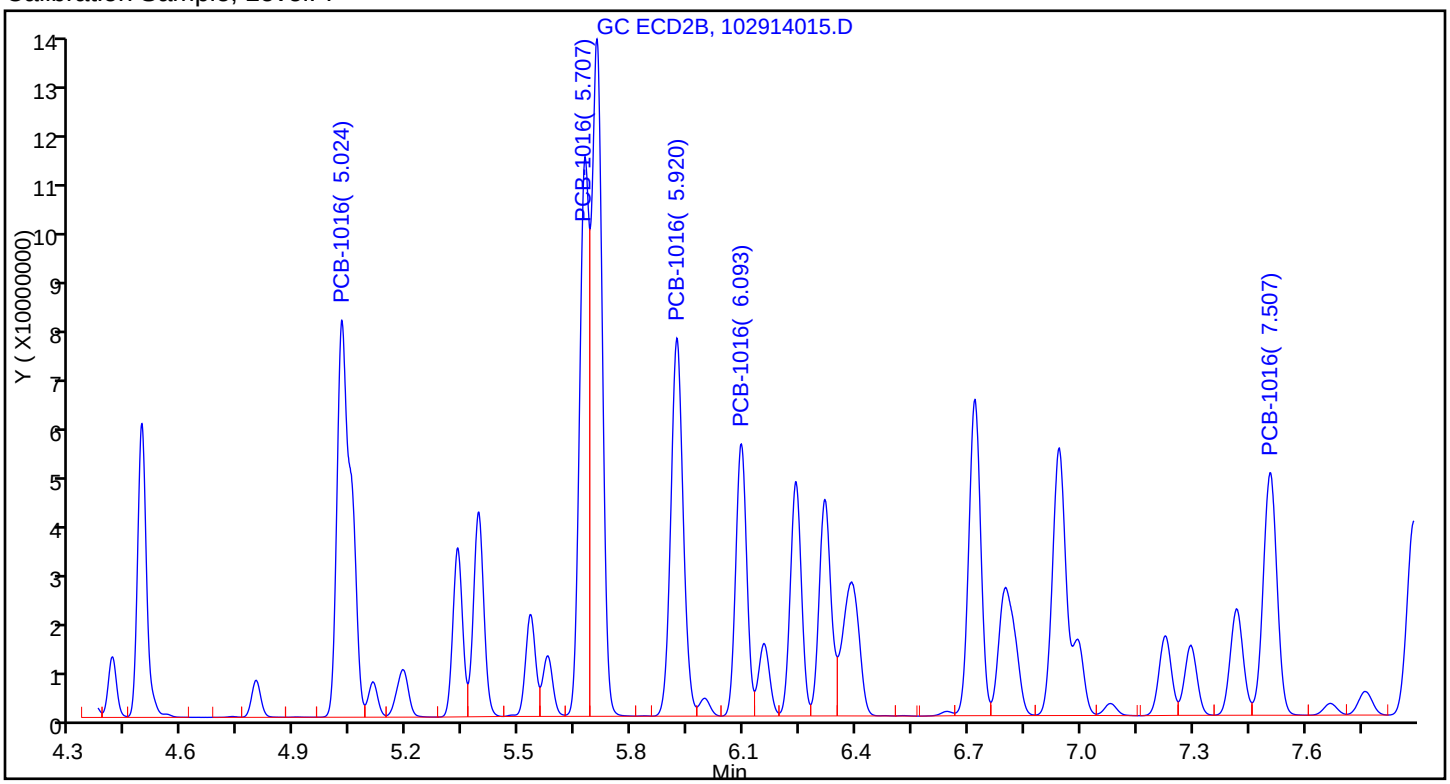
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

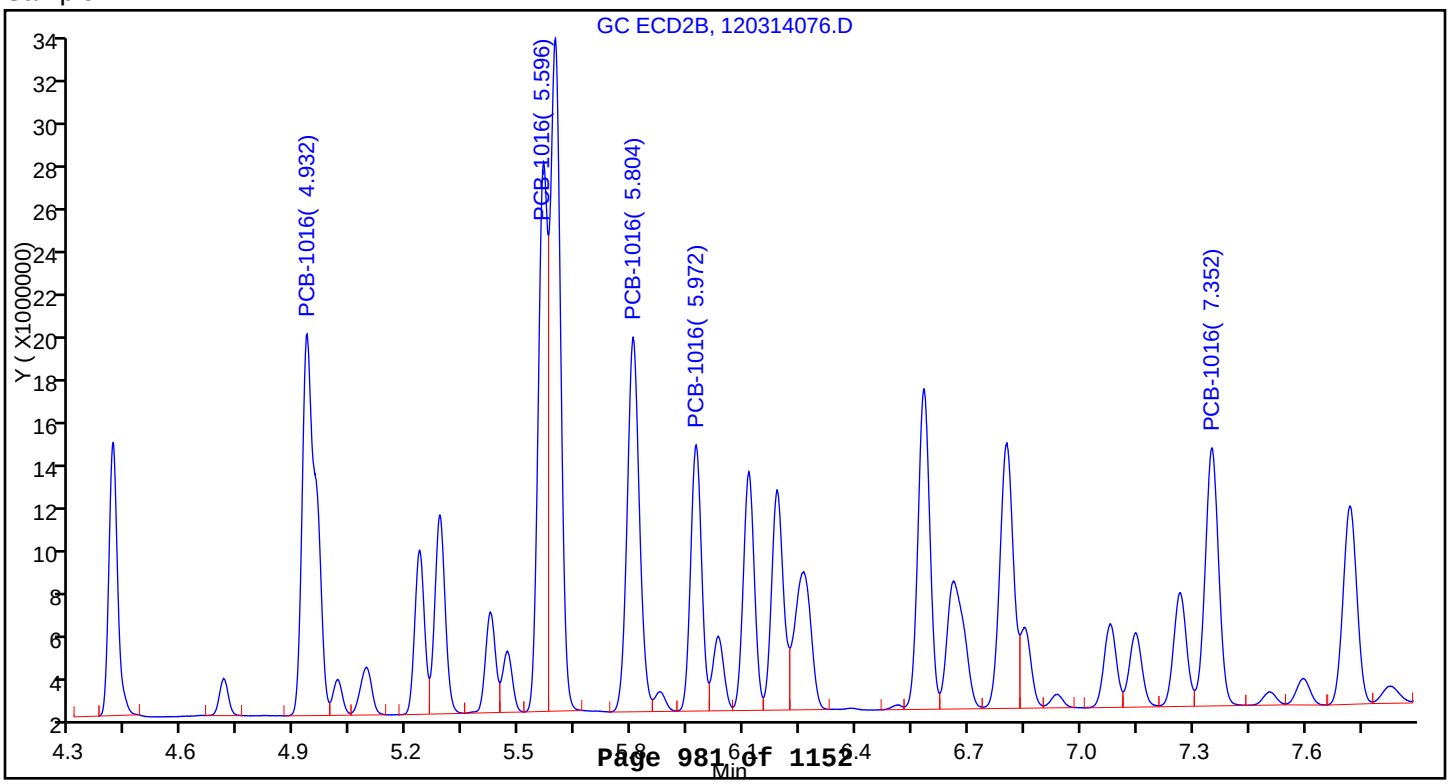
Column: Restek CLP2 (0.53 mm) Detector GC ECD2B

4 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 7



Sample



Report Date: 04-Dec-2014 14:15:49 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHGC16\20141203-4694.b\120314076.D

Injection Date: 04-Dec-2014 11:23:09 Instrument ID: CHGC16

Lims ID: LCSD 180-126039/5-A

Client ID:

Operator ID: 402331 ALS Bottle#: 73 Worklist Smp#: 73

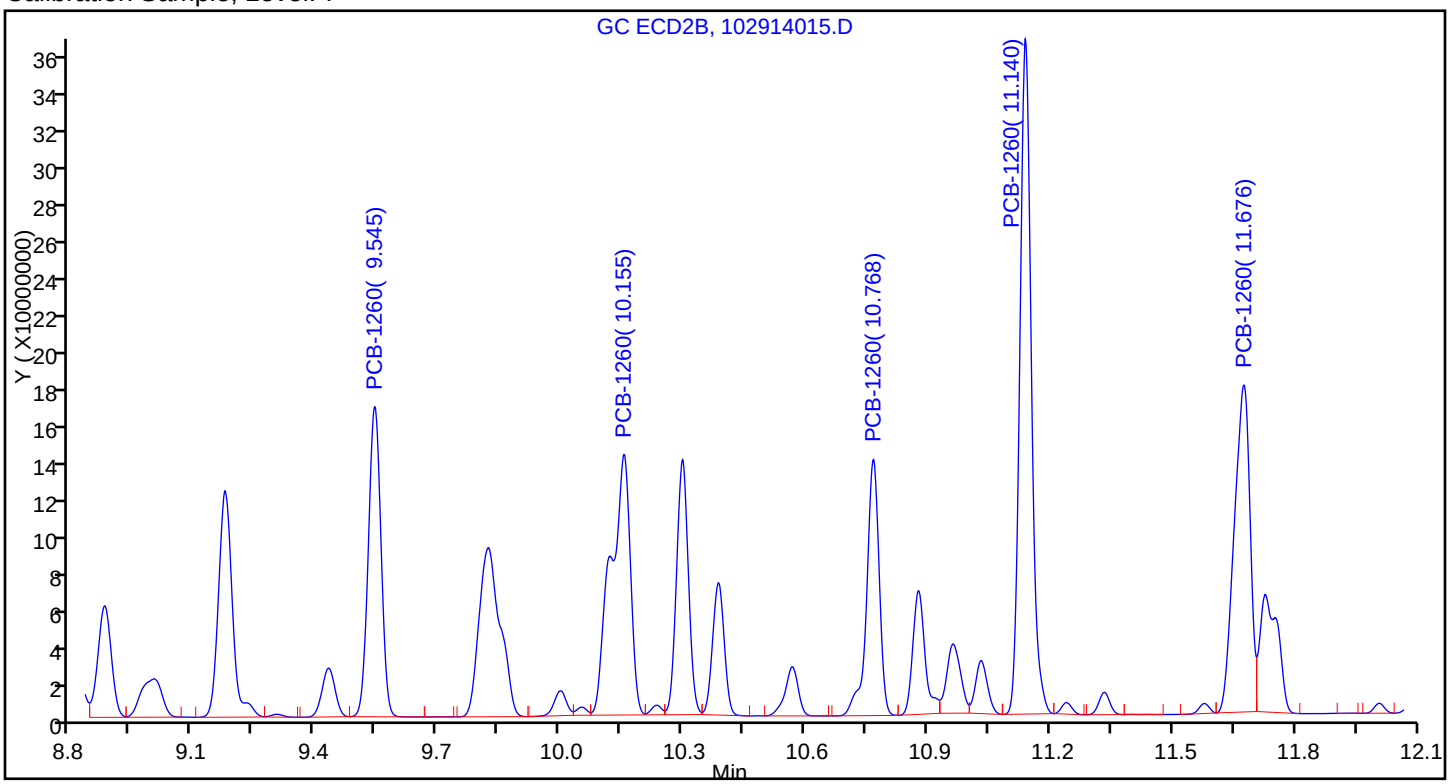
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_CHGC16 Limit Group: GCS 8082A ICAL

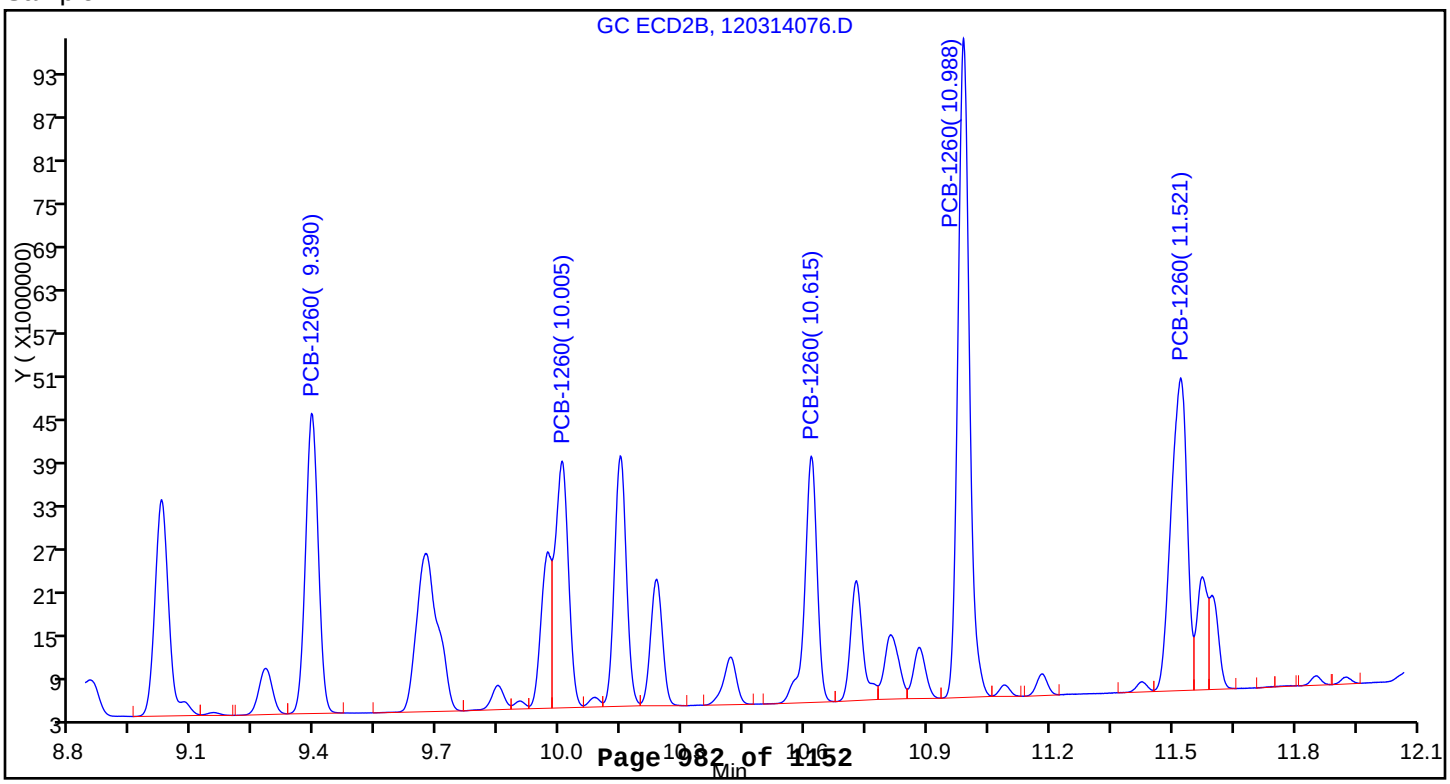
Column: Restek CLP2 (0.53 mm) Detector GC ECD2B

8 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



Sample



GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Instrument ID: CHGC16 Start Date: 10/29/2014 08:31

Analysis Batch Number: 123130 End Date: 10/30/2014 05:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 180-123130/1		10/29/2014 08:31	1		RTX-CLP1 0.53(mm)
IC 180-123130/1		10/29/2014 08:31	1		RTX-CLP2 0.53(mm)
IC 180-123130/2		10/29/2014 08:51	1	102914004.D	RTX-CLP1 0.53(mm)
IC 180-123130/2		10/29/2014 08:51	1	102914004.D	RTX-CLP2 0.53(mm)
IC 180-123130/3		10/29/2014 09:10	1	102914005.D	RTX-CLP1 0.53(mm)
IC 180-123130/3		10/29/2014 09:10	1	102914005.D	RTX-CLP2 0.53(mm)
IC 180-123130/4		10/29/2014 09:29	1	102914006.D	RTX-CLP1 0.53(mm)
IC 180-123130/4		10/29/2014 09:29	1	102914006.D	RTX-CLP2 0.53(mm)
IC 180-123130/5		10/29/2014 09:48	1		RTX-CLP1 0.53(mm)
IC 180-123130/5		10/29/2014 09:48	1		RTX-CLP2 0.53(mm)
IC 180-123130/6		10/29/2014 10:07	1		RTX-CLP1 0.53(mm)
IC 180-123130/6		10/29/2014 10:07	1		RTX-CLP2 0.53(mm)
IC 180-123130/7		10/29/2014 10:27	1	102914009.D	RTX-CLP1 0.53(mm)
IC 180-123130/7		10/29/2014 10:27	1	102914009.D	RTX-CLP2 0.53(mm)
IC 180-123130/8		10/29/2014 10:46	1	102914010.D	RTX-CLP1 0.53(mm)
IC 180-123130/8		10/29/2014 10:46	1	102914010.D	RTX-CLP2 0.53(mm)
IC 180-123130/9		10/29/2014 11:05	1	102914011.D	RTX-CLP1 0.53(mm)
IC 180-123130/9		10/29/2014 11:05	1	102914011.D	RTX-CLP2 0.53(mm)
ICRT 180-123130/10		10/29/2014 11:25	1	102914012.D	RTX-CLP1 0.53(mm)
ICRT 180-123130/10		10/29/2014 11:25	1	102914012.D	RTX-CLP2 0.53(mm)
IC 180-123130/11		10/29/2014 11:44	1	102914013.D	RTX-CLP1 0.53(mm)
IC 180-123130/11		10/29/2014 11:44	1	102914013.D	RTX-CLP2 0.53(mm)
IC 180-123130/12		10/29/2014 12:03	1	102914014.D	RTX-CLP1 0.53(mm)
IC 180-123130/12		10/29/2014 12:03	1	102914014.D	RTX-CLP2 0.53(mm)
IC 180-123130/13		10/29/2014 12:22	1	102914015.D	RTX-CLP1 0.53(mm)
IC 180-123130/13		10/29/2014 12:22	1	102914015.D	RTX-CLP2 0.53(mm)
ICV 180-123130/14		10/29/2014 12:41	1		RTX-CLP1 0.53(mm)
ICV 180-123130/14		10/29/2014 12:41	1		RTX-CLP2 0.53(mm)
ICV 180-123130/15		10/29/2014 13:00	1		RTX-CLP1 0.53(mm)
ICV 180-123130/15		10/29/2014 13:00	1		RTX-CLP2 0.53(mm)
ICV 180-123130/16		10/29/2014 13:19	1		RTX-CLP1 0.53(mm)
ICV 180-123130/16		10/29/2014 13:19	1		RTX-CLP2 0.53(mm)
ICV 180-123130/17		10/29/2014 13:39	1		RTX-CLP1 0.53(mm)
ICV 180-123130/17		10/29/2014 13:39	1		RTX-CLP2 0.53(mm)
ICV 180-123130/18		10/29/2014 13:57	1		RTX-CLP1 0.53(mm)
ICV 180-123130/18		10/29/2014 13:57	1		RTX-CLP2 0.53(mm)
ICV 180-123130/19		10/29/2014 14:17	1		RTX-CLP1 0.53(mm)
ICV 180-123130/19		10/29/2014 14:17	1		RTX-CLP2 0.53(mm)
ICV 180-123130/20		10/29/2014 14:35	1		RTX-CLP1 0.53(mm)
ICV 180-123130/20		10/29/2014 14:35	1		RTX-CLP2 0.53(mm)
ZZZZZ		10/29/2014 15:14	10		RTX-CLP1 0.53(mm)
ZZZZZ		10/29/2014 15:14	10		RTX-CLP2 0.53(mm)
ZZZZZ		10/29/2014 19:34	10		RTX-CLP1 0.53(mm)
ZZZZZ		10/29/2014 19:34	10		RTX-CLP2 0.53(mm)
ZZZZZ		10/29/2014 19:53	10		RTX-CLP1 0.53(mm)

8082A

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Instrument ID: CHGC16 Start Date: 10/29/2014 08:31

Analysis Batch Number: 123130 End Date: 10/30/2014 05:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		10/29/2014 19:53	10		RTX-CLP2 0.53(mm)
ZZZZZ		10/29/2014 20:12	10		RTX-CLP1 0.53(mm)
ZZZZZ		10/29/2014 20:12	10		RTX-CLP2 0.53(mm)
ZZZZZ		10/29/2014 20:51	1		RTX-CLP1 0.53(mm)
ZZZZZ		10/29/2014 20:51	1		RTX-CLP2 0.53(mm)
ZZZZZ		10/29/2014 21:10	1		RTX-CLP1 0.53(mm)
ZZZZZ		10/29/2014 21:10	1		RTX-CLP2 0.53(mm)
CCV 180-123130/79		10/30/2014 05:10	1		RTX-CLP1 0.53(mm)
CCV 180-123130/79		10/30/2014 05:10	1		RTX-CLP2 0.53(mm)

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Instrument ID: CHGC16 Start Date: 12/03/2014 09:52

Analysis Batch Number: 127055 End Date: 12/04/2014 13:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 180-127055/1		12/03/2014 09:52	1	120314001.D	RTX-CLP1 0.53(mm)
CCVRT 180-127055/1		12/03/2014 09:52	1	120314001.D	RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 10:11	1		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 10:11	1		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 10:30	1		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 10:30	1		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 10:49	1		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 10:49	1		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 11:08	1		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 11:08	1		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 11:27	1		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 11:27	1		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 11:46	1		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 11:46	1		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 12:05	1		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 12:05	1		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 12:25	1		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 12:25	1		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 12:43	1		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 12:43	1		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 13:02	1		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 13:02	1		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 13:21	1		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 13:21	1		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 13:40	1		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 13:40	1		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 14:00	10		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 14:00	10		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 14:19	10		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 14:19	10		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 14:38	10		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 14:38	10		RTX-CLP2 0.53(mm)
CCV 180-127055/14		12/03/2014 14:57	1		RTX-CLP1 0.53(mm)
CCV 180-127055/14		12/03/2014 14:57	1		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 15:16	1		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 15:16	1		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 15:35	1		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 15:35	1		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 15:54	1		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 15:54	1		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 16:12	1		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 16:12	1		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 16:31	1		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 16:31	1		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 16:50	1		RTX-CLP1 0.53(mm)

8082A

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Instrument ID: CHGC16 Start Date: 12/03/2014 09:52

Analysis Batch Number: 127055 End Date: 12/04/2014 13:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		12/03/2014 16:50	1		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 17:09	1		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 17:09	1		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 17:28	5		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 17:28	5		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 17:47	5		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 17:47	5		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 18:06	5		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 18:06	5		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 18:25	1		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 18:25	1		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 18:44	1		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 18:44	1		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 19:04	1		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 19:04	1		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 19:20	1		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 19:20	1		RTX-CLP2 0.53(mm)
ZZZZZ		12/03/2014 19:39	1		RTX-CLP1 0.53(mm)
ZZZZZ		12/03/2014 19:39	1		RTX-CLP2 0.53(mm)
CCV 180-127055/35		12/03/2014 21:32	1	120314038.D	RTX-CLP1 0.53(mm)
CCV 180-127055/35		12/03/2014 21:32	1	120314038.D	RTX-CLP2 0.53(mm)
CCV 180-127055/53		12/04/2014 05:00	1	120314056.D	RTX-CLP1 0.53(mm)
CCV 180-127055/53		12/04/2014 05:00	1	120314056.D	RTX-CLP2 0.53(mm)
MB 180-126039/1-A		12/04/2014 05:19	1	120314057.D	RTX-CLP1 0.53(mm)
MB 180-126039/1-A		12/04/2014 05:19	1	120314057.D	RTX-CLP2 0.53(mm)
180-39026-1	ST-018-111614	12/04/2014 06:36	1	120314061.D	RTX-CLP1 0.53(mm)
180-39026-1	ST-018-111614	12/04/2014 06:36	1	120314061.D	RTX-CLP2 0.53(mm)
180-39026-2	ST-UNNAMED-111614	12/04/2014 06:56	1	120314062.D	RTX-CLP1 0.53(mm)
180-39026-2	ST-UNNAMED-111614	12/04/2014 06:56	1	120314062.D	RTX-CLP2 0.53(mm)
180-39026-3	ST-DUP1-111614	12/04/2014 07:15	1	120314063.D	RTX-CLP1 0.53(mm)
180-39026-3	ST-DUP1-111614	12/04/2014 07:15	1	120314063.D	RTX-CLP2 0.53(mm)
180-39026-4	ST-014-111614	12/04/2014 07:35	1	120314064.D	RTX-CLP1 0.53(mm)
180-39026-4	ST-014-111614	12/04/2014 07:35	1	120314064.D	RTX-CLP2 0.53(mm)
ZZZZZ		12/04/2014 09:10	1		RTX-CLP1 0.53(mm)
ZZZZZ		12/04/2014 09:10	1		RTX-CLP2 0.53(mm)
ZZZZZ		12/04/2014 10:45	1		RTX-CLP1 0.53(mm)
ZZZZZ		12/04/2014 10:45	1		RTX-CLP2 0.53(mm)
LCS 180-126039/4-A		12/04/2014 11:04	1	120314075.D	RTX-CLP1 0.53(mm)
LCS 180-126039/4-A		12/04/2014 11:04	1	120314075.D	RTX-CLP2 0.53(mm)
LCSD 180-126039/5-A		12/04/2014 11:23	1	120314076.D	RTX-CLP1 0.53(mm)
LCSD 180-126039/5-A		12/04/2014 11:23	1	120314076.D	RTX-CLP2 0.53(mm)
CCV 180-127055/74		12/04/2014 13:58	1	120314077.D	RTX-CLP1 0.53(mm)
CCV 180-127055/74		12/04/2014 13:58	1	120314077.D	RTX-CLP2 0.53(mm)

GC SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Batch Number: 126039 Batch Start Date: 11/21/14 16:15 Batch Analyst: Yushinski, Charles

Batch Method: 3510C Batch End Date: 11/21/14 22:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	ReceivedpH	InitialAmount	FinalAmount	GCMATRIXWORKS 00011	OP/PESTPCBRTS 00002	
MB 180-126039/1		3510C, 8082A		6	1000 mL	1.0 mL		0.1 mL	
LCS 180-126039/4		3510C, 8082A		6	1000 mL	1.0 mL	25 uL	0.1 mL	
LCSD 180-126039/5		3510C, 8082A		6	1000 mL	1.0 mL	25 uL	0.1 mL	
180-39026-C-1	ST-018-111614	3510C, 8082A	T	7	1060 mL	1.0 mL		0.1 mL	
180-39026-C-2	ST-UNNAMED-111614	3510C, 8082A	T	7	1060 mL	1.0 mL		0.1 mL	
180-39026-C-3	ST-DUP1-111614	3510C, 8082A	T	7	1060 mL	1.0 mL		0.1 mL	
180-39026-C-4	ST-014-111614	3510C, 8082A	T	6	1060 mL	1.0 mL		0.1 mL	

Batch Notes	
Person's name who did the concentration	CBY
Exchange Solvent Lot #	1345111
Exchange Solvent Name	Hexane
N-evap #	1
N-evap temperature	21 Celsius
Na2SO4 Lot Number	1409812
Oven, Bath or Block Temperature 1	79 Celsius
pH Paper Lot Number	Ph paper HC419379
Prep Solvent Lot #	1406137
Prep Solvent Name	Methylene chloride
Prep Solvent Volume Used	180 mL
Person's name who did the prep	CBY
Sufficient volume for MS/MSD?	no
Uncorrected N-evap Temperature	21 Celsius
Uncorrected Temperature	79 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.

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Pittsburgh Job Number: 180-39026-1

SDG No.:

Project: Sparrows Point Trust Offshore Investigat

Client Sample ID	Lab Sample ID
ST-018-111614	180-39026-1
ST-UNNAMED-111614	180-39026-2
ST-DUP1-111614	180-39026-3
ST-014-111614	180-39026-4

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: ST-018-111614 Lab Sample ID: 180-39026-1

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG ID.:

Matrix: Water Date Sampled: 11/16/2014 18:08

Reporting Basis: WET Date Received: 11/18/2014 09:35

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.20	0.038	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: ST-018-111614 Lab Sample ID: 180-39026-1

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG ID.:

Matrix: Water Date Sampled: 11/16/2014 18:08

Reporting Basis: WET Date Received: 11/18/2014 09:35

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	3.4	1.0	0.29	ug/L			1	6020A
7440-43-9	Cadmium	ND	1.0	0.11	ug/L			1	6020A
7440-47-3	Chromium	3.7	2.0	0.54	ug/L			1	6020A
7439-92-1	Lead	0.63	1.0	0.019	ug/L	J	B	1	6020A
7782-49-2	Selenium	2.3	5.0	0.42	ug/L	J		1	6020A
7440-22-4	Silver	ND	1.0	0.036	ug/L			1	6020A
7440-41-7	Beryllium	ND	1.0	0.037	ug/L			1	6020A
7440-28-0	Thallium	0.058	1.0	0.015	ug/L	J	B	1	6020A
7440-36-0	Antimony	0.60	2.0	0.019	ug/L	J	B	1	6020A
7440-02-0	Nickel	0.30	1.0	0.17	ug/L	J		1	6020A
7440-66-6	Zinc	1.6	5.0	0.96	ug/L	J		1	6020A
7440-50-8	Copper	1.3	2.0	0.24	ug/L	J		1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: ST-UNNAMED-111614 Lab Sample ID: 180-39026-2

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG ID.:

Matrix: Water Date Sampled: 11/16/2014 18:55

Reporting Basis: WET Date Received: 11/18/2014 09:35

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.20	0.038	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: ST-UNNAMED-111614 Lab Sample ID: 180-39026-2

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG ID.:

Matrix: Water Date Sampled: 11/16/2014 18:55

Reporting Basis: WET Date Received: 11/18/2014 09:35

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	ND	1.0	0.29	ug/L			1	6020A
7440-43-9	Cadmium	ND	1.0	0.11	ug/L			1	6020A
7440-47-3	Chromium	0.96	2.0	0.54	ug/L	J		1	6020A
7439-92-1	Lead	0.27	1.0	0.019	ug/L	J	B	1	6020A
7782-49-2	Selenium	ND	5.0	0.42	ug/L			1	6020A
7440-22-4	Silver	ND	1.0	0.036	ug/L			1	6020A
7440-41-7	Beryllium	ND	1.0	0.037	ug/L			1	6020A
7440-28-0	Thallium	ND	1.0	0.015	ug/L			1	6020A
7440-36-0	Antimony	0.51	2.0	0.019	ug/L	J	B	1	6020A
7440-02-0	Nickel	1.5	1.0	0.17	ug/L			1	6020A
7440-66-6	Zinc	10	5.0	0.96	ug/L			1	6020A
7440-50-8	Copper	1.1	2.0	0.24	ug/L	J		1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: ST-DUP1-111614 Lab Sample ID: 180-39026-3

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG ID.:

Matrix: Water Date Sampled: 11/16/2014 00:00

Reporting Basis: WET Date Received: 11/18/2014 09:35

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.20	0.038	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: ST-DUP1-111614 Lab Sample ID: 180-39026-3

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG ID.:

Matrix: Water Date Sampled: 11/16/2014 00:00

Reporting Basis: WET Date Received: 11/18/2014 09:35

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	0.67	1.0	0.29	ug/L	J		1	6020A
7440-43-9	Cadmium	ND	1.0	0.11	ug/L			1	6020A
7440-47-3	Chromium	1.0	2.0	0.54	ug/L	J		1	6020A
7439-92-1	Lead	0.28	1.0	0.019	ug/L	J	B	1	6020A
7782-49-2	Selenium	0.45	5.0	0.42	ug/L	J		1	6020A
7440-22-4	Silver	ND	1.0	0.036	ug/L			1	6020A
7440-41-7	Beryllium	ND	1.0	0.037	ug/L			1	6020A
7440-28-0	Thallium	ND	1.0	0.015	ug/L			1	6020A
7440-36-0	Antimony	0.33	2.0	0.019	ug/L	J	B	1	6020A
7440-02-0	Nickel	1.9	1.0	0.17	ug/L			1	6020A
7440-66-6	Zinc	14	5.0	0.96	ug/L			1	6020A
7440-50-8	Copper	1.1	2.0	0.24	ug/L	J		1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: ST-014-111614 Lab Sample ID: 180-39026-4

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG ID.:

Matrix: Water Date Sampled: 11/16/2014 19:15

Reporting Basis: WET Date Received: 11/18/2014 09:35

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.20	0.038	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: ST-014-111614 Lab Sample ID: 180-39026-4

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG ID.:

Matrix: Water Date Sampled: 11/16/2014 19:15

Reporting Basis: WET Date Received: 11/18/2014 09:35

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	ND	1.0	0.29	ug/L			1	6020A
7440-43-9	Cadmium	ND	1.0	0.11	ug/L			1	6020A
7440-47-3	Chromium	1.2	2.0	0.54	ug/L	J		1	6020A
7439-92-1	Lead	0.17	1.0	0.019	ug/L	J	B	1	6020A
7782-49-2	Selenium	ND	5.0	0.42	ug/L			1	6020A
7440-22-4	Silver	ND	1.0	0.036	ug/L			1	6020A
7440-41-7	Beryllium	ND	1.0	0.037	ug/L			1	6020A
7440-28-0	Thallium	ND	1.0	0.015	ug/L			1	6020A
7440-36-0	Antimony	0.42	2.0	0.019	ug/L	J	B	1	6020A
7440-02-0	Nickel	4.1	1.0	0.17	ug/L			1	6020A
7440-66-6	Zinc	10	5.0	0.96	ug/L			1	6020A
7440-50-8	Copper	0.69	2.0	0.24	ug/L	J		1	6020A

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

ICV Source: MICVX_00026 Concentration Units: ug/L

CCV Source: MCCV1X_00069

Analyte	ICV 180-127095/5 12/03/2014 08:59				CCV 180-127095/10 12/03/2014 09:21				CCV 180-127095/22 12/03/2014 10:06			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	83.5		80.0	104	93.6		100	94	92.2		100	92
Arsenic	80.9		80.0	101	97.1		100	97	96.2		100	96
Beryllium	85.9		80.0	107	107		100	107	101		100	101
Cadmium	83.8		80.0	105	98.3		100	98	98.6		100	99
Chromium	81.3		80.0	102	93.5		100	93	94.1		100	94
Copper	83.7		80.0	105	98.1		100	98	96.6		100	97
Lead	80.6		80.0	101	98.4		100	98	106		100	106
Nickel	82.7		80.0	103	95.6		100	96	96.1		100	96
Selenium	80.9		80.0	101	99.4		100	99	98.8		100	99
Silver	84.0		80.0	105	99.6		100	100	100		100	100
Thallium	84.9		80.0	106	100		100	100	107		100	107
Zinc	85.8		80.0	107	99.5		100	99	101		100	101

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

ICV Source: MICVX_00026 Concentration Units: ug/L

CCV Source: MCCV1X_00069

Analyte	CCV 180-127095/34 12/03/2014 10:51				CCV 180-127095/46 12/03/2014 11:38							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	91.6		100	92	91.8		100	92				
Arsenic	95.7		100	96	94.9		100	95				
Beryllium	105		100	105	102		100	102				
Cadmium	98.9		100	99	99.1		100	99				
Chromium	94.2		100	94	98.8		100	99				
Copper	97.1		100	97	98.6		100	99				
Lead	106		100	106	105		100	105				
Nickel	96.1		100	96	99.1		100	99				
Selenium	100		100	100	98.4		100	98				
Silver	101		100	101	99.6		100	100				
Thallium	108		100	108	107		100	107				
Zinc	101		100	101	104		100	104				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

ICV Source: MHgWorkingicv_00908 Concentration Units: ug/L

CCV Source: MHgworkingCal_00930

Analyte	ICV 180-126589/7-A 11/26/2014 16:55				CCV 180-126589/10-A 11/26/2014 17:01				CCV 180-126589/10-A 11/26/2014 17:22			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.44		2.50	98	5.20		5.00	104	4.83		5.00	97

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

ICV Source: MHgWorkingicv_00908 Concentration Units: ug/L

CCV Source: MHgworkingCal_00930

Analyte	CCV 180-126589/10-A 11/26/2014 17:44											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.50		5.00	90								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Method: 6020A Instrument ID: M

Lab Sample ID: CRI 180-127095/7 Concentration Units: ug/L

CRQL Check Standard Source: MCRIX_00058

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Arsenic	1.00	1.06		106	70-130
Cadmium	1.00	1.05		105	70-130
Chromium	2.00	2.01		101	70-130
Lead	1.00	0.910	J	91	70-130
Selenium	5.00	5.45		109	70-130
Silver	1.00	0.957	J	96	70-130
Beryllium	1.00	1.16		116	70-130
Thallium	1.00	0.920	J	92	70-130
Antimony	2.00	1.77	J	89	70-130
Nickel	1.00	1.03		103	70-130
Zinc	5.00	5.48		110	70-130
Copper	2.00	2.38		119	70-130

Lab Sample ID: CRI 180-127095/40 Concentration Units: ug/L

CRQL Check Standard Source: MCRIX_00058

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Arsenic	1.00	0.867	J	87	70-130
Cadmium	1.00	0.993	J	99	70-130
Chromium	2.00	2.12		106	70-130
Lead	1.00	0.993	J	99	70-130
Selenium	5.00	4.01	J	80	70-130
Silver	1.00	0.990	J	99	70-130
Beryllium	1.00	1.09		109	70-130
Thallium	1.00	0.968	J	97	70-130
Antimony	2.00	1.70	J	85	70-130
Nickel	1.00	1.03		103	70-130
Zinc	5.00	5.29		106	70-130
Copper	2.00	2.03		101	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Method: 7470A Instrument ID: K

Lab Sample ID: CRA 180-126589/9-A Concentration Units: ug/L

CRQL Check Standard Source: MHgworkingCal_00930

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.176	J	88	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 180-127095/6 12/03/2014 09:05		CCB1 180-127095/11 12/03/2014 09:27		CCB2 180-127095/23 12/03/2014 10:12		CCB3 180-127095/35 12/03/2014 10:57	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	ND		0.0760	J	0.0760	J	0.0800	J
Arsenic	1.0	ND		ND		ND		ND	
Beryllium	1.0	ND		ND		ND		ND	
Cadmium	1.0	ND		ND		ND		ND	
Chromium	2.0	ND		ND		ND		ND	
Copper	2.0	ND		ND		ND		ND	
Lead	1.0	0.0350	J	0.0660	J	0.254	J	0.128	J
Nickel	1.0	ND		ND		ND		ND	
Selenium	5.0	ND		ND		ND		ND	
Silver	1.0	ND		ND		ND		ND	
Thallium	1.0	ND		ND		ND		ND	
Zinc	5.0	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB4 180-127095/47 12/03/2014 11:44							
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.101	J						
Arsenic	1.0	ND							
Beryllium	1.0	ND							
Cadmium	1.0	ND							
Chromium	2.0	ND							
Copper	2.0	ND							
Lead	1.0	0.159	J						
Nickel	1.0	ND							
Selenium	5.0	ND							
Silver	1.0	ND							
Thallium	1.0	ND							
Zinc	5.0	ND							

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 180-126589/8-A 11/26/2014 16:57		CCB 180-126589/11-A 11/26/2014 17:03		CCB 180-126589/11-A 11/26/2014 17:24		CCB 180-126589/11-A 11/26/2014 17:45	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 180-126109/1-A

Instrument Code: M Batch No.: 127095

CAS No.	Analyte	Concentration	C	Q	Method
7440-38-2	Arsenic	ND			6020A
7440-43-9	Cadmium	ND			6020A
7440-47-3	Chromium	ND			6020A
7439-92-1	Lead	0.207	J		6020A
7782-49-2	Selenium	ND			6020A
7440-22-4	Silver	ND			6020A
7440-41-7	Beryllium	ND			6020A
7440-28-0	Thallium	0.0240	J		6020A
7440-36-0	Antimony	0.122	J		6020A
7440-02-0	Nickel	ND			6020A
7440-66-6	Zinc	ND			6020A
7440-50-8	Copper	ND			6020A

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 180-126586/1-A

Instrument Code: K Batch No.: 126657

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			7470A

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: ICSA 180-127095/8 Instrument ID: M

Lab File ID: M41203A.xml ICS Source: MICSAX_00059

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.0670**	
Arsenic		**0.191**	
Beryllium		**-0.0050**	
Cadmium		**0.228**	
Chromium		**0.894**	
Copper		**1.58**	
Lead		**0.433**	
Nickel		**-0.912**	
Selenium		**0.650**	
Silver		**0.0410**	
Thallium		**0.0650**	
Zinc		**2.16**	
Aluminum	*100000*	*104100*	*104*
Barium		*0.181*	
Boron		*0.886*	
Calcium	*100000*	*110000*	*110*
Cobalt		*0.0630*	
Iron	*100000*	*111100*	*111*
Magnesium	*100000*	*103700*	*104*
Manganese		*0.750*	
Molybdenum	*2000*	*2379*	*119*
Potassium	*100000*	*108800*	*109*
Silicon		*27.5*	
Sodium	*100000*	*107800*	*108*
Strontium		*0.808*	
Tin		*0.0830*	
Titanium	*2000*	*2355*	*118*
Vanadium		*-0.225*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Lab Sample ID: ICSAB 180-127095/9 Instrument ID: M

Lab File ID: M41203A.xml ICS Source: MICSABX_00063

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**20.0**	**20.4**	**102**
Arsenic	**20.0**	**22.1**	**111**
Beryllium	**20.0**	**20.7**	**104**
Cadmium	**20.0**	**20.1**	**101**
Chromium	**20.0**	**22.3**	**112**
Copper	**20.0**	**22.5**	**112**
Lead	**20.0**	**22.1**	**111**
Nickel	**20.0**	**20.3**	**102**
Selenium	**50.0**	**53.7**	**107**
Silver	**20.0**	**19.6**	**98**
Thallium	**20.0**	**22.5**	**113**
Zinc	**25.0**	**23.2**	**93**
Aluminum	*100000*	*101323*	*101*
Barium	*20.0*	*21.5*	*108*
Boron	*50.0*	*49.0*	*98*
Calcium	*100000*	*110367*	*110*
Cobalt	*20.0*	*21.3*	*106*
Iron	*100000*	*110000*	*110*
Magnesium	*100000*	*101050*	*101*
Manganese	*22.5*	*22.3*	*99*
Molybdenum	*2000*	*2393*	*120*
Potassium	*100000*	*109733*	*110*
Silicon	*500*	*492*	*98*
Sodium	*100000*	*105433*	*105*
Strontium	*25.0*	*22.9*	*92*
Tin	*100*	*104*	*104*
Titanium	*2000*	*2309*	*115*
Vanadium	*20.0*	*21.1*	*105*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 180-126109/3-A

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

Sample Matrix: Water LCS Source: MTAPITTICPMS_00018

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Arsenic	40.0	33.8		85	80	120		6020A
Cadmium	50.0	47.9		96	80	120		6020A
Chromium	200	197		99	80	120		6020A
Lead	20.0	22.7		114	80	120		6020A
Selenium	10.0	8.16		82	80	120		6020A
Silver	50.0	51.7		103	80	120		6020A
Beryllium	50.0	50.5		101	80	120		6020A
Thallium	50.0	56.9		114	80	120		6020A
Antimony	500	469		94	80	120		6020A
Nickel	500	485		97	80	120		6020A
Zinc	500	458		92	80	120		6020A
Copper	250	240		96	80	120		6020A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 180-126586/2-A

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

Sample Matrix: Water LCS Source: MHgworkingCal_00930

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	2.50	2.28		91	80	120		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Pittsburgh Job Number: 180-39026-1

SDG Number:

Matrix: Water Instrument ID: M

Method: 6020A MDL Date: 01/23/2010 18:33

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121	2	0.0187
Arsenic	75	1	0.2908
Beryllium	9	1	0.0367
Cadmium	111	1	0.1144
Chromium	52	2	0.5433
Copper	65	2	0.2443
Lead	208	1	0.0192
Nickel	60	1	0.1749
Selenium	82	5	0.4216
Silver	107	1	0.0362
Thallium	205	1	0.0152
Zinc	66	5	0.9609

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Pittsburgh Job Number: 180-39026-1

SDG Number:

Matrix: Water Instrument ID: M

Method: 6020A XMDL Date: 01/23/2010 18:33

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121	2	0.0187
Arsenic	75	1	0.2908
Beryllium	9	1	0.0367
Cadmium	111	1	0.1144
Chromium	52	2	0.5433
Copper	65	2	0.2443
Lead	208	1	0.0192
Nickel	60	1	0.1749
Selenium	82	5	0.4216
Silver	107	1	0.0362
Thallium	205	1	0.0152
Zinc	66	5	0.9609

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Pittsburgh Job Number: 180-39026-1

SDG Number:

Matrix: Water Instrument ID: K

Method: 7470A MDL Date: 01/23/2010 12:29

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.0384

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Pittsburgh Job Number: 180-39026-1

SDG Number:

Matrix: Water Instrument ID: K

Method: 7470A XMDL Date: 01/23/2010 12:30

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.0384

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Pittsburgh Job No: 180-39026-1

SDG No.:

Instrument ID: M Date: 03/14/2011 22:35

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Arsenic		4500	6020A
Cadmium		13500	6020A
Chromium		13500	6020A
Lead		20000	6020A
Selenium		4500	6020A
Silver		2500	6020A
Beryllium		9000	6020A
Thallium		13500	6020A
Antimony		13500	6020A
Nickel		13500	6020A
Zinc		25000	6020A
Copper		20000	6020A

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 180-126109/1-A	11/23/2014 08:31	126109		50	50
LCS 180-126109/3-A	11/23/2014 08:31	126109		50	50
180-39026-1	11/23/2014 08:31	126109		50	50
180-39026-2	11/23/2014 08:31	126109		50	50
180-39026-3	11/23/2014 08:31	126109		50	50
180-39026-4	11/23/2014 08:31	126109		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 180-126586/1-A	11/26/2014 12:07	126586		50	50
LCS 180-126586/2-A	11/26/2014 12:07	126586		50	50
180-39026-1	11/26/2014 12:07	126586		50	50
180-39026-2	11/26/2014 12:07	126586		50	50
180-39026-3	11/26/2014 12:07	126586		50	50
180-39026-4	11/26/2014 12:07	126586		50	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Instrument ID: M Method: 6020A

Start Date: 12/03/2014 07:36 End Date: 12/03/2014 13:14

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Be	Cd	Cr	Cu	Ni	Pb	Sb	Se	Tl	Zn								
ITUNE 180-127095/1			07:36																				
STD1 180-127095/2 IC	1		08:49	X	X	X	X	X	X	X	X	X	X	X	X								
STD2 180-127095/3 IC	1		08:52	X	X	X	X	X	X	X	X	X	X	X	X								
STD3 180-127095/4 IC	1		08:55	X	X	X	X	X	X	X	X	X	X	X	X								
ICV 180-127095/5	1		08:59	X	X	X	X	X	X	X	X	X	X	X	X								
ICB 180-127095/6	1		09:05	X	X	X	X	X	X	X	X	X	X	X	X								
CRI 180-127095/7	1		09:08	X	X	X	X	X	X	X	X	X	X	X	X								
ICSA 180-127095/8	1		09:11	X	X	X	X	X	X	X	X	X	X	X	X								
ICSAB 180-127095/9	1		09:15	X	X	X	X	X	X	X	X	X	X	X	X								
CCV 180-127095/10	1		09:21	X	X	X	X	X	X	X	X	X	X	X	X								
CCB1 180-127095/11	1		09:27	X	X	X	X	X	X	X	X	X	X	X	X								
MB 180-126109/1-A	1	R	09:30	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			09:34																				
LCS 180-126109/3-A	1	R	09:37	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			09:41																				
ZZZZZZ			09:44																				
ZZZZZZ			09:48																				
ZZZZZZ			09:51																				
ZZZZZZ			09:55																				
ZZZZZZ			09:59																				
ZZZZZZ			10:02																				
CCV 180-127095/22	1		10:06	X	X	X	X	X	X	X	X	X	X	X	X								
CCB2 180-127095/23	1		10:12	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			10:15																				
ZZZZZZ			10:19																				
ZZZZZZ			10:22																				
ZZZZZZ			10:26																				
ZZZZZZ			10:29																				
ZZZZZZ			10:33																				
ZZZZZZ			10:36																				
ZZZZZZ			10:40																				
ZZZZZZ			10:43																				
180-39026-1	1	R	10:47	X	X	X	X	X	X	X	X	X	X	X	X								
CCV 180-127095/34	1		10:51	X	X	X	X	X	X	X	X	X	X	X	X								
CCB3 180-127095/35	1		10:57	X	X	X	X	X	X	X	X	X	X	X	X								
180-39026-2	1	R	11:00	X	X	X	X	X	X	X	X	X	X	X	X								
180-39026-3	1	R	11:04	X	X	X	X	X	X	X	X	X	X	X	X								
180-39026-4	1	R	11:07	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			11:11																				
CRI 180-127095/40	1		11:17	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			11:20																				
ZZZZZZ			11:24																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Instrument ID: M Method: 6020A

Start Date: 12/03/2014 07:36 End Date: 12/03/2014 13:14

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	As	Be	Cd	Cr	Cu	Ni	Pb	Sb	Se	Tl	Zn								
ZZZZZZ			11:27																				
ZZZZZZ			11:31																				
ZZZZZZ			11:34																				
CCV 180-127095/46	1		11:38	X	X	X	X	X	X	X	X	X	X	X	X								
CCB4 180-127095/47	1		11:44	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			11:48																				
ZZZZZZ			11:51																				
ZZZZZZ			11:55																				
ZZZZZZ			11:58																				
ZZZZZZ			12:02																				
ZZZZZZ			12:05																				
ZZZZZZ			12:09																				
ZZZZZZ			12:13																				
ZZZZZZ			12:16																				
ZZZZZZ			12:20																				
CCV 180-127095/58			12:23																				
CCB5 180-127095/59			12:29																				
ZZZZZZ			12:33																				
ZZZZZZ			12:36																				
ZZZZZZ			12:40																				
ZZZZZZ			12:43																				
ZZZZZZ			12:47																				
ZZZZZZ			12:50																				
ZZZZZZ			12:54																				
ZZZZZZ			12:57																				
ZZZZZZ			13:01																				
ZZZZZZ			13:05																				
CCV 180-127095/70			13:08																				
CCB6 180-127095/71			13:14																				

Prep Types

R = Total Recoverable

T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Instrument ID: K Method: 7470A

Start Date: 11/26/2014 16:44 End Date: 11/26/2014 18:48

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
IC 180-126589/1-A			16:44	X																			
IC 180-126589/2-A			16:46	X																			
IC 180-126589/3-A			16:47	X																			
IC 180-126589/4-A			16:49	X																			
IC 180-126589/5-A			16:51	X																			
IC 180-126589/6-A			16:53	X																			
ICV 180-126589/7-A	1		16:55	X																			
ICB 180-126589/8-A	1		16:57	X																			
CRA 180-126589/9-A	1		16:59	X																			
CCV 180-126589/10-A	1		17:01	X																			
CCB 180-126589/11-A	1		17:03	X																			
ZZZZZZ			17:05																				
ZZZZZZ			17:06																				
ZZZZZZ			17:08																				
MB 180-126586/1-A	1	T	17:10	X																			
LCS 180-126586/2-A	1	T	17:12	X																			
ZZZZZZ			17:13																				
ZZZZZZ			17:15																				
ZZZZZZ			17:17																				
ZZZZZZ			17:19																				
ZZZZZZ			17:20																				
CCV 180-126589/10-A	1		17:22	X																			
CCB 180-126589/11-A	1		17:24	X																			
ZZZZZZ			17:26																				
ZZZZZZ			17:28																				
ZZZZZZ			17:30																				
180-39026-1	1	T	17:32	X																			
180-39026-2	1	T	17:33	X																			
180-39026-3	1	T	17:35	X																			
180-39026-4	1	T	17:37	X																			
ZZZZZZ			17:38																				
ZZZZZZ			17:40																				
ZZZZZZ			17:42																				
CCV 180-126589/10-A	1		17:44	X																			
CCB 180-126589/11-A	1		17:45	X																			
ZZZZZZ			17:47																				
ZZZZZZ			17:49																				
ZZZZZZ			17:51																				
ZZZZZZ			17:53																				
ZZZZZZ			17:55																				
ZZZZZZ			17:56																				
ZZZZZZ			17:58																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Instrument ID: K Method: 7470A

Start Date: 11/26/2014 16:44 End Date: 11/26/2014 18:48

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
ZZZZZZ			18:00																				
ZZZZZZ			18:02																				
ZZZZZZ			18:04																				
CCV 180-126589/10-A			18:06																				
CCB 180-126589/11-A			18:07																				
ZZZZZZ			18:09																				
ZZZZZZ			18:11																				
ZZZZZZ			18:13																				
ZZZZZZ			18:15																				
ZZZZZZ			18:17																				
ZZZZZZ			18:18																				
ZZZZZZ			18:20																				
ZZZZZZ			18:22																				
ZZZZZZ			18:24																				
ZZZZZZ			18:26																				
CCV 180-126589/10-A			18:28																				
CCB 180-126589/11-A			18:30																				
ZZZZZZ			18:32																				
ZZZZZZ			18:33																				
ZZZZZZ			18:35																				
ZZZZZZ			18:37																				
ZZZZZZ			18:39																				
ZZZZZZ			18:41																				
ZZZZZZ			18:43																				
ZZZZZZ			18:44																				
CCV 180-126589/10-A			18:46																				
CCB 180-126589/11-A			18:48																				

Prep Types

D = Dissolved

T = Total/NA

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

ICP-MS Instrument ID: M Start Date: 12/03/2014 End Date: 12/03/2014

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc	Q	Element Y-89	Q	Element Rh-103	Q	Element In	Q
STD1 180-127095/2 IC	08:49	100		100		100		100		100	
STD2 180-127095/3 IC	08:52	98		91		88		79		84	
STD3 180-127095/4 IC	08:55	101		101		95		95		94	
ICV 180-127095/5	08:59	101		98		93		82		86	
ICB 180-127095/6	09:05	108		102		94		95		93	
CRI 180-127095/7	09:08	107		107		96		95		95	
ICSA 180-127095/8	09:11	72		74		73		73		78	
ICSAB 180-127095/9	09:15	61		67		70		69		76	
CCV 180-127095/10	09:21	81		89		83		77		82	
CCB1 180-127095/11	09:27	81		85		87		87		91	
MB 180-126109/1-A	09:30	79		86		90		88		92	
LCS 180-126109/3-A	09:37	54		61		67		63		71	
CCV 180-127095/22	10:06	77		82		81		73		82	
CCB2 180-127095/23	10:12	88		92		91		89		93	
180-39026-1	10:47	70		72		80		71		80	
CCV 180-127095/34	10:51	76		78		77		70		78	
CCB3 180-127095/35	10:57	92		96		95		93		96	
180-39026-2	11:00	72		72		76		66		74	
180-39026-3	11:04	73		70		74		64		72	
180-39026-4	11:07	72		70		76		67		75	
CRI 180-127095/40	11:17	90		87		82		80		85	
CCV 180-127095/46	11:38	80		72		74		67		75	
CCB4 180-127095/47	11:44	94		91		87		86		90	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

ICP-MS Instrument ID: M Start Date: 12/03/2014 End Date: 12/03/2014

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 180-127095/2 IC	08:49	100		100		100					
STD2 180-127095/3 IC	08:52	87		87		80					
STD3 180-127095/4 IC	08:55	93		93		93					
ICV 180-127095/5	08:59	88		90		86					
ICB 180-127095/6	09:05	93		93		96					
CRI 180-127095/7	09:08	93		94		98					
ICSA 180-127095/8	09:11	77		77		77					
ICSAB 180-127095/9	09:15	78		78		71					
CCV 180-127095/10	09:21	87		88		80					
CCB1 180-127095/11	09:27	93		95		97					
MB 180-126109/1-A	09:30	95		96		92					
LCS 180-126109/3-A	09:37	81		82		63					
CCV 180-127095/22	10:06	87		89		76					
CCB2 180-127095/23	10:12	94		95		94					
180-39026-1	10:47	88		89		69					
CCV 180-127095/34	10:51	85		86		74					
CCB3 180-127095/35	10:57	97		98		96					
180-39026-2	11:00	84		85		62					
180-39026-3	11:04	82		83		61					
180-39026-4	11:07	85		86		66					
CRI 180-127095/40	11:17	88		89		88					
CCV 180-127095/46	11:38	81		83		72					
CCB4 180-127095/47	11:44	91		93		93					

Dilution Corrected Concentrations

STD1 1388761NT STD 12/3/2014 8:49:36 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:49:55	100.863%	-0.017	0.188	-0.056	0.000	0.260	0.132	0.043
2	08:50:14	100.399%	0.008	-0.306	0.068	0.000	-0.429	0.043	-0.014
3	08:50:33	98.738%	0.009	0.118	-0.012	0.000	0.169	-0.175	-0.029
x		100.000%	0.000	-0.000	0.000	0.000	0.000	0.000	-0.000
σ		1.117%	0.014	0.268	0.063	0.000	0.374	0.158	0.038
%RSD		1.117	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:49:55	-0.011	0.071	0.000	0.821	4.889	0.664	99.912%	-0.015
2	08:50:14	0.016	-0.276	0.000	-1.573	-0.642	-0.232	100.764%	0.029
3	08:50:33	-0.005	0.205	0.000	0.752	-4.246	-0.433	99.324%	-0.014
x		-0.000	0.000	0.000	-0.000	-0.000	0.000	100.000%	0.000
σ		0.015	0.249	0.000	1.363	4.601	0.584	0.724%	0.025
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.724	0.000
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:49:55	0.037	0.000	0.005	1.963	-0.366	0.001	0.010	-0.049
2	08:50:14	-0.108	-0.050	-0.000	-0.811	0.383	0.002	-0.005	0.026
3	08:50:33	0.071	0.049	-0.005	-1.152	-0.016	-0.004	-0.005	0.023
x		-0.000	-0.000	-0.000	0.000	0.000	0.000	0.000	0.000
σ		0.095	0.050	0.005	1.709	0.375	0.003	0.008	0.042
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:49:55	0.056	0.024	-0.026	0.000	0.008	0.114	0.000	0.002
2	08:50:14	-0.060	-0.021	0.002	-0.013	0.012	-0.094	0.000	-0.002
3	08:50:33	0.004	-0.003	0.024	0.013	-0.021	-0.021	0.000	0.001
x		0.000	0.000	-0.000	0.000	0.000	0.000	0.000	0.000
σ		0.058	0.023	0.025	0.013	0.018	0.106	0.000	0.002
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:49:55	98.862%	-0.010	-0.016	99.495%	-0.020	-0.004	0.046	0.037
2	08:50:14	100.759%	0.022	0.007	100.274%	0.006	0.007	0.010	0.009
3	08:50:33	100.378%	-0.012	0.009	100.232%	0.014	-0.003	-0.056	-0.046
x		100.000%	-0.000	0.000	100.000%	0.000	0.000	0.000	0.000
σ		1.004%	0.019	0.014	0.438%	0.018	0.006	0.051	0.042
%RSD		1.004	0.000	0.000	0.438	0.000	0.000	0.000	0.000
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:49:55	99.535%	-0.034	0.006	-0.021	0.018	-0.005	99.131%	99.026%
2	08:50:14	99.871%	0.025	0.006	0.019	-0.006	0.003	99.905%	100.040%
3	08:50:33	100.593%	0.008	-0.012	0.002	-0.011	0.003	100.964%	100.934%
x		100.000%	0.000	-0.000	-0.000	0.000	-0.000	100.000%	100.000%
σ		0.541%	0.030	0.010	0.020	0.015	0.005	0.920%	0.955%
%RSD		0.541	0.000	0.000	0.000	0.000	0.000	0.920	0.955
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	08:49:55	-0.001	-0.001	0.000	-0.001	-0.004	100.183%		
2	08:50:14	0.001	0.001	-0.005	-0.004	-0.002	100.226%		
3	08:50:33	-0.000	0.000	0.005	0.005	0.005	99.591%		
x		0.000	-0.000	-0.000	0.000	-0.000	100.000%		
σ		0.001	0.001	0.005	0.005	0.005	0.355%		
%RSD		0.000	0.000	0.000	0.000	0.000	0.355		

STD2 1408390 12/3/2014 8:52:25 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:52:25	101.945%	198.800	0.241	-0.124	0.000	98760.000	98490.000	98480.000
2	08:52:44	96.862%	200.400	0.873	0.238	0.000	100100.000	100700.000	99340.000
3	08:53:03	93.990%	200.900	0.119	-0.131	0.000	101100.000	100900.000	102200.000
x		97.599%	200.000	0.411	-0.006	0.000	100000.000	100000.000	100000.000
σ		4.028%	1.100	0.405	0.211	0.000	1174.000	1313.000	1934.000
%RSD		4.127	0.550	98.570	3799.000	0.000	1.174	1.313	1.934
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:52:25	983.700	4.614	0.000	98440.000	97430.000	98600.000	92.662%	0.254
2	08:52:44	999.500	4.818	0.000	99350.000	100200.000	99120.000	90.576%	0.135
3	08:53:03	1017.000	5.313	0.000	102200.000	102400.000	102300.000	88.697%	0.169
x		1000.000	4.915	0.000	100000.000	100000.000	100000.000	90.645%	0.186
σ		16.510	0.359	0.000	1973.000	2494.000	1992.000	1.983%	0.061
%RSD		1.651	7.310	0.000	1.973	2.494	1.992	2.188	32.850
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:52:25	197.200	198.500	991.200	49580.000	49830.000	199.500	198.200	199.200
2	08:52:44	201.900	200.100	999.600	49880.000	49690.000	199.100	198.200	199.200
3	08:53:03	200.900	201.400	1009.000	50540.000	50480.000	201.300	203.500	201.500
x		200.000	200.000	1000.000	50000.000	50000.000	200.000	200.000	200.000
σ		2.467	1.471	9.048	490.900	417.100	1.170	3.050	1.328
%RSD		1.233	0.735	0.905	0.982	0.834	0.585	1.525	0.664
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:52:25	200.900	198.600	198.200	198.700	198.600	199.300	0.000	199.600
2	08:52:44	199.200	200.000	199.600	199.900	199.600	199.200	0.000	199.100
3	08:53:03	200.000	201.300	202.200	201.400	201.700	201.400	0.000	201.300
x		200.000	200.000	200.000	200.000	200.000	200.000	0.000	200.000
σ		0.865	1.359	2.069	1.385	1.565	1.246	0.000	1.137
%RSD		0.432	0.680	1.035	0.693	0.782	0.623	0.000	0.569
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:52:25	86.832%	0.102	0.093	78.147%	199.000	200.600	201.400	201.300
2	08:52:44	88.388%	0.140	0.108	78.665%	199.800	199.800	199.900	199.900
3	08:53:03	87.935%	0.129	0.111	78.577%	201.300	199.600	198.700	198.900
x		87.718%	0.124	0.104	78.463%	200.000	200.000	200.000	200.000
σ		0.800%	0.019	0.010	0.277%	1.154	0.517	1.339	1.191
%RSD		0.913	15.760	9.552	0.353	0.577	0.259	0.669	0.596
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:52:25	83.095%	0.056	0.201	0.158	200.800	200.200	85.735%	86.432%
2	08:52:44	84.732%	0.109	0.170	0.247	200.400	201.400	87.378%	87.247%
3	08:53:03	85.267%	0.066	0.180	0.187	198.800	198.400	88.141%	87.666%
x		84.365%	0.077	0.183	0.197	200.000	200.000	87.085%	87.115%
σ		1.131%	0.028	0.016	0.045	1.046	1.536	1.230%	0.628%
%RSD		1.341	36.450	8.704	23.000	0.523	0.768	1.412	0.721
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	08:52:25	192.500	194.000	192.300	191.800	191.800	82.357%		
2	08:52:44	201.800	201.300	201.600	200.700	201.300	79.415%		
3	08:53:03	205.700	204.700	206.100	207.500	206.900	78.331%		
x		200.000	200.000	200.000	200.000	200.000	80.034%		
σ		6.761	5.494	7.049	7.867	7.638	2.083%		
%RSD		3.380	2.747	3.524	3.934	3.819	2.603		

STD3 1408391 12/3/2014 8:55:44 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:55:44	102.113%	0.342	204.800	201.200	0.000	191.100	181.200	186.500
2	08:56:03	103.419%	0.125	205.100	199.200	0.000	182.000	172.000	171.700
3	08:56:22	98.155%	0.233	190.100	199.600	0.000	175.200	164.700	163.500
x		101.229%	0.233	200.000	200.000	0.000	182.800	172.600	173.900
σ		2.741%	0.109	8.594	1.049	0.000	7.966	8.242	11.650
%RSD		2.708	46.570	4.297	0.524	0.000	4.359	4.775	6.700

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:55:44	45.330	10250.000	0.000	171.000	171.600	212.400	102.994%	198.900
2	08:56:03	43.120	9918.000	0.000	164.300	148.300	211.700	103.049%	201.100
3	08:56:22	43.140	9827.000	0.000	153.800	150.700	213.300	97.992%	200.100
x		43.860	10000.000	0.000	163.000	156.800	212.500	101.345%	200.000
σ		1.270	225.400	0.000	8.697	12.800	0.786	2.904%	1.111
%RSD		2.896	2.254	0.000	5.334	8.164	0.370	2.866	0.556

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:55:44	0.405	0.456	1.794	155.000	152.500	0.341	0.545	0.507
2	08:56:03	0.331	0.437	1.697	130.800	133.500	0.336	0.513	0.532
3	08:56:22	0.338	0.403	1.717	110.400	109.800	0.330	0.496	0.348
x		0.358	0.432	1.736	132.100	131.900	0.336	0.518	0.463
σ		0.041	0.026	0.051	22.320	21.420	0.005	0.025	0.100
%RSD		11.440	6.118	2.935	16.900	16.230	1.586	4.791	21.550

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:55:44	0.591	4.744	4.463	-0.041	0.389	-0.500	0.000	0.365
2	08:56:03	0.488	5.028	5.019	-0.170	0.483	-1.057	0.000	0.338
3	08:56:22	0.545	4.647	4.864	-0.477	0.447	-2.411	0.000	0.327
x		0.541	4.806	4.782	-0.229	0.440	-1.323	0.000	0.344
σ		0.051	0.198	0.287	0.224	0.048	0.983	0.000	0.019
%RSD		9.474	4.115	5.995	97.690	10.890	74.280	0.000	5.575

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:55:44	94.067%	196.000	192.900	94.254%	0.383	0.401	0.351	-0.278
2	08:56:03	95.415%	201.400	202.900	95.314%	0.368	0.373	0.337	-0.060
3	08:56:22	94.710%	202.600	204.200	94.220%	0.387	0.362	0.265	-0.370
x		94.731%	200.000	200.000	94.596%	0.379	0.379	0.318	-0.236
σ		0.674%	3.522	6.220	0.622%	0.010	0.020	0.046	0.159
%RSD		0.712	1.761	3.110	0.658	2.695	5.289	14.450	67.480

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:55:44	91.966%	201.200	200.200	200.200	0.519	0.553	90.169%	90.370%
2	08:56:03	93.963%	199.900	200.100	199.800	0.477	0.575	94.145%	94.294%
3	08:56:22	95.171%	198.800	199.700	200.000	0.449	0.495	93.854%	95.168%
x		93.700%	200.000	200.000	200.000	0.481	0.541	92.723%	93.277%
σ		1.619%	1.216	0.225	0.207	0.035	0.041	2.216%	2.555%
%RSD		1.728	0.608	0.112	0.104	7.308	7.631	2.390	2.739

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	08:55:44	0.338	0.334	0.358	0.351	0.352	92.861%
2	08:56:03	0.314	0.325	0.360	0.359	0.352	93.231%
3	08:56:22	0.310	0.331	0.376	0.365	0.362	92.958%
x		0.321	0.330	0.365	0.358	0.356	93.017%
σ		0.015	0.004	0.010	0.007	0.006	0.192%
%RSD		4.807	1.271	2.797	2.004	1.693	0.206

ICV 1423408 12/3/2014 8:59:04 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:59:04	105.765%	88.490	83.830	82.340	0.000	40770.000	41030.000	41360.000
2	08:59:23	97.525%	84.950	85.660	84.050	0.000	40910.000	40720.000	40660.000
3	08:59:42	98.525%	84.160	85.070	83.500	0.000	40250.000	39960.000	39290.000
x		100.605%	107.333%	106.069%	104.122%	0.000	101.602%	101.429%	101.097%
σ		4.496%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		4.469	2.686	1.104	1.045	0.000	0.853	1.363	2.599
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:59:04	411.400	3907.000	0.000	40180.000	38860.000	38930.000	100.725%	81.170
2	08:59:23	404.000	3899.000	0.000	40350.000	39590.000	39140.000	97.555%	79.010
3	08:59:42	397.500	3778.000	0.000	39450.000	39270.000	38680.000	95.320%	82.130
x		101.080%	96.536%	0.000	99.990%	98.096%	97.283%	97.867%	100.962%
σ		n/a	n/a	0.000	n/a	n/a	n/a	2.716%	n/a
%RSD		1.724	1.881	0.000	1.195	0.931	0.593	2.775	1.975
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:59:04	78.100	80.900	392.000	19920.000	19740.000	81.230	81.930	84.160
2	08:59:23	78.750	80.990	394.000	19870.000	19930.000	80.630	83.140	83.930
3	08:59:42	79.820	82.070	399.800	20200.000	20120.000	81.380	83.050	84.910
x		98.609%	101.647%	98.811%	99.996%	99.639%	101.351%	103.384%	105.415%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.100	0.803	1.021	0.882	0.958	0.487	0.815	0.603
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:59:04	84.950	85.770	85.060	81.030	83.350	82.060	0.000	76.020
2	08:59:23	83.090	85.810	85.100	81.020	82.710	79.220	0.000	75.960
3	08:59:42	82.930	85.950	86.090	80.650	82.450	81.350	0.000	75.450
x		104.570%	107.305%	106.771%	101.129%	103.544%	101.097%	0.000	94.764%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.338	0.105	0.681	0.268	0.562	1.829	0.000	0.409
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:59:04	92.219%	80.760	84.090	81.964%	84.320	85.050	84.340	84.690
2	08:59:23	93.249%	84.260	86.410	82.090%	83.960	83.650	83.200	83.730
3	08:59:42	93.276%	84.900	88.970	82.263%	83.660	83.800	83.810	84.160
x		92.914%	104.133%	108.114%	82.106%	104.974%	105.208%	104.732%	105.242%
σ		0.603%	n/a	n/a	0.150%	n/a	n/a	n/a	n/a
%RSD		0.649	2.679	2.826	0.183	0.393	0.913	0.680	0.567
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:59:04	84.485%	82.880	84.130	82.970	81.510	81.550	85.611%	86.876%
2	08:59:23	86.770%	82.740	83.110	82.890	80.450	81.520	89.124%	90.109%
3	08:59:42	86.164%	84.200	83.310	83.010	82.060	81.220	89.931%	91.376%
x		85.806%	104.092%	104.397%	103.691%	101.675%	101.785%	88.222%	89.454%
σ		1.184%	n/a	n/a	n/a	n/a	n/a	2.297%	2.320%
%RSD		1.380	0.970	0.647	0.072	1.010	0.224	2.604	2.594
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	08:59:04	80.090	82.870	80.200	76.310	78.000	86.186%		
2	08:59:23	82.220	84.900	83.220	78.550	80.900	85.646%		
3	08:59:42	84.250	86.800	84.780	81.520	82.870	84.898%		
x		102.731%	106.071%	103.415%	98.493%	100.738%	85.577%		
σ		n/a	n/a	n/a	n/a	n/a	0.647%		
%RSD		2.534	2.320	2.817	3.314	3.036	0.756		

ICB 12/3/2014 9:05:08 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:05:08	110.552%	0.004	0.463	0.564	0.000	1.493	1.861	2.231
2	09:05:27	107.977%	0.005	0.838	0.505	0.000	1.702	2.180	2.417
3	09:05:46	104.109%	0.053	0.615	0.581	0.000	1.472	2.344	2.556
x		107.546%	0.021	0.638	0.550	0.000	1.556	2.128	2.401
σ		3.243%	0.029	0.189	0.040	0.000	0.127	0.246	0.164
%RSD		3.016	138.500	29.530	7.298	0.000	8.148	11.560	6.809

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:05:08	2.207	2.266	0.000	1.005	2.526	-0.127	105.925%	-0.004
2	09:05:27	2.518	1.502	0.000	2.116	-0.724	0.682	101.994%	-0.042
3	09:05:46	2.341	1.104	0.000	2.081	-2.416	0.703	99.372%	0.033
x		2.355	1.624	0.000	1.734	-0.205	0.419	102.430%	-0.004
σ		0.156	0.590	0.000	0.631	2.511	0.473	3.298%	0.038
%RSD		6.611	36.360	0.000	36.400	1226.000	112.800	3.220	921.700

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:05:08	-0.031	0.030	0.031	10.620	6.835	-0.001	0.044	-0.019
2	09:05:27	0.004	0.039	0.029	9.286	7.392	0.003	-0.005	-0.064
3	09:05:46	-0.018	0.056	0.018	6.843	7.513	-0.011	0.040	-0.009
x		-0.015	0.042	0.026	8.915	7.247	-0.003	0.026	-0.031
σ		0.018	0.013	0.007	1.914	0.362	0.007	0.027	0.029
%RSD		116.100	30.900	25.860	21.470	4.990	243.600	102.300	95.070

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:05:08	0.014	0.032	0.059	-0.087	-0.296	0.200	0.000	0.012
2	09:05:27	0.025	0.064	0.002	0.081	-0.072	0.451	0.000	0.014
3	09:05:46	0.098	0.111	0.085	-0.304	0.080	-0.857	0.000	0.013
x		0.045	0.069	0.049	-0.104	-0.096	-0.069	0.000	0.013
σ		0.046	0.040	0.042	0.193	0.189	0.694	0.000	0.001
%RSD		100.500	57.150	86.500	186.400	196.700	1010.000	0.000	4.756

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:05:08	94.540%	0.208	0.235	94.544%	-0.014	-0.020	0.033	0.018
2	09:05:27	94.189%	0.253	0.205	94.596%	-0.007	-0.016	-0.025	-0.015
3	09:05:46	94.418%	0.194	0.251	94.484%	0.014	-0.015	-0.026	-0.018
x		94.382%	0.218	0.230	94.541%	-0.002	-0.017	-0.006	-0.005
σ		0.178%	0.030	0.023	0.056%	0.014	0.003	0.034	0.020
%RSD		0.189	13.920	10.050	0.059	591.800	15.620	569.400	408.300

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:05:08	92.524%	-0.109	-0.009	-0.042	0.005	0.030	90.714%	91.114%
2	09:05:27	93.146%	-0.036	-0.035	-0.022	0.020	0.036	93.599%	93.803%
3	09:05:46	94.536%	-0.069	0.004	0.030	0.020	0.052	93.611%	94.963%
x		93.402%	-0.071	-0.013	-0.011	0.015	0.039	92.641%	93.293%
σ		1.030%	0.036	0.020	0.037	0.009	0.011	1.669%	1.975%
%RSD		1.103	51.040	148.600	329.200	58.110	29.070	1.801	2.117

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	09:05:08	0.013	0.006	0.028	0.027	0.030	96.534%
2	09:05:27	0.004	0.004	0.029	0.040	0.032	95.803%
3	09:05:46	0.010	0.008	0.041	0.045	0.044	96.642%
x		0.009	0.006	0.033	0.037	0.035	96.326%
σ		0.005	0.002	0.007	0.009	0.007	0.456%
%RSD		52.810	34.670	21.230	24.530	20.490	0.474

CRI 1411047 12/3/2014 9:08:30 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:08:30	109.731%	1.029	5.006	4.418	0.000	97.420	101.000	102.900
2	09:08:50	106.296%	1.178	4.964	4.562	0.000	94.880	102.800	102.000
3	09:09:09	103.801%	1.279	3.416	4.991	0.000	96.140	97.580	100.700
x		106.609%	116.174%	89.233%	93.144%	0.000	96.148%	100.458%	101.864%
σ		2.977%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.793	10.840	20.310	6.400	0.000	1.319	2.650	1.104

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:08:30	36.450	464.200	0.000	91.100	71.900	88.590	110.244%	4.732
2	09:08:50	38.850	465.800	0.000	93.920	82.450	88.770	107.468%	4.570
3	09:09:09	35.760	449.300	0.000	94.420	92.970	90.560	103.361%	5.292
x		123.404%	91.961%	0.000	93.144%	82.439%	89.307%	107.024%	97.295%
σ		n/a	n/a	0.000	n/a	n/a	n/a	3.463%	n/a
%RSD		4.376	1.978	0.000	1.921	12.780	1.222	3.236	7.793

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:08:30	0.762	1.970	4.665	51.950	47.280	0.489	1.066	2.290
2	09:08:50	0.924	1.955	4.821	51.870	50.170	0.476	0.972	2.165
3	09:09:09	0.957	2.114	4.878	51.580	51.040	0.489	1.052	2.148
x		88.114%	100.637%	95.764%	103.597%	98.990%	96.902%	103.006%	110.037%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		11.820	4.364	2.304	0.379	3.974	1.479	4.924	3.520

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:08:30	2.402	5.343	5.687	1.011	5.132	4.939	0.000	4.632
2	09:08:50	2.269	5.242	5.152	0.910	5.155	5.109	0.000	4.661
3	09:09:09	2.473	5.853	5.068	1.252	4.763	6.314	0.000	4.671
x		119.062%	109.587%	106.046%	105.768%	100.335%	109.076%	0.000	93.093%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		4.359	5.983	6.337	16.600	4.386	13.740	0.000	0.438

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:08:30	95.474%	4.854	5.036	95.548%	0.939	1.001	1.119	1.014
2	09:08:50	95.556%	4.919	4.983	94.942%	0.930	1.017	0.979	1.076
3	09:09:09	95.966%	4.885	5.009	94.817%	1.003	1.020	1.065	0.892
x		95.665%	97.726%	100.188%	95.102%	95.732%	101.254%	105.411%	99.394%
σ		0.263%	n/a	n/a	0.391%	n/a	n/a	n/a	n/a
%RSD		0.275	0.666	0.536	0.411	4.130	1.027	6.670	9.396

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:08:30	93.554%	5.404	1.755	1.737	9.439	9.485	92.475%	92.247%
2	09:08:50	94.979%	4.562	1.746	1.781	9.559	9.360	92.307%	93.423%
3	09:09:09	95.937%	4.617	1.819	1.787	9.096	9.444	94.678%	95.051%
x		94.823%	97.219%	88.680%	88.414%	93.644%	94.297%	93.153%	93.574%
σ		1.199%	n/a	n/a	n/a	n/a	n/a	1.323%	1.408%
%RSD		1.265	9.696	2.254	1.558	2.566	0.680	1.420	1.505

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	09:08:30	0.850	0.888	0.884	0.887	0.875	98.842%
2	09:08:50	0.926	0.935	0.973	0.898	0.915	97.018%
3	09:09:09	0.888	0.936	0.932	0.926	0.939	97.114%
x		88.814%	91.989%	92.956%	90.379%	90.999%	97.658%
σ		n/a	n/a	n/a	n/a	n/a	1.026%
%RSD		4.289	2.984	4.809	2.216	3.545	1.051

ICSA 1417030 12/3/2014 9:11:53 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:11:53	81.389%	-0.011	1.264	0.805	0.000	107700.000	103700.000	104900.000
2	09:12:12	70.120%	-0.041	1.281	0.851	0.000	107700.000	104000.000	103900.000
3	09:12:31	62.954%	0.036	2.076	1.001	0.000	108100.000	103400.000	102300.000
x		71.488%	-0.005	1.540	0.886	0.000	107800.000	103700.000	103700.000
σ		9.293%	0.039	0.464	0.102	0.000	236.500	279.400	1307.000
%RSD		13.000	769.200	30.100	11.570	0.000	0.219	0.269	1.260

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:11:53	104700.000	27.470	0.000	108700.000	109700.000	109700.000	78.889%	2325.000
2	09:12:12	105000.000	28.010	0.000	108200.000	112200.000	109600.000	72.933%	2364.000
3	09:12:31	102600.000	26.930	0.000	109400.000	112000.000	110700.000	68.770%	2377.000
x		104100.000	27.470	0.000	108800.000	111300.000	110000.000	73.531%	2355.000
σ		1292.000	0.544	0.000	582.200	1407.000	577.200	5.086%	27.190
%RSD		1.241	1.979	0.000	0.535	1.264	0.525	6.916	1.154

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:11:53	-0.225	0.962	0.734	109900.000	110300.000	0.079	-0.835	1.618
2	09:12:12	-0.234	0.799	0.749	111000.000	111300.000	0.053	-1.034	1.671
3	09:12:31	-0.216	0.920	0.768	112400.000	111100.000	0.057	-0.867	1.703
x		-0.225	0.894	0.750	111100.000	110900.000	0.063	-0.912	1.664
σ		0.009	0.085	0.017	1226.000	484.700	0.014	0.107	0.043
%RSD		4.056	9.456	2.294	1.103	0.437	21.850	11.710	2.579

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:11:53	1.663	2.112	1.335	-0.082	0.377	-0.277	0.000	0.806
2	09:12:12	1.602	2.245	1.392	0.249	0.347	1.076	0.000	0.823
3	09:12:31	1.475	2.134	1.704	0.407	0.154	1.151	0.000	0.794
x		1.580	2.164	1.477	0.191	0.292	0.650	0.000	0.808
σ		0.096	0.071	0.199	0.250	0.121	0.804	0.000	0.015
%RSD		6.063	3.292	13.460	130.600	41.420	123.700	0.000	1.806

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:11:53	73.004%	2299.000	2340.000	74.007%	0.041	0.073	0.245	0.225
2	09:12:12	73.187%	2362.000	2387.000	73.090%	0.030	0.065	0.199	0.119
3	09:12:31	71.939%	2358.000	2410.000	71.362%	0.053	0.061	0.238	0.219
x		72.710%	2340.000	2379.000	72.820%	0.041	0.066	0.228	0.188
σ		0.674%	35.250	35.270	1.343%	0.011	0.006	0.025	0.060
%RSD		0.926	1.507	1.483	1.845	26.990	9.042	10.830	31.730

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:11:53	77.139%	0.050	0.056	0.056	0.172	0.177	75.080%	74.657%
2	09:12:12	78.398%	0.085	0.072	0.058	0.173	0.206	78.357%	77.427%
3	09:12:31	78.504%	0.115	0.072	0.018	0.161	0.158	78.030%	78.593%
x		78.014%	0.083	0.067	0.044	0.169	0.181	77.156%	76.892%
σ		0.759%	0.032	0.009	0.023	0.007	0.024	1.805%	2.022%
%RSD		0.973	38.790	13.650	51.780	3.966	13.380	2.339	2.629

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	09:11:53	0.084	0.068	0.420	0.354	0.388	85.364%
2	09:12:12	0.057	0.071	0.462	0.389	0.444	74.924%
3	09:12:31	0.058	0.057	0.495	0.472	0.469	71.160%
x		0.066	0.065	0.459	0.405	0.433	77.149%
σ		0.015	0.008	0.038	0.061	0.042	7.359%
%RSD		22.950	11.710	8.203	14.980	9.600	9.539

ICSAB 1417031 12/3/2014 9:15:15 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:15:15	66.686%	19.960	51.860	48.520	0.000	107500.000	104200.000	103500.000
2	09:15:34	60.133%	20.940	49.990	48.710	0.000	104500.000	99130.000	98750.000
3	09:15:54	56.329%	21.250	46.680	49.660	0.000	104300.000	99920.000	100900.000
x		61.049%	103.579%	99.027%	97.925%	0.000	105.436%	101.094%	101.043%
σ		5.239%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		8.581	3.267	5.297	1.254	0.000	1.703	2.719	2.331

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:15:15	103800.000	503.700	0.000	109600.000	110200.000	109700.000	71.487%	2284.000
2	09:15:34	100700.000	488.700	0.000	109400.000	113000.000	110000.000	65.299%	2289.000
3	09:15:54	99470.000	482.800	0.000	110200.000	114300.000	111400.000	64.143%	2354.000
x		101.350%	98.350%	0.000	109.716%	112.517%	110.378%	66.976%	115.444%
σ		n/a	n/a	0.000	n/a	n/a	n/a	3.949%	n/a
%RSD		2.218	2.190	0.000	0.386	1.898	0.854	5.896	1.686

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:15:15	20.330	22.030	21.980	108700.000	108300.000	21.490	20.740	22.390
2	09:15:34	21.230	22.500	22.300	111100.000	110100.000	21.250	19.840	21.780
3	09:15:54	21.600	22.370	22.590	110200.000	109900.000	21.020	20.450	21.560
x		105.261%	111.503%	96.915%	110.003%	109.398%	106.276%	101.712%	109.571%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		3.088	1.081	1.364	1.122	0.899	1.097	2.263	1.958

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:15:15	22.590	22.670	22.000	22.180	53.800	55.350	0.000	22.960
2	09:15:34	22.650	23.280	22.720	20.750	53.070	51.890	0.000	22.750
3	09:15:54	22.190	23.580	21.670	23.400	52.770	53.810	0.000	22.920
x		112.368%	92.717%	88.522%	110.571%	106.424%	107.364%	0.000	114.371%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.117	1.994	2.436	5.998	0.996	3.232	0.000	0.486

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:15:15	70.386%	2336.000	2354.000	69.131%	19.660	19.340	20.400	19.670
2	09:15:34	70.145%	2354.000	2392.000	68.725%	19.590	19.110	19.700	19.610
3	09:15:54	69.998%	2406.000	2433.000	67.767%	19.670	19.140	20.310	19.850
x		70.176%	118.267%	119.665%	68.541%	98.178%	95.991%	100.688%	98.559%
σ		0.196%	n/a	n/a	0.700%	n/a	n/a	n/a	n/a
%RSD		0.279	1.538	1.647	1.021	0.222	0.664	1.888	0.641

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:15:15	75.700%	103.500	20.290	20.490	21.430	21.440	76.176%	76.360%
2	09:15:34	76.463%	103.500	20.340	20.250	21.460	21.350	78.146%	77.926%
3	09:15:54	77.086%	103.900	20.530	20.460	23.040	21.750	78.531%	78.805%
x		76.416%	103.613%	101.930%	102.011%	109.877%	107.572%	77.618%	77.697%
σ		0.694%	n/a	n/a	n/a	n/a	n/a	1.263%	1.238%
%RSD		0.908	0.201	0.623	0.647	4.182	0.977	1.627	1.594

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	09:15:15	20.410	21.040	20.750	21.030	20.730	74.523%
2	09:15:34	22.140	22.960	22.390	23.050	22.530	70.316%
3	09:15:54	22.770	23.580	23.480	23.270	23.160	68.953%
x		108.867%	112.640%	111.050%	112.251%	110.688%	71.264%
σ		n/a	n/a	n/a	n/a	n/a	2.903%
%RSD		5.614	5.872	6.191	5.494	5.693	4.074

CCV 1408349 12/3/2014 9:21:17 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:21:17	85.778%	108.000	99.450	95.470	0.000	49590.000	50200.000	48920.000
2	09:21:36	78.321%	108.000	100.100	94.680	0.000	48330.000	47840.000	48210.000
3	09:21:56	77.377%	106.400	96.920	94.970	0.000	47210.000	47180.000	46470.000
x		80.492%	107.466%	98.824%	95.039%	0.000	96.755%	96.815%	95.730%
σ		4.602%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		5.718	0.878	1.698	0.419	0.000	2.457	3.274	2.639

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:21:17	481.500	4529.000	0.000	46470.000	46410.000	45990.000	93.109%	90.630
2	09:21:36	484.700	4523.000	0.000	46790.000	47080.000	46380.000	88.262%	92.140
3	09:21:56	469.300	4416.000	0.000	46750.000	46610.000	46090.000	85.716%	89.830
x		95.704%	89.793%	0.000	93.333%	93.398%	92.308%	89.029%	90.867%
σ		n/a	n/a	0.000	n/a	n/a	n/a	3.756%	n/a
%RSD		1.706	1.417	0.000	0.374	0.730	0.436	4.219	1.288

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:21:17	90.090	93.450	466.600	23710.000	23820.000	95.300	98.230	100.200
2	09:21:36	91.720	92.990	473.400	23840.000	24010.000	94.750	95.190	97.240
3	09:21:56	91.560	93.940	478.900	23840.000	24010.000	94.090	93.350	94.900
x		91.123%	93.460%	94.593%	95.199%	95.784%	94.712%	95.592%	97.456%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.982	0.507	1.298	0.313	0.473	0.641	2.575	2.738

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:21:17	101.400	101.200	97.860	98.090	99.430	98.390	0.000	95.280
2	09:21:36	97.400	98.670	99.040	96.630	98.520	100.000	0.000	94.320
3	09:21:56	95.480	98.600	98.150	96.660	99.780	99.860	0.000	96.060
x		98.092%	99.488%	98.348%	97.126%	99.243%	99.419%	0.000	95.220%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		3.073	1.485	0.625	0.856	0.655	0.897	0.000	0.914

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:21:17	82.250%	92.100	96.170	77.401%	99.700	98.350	98.800	98.400
2	09:21:36	84.057%	99.160	100.200	77.053%	98.860	98.720	96.540	97.950
3	09:21:56	82.759%	102.200	103.300	76.076%	100.300	99.480	99.450	98.620
x		83.022%	97.836%	99.918%	76.843%	99.633%	98.851%	98.265%	98.322%
σ		0.932%	n/a	n/a	0.687%	n/a	n/a	n/a	n/a
%RSD		1.122	5.314	3.593	0.894	0.746	0.579	1.556	0.348

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:21:17	81.843%	94.780	92.660	91.050	96.260	96.090	84.753%	86.183%
2	09:21:36	82.653%	94.690	93.010	92.980	96.780	96.920	87.544%	88.297%
3	09:21:56	82.659%	95.140	95.220	94.060	96.580	95.510	88.144%	89.396%
x		82.385%	94.869%	93.630%	92.699%	96.541%	96.174%	86.814%	87.959%
σ		0.469%	n/a	n/a	n/a	n/a	n/a	1.810%	1.633%
%RSD		0.569	0.247	1.479	1.645	0.272	0.737	2.084	1.856

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	09:21:17	93.190	96.690	95.480	94.620	94.760	81.199%
2	09:21:36	98.430	102.200	99.760	100.000	99.790	78.886%
3	09:21:56	98.980	102.500	100.900	101.300	100.600	79.256%
x		96.867%	100.464%	98.704%	98.633%	98.382%	79.780%
σ		n/a	n/a	n/a	n/a	n/a	1.242%
%RSD		3.297	3.260	2.888	3.580	3.215	1.557

CCB1 12/3/2014 9:27:13 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:27:32	84.172%	-0.012	-0.454	0.162	0.000	5.348	3.616	3.037
2	09:27:51	80.073%	-0.010	0.456	-0.568	0.000	6.478	2.163	2.598
3	09:28:10	78.605%	-0.041	-0.138	0.207	0.000	7.060	2.198	2.521
x		80.950%	-0.021	-0.045	-0.066	0.000	6.295	2.659	2.719
σ		2.885%	0.017	0.462	0.435	0.000	0.871	0.829	0.278
%RSD		3.564	81.650	1027.000	656.800	0.000	13.830	31.180	10.230
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:27:32	2.143	0.405	0.000	3.838	-1.875	0.406	86.955%	0.096
2	09:27:51	1.909	-0.273	0.000	3.482	4.808	0.815	84.134%	-0.059
3	09:28:10	2.017	0.461	0.000	4.138	-3.887	2.273	83.361%	-0.114
x		2.023	0.198	0.000	3.819	-0.318	1.165	84.817%	-0.025
σ		0.117	0.408	0.000	0.329	4.552	0.981	1.892%	0.109
%RSD		5.773	206.500	0.000	8.602	1432.000	84.260	2.231	428.700
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:27:32	0.007	0.053	0.045	11.040	9.143	-0.013	0.022	-0.074
2	09:27:51	-0.052	0.011	0.047	8.559	7.722	-0.007	0.014	-0.039
3	09:28:10	-0.076	0.067	0.059	8.900	4.583	-0.009	0.040	-0.008
x		-0.040	0.043	0.050	9.501	7.149	-0.010	0.026	-0.040
σ		0.043	0.029	0.007	1.347	2.333	0.003	0.013	0.033
%RSD		105.300	66.950	14.720	14.170	32.640	32.480	51.600	82.480
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:27:32	0.037	0.012	0.240	-0.069	-0.012	-0.129	0.000	0.014
2	09:27:51	0.027	0.113	0.256	0.045	-0.130	-0.011	0.000	0.013
3	09:28:10	-0.011	0.132	0.149	-0.096	-0.017	-0.537	0.000	0.011
x		0.018	0.086	0.215	-0.040	-0.053	-0.226	0.000	0.013
σ		0.026	0.064	0.058	0.075	0.066	0.276	0.000	0.001
%RSD		144.900	75.190	26.720	186.800	124.500	122.100	0.000	10.880
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:27:32	86.357%	0.694	0.697	86.664%	-0.015	-0.021	0.023	0.007
2	09:27:51	87.743%	0.681	0.721	87.002%	-0.014	-0.005	0.047	0.027
3	09:28:10	87.537%	0.732	0.695	87.281%	-0.013	-0.013	0.030	0.010
x		87.213%	0.702	0.704	86.983%	-0.014	-0.013	0.033	0.015
σ		0.748%	0.026	0.015	0.309%	0.001	0.008	0.012	0.011
%RSD		0.858	3.768	2.090	0.355	7.886	62.480	35.970	73.890
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:27:32	88.929%	-0.102	0.075	0.087	-0.000	0.046	91.091%	92.448%
2	09:27:51	90.599%	-0.102	0.079	0.090	0.005	0.019	93.456%	95.406%
3	09:28:10	92.016%	-0.162	0.074	0.056	-0.001	0.018	94.734%	96.322%
x		90.515%	-0.122	0.076	0.078	0.001	0.028	93.094%	94.726%
σ		1.546%	0.034	0.002	0.019	0.003	0.016	1.848%	2.025%
%RSD		1.708	28.270	3.163	24.110	215.700	58.210	1.985	2.137
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	09:27:32	0.017	0.007	0.055	0.075	0.061	97.067%		
2	09:27:51	0.015	0.006	0.064	0.074	0.066	97.430%		
3	09:28:10	0.008	0.008	0.083	0.070	0.071	97.067%		
x		0.013	0.007	0.067	0.073	0.066	97.188%		
σ		0.005	0.001	0.014	0.003	0.005	0.210%		
%RSD		33.890	16.560	21.220	3.939	7.482	0.216		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:31:05	81.640%	-0.041	0.606	-0.422	0.000	1.998	1.037	1.073
2	09:31:24	77.432%	0.053	0.741	-0.762	0.000	3.814	0.768	0.736
3	09:31:43	76.538%	-0.041	-0.457	-0.255	0.000	3.061	0.508	0.397
x		78.537%	-0.009	0.296	-0.480	0.000	2.958	0.771	0.735
σ		2.725%	0.054	0.656	0.258	0.000	0.912	0.265	0.338
%RSD		3.469	572.400	221.300	53.840	0.000	30.850	34.310	46.010
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:31:05	15.910	12.750	0.000	5.746	0.122	9.413	88.736%	0.247
2	09:31:24	8.051	13.220	0.000	4.533	0.331	6.709	85.955%	0.208
3	09:31:43	4.431	12.280	0.000	3.820	-1.730	8.839	84.355%	0.436
x		9.465	12.750	0.000	4.700	-0.426	8.320	86.349%	0.297
σ		5.869	0.467	0.000	0.974	1.134	1.424	2.217%	0.122
%RSD		62.010	3.660	0.000	20.720	266.500	17.120	2.567	41.050
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:31:05	0.786	0.207	0.033	9.630	8.171	-0.021	0.013	0.055
2	09:31:24	-0.047	0.163	0.013	8.601	5.572	-0.020	0.014	0.020
3	09:31:43	-1.049	0.145	0.007	5.795	3.601	-0.025	0.014	0.004
x		-0.103	0.172	0.018	8.009	5.782	-0.022	0.014	0.026
σ		0.919	0.032	0.014	1.985	2.292	0.002	0.001	0.026
%RSD		889.000	18.500	76.950	24.790	39.640	11.140	4.123	100.200
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:31:05	0.183	1.073	1.060	-0.386	0.051	-1.332	0.000	0.014
2	09:31:24	0.041	0.930	0.931	-0.249	0.019	-1.390	0.000	0.007
3	09:31:43	0.057	0.828	1.136	-0.392	-0.210	-1.503	0.000	0.005
x		0.094	0.944	1.043	-0.342	-0.047	-1.408	0.000	0.009
σ		0.078	0.123	0.104	0.081	0.142	0.087	0.000	0.005
%RSD		82.720	13.060	9.949	23.600	305.200	6.174	0.000	54.830
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:31:05	89.540%	0.731	0.667	88.538%	-0.009	-0.020	0.085	0.043
2	09:31:24	89.422%	0.689	0.718	87.835%	0.005	-0.013	-0.026	-0.007
3	09:31:43	89.707%	0.593	0.639	87.230%	-0.003	-0.009	-0.001	-0.020
x		89.557%	0.671	0.675	87.868%	-0.003	-0.014	0.019	0.005
σ		0.143%	0.071	0.040	0.654%	0.007	0.006	0.058	0.033
%RSD		0.160	10.540	5.907	0.745	279.900	40.210	300.100	653.700
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:31:05	91.240%	0.358	0.112	0.104	0.010	0.053	93.854%	94.760%
2	09:31:24	91.791%	0.345	0.112	0.102	-0.006	0.021	95.310%	96.155%
3	09:31:43	93.274%	0.356	0.143	0.112	-0.006	0.009	96.601%	97.600%
x		92.102%	0.353	0.122	0.106	-0.001	0.028	95.255%	96.172%
σ		1.052%	0.007	0.018	0.006	0.009	0.023	1.374%	1.420%
%RSD		1.142	2.082	14.730	5.317	1510.000	82.340	1.443	1.477
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	09:31:05	0.040	0.031	0.242	0.253	0.256	92.968%		
2	09:31:24	0.031	0.021	0.222	0.198	0.200	92.224%		
3	09:31:43	0.024	0.019	0.161	0.165	0.163	91.706%		
x		0.032	0.024	0.208	0.205	0.207	92.299%		
σ		0.008	0.007	0.043	0.044	0.047	0.634%		
%RSD		24.160	28.320	20.430	21.690	22.590	0.687		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:34:35	82.734%	-0.041	0.026	-0.653	0.000	-1.148	0.993	1.006
2	09:34:54	81.499%	-0.011	-0.478	-0.402	0.000	0.498	0.365	0.747
3	09:35:14	74.120%	-0.041	-0.039	-0.323	0.000	2.627	0.184	0.287
x		79.451%	-0.031	-0.164	-0.459	0.000	0.659	0.514	0.680
σ		4.658%	0.017	0.274	0.172	0.000	1.892	0.425	0.364
%RSD		5.863	55.810	167.400	37.540	0.000	287.200	82.600	53.540

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:34:35	12.830	9.344	0.000	1.891	-2.174	5.002	94.114%	0.122
2	09:34:54	7.843	8.884	0.000	2.365	-3.991	3.453	87.544%	0.094
3	09:35:14	3.077	9.663	0.000	2.099	2.632	6.975	84.492%	0.105
x		7.915	9.297	0.000	2.118	-1.178	5.143	88.717%	0.107
σ		4.875	0.392	0.000	0.237	3.422	1.765	4.917%	0.014
%RSD		61.590	4.213	0.000	11.210	290.500	34.310	5.543	13.250

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:34:35	0.008	0.176	0.011	6.576	3.717	-0.026	0.035	-0.024
2	09:34:54	0.402	0.192	0.001	6.682	2.853	-0.026	-0.003	-0.020
3	09:35:14	-0.084	0.151	0.003	4.911	3.385	-0.029	0.006	-0.025
x		0.109	0.173	0.005	6.057	3.318	-0.027	0.012	-0.023
σ		0.258	0.020	0.006	0.993	0.436	0.002	0.020	0.003
%RSD		237.800	11.710	112.600	16.400	13.140	5.799	158.000	11.350

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:34:35	0.080	0.409	0.616	0.090	-0.324	-0.216	0.000	0.011
2	09:34:54	0.101	0.434	0.616	0.256	-0.166	0.597	0.000	0.005
3	09:35:14	0.016	0.298	0.483	0.202	-0.218	-0.317	0.000	0.005
x		0.066	0.380	0.572	0.183	-0.236	0.022	0.000	0.007
σ		0.045	0.072	0.077	0.084	0.081	0.501	0.000	0.004
%RSD		67.970	18.920	13.390	46.160	34.100	2323.000	0.000	54.640

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:34:35	92.148%	0.269	0.382	90.178%	-0.021	-0.029	-0.013	-0.024
2	09:34:54	90.647%	0.266	0.344	89.381%	-0.005	-0.033	-0.014	-0.020
3	09:35:14	91.512%	0.212	0.347	88.821%	-0.019	-0.031	0.001	-0.010
x		91.436%	0.249	0.358	89.460%	-0.015	-0.031	-0.009	-0.018
σ		0.753%	0.032	0.021	0.682%	0.009	0.002	0.009	0.007
%RSD		0.824	12.810	5.876	0.762	57.650	6.220	101.500	41.200

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:34:35	92.583%	0.058	0.026	-0.002	0.025	0.050	94.289%	94.164%
2	09:34:54	92.665%	0.072	0.006	0.012	0.004	0.029	95.544%	95.839%
3	09:35:14	94.721%	0.069	0.007	-0.015	0.014	0.012	96.275%	97.413%
x		93.323%	0.066	0.013	-0.002	0.014	0.030	95.369%	95.805%
σ		1.211%	0.007	0.012	0.013	0.010	0.019	1.004%	1.625%
%RSD		1.298	11.180	90.720	670.200	71.320	62.720	1.053	1.696

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	09:34:35	0.001	0.004	0.109	0.112	0.109	89.233%
2	09:34:54	0.006	0.002	0.102	0.074	0.093	88.970%
3	09:35:14	0.005	0.000	0.068	0.063	0.062	89.582%
x		0.004	0.002	0.093	0.083	0.088	89.262%
σ		0.003	0.002	0.022	0.026	0.024	0.307%
%RSD		76.340	98.480	23.530	30.960	27.210	0.344

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:38:06	58.361%	48.650	912.200	892.900	0.000	43600.000	43020.000	41570.000
2	09:38:26	52.364%	49.370	944.300	933.800	0.000	44850.000	42290.000	42230.000
3	09:38:45	49.819%	53.420	968.000	942.300	0.000	43960.000	42190.000	42080.000
x		53.515%	50.480	941.500	923.000	0.000	44140.000	42500.000	41960.000
σ		4.386%	2.571	27.980	26.380	0.000	643.200	451.900	347.300
%RSD		8.195	5.094	2.971	2.858	0.000	1.457	1.063	0.828
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:38:06	1709.000	7323.000	0.000	47780.000	51280.000	49350.000	64.345%	967.400
2	09:38:26	1735.000	7403.000	0.000	48510.000	52090.000	49280.000	60.708%	951.000
3	09:38:45	1688.000	7349.000	0.000	48020.000	50700.000	49490.000	58.233%	962.100
x		1711.000	7358.000	0.000	48100.000	51360.000	49380.000	61.095%	960.200
σ		23.340	40.930	0.000	374.000	697.800	105.700	3.074%	8.370
%RSD		1.365	0.556	0.000	0.777	1.359	0.214	5.032	0.872
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:38:06	492.000	197.100	513.500	1026.000	1154.000	495.200	481.300	238.500
2	09:38:26	489.000	196.700	521.200	1035.000	1072.000	498.900	483.400	240.300
3	09:38:45	494.600	197.100	534.800	1066.000	1108.000	505.400	491.400	239.600
x		491.900	197.000	523.200	1043.000	1111.000	499.800	485.300	239.500
σ		2.794	0.205	10.760	20.640	41.000	5.147	5.342	0.903
%RSD		0.568	0.104	2.056	1.980	3.690	1.030	1.101	0.377
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:38:06	239.400	456.100	453.300	34.160	8.837	7.505	0.000	1072.000
2	09:38:26	236.200	455.100	458.700	32.820	8.740	7.964	0.000	1077.000
3	09:38:45	245.000	463.700	467.000	34.440	9.070	9.024	0.000	1078.000
x		240.200	458.300	459.700	33.810	8.882	8.164	0.000	1076.000
σ		4.464	4.720	6.889	0.862	0.170	0.779	0.000	3.255
%RSD		1.858	1.030	1.499	2.550	1.908	9.542	0.000	0.303
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:38:06	67.984%	1093.000	1125.000	63.601%	51.190	51.270	47.330	39.860
2	09:38:26	67.272%	1101.000	1133.000	62.455%	52.040	51.640	48.190	41.220
3	09:38:45	65.693%	1109.000	1146.000	61.401%	51.920	50.920	48.020	40.560
x		66.983%	1101.000	1135.000	62.486%	51.710	51.280	47.850	40.550
σ		1.172%	7.871	10.590	1.101%	0.459	0.361	0.453	0.682
%RSD		1.750	0.715	0.934	1.761	0.888	0.704	0.946	1.682
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:38:06	70.994%	2035.000	469.800	463.400	2037.000	2045.000	80.517%	81.586%
2	09:38:26	71.073%	2023.000	468.300	463.500	2012.000	2020.000	81.670%	82.142%
3	09:38:45	70.221%	2023.000	468.200	464.600	2018.000	2029.000	81.749%	82.588%
x		70.763%	2027.000	468.800	463.900	2022.000	2031.000	81.312%	82.105%
σ		0.470%	7.012	0.926	0.669	12.880	12.230	0.690%	0.502%
%RSD		0.665	0.346	0.198	0.144	0.637	0.602	0.848	0.611
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	09:38:06	54.160	55.980	22.250	22.400	22.530	64.013%		
2	09:38:26	54.890	56.860	22.660	22.960	22.720	63.325%		
3	09:38:45	55.840	57.870	22.790	23.070	22.910	62.418%		
x		54.960	56.910	22.570	22.810	22.720	63.252%		
σ		0.840	0.945	0.287	0.359	0.189	0.800%		
%RSD		1.528	1.661	1.272	1.574	0.833	1.265		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:41:37	57.312%	-0.041	50.700	52.200	0.000	48590.000	22.260	21.020
2	09:41:57	54.280%	-0.041	48.900	46.990	0.000	45510.000	18.360	21.240
3	09:42:16	51.121%	-0.041	43.870	46.350	0.000	44020.000	15.660	18.930
x		54.238%	-0.041	47.830	48.510	0.000	46040.000	18.760	20.400
σ		3.096%	0.000	3.542	3.207	0.000	2330.000	3.322	1.272
%RSD		5.708	0.000	7.407	6.610	0.000	5.061	17.700	6.237

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:41:37	500.100	3960.000	0.000	2364.000	116300.000	111400.000	67.503%	1.318
2	09:41:57	480.700	3814.000	0.000	2312.000	113700.000	108500.000	63.529%	1.267
3	09:42:16	467.600	3710.000	0.000	2273.000	111900.000	108700.000	61.187%	1.059
x		482.800	3828.000	0.000	2316.000	114000.000	109500.000	64.073%	1.215
σ		16.360	126.000	0.000	45.590	2194.000	1648.000	3.193%	0.137
%RSD		3.388	3.293	0.000	1.968	1.926	1.504	4.984	11.290

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:41:37	2.196	0.975	0.204	15.930	172.500	0.184	-0.132	2.517
2	09:41:57	-1.182	1.045	0.228	11.140	135.000	0.177	-0.292	2.655
3	09:42:16	-0.364	0.938	0.214	8.595	136.500	0.111	-0.154	2.131
x		0.217	0.986	0.215	11.890	148.000	0.157	-0.193	2.434
σ		1.762	0.054	0.012	3.727	21.230	0.040	0.087	0.272
%RSD		812.900	5.523	5.645	31.340	14.350	25.520	45.220	11.160

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:41:37	2.107	1.763	1.861	4.734	3.595	3.271	0.000	548.600
2	09:41:57	2.140	1.649	2.310	3.411	2.994	2.000	0.000	546.900
3	09:42:16	2.049	1.696	2.064	5.437	3.192	3.127	0.000	542.300
x		2.099	1.703	2.079	4.528	3.260	2.799	0.000	546.000
σ		0.046	0.057	0.225	1.029	0.306	0.696	0.000	3.245
%RSD		2.199	3.370	10.810	22.720	9.389	24.850	0.000	0.594

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:41:37	77.672%	13.790	14.080	70.979%	0.019	-0.005	-0.091	-0.072
2	09:41:57	75.305%	13.370	13.450	68.032%	0.024	-0.002	-0.120	-0.127
3	09:42:16	73.272%	12.490	12.980	66.646%	0.017	0.012	-0.088	-0.095
x		75.416%	13.220	13.500	68.553%	0.020	0.002	-0.100	-0.098
σ		2.202%	0.664	0.555	2.213%	0.004	0.009	0.017	0.028
%RSD		2.920	5.022	4.112	3.228	17.510	624.600	17.310	28.420

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:41:37	77.359%	5.711	2.009	2.048	198.400	197.400	85.464%	85.959%
2	09:41:57	76.570%	4.903	1.970	2.047	196.800	196.500	85.615%	86.173%
3	09:42:16	74.778%	4.005	2.094	2.024	198.600	197.600	84.456%	86.336%
x		76.236%	4.873	2.024	2.040	197.900	197.200	85.179%	86.156%
σ		1.323%	0.853	0.063	0.014	0.985	0.579	0.630%	0.189%
%RSD		1.735	17.510	3.127	0.684	0.498	0.294	0.740	0.220

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	09:41:37	0.077	0.075	0.127	0.117	0.129	67.847%
2	09:41:57	0.063	0.066	0.111	0.130	0.110	67.212%
3	09:42:16	0.058	0.055	0.086	0.091	0.090	67.338%
x		0.066	0.065	0.108	0.113	0.110	67.466%
σ		0.010	0.010	0.020	0.020	0.019	0.336%
%RSD		14.800	15.710	18.900	17.760	17.610	0.499

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:45:10	45.158%	0.119	143.900	143.000	0.000	13320.000	74140.000	73890.000
2	09:45:30	36.759%	0.089	142.400	144.700	0.000	12850.000	73390.000	75330.000
3	09:45:50	31.491%	0.186	143.400	146.700	0.000	12980.000	72660.000	71600.000
x		37.803%	0.132	143.200	144.800	0.000	13050.000	73390.000	73610.000
σ		6.893%	0.050	0.764	1.822	0.000	243.800	742.500	1881.000
%RSD		18.234	37.720	0.533	1.258	0.000	1.868	1.012	2.555
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:45:10	8.858	7269.000	0.000	5855.000	447700.000	433300.000	56.719%	1.199
2	09:45:30	6.204	7311.000	0.000	5917.000	441300.000	430600.000	51.612%	1.069
3	09:45:50	4.324	7085.000	0.000	5749.000	449900.000	430300.000	47.384%	2.007
x		6.462	7222.000	0.000	5840.000	446300.000	431400.000	51.905%	1.425
σ		2.278	120.100	0.000	84.890	4420.000	1666.000	4.674%	0.508
%RSD		35.260	1.663	0.000	1.453	0.990	0.386	9.006	35.660
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:45:10	-0.507	0.810	4310.000	27040.000	27480.000	1.912	-1.361	0.352
2	09:45:30	-0.858	0.735	4255.000	26610.000	27860.000	1.887	-1.833	0.326
3	09:45:50	-8.525	0.845	4417.000	27350.000	27200.000	2.050	-2.233	0.371
x		-3.297	0.797	4327.000	27000.000	27510.000	1.950	-1.809	0.349
σ		4.531	0.056	82.660	372.500	330.900	0.088	0.437	0.022
%RSD		137.500	7.056	1.910	1.379	1.203	4.513	24.130	6.397
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:45:10	0.563	1.381	1.060	4.208	-0.162	-0.928	0.000	3028.000
2	09:45:30	0.812	1.366	1.089	5.151	0.134	-1.727	0.000	2997.000
3	09:45:50	0.707	1.305	1.039	7.391	0.128	-1.668	0.000	3032.000
x		0.694	1.351	1.063	5.583	0.033	-1.441	0.000	3019.000
σ		0.125	0.040	0.025	1.635	0.169	0.446	0.000	19.300
%RSD		17.990	2.963	2.340	29.280	510.200	30.920	0.000	0.639
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:45:10	70.800%	0.799	0.861	59.441%	-0.014	-0.029	-0.094	-0.081
2	09:45:30	68.987%	0.925	1.018	57.252%	-0.004	0.009	-0.112	-0.106
3	09:45:50	66.373%	0.848	0.814	55.193%	0.007	-0.000	-0.137	-0.135
x		68.720%	0.858	0.898	57.295%	-0.004	-0.006	-0.115	-0.107
σ		2.226%	0.064	0.107	2.124%	0.010	0.020	0.022	0.027
%RSD		3.239	7.435	11.950	3.708	288.500	306.900	18.820	24.790
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:45:10	68.858%	2.263	0.160	0.231	13.220	13.250	78.859%	78.413%
2	09:45:30	68.142%	2.166	0.132	0.197	13.040	13.280	76.755%	77.198%
3	09:45:50	66.422%	2.375	0.195	0.255	13.680	13.750	76.693%	77.642%
x		67.807%	2.268	0.162	0.228	13.310	13.430	77.435%	77.751%
σ		1.252%	0.104	0.032	0.029	0.333	0.279	1.233%	0.615%
%RSD		1.846	4.594	19.600	12.780	2.500	2.075	1.592	0.791
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	09:45:10	0.024	0.014	0.052	0.065	0.072	55.179%		
2	09:45:30	0.016	0.018	0.058	0.052	0.055	54.739%		
3	09:45:50	0.017	0.013	0.052	0.056	0.049	53.891%		
x		0.019	0.015	0.054	0.058	0.058	54.603%		
σ		0.004	0.003	0.003	0.007	0.012	0.655%		
%RSD		23.560	18.430	6.258	11.350	19.980	1.199		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:48:43	46.618%	0.063	41.440	44.720	0.000	30750.000	6791.000	6948.000
2	09:49:03	39.225%	-0.041	46.670	50.510	0.000	32930.000	7214.000	7341.000
3	09:49:22	36.793%	-0.041	52.120	45.460	0.000	30890.000	6824.000	6863.000
x		40.879%	-0.006	46.740	46.900	0.000	31520.000	6943.000	7051.000
σ		5.117%	0.060	5.343	3.152	0.000	1220.000	235.600	255.200
%RSD		12.517	961.100	11.430	6.722	0.000	3.871	3.393	3.620

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:48:43	5.864	1520.000	0.000	3921.000	21520.000	20450.000	54.289%	0.879
2	09:49:03	5.545	1569.000	0.000	3966.000	22070.000	20710.000	50.576%	1.049
3	09:49:22	4.789	1492.000	0.000	3910.000	21740.000	20880.000	48.924%	0.997
x		5.399	1527.000	0.000	3932.000	21780.000	20680.000	51.263%	0.975
σ		0.552	38.840	0.000	29.560	273.400	213.900	2.748%	0.087
%RSD		10.220	2.544	0.000	0.752	1.256	1.034	5.360	8.924

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:48:43	0.894	1.255	629.600	21.360	40.550	0.185	1.279	1.391
2	09:49:03	2.272	1.390	642.600	18.320	42.840	0.202	1.189	1.657
3	09:49:22	-4.044	1.298	638.000	18.320	41.190	0.197	1.199	1.680
x		-0.293	1.315	636.700	19.330	41.530	0.194	1.222	1.576
σ		3.321	0.069	6.611	1.754	1.183	0.009	0.049	0.161
%RSD		1135.000	5.241	1.038	9.071	2.849	4.507	4.021	10.200

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:48:43	1.401	3.092	3.060	-1.022	-0.221	-1.624	0.000	108.500
2	09:49:03	1.355	3.219	3.153	-0.804	-0.040	-1.164	0.000	109.200
3	09:49:22	1.175	3.029	3.014	-0.733	0.168	0.243	0.000	109.000
x		1.310	3.113	3.076	-0.853	-0.031	-0.848	0.000	108.900
σ		0.120	0.097	0.071	0.150	0.195	0.973	0.000	0.359
%RSD		9.130	3.112	2.300	17.630	630.300	114.700	0.000	0.330

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:48:43	70.058%	2.538	2.535	65.276%	-0.005	-0.023	-0.137	-0.084
2	09:49:03	69.007%	2.307	2.554	64.042%	-0.011	-0.009	-0.124	-0.068
3	09:49:22	68.036%	2.466	2.445	62.268%	0.000	-0.006	-0.140	-0.087
x		69.034%	2.437	2.511	63.862%	-0.005	-0.012	-0.134	-0.080
σ		1.011%	0.118	0.058	1.512%	0.005	0.009	0.008	0.010
%RSD		1.465	4.859	2.324	2.368	108.200	73.170	6.216	12.580

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:48:43	73.209%	1.543	0.612	0.610	93.540	92.810	83.167%	84.198%
2	09:49:03	72.344%	1.598	0.642	0.558	94.300	94.070	82.727%	84.944%
3	09:49:22	71.696%	1.626	0.663	0.608	91.960	93.420	83.844%	85.060%
x		72.416%	1.589	0.639	0.592	93.270	93.430	83.246%	84.734%
σ		0.759%	0.043	0.026	0.030	1.190	0.630	0.563%	0.467%
%RSD		1.048	2.681	4.070	5.015	1.276	0.674	0.676	0.552

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	09:48:43	0.016	0.012	0.072	0.053	0.065	69.283%
2	09:49:03	0.006	0.005	0.068	0.058	0.065	69.267%
3	09:49:22	0.007	0.008	0.062	0.061	0.058	69.479%
x		0.010	0.008	0.067	0.057	0.062	69.343%
σ		0.006	0.004	0.005	0.004	0.004	0.118%
%RSD		57.160	43.340	7.534	6.745	6.232	0.171

180-38967-C-5-A @10 12/3/2014 9:51:56 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:52:15	61.018%	-0.041	276.500	275.000	0.000	693500.000	79520.000	79000.000
2	09:52:34	55.232%	0.003	272.400	286.200	0.000	692400.000	79890.000	79390.000
3	09:52:53	50.741%	0.007	292.500	295.900	0.000	697600.000	81630.000	80370.000
x		55.664%	-0.010	280.400	285.700	0.000	694500.000	80350.000	79590.000
σ		5.152%	0.026	10.650	10.480	0.000	2761.000	1126.000	703.900
%RSD		9.256	254.000	3.797	3.667	0.000	0.398	1.401	0.884
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:52:15	12.400	108.800	0.000	27170.000	29690.000	27870.000	66.678%	0.262
2	09:52:34	12.680	116.200	0.000	27480.000	29980.000	28840.000	63.781%	0.138
3	09:52:53	11.680	113.800	0.000	27320.000	29830.000	28970.000	63.216%	0.434
x		12.250	112.900	0.000	27320.000	29830.000	28560.000	64.558%	0.278
σ		0.517	3.736	0.000	153.100	146.400	604.700	1.857%	0.149
%RSD		4.216	3.308	0.000	0.561	0.491	2.117	2.877	53.470
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:52:15	0.079	0.317	10.600	21.160	57.650	0.122	0.084	6.180
2	09:52:34	0.107	0.337	10.740	19.290	50.490	0.169	0.320	6.282
3	09:52:53	-0.023	0.313	10.760	17.460	53.140	0.116	0.276	6.361
x		0.054	0.323	10.700	19.300	53.760	0.136	0.227	6.274
σ		0.068	0.013	0.091	1.850	3.618	0.029	0.125	0.091
%RSD		125.700	4.055	0.849	9.584	6.730	21.230	55.190	1.449
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:52:15	0.168	0.533	0.377	1.457	-0.192	3.023	0.000	542.500
2	09:52:34	0.244	0.521	0.406	1.437	-0.120	3.119	0.000	540.900
3	09:52:53	0.222	0.398	0.434	0.733	-0.410	3.095	0.000	541.500
x		0.211	0.484	0.406	1.209	-0.241	3.079	0.000	541.600
σ		0.039	0.075	0.028	0.412	0.151	0.050	0.000	0.822
%RSD		18.530	15.430	7.018	34.110	62.890	1.635	0.000	0.152
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:52:15	72.240%	2.178	2.303	60.982%	-0.033	-0.020	-0.041	-0.038
2	09:52:34	72.640%	2.360	2.418	60.475%	-0.047	-0.035	-0.005	-0.025
3	09:52:53	72.280%	2.290	2.417	60.433%	-0.027	-0.025	-0.069	-0.052
x		72.387%	2.276	2.379	60.630%	-0.036	-0.027	-0.038	-0.038
σ		0.220%	0.091	0.066	0.306%	0.010	0.008	0.032	0.014
%RSD		0.304	4.020	2.766	0.504	28.230	29.220	84.560	36.100
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:52:15	69.993%	-0.202	0.037	0.013	29.520	29.170	78.148%	79.173%
2	09:52:34	71.078%	-0.188	0.046	0.035	29.320	29.580	79.558%	80.904%
3	09:52:53	71.234%	-0.187	0.073	0.028	29.130	28.820	79.996%	80.820%
x		70.768%	-0.192	0.052	0.025	29.320	29.190	79.234%	80.299%
σ		0.676%	0.008	0.019	0.011	0.194	0.380	0.965%	0.976%
%RSD		0.956	4.313	36.260	45.410	0.662	1.300	1.218	1.216
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	09:52:15	-0.002	-0.005	0.075	0.055	0.061	58.342%		
2	09:52:34	-0.002	-0.007	0.061	0.078	0.078	57.848%		
3	09:52:53	-0.005	-0.003	0.059	0.049	0.060	58.429%		
x		-0.003	-0.005	0.065	0.061	0.066	58.206%		
σ		0.002	0.002	0.009	0.015	0.010	0.313%		
%RSD		68.150	41.650	13.280	24.450	15.030	0.538		

180-38967-C-6-A @10 12/3/2014 9:55:28 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:55:47	65.359%	-0.004	274.200	283.800	0.000	685100.000	80470.000	79970.000
2	09:56:06	60.196%	-0.001	280.800	288.200	0.000	704100.000	80000.000	79500.000
3	09:56:25	56.840%	-0.041	275.100	285.800	0.000	694200.000	80090.000	78960.000
x		60.798%	-0.015	276.700	285.900	0.000	694500.000	80190.000	79470.000
σ		4.291%	0.022	3.562	2.189	0.000	9490.000	244.600	506.800
%RSD		7.058	148.900	1.287	0.765	0.000	1.366	0.305	0.638

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:55:47	20.720	106.900	0.000	27070.000	29140.000	28000.000	72.480%	0.064
2	09:56:06	20.370	108.200	0.000	27360.000	29520.000	28560.000	68.618%	0.113
3	09:56:25	17.490	103.700	0.000	26860.000	30270.000	28420.000	64.756%	0.133
x		19.520	106.300	0.000	27100.000	29650.000	28330.000	68.618%	0.103
σ		1.774	2.338	0.000	253.200	573.900	290.900	3.862%	0.036
%RSD		9.088	2.200	0.000	0.934	1.936	1.027	5.628	34.440

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:55:47	0.326	0.247	10.340	2.408	39.180	0.124	0.363	6.357
2	09:56:06	0.495	0.256	10.530	-0.690	31.300	0.120	0.174	6.660
3	09:56:25	0.762	0.255	10.580	1.921	33.650	0.149	0.049	6.452
x		0.528	0.253	10.480	1.213	34.710	0.131	0.195	6.489
σ		0.220	0.005	0.128	1.666	4.049	0.016	0.158	0.155
%RSD		41.650	2.040	1.217	137.300	11.670	12.210	80.760	2.386

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:55:47	0.469	17.630	18.330	1.147	-0.382	2.819	0.000	539.400
2	09:56:06	0.596	17.850	17.920	1.522	-0.321	2.419	0.000	538.000
3	09:56:25	0.637	18.060	17.820	1.443	-0.373	3.675	0.000	536.600
x		0.568	17.850	18.020	1.370	-0.359	2.971	0.000	538.000
σ		0.088	0.212	0.271	0.198	0.033	0.642	0.000	1.413
%RSD		15.520	1.187	1.504	14.430	9.236	21.600	0.000	0.263

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:55:47	74.544%	2.379	2.465	62.190%	-0.043	-0.039	-0.018	-0.016
2	09:56:06	73.890%	2.328	2.246	62.024%	-0.031	-0.025	-0.054	-0.067
3	09:56:25	72.761%	2.310	2.374	60.291%	-0.026	-0.048	-0.079	-0.052
x		73.732%	2.339	2.362	61.502%	-0.033	-0.037	-0.050	-0.045
σ		0.902%	0.036	0.110	1.052%	0.009	0.012	0.031	0.026
%RSD		1.223	1.520	4.648	1.711	27.180	31.440	61.610	58.320

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:55:47	71.723%	-0.223	0.033	0.046	29.590	28.670	78.818%	79.313%
2	09:56:06	70.691%	-0.222	0.040	0.013	28.860	28.870	80.172%	80.744%
3	09:56:25	70.947%	-0.218	0.059	0.023	29.200	28.670	80.114%	80.879%
x		71.121%	-0.221	0.044	0.027	29.220	28.740	79.702%	80.312%
σ		0.538%	0.003	0.013	0.017	0.366	0.117	0.766%	0.868%
%RSD		0.756	1.343	30.440	63.270	1.253	0.408	0.961	1.081

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	09:55:47	-0.004	-0.005	0.113	0.086	0.106	57.242%
2	09:56:06	-0.006	-0.007	0.101	0.093	0.103	57.201%
3	09:56:25	-0.001	-0.008	0.118	0.101	0.110	57.217%
x		-0.004	-0.007	0.110	0.093	0.107	57.220%
σ		0.003	0.002	0.009	0.007	0.003	0.021%
%RSD		76.870	23.740	7.865	7.692	3.064	0.036

180-38967-C-7-A @10 12/3/2014 9:59:01 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:59:20	57.946%	0.001	283.700	298.100	0.000	728400.000	83750.000	83130.000
2	09:59:39	57.232%	0.044	286.800	285.600	0.000	706000.000	82040.000	80670.000
3	09:59:58	53.580%	-0.041	289.800	295.600	0.000	714100.000	83610.000	82390.000
x		56.253%	0.001	286.800	293.100	0.000	716200.000	83140.000	82070.000
σ		2.342%	0.042	3.057	6.638	0.000	11350.000	947.800	1263.000
%RSD		4.163	3525.000	1.066	2.265	0.000	1.585	1.140	1.539

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:59:20	55.500	161.800	0.000	27910.000	30020.000	29130.000	70.808%	1.055
2	09:59:39	50.800	152.800	0.000	28010.000	29910.000	29150.000	67.503%	1.150
3	09:59:58	47.930	161.000	0.000	27910.000	30260.000	29020.000	64.749%	1.242
x		51.410	158.500	0.000	27940.000	30060.000	29100.000	67.687%	1.149
σ		3.825	4.940	0.000	56.760	179.000	72.830	3.033%	0.094
%RSD		7.441	3.116	0.000	0.203	0.595	0.250	4.481	8.158

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:59:20	-0.479	0.272	7.712	61.390	103.800	0.216	0.318	6.031
2	09:59:39	0.355	0.276	7.686	62.170	96.070	0.149	0.220	6.376
3	09:59:58	0.588	0.268	8.101	64.010	98.680	0.215	0.306	6.295
x		0.155	0.272	7.833	62.520	99.530	0.194	0.281	6.234
σ		0.561	0.004	0.232	1.347	3.957	0.039	0.053	0.181
%RSD		362.000	1.424	2.966	2.155	3.975	19.930	18.980	2.899

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:59:20	0.304	3.137	2.995	1.464	-0.017	3.889	0.000	532.800
2	09:59:39	0.226	2.745	2.806	1.162	-0.316	3.156	0.000	535.800
3	09:59:58	0.395	2.952	2.697	1.294	-0.002	3.250	0.000	541.800
x		0.309	2.945	2.833	1.307	-0.112	3.432	0.000	536.800
σ		0.085	0.197	0.151	0.152	0.177	0.399	0.000	4.602
%RSD		27.470	6.673	5.323	11.600	158.800	11.620	0.000	0.858

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:59:20	74.981%	0.833	1.060	61.371%	-0.043	-0.044	0.017	-0.001
2	09:59:39	73.835%	1.043	1.110	61.352%	-0.025	-0.036	-0.119	-0.084
3	09:59:58	73.267%	0.937	1.123	60.604%	-0.035	-0.031	-0.043	-0.041
x		74.028%	0.938	1.098	61.109%	-0.034	-0.037	-0.049	-0.042
σ		0.873%	0.105	0.033	0.437%	0.009	0.006	0.068	0.041
%RSD		1.179	11.160	3.030	0.716	26.260	17.250	140.500	98.320

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:59:20	70.710%	-0.203	-0.065	-0.032	40.690	40.700	78.568%	79.900%
2	09:59:39	71.301%	-0.184	-0.059	-0.048	40.740	40.140	80.292%	81.070%
3	09:59:58	71.631%	-0.227	-0.055	0.007	41.410	39.800	80.615%	81.749%
x		71.214%	-0.204	-0.060	-0.025	40.950	40.210	79.825%	80.906%
σ		0.467%	0.022	0.005	0.028	0.403	0.453	1.101%	0.936%
%RSD		0.655	10.550	8.720	114.900	0.983	1.127	1.379	1.157

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	09:59:20	-0.002	-0.007	0.131	0.111	0.136	57.229%
2	09:59:39	-0.004	-0.007	0.130	0.130	0.143	57.523%
3	09:59:58	-0.006	-0.008	0.128	0.147	0.133	57.413%
x		-0.004	-0.008	0.129	0.129	0.137	57.388%
σ		0.002	0.001	0.001	0.018	0.005	0.148%
%RSD		48.160	7.782	1.132	13.640	3.731	0.258

180-38967-C-8-A @10 12/3/2014 10:02:33 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:02:53	64.176%	-0.041	265.900	267.300	0.000	663800.000	79000.000	79490.000
2	10:03:12	56.513%	0.087	264.300	277.300	0.000	686600.000	80000.000	79110.000
3	10:03:31	53.792%	0.004	278.100	297.900	0.000	725200.000	80870.000	79690.000
x		58.160%	0.017	269.500	280.800	0.000	691900.000	79950.000	79430.000
σ		5.384%	0.065	7.547	15.600	0.000	31030.000	935.900	292.800
%RSD		9.258	387.800	2.801	5.556	0.000	4.484	1.171	0.369

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:02:53	30.670	88.700	0.000	26730.000	28880.000	28010.000	72.891%	0.190
2	10:03:12	24.050	86.880	0.000	27050.000	29540.000	28260.000	69.121%	0.211
3	10:03:31	18.160	90.090	0.000	26900.000	29910.000	28470.000	67.983%	0.184
x		24.290	88.560	0.000	26890.000	29440.000	28250.000	69.998%	0.195
σ		6.262	1.609	0.000	163.400	524.000	232.200	2.569%	0.014
%RSD		25.780	1.817	0.000	0.608	1.780	0.822	3.670	7.302

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:02:53	0.460	0.314	7.406	7.815	44.040	0.169	0.371	6.488
2	10:03:12	0.176	0.228	7.444	8.725	41.010	0.139	0.069	6.239
3	10:03:31	-0.111	0.194	7.564	5.602	36.070	0.170	0.236	6.434
x		0.175	0.245	7.471	7.381	40.370	0.159	0.225	6.387
σ		0.285	0.062	0.083	1.606	4.023	0.018	0.151	0.131
%RSD		163.200	25.100	1.107	21.760	9.965	11.210	66.970	2.054

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:02:53	0.544	7.229	6.906	1.178	-0.311	4.327	0.000	519.200
2	10:03:12	0.423	7.080	7.437	0.820	-0.003	2.928	0.000	516.300
3	10:03:31	0.361	6.809	7.349	1.584	-0.251	3.694	0.000	520.100
x		0.443	7.039	7.231	1.194	-0.188	3.649	0.000	518.500
σ		0.093	0.213	0.285	0.382	0.163	0.700	0.000	1.999
%RSD		20.970	3.022	3.940	31.990	86.720	19.190	0.000	0.386

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:02:53	76.176%	0.931	0.996	63.583%	-0.039	-0.034	-0.079	-0.057
2	10:03:12	76.806%	0.988	0.997	63.239%	-0.028	-0.033	-0.038	-0.023
3	10:03:31	76.024%	0.865	1.082	62.882%	-0.036	-0.033	-0.073	-0.061
x		76.335%	0.928	1.025	63.235%	-0.034	-0.033	-0.063	-0.047
σ		0.415%	0.062	0.049	0.351%	0.006	0.001	0.022	0.021
%RSD		0.543	6.656	4.782	0.555	16.540	2.613	35.300	43.790

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:02:53	73.547%	-0.198	-0.061	-0.053	39.030	38.510	81.079%	81.565%
2	10:03:12	73.478%	-0.202	-0.050	-0.071	39.410	38.870	81.506%	83.066%
3	10:03:31	73.793%	-0.215	-0.057	-0.041	38.770	38.710	83.544%	84.152%
x		73.606%	-0.205	-0.056	-0.055	39.070	38.700	82.043%	82.928%
σ		0.166%	0.009	0.006	0.015	0.321	0.183	1.317%	1.299%
%RSD		0.225	4.253	9.970	26.860	0.820	0.474	1.605	1.567

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:02:53	0.002	-0.008	0.149	0.122	0.121	58.662%
2	10:03:12	-0.004	-0.006	0.094	0.085	0.088	58.521%
3	10:03:31	-0.006	-0.007	0.089	0.095	0.084	59.521%
x		-0.003	-0.007	0.111	0.101	0.098	58.901%
σ		0.004	0.001	0.033	0.019	0.021	0.542%
%RSD		163.200	17.770	30.150	18.620	21.050	0.919

CCV 1408349 12/3/2014 10:06:14 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:06:14	81.980%	100.000	96.290	93.550	0.000	45530.000	45440.000	45510.000
2	10:06:33	76.479%	102.400	96.890	97.710	0.000	45250.000	45750.000	46450.000
3	10:06:52	72.603%	100.800	98.360	99.450	0.000	45520.000	46530.000	46100.000
x		77.021%	101.076%	97.182%	96.904%	0.000	90.859%	91.807%	92.041%
σ		4.712%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		6.118	1.197	1.097	3.126	0.000	0.349	1.227	1.033

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:06:14	452.000	4236.000	0.000	45210.000	46940.000	45100.000	84.688%	92.260
2	10:06:33	468.200	4333.000	0.000	46590.000	47940.000	46310.000	81.180%	94.720
3	10:06:52	459.700	4251.000	0.000	46120.000	48460.000	46490.000	78.723%	93.890
x		91.995%	85.467%	0.000	91.943%	95.559%	91.938%	81.530%	93.623%
σ		n/a	n/a	0.000	n/a	n/a	n/a	2.998%	n/a
%RSD		1.752	1.226	0.000	1.530	1.611	1.649	3.677	1.332

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:06:14	91.290	93.220	475.600	23330.000	23710.000	93.990	94.710	96.680
2	10:06:33	92.400	94.380	482.800	23690.000	24290.000	95.200	96.340	97.460
3	10:06:52	94.250	94.720	488.300	24080.000	24540.000	95.940	97.100	96.650
x		92.644%	94.107%	96.455%	94.797%	96.714%	95.042%	96.050%	96.931%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.617	0.832	1.322	1.567	1.772	1.035	1.274	0.468

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:06:14	95.840	100.800	99.780	95.790	101.100	101.100	0.000	93.890
2	10:06:33	96.230	98.760	100.600	96.560	99.040	97.490	0.000	93.990
3	10:06:52	97.790	102.000	98.510	96.260	101.600	97.690	0.000	95.320
x		96.620%	100.521%	99.647%	96.205%	100.580%	98.745%	0.000	94.401%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.066	1.618	1.080	0.400	1.354	2.034	0.000	0.849

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:06:14	80.491%	87.470	90.400	73.462%	100.700	99.650	98.990	97.430
2	10:06:33	82.203%	93.110	96.400	73.712%	99.770	98.230	96.800	97.400
3	10:06:52	81.378%	96.970	100.400	72.743%	100.300	99.350	99.880	97.570
x		81.357%	92.516%	95.746%	73.306%	100.231%	99.074%	98.555%	97.468%
σ		0.856%	n/a	n/a	0.503%	n/a	n/a	n/a	n/a
%RSD		1.052	5.159	5.277	0.686	0.442	0.753	1.604	0.093

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:06:14	80.765%	94.350	91.560	90.640	94.460	95.490	85.922%	87.347%
2	10:06:33	83.035%	93.620	91.850	92.220	94.920	94.320	88.208%	89.614%
3	10:06:52	83.300%	94.110	93.040	92.100	94.440	94.120	88.063%	89.997%
x		82.367%	94.029%	92.153%	91.656%	94.603%	94.640%	87.398%	88.986%
σ		1.394%	n/a	n/a	n/a	n/a	n/a	1.280%	1.432%
%RSD		1.692	0.393	0.852	0.960	0.289	0.782	1.465	1.609

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:06:14	101.500	105.600	103.900	105.300	104.200	75.794%
2	10:06:33	103.600	107.400	105.800	106.700	105.800	75.585%
3	10:06:52	103.500	107.900	106.700	107.900	107.000	76.096%
x		102.863%	106.948%	105.442%	106.655%	105.670%	75.825%
σ		n/a	n/a	n/a	n/a	n/a	0.257%
%RSD		1.133	1.132	1.347	1.225	1.331	0.339

CCB2 12/3/2014 10:12:09 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:12:28	93.164%	-0.015	2.278	1.143	0.000	7.785	3.495	3.320
2	10:12:47	85.085%	-0.012	2.005	1.251	0.000	8.262	2.596	3.171
3	10:13:06	84.526%	-0.041	1.314	0.921	0.000	7.350	2.332	2.656
x		87.592%	-0.023	1.865	1.105	0.000	7.799	2.808	3.049
σ		4.834%	0.016	0.497	0.168	0.000	0.456	0.610	0.348
%RSD		5.519	70.300	26.640	15.220	0.000	5.847	21.720	11.430
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:12:28	1.673	1.033	0.000	2.124	1.606	6.787	95.176%	0.168
2	10:12:47	2.020	1.573	0.000	1.991	-2.081	9.200	91.633%	0.156
3	10:13:06	1.853	0.706	0.000	1.934	-1.990	7.039	89.510%	0.139
x		1.849	1.104	0.000	2.017	-0.821	7.675	92.106%	0.154
σ		0.174	0.438	0.000	0.097	2.103	1.326	2.863%	0.014
%RSD		9.412	39.660	0.000	4.827	256.000	17.280	3.108	9.312
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:12:28	0.130	0.089	0.204	13.080	10.850	-0.009	0.035	-0.014
2	10:12:47	0.081	0.098	0.173	9.785	8.443	-0.018	0.020	0.010
3	10:13:06	0.044	0.067	0.172	7.349	7.000	-0.016	0.029	-0.014
x		0.085	0.085	0.183	10.070	8.763	-0.014	0.028	-0.006
σ		0.043	0.016	0.018	2.874	1.943	0.005	0.007	0.014
%RSD		50.570	18.430	10.090	28.540	22.170	34.310	26.090	217.900
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:12:28	-0.046	0.278	0.521	-0.221	-0.687	-0.647	0.000	0.016
2	10:12:47	0.081	0.347	0.507	-0.251	-0.142	-0.819	0.000	0.016
3	10:13:06	0.072	0.344	0.402	-0.285	0.069	-0.964	0.000	0.014
x		0.035	0.323	0.476	-0.253	-0.254	-0.810	0.000	0.015
σ		0.071	0.039	0.065	0.032	0.390	0.159	0.000	0.001
%RSD		201.200	12.070	13.560	12.770	153.800	19.580	0.000	8.703
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:12:28	90.117%	0.334	0.329	88.801%	-0.026	-0.020	0.031	0.012
2	10:12:47	90.723%	0.241	0.306	88.484%	-0.015	-0.017	0.020	0.011
3	10:13:06	90.905%	0.252	0.230	88.487%	-0.021	-0.020	0.032	0.021
x		90.582%	0.276	0.288	88.591%	-0.020	-0.019	0.028	0.014
σ		0.412%	0.051	0.052	0.182%	0.005	0.002	0.007	0.006
%RSD		0.455	18.320	17.970	0.206	26.390	10.290	24.440	40.180
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:12:28	91.881%	-0.229	0.076	0.083	0.010	0.036	92.771%	94.024%
2	10:12:47	93.612%	-0.222	0.097	0.076	0.010	0.021	93.724%	94.800%
3	10:13:06	93.559%	-0.197	0.055	0.060	-0.001	0.023	95.647%	96.367%
x		93.017%	-0.216	0.076	0.073	0.006	0.027	94.047%	95.064%
σ		0.985%	0.017	0.021	0.012	0.006	0.008	1.465%	1.194%
%RSD		1.059	7.830	27.640	16.620	98.140	30.130	1.558	1.256
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	10:12:28	0.001	0.005	0.235	0.242	0.238	93.414%		
2	10:12:47	0.005	0.003	0.254	0.269	0.256	93.754%		
3	10:13:06	0.001	0.003	0.267	0.256	0.268	93.390%		
x		0.002	0.003	0.252	0.255	0.254	93.519%		
σ		0.002	0.001	0.016	0.014	0.015	0.203%		
%RSD		104.600	36.740	6.395	5.301	5.792	0.217		

180-38967-C-9-A @10 12/3/2014 10:15:43 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:16:03	71.721%	-0.041	262.500	272.900	0.000	707500.000	80800.000	79960.000
2	10:16:22	70.306%	0.063	265.400	262.000	0.000	673100.000	77240.000	76040.000
3	10:16:41	62.427%	-0.002	271.100	268.300	0.000	673100.000	79110.000	78600.000
x		68.151%	0.006	266.300	267.700	0.000	684500.000	79050.000	78200.000
σ		5.008%	0.052	4.392	5.509	0.000	19890.000	1783.000	1994.000
%RSD		7.348	805.900	1.649	2.057	0.000	2.906	2.256	2.550
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:16:03	51.620	160.500	0.000	26340.000	28780.000	27760.000	80.904%	1.329
2	10:16:22	46.930	157.100	0.000	26580.000	29130.000	27620.000	80.122%	1.312
3	10:16:41	49.600	162.800	0.000	26680.000	29670.000	28090.000	78.489%	0.959
x		49.380	160.100	0.000	26530.000	29190.000	27830.000	79.839%	1.200
σ		2.349	2.902	0.000	174.000	447.700	243.600	1.232%	0.209
%RSD		4.756	1.813	0.000	0.656	1.533	0.875	1.543	17.430
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:16:03	0.781	0.321	8.605	74.180	104.100	0.131	0.108	6.953
2	10:16:22	0.536	0.362	8.745	73.140	107.800	0.148	0.520	7.106
3	10:16:41	0.172	0.275	8.934	72.010	105.000	0.152	0.202	7.610
x		0.496	0.319	8.761	73.110	105.600	0.144	0.277	7.223
σ		0.307	0.044	0.165	1.084	1.958	0.011	0.216	0.344
%RSD		61.760	13.680	1.885	1.482	1.854	7.866	78.160	4.758
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:16:03	1.063	1.935	2.576	1.772	-0.254	3.504	0.000	510.700
2	10:16:22	1.187	2.501	2.053	1.236	-0.067	4.498	0.000	513.400
3	10:16:41	0.953	2.417	2.017	1.664	-0.141	4.669	0.000	514.300
x		1.068	2.284	2.215	1.557	-0.154	4.224	0.000	512.800
σ		0.117	0.305	0.313	0.283	0.094	0.629	0.000	1.893
%RSD		10.940	13.360	14.120	18.200	61.250	14.900	0.000	0.369
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:16:03	81.731%	1.263	1.348	68.767%	-0.041	-0.035	-0.029	-0.019
2	10:16:22	83.832%	1.209	1.289	69.803%	-0.017	-0.039	0.017	-0.004
3	10:16:41	83.496%	1.182	1.290	69.668%	-0.042	-0.022	-0.061	-0.055
x		83.020%	1.218	1.309	69.413%	-0.033	-0.032	-0.025	-0.026
σ		1.129%	0.042	0.034	0.563%	0.014	0.009	0.039	0.026
%RSD		1.359	3.417	2.603	0.811	42.190	28.010	159.000	101.600
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:16:03	76.449%	-0.154	0.060	0.069	47.020	47.430	83.280%	83.755%
2	10:16:22	79.378%	-0.158	0.048	0.008	46.930	47.100	85.583%	86.509%
3	10:16:41	80.200%	-0.121	0.030	0.085	48.200	47.930	86.996%	88.048%
x		78.675%	-0.144	0.046	0.054	47.380	47.490	85.286%	86.104%
σ		1.972%	0.020	0.015	0.041	0.705	0.416	1.875%	2.175%
%RSD		2.506	14.220	31.960	75.200	1.489	0.876	2.199	2.526
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	10:16:03	0.004	0.002	0.173	0.195	0.170	63.460%		
2	10:16:22	-0.002	0.002	0.165	0.144	0.159	62.388%		
3	10:16:41	0.002	-0.002	0.136	0.107	0.137	63.190%		
x		0.001	0.000	0.158	0.149	0.155	63.013%		
σ		0.003	0.002	0.019	0.044	0.017	0.558%		
%RSD		191.700	573.000	12.130	29.520	10.940	0.885		

180-38967-C-10-A @10 12/3/2014 10:19:15 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:19:34	74.890%	-0.009	285.000	288.500	0.000	703000.000	82930.000	82100.000
2	10:19:54	69.934%	-0.041	280.000	282.100	0.000	709900.000	82290.000	81390.000
3	10:20:13	65.838%	0.032	278.800	290.600	0.000	723100.000	82610.000	82890.000
x		70.220%	-0.006	281.300	287.100	0.000	712000.000	82610.000	82130.000
σ		4.533%	0.037	3.286	4.409	0.000	10210.000	317.400	751.500
%RSD		6.455	643.700	1.168	1.536	0.000	1.434	0.384	0.915
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:19:34	2.231	101.700	0.000	27050.000	29940.000	27790.000	89.422%	0.192
2	10:19:54	2.078	103.600	0.000	27360.000	29470.000	28130.000	85.762%	0.019
3	10:20:13	2.074	103.900	0.000	27460.000	29900.000	28290.000	82.276%	0.114
x		2.128	103.100	0.000	27290.000	29770.000	28070.000	85.820%	0.108
σ		0.090	1.168	0.000	217.300	260.600	255.800	3.574%	0.087
%RSD		4.212	1.133	0.000	0.796	0.875	0.911	4.164	79.990
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:19:34	0.322	0.201	8.351	10.470	42.590	0.135	0.262	6.870
2	10:19:54	-0.077	0.276	8.540	12.070	43.440	0.178	0.149	6.934
3	10:20:13	-0.167	0.202	8.395	11.140	35.010	0.151	0.218	7.490
x		0.026	0.226	8.429	11.230	40.350	0.155	0.210	7.098
σ		0.260	0.043	0.099	0.805	4.640	0.022	0.057	0.341
%RSD		1004.000	19.070	1.178	7.166	11.500	14.080	27.170	4.800
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:19:34	0.425	2.134	1.906	1.222	-0.014	4.224	0.000	520.100
2	10:19:54	0.284	2.139	1.809	0.993	0.041	3.610	0.000	518.400
3	10:20:13	0.403	2.152	1.840	1.504	-0.014	3.429	0.000	524.700
x		0.371	2.142	1.852	1.239	0.005	3.754	0.000	521.100
σ		0.076	0.010	0.049	0.256	0.032	0.416	0.000	3.277
%RSD		20.440	0.450	2.671	20.650	695.200	11.090	0.000	0.629
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:19:34	88.518%	1.141	1.279	73.827%	-0.040	-0.053	-0.046	-0.052
2	10:19:54	88.327%	1.134	1.352	73.325%	-0.028	-0.039	-0.083	-0.065
3	10:20:13	88.057%	1.361	1.273	72.776%	-0.038	-0.031	-0.069	-0.061
x		88.301%	1.212	1.301	73.309%	-0.035	-0.041	-0.066	-0.059
σ		0.232%	0.129	0.044	0.526%	0.006	0.011	0.018	0.007
%RSD		0.263	10.630	3.360	0.717	18.410	27.170	27.990	11.130
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:19:34	82.169%	-0.239	-0.024	0.016	47.720	48.590	86.675%	87.750%
2	10:19:54	82.692%	-0.170	-0.011	0.004	49.550	48.910	89.395%	89.367%
3	10:20:13	83.896%	-0.193	0.004	0.021	48.380	48.000	89.638%	89.940%
x		82.919%	-0.201	-0.010	0.014	48.550	48.500	88.569%	89.019%
σ		0.886%	0.035	0.014	0.009	0.926	0.462	1.645%	1.136%
%RSD		1.068	17.630	135.500	65.790	1.907	0.953	1.858	1.276
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	10:19:34	-0.002	-0.006	0.107	0.121	0.114	62.351%		
2	10:19:54	-0.008	-0.006	0.124	0.101	0.123	61.507%		
3	10:20:13	-0.005	-0.009	0.119	0.090	0.102	61.927%		
x		-0.005	-0.007	0.117	0.104	0.113	61.928%		
σ		0.003	0.002	0.009	0.016	0.011	0.422%		
%RSD		55.870	24.550	7.831	15.150	9.675	0.682		

180-38967-C-11-A @10 12/3/2014 10:22:46 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:23:09	74.308%	-0.008	279.000	293.600	0.000	732700.000	86520.000	85810.000
2	10:23:28	71.067%	-0.041	271.000	288.700	0.000	736200.000	86290.000	85060.000
3	10:23:47	63.333%	-0.041	286.600	295.300	0.000	751800.000	87360.000	88560.000
x		69.569%	-0.030	278.900	292.500	0.000	740200.000	86720.000	86480.000
σ		5.639%	0.019	7.828	3.420	0.000	10170.000	563.900	1841.000
%RSD		8.105	62.380	2.807	1.169	0.000	1.373	0.650	2.129
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:23:09	84.440	272.300	0.000	28210.000	28720.000	27370.000	91.728%	3.231
2	10:23:28	82.080	268.600	0.000	27870.000	29180.000	27560.000	90.165%	3.208
3	10:23:47	87.510	274.300	0.000	28450.000	29130.000	27960.000	85.029%	3.354
x		84.670	271.700	0.000	28180.000	29010.000	27630.000	88.974%	3.264
σ		2.723	2.920	0.000	295.600	252.700	297.500	3.505%	0.079
%RSD		3.216	1.075	0.000	1.049	0.871	1.077	3.939	2.408
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:23:09	0.113	1.844	26.620	302.600	332.400	0.092	1.268	11.090
2	10:23:28	1.029	1.721	26.580	299.300	325.600	0.090	1.324	10.900
3	10:23:47	0.428	1.769	27.440	307.100	341.400	0.074	1.481	11.080
x		0.523	1.778	26.880	303.000	333.200	0.085	1.357	11.020
σ		0.465	0.062	0.488	3.928	7.913	0.010	0.110	0.107
%RSD		88.900	3.481	1.815	1.296	2.375	11.820	8.122	0.971
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:23:09	3.766	11.560	11.630	1.769	-0.079	4.140	0.000	478.300
2	10:23:28	3.877	11.770	11.590	1.531	0.143	3.564	0.000	477.100
3	10:23:47	3.631	11.250	12.250	2.091	0.146	4.298	0.000	483.100
x		3.758	11.520	11.820	1.797	0.070	4.001	0.000	479.500
σ		0.123	0.262	0.369	0.281	0.129	0.386	0.000	3.212
%RSD		3.272	2.277	3.122	15.630	184.700	9.657	0.000	0.670
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:23:09	90.183%	5.574	5.722	74.835%	0.055	0.026	-0.031	0.018
2	10:23:28	91.802%	5.888	5.860	75.081%	0.053	0.032	-0.002	0.008
3	10:23:47	90.181%	5.870	6.053	74.211%	0.050	0.046	0.013	0.009
x		90.722%	5.778	5.878	74.709%	0.053	0.035	-0.007	0.012
σ		0.935%	0.176	0.166	0.448%	0.003	0.010	0.023	0.006
%RSD		1.031	3.054	2.829	0.600	5.349	29.970	338.400	46.430
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:23:09	83.999%	0.222	1.613	1.458	17.490	18.150	88.578%	88.478%
2	10:23:28	86.034%	0.255	1.613	1.744	17.800	18.320	89.503%	90.734%
3	10:23:47	85.302%	0.351	1.611	1.617	18.340	18.020	89.610%	90.851%
x		85.112%	0.276	1.612	1.606	17.880	18.160	89.230%	90.021%
σ		1.031%	0.067	0.001	0.144	0.431	0.150	0.567%	1.337%
%RSD		1.211	24.410	0.087	8.942	2.413	0.826	0.636	1.486
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	10:23:09	0.001	-0.002	7.463	6.899	7.108	61.485%		
2	10:23:28	-0.004	-0.006	7.528	7.022	7.334	61.622%		
3	10:23:47	-0.004	-0.005	7.701	7.039	7.379	61.258%		
x		-0.002	-0.004	7.564	6.987	7.274	61.455%		
σ		0.003	0.002	0.123	0.077	0.145	0.184%		
%RSD		114.400	39.570	1.624	1.096	1.997	0.299		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:26:39	76.819%	-0.010	257.200	265.800	0.000	697600.000	82000.000	81790.000
2	10:26:58	69.746%	0.097	285.900	287.700	0.000	722700.000	83710.000	82300.000
3	10:27:17	71.403%	-0.007	262.400	262.300	0.000	672400.000	78260.000	79050.000
x		72.656%	0.027	268.500	271.900	0.000	697600.000	81320.000	81050.000
σ		3.699%	0.061	15.280	13.740	0.000	25140.000	2788.000	1750.000
%RSD		5.092	227.200	5.691	5.053	0.000	3.603	3.429	2.159

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:26:39	8.943	87.150	0.000	26760.000	26960.000	25850.000	96.979%	0.280
2	10:26:58	8.799	87.510	0.000	26740.000	27430.000	25810.000	92.153%	0.078
3	10:27:17	6.823	80.750	0.000	26340.000	27640.000	26140.000	91.207%	0.183
x		8.188	85.140	0.000	26620.000	27340.000	25930.000	93.446%	0.180
σ		1.185	3.803	0.000	238.000	344.500	178.000	3.095%	0.101
%RSD		14.470	4.467	0.000	0.894	1.260	0.687	3.312	56.100

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:26:39	0.375	0.331	23.730	40.430	66.040	0.048	0.313	7.004
2	10:26:58	0.583	0.321	24.510	36.740	62.800	0.043	0.339	7.133
3	10:27:17	0.893	0.413	24.170	24.940	45.650	0.031	0.411	7.310
x		0.617	0.355	24.130	34.040	58.160	0.041	0.354	7.149
σ		0.260	0.050	0.390	8.093	10.950	0.008	0.051	0.154
%RSD		42.210	14.160	1.615	23.780	18.830	20.690	14.260	2.151

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:26:39	0.474	2.948	2.518	1.314	0.053	3.649	0.000	450.800
2	10:26:58	0.371	2.791	2.874	1.474	0.151	4.354	0.000	449.400
3	10:27:17	0.396	2.394	2.785	1.343	0.283	4.050	0.000	450.900
x		0.414	2.711	2.726	1.377	0.162	4.018	0.000	450.400
σ		0.054	0.286	0.185	0.085	0.116	0.354	0.000	0.811
%RSD		13.040	10.540	6.796	6.191	71.220	8.804	0.000	0.180

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:26:39	94.258%	5.087	5.263	78.217%	-0.032	-0.026	-0.036	-0.043
2	10:26:58	94.833%	5.552	5.303	78.863%	-0.026	-0.042	-0.203	-0.135
3	10:27:17	95.561%	5.350	5.536	78.719%	-0.030	-0.041	-0.097	-0.070
x		94.884%	5.330	5.368	78.600%	-0.029	-0.036	-0.112	-0.082
σ		0.653%	0.233	0.147	0.339%	0.003	0.009	0.085	0.048
%RSD		0.688	4.376	2.746	0.432	8.995	24.100	75.620	57.880

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:26:39	87.976%	-0.108	1.422	1.479	13.440	13.440	91.950%	91.821%
2	10:26:58	88.196%	-0.111	1.488	1.405	13.370	13.370	93.003%	93.550%
3	10:27:17	88.510%	-0.069	1.452	1.468	13.710	13.500	93.807%	94.453%
x		88.227%	-0.096	1.454	1.451	13.510	13.440	92.920%	93.274%
σ		0.269%	0.024	0.033	0.040	0.180	0.064	0.931%	1.338%
%RSD		0.304	24.560	2.273	2.750	1.331	0.476	1.002	1.434

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:26:39	-0.005	-0.007	0.458	0.394	0.449	63.578%
2	10:26:58	-0.006	-0.006	0.405	0.386	0.398	63.806%
3	10:27:17	-0.007	-0.005	0.173	0.147	0.170	64.253%
x		-0.006	-0.006	0.346	0.309	0.339	63.879%
σ		0.001	0.001	0.152	0.140	0.148	0.343%
%RSD		17.590	14.700	43.830	45.440	43.730	0.537

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:30:09	72.292%	0.026	687.300	672.400	0.000	34580.000	24930.000	24350.000
2	10:30:28	67.647%	-0.005	679.400	677.700	0.000	33870.000	24420.000	24250.000
3	10:30:47	62.404%	0.114	698.800	659.800	0.000	33650.000	24520.000	24260.000
x		67.448%	0.045	688.500	670.000	0.000	34030.000	24620.000	24290.000
σ		4.947%	0.062	9.737	9.198	0.000	481.800	268.800	54.810
%RSD		7.334	137.000	1.414	1.373	0.000	1.416	1.092	0.226
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:30:09	87.290	4489.000	0.000	9873.000	67750.000	64620.000	82.379%	2.113
2	10:30:28	86.060	4442.000	0.000	9768.000	67640.000	65540.000	77.646%	2.459
3	10:30:47	86.270	4482.000	0.000	9979.000	70140.000	66260.000	73.663%	2.254
x		86.540	4471.000	0.000	9874.000	68510.000	65470.000	77.896%	2.275
σ		0.656	25.280	0.000	105.400	1411.000	819.100	4.363%	0.174
%RSD		0.758	0.565	0.000	1.067	2.059	1.251	5.602	7.644
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:30:09	1.531	12.360	1703.000	1359.000	1445.000	6.755	37.480	2.283
2	10:30:28	-0.753	12.430	1715.000	1358.000	1474.000	6.716	37.160	2.207
3	10:30:47	-3.724	12.580	1763.000	1386.000	1470.000	6.587	36.740	2.217
x		-0.982	12.460	1727.000	1368.000	1463.000	6.686	37.130	2.236
σ		2.635	0.110	31.690	16.030	15.310	0.088	0.371	0.041
%RSD		268.400	0.886	1.835	1.172	1.047	1.311	1.000	1.839
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:30:09	2.158	45.730	46.170	0.822	0.009	-0.227	0.000	993.000
2	10:30:28	2.232	47.500	47.420	0.151	0.068	0.328	0.000	987.200
3	10:30:47	2.188	47.930	46.350	1.255	0.019	-0.453	0.000	981.800
x		2.192	47.050	46.650	0.743	0.032	-0.117	0.000	987.300
σ		0.037	1.166	0.673	0.556	0.032	0.402	0.000	5.589
%RSD		1.696	2.479	1.442	74.910	99.270	343.200	0.000	0.566
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:30:09	89.580%	0.559	0.535	78.732%	-0.024	-0.029	0.557	0.470
2	10:30:28	89.081%	0.544	0.597	77.801%	0.005	-0.033	0.472	0.464
3	10:30:47	88.408%	0.489	0.644	76.623%	-0.007	-0.022	0.459	0.416
x		89.023%	0.531	0.592	77.719%	-0.009	-0.028	0.496	0.450
σ		0.588%	0.036	0.055	1.057%	0.015	0.006	0.053	0.030
%RSD		0.660	6.854	9.224	1.360	170.200	21.270	10.720	6.576
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:30:09	87.171%	1.525	0.168	0.192	65.050	64.670	94.946%	96.135%
2	10:30:28	86.919%	1.459	0.199	0.147	65.920	64.810	94.976%	95.892%
3	10:30:47	86.004%	1.640	0.146	0.165	64.750	64.990	94.419%	95.318%
x		86.698%	1.541	0.171	0.168	65.240	64.820	94.781%	95.782%
σ		0.614%	0.092	0.026	0.023	0.609	0.160	0.314%	0.420%
%RSD		0.709	5.945	15.310	13.440	0.934	0.247	0.331	0.438
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	10:30:09	0.139	0.145	0.882	0.813	0.845	73.478%		
2	10:30:28	0.132	0.156	0.886	0.794	0.838	73.949%		
3	10:30:47	0.141	0.147	0.887	0.842	0.837	72.812%		
x		0.137	0.149	0.885	0.817	0.840	73.413%		
σ		0.004	0.006	0.003	0.024	0.004	0.571%		
%RSD		3.159	3.934	0.316	2.950	0.514	0.778		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:33:39	89.372%	0.014	140.500	145.600	0.000	6884.000	5398.000	5372.000
2	10:33:58	80.925%	-0.011	151.000	144.700	0.000	6974.000	5430.000	5282.000
3	10:34:18	78.205%	-0.041	142.100	143.100	0.000	6848.000	5219.000	5233.000
x		82.834%	-0.013	144.600	144.500	0.000	6902.000	5349.000	5296.000
σ		5.823%	0.027	5.674	1.286	0.000	65.320	113.800	70.600
%RSD		7.030	217.300	3.925	0.890	0.000	0.946	2.128	1.333

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:33:39	27.790	965.000	0.000	1874.000	13020.000	12330.000	91.565%	0.208
2	10:33:58	26.950	971.900	0.000	1913.000	8181.000	12570.000	85.867%	0.398
3	10:34:18	26.880	945.500	0.000	1888.000	7864.000	12720.000	82.904%	0.447
x		27.200	960.800	0.000	1892.000	9687.000	12540.000	86.779%	0.351
σ		0.505	13.690	0.000	19.970	2889.000	197.000	4.402%	0.126
%RSD		1.858	1.425	0.000	1.056	29.820	1.571	5.072	36.000

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:33:39	0.891	2.659	348.000	273.000	288.400	1.373	7.689	0.532
2	10:33:58	0.713	2.689	353.700	274.000	294.000	1.269	8.169	0.475
3	10:34:18	-0.429	2.758	355.300	275.100	290.500	1.304	7.457	0.531
x		0.391	2.702	352.300	274.100	291.000	1.315	7.772	0.513
σ		0.716	0.051	3.857	1.054	2.854	0.053	0.363	0.033
%RSD		183.100	1.881	1.095	0.385	0.981	4.048	4.676	6.393

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:33:39	0.523	12.540	12.280	0.016	-0.167	-1.662	0.000	195.000
2	10:33:58	0.614	12.640	12.410	0.138	-0.174	-0.357	0.000	193.900
3	10:34:18	0.526	13.040	12.930	0.672	-0.222	-0.264	0.000	193.300
x		0.555	12.740	12.540	0.275	-0.188	-0.761	0.000	194.100
σ		0.052	0.265	0.347	0.349	0.030	0.781	0.000	0.846
%RSD		9.315	2.077	2.766	126.700	16.100	102.700	0.000	0.436

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:33:39	90.150%	0.035	0.062	85.317%	-0.038	-0.040	0.085	0.102
2	10:33:58	90.149%	0.016	0.078	84.596%	-0.021	-0.036	0.026	0.044
3	10:34:18	89.931%	0.088	0.056	83.401%	-0.030	-0.027	0.054	0.077
x		90.077%	0.046	0.065	84.438%	-0.029	-0.034	0.055	0.074
σ		0.126%	0.037	0.011	0.968%	0.008	0.007	0.029	0.029
%RSD		0.140	80.950	17.290	1.146	28.330	19.850	53.780	39.620

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:33:39	92.021%	-0.159	-0.066	-0.074	12.670	12.270	94.084%	95.520%
2	10:33:58	91.999%	-0.162	-0.065	-0.070	12.710	12.430	95.668%	97.070%
3	10:34:18	91.578%	-0.132	-0.067	-0.070	12.790	12.760	96.570%	97.351%
x		91.866%	-0.151	-0.066	-0.071	12.720	12.490	95.441%	96.647%
σ		0.250%	0.016	0.001	0.003	0.060	0.250	1.258%	0.986%
%RSD		0.272	10.880	1.794	3.829	0.471	2.005	1.319	1.020

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:33:39	0.011	0.016	0.162	0.130	0.144	83.667%
2	10:33:58	0.023	0.021	0.167	0.135	0.146	84.201%
3	10:34:18	0.023	0.018	0.151	0.143	0.146	84.987%
x		0.019	0.018	0.160	0.136	0.145	84.285%
σ		0.007	0.003	0.008	0.006	0.001	0.664%
%RSD		37.840	14.210	5.015	4.722	0.950	0.788

180-38987-H-1-B MS 12/3/2014 10:36:51 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:37:11	75.936%	47.890	1604.000	1545.000	0.000	75280.000	66430.000	65080.000
2	10:37:30	68.558%	48.190	1593.000	1520.000	0.000	75080.000	64480.000	64320.000
3	10:37:49	65.547%	46.230	1586.000	1566.000	0.000	75240.000	63090.000	62230.000
x		70.014%	47.440	1594.000	1544.000	0.000	75200.000	64670.000	63880.000
σ		5.345%	1.055	9.059	23.020	0.000	103.500	1676.000	1479.000
%RSD		7.634	2.224	0.568	1.491	0.000	0.138	2.591	2.316
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:37:11	1828.000	11480.000	0.000	56170.000	119800.000	114300.000	76.710%	947.600
2	10:37:30	1844.000	11280.000	0.000	56200.000	120400.000	115500.000	72.157%	952.400
3	10:37:49	1784.000	11110.000	0.000	55920.000	120400.000	114200.000	69.964%	940.200
x		1818.000	11290.000	0.000	56100.000	120200.000	114700.000	72.944%	946.800
σ		30.970	182.500	0.000	152.100	364.400	746.700	3.441%	6.152
%RSD		1.703	1.616	0.000	0.271	0.303	0.651	4.717	0.650
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:37:11	480.500	205.100	2372.000	2336.000	2509.000	482.800	490.300	223.200
2	10:37:30	485.400	199.600	2355.000	2312.000	2483.000	476.800	483.000	223.800
3	10:37:49	483.300	201.800	2368.000	2325.000	2513.000	472.700	486.600	221.400
x		483.100	202.200	2365.000	2324.000	2502.000	477.400	486.600	222.800
σ		2.439	2.738	8.939	12.110	16.480	5.087	3.619	1.253
%RSD		0.505	1.354	0.378	0.521	0.659	1.065	0.744	0.562
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:37:11	223.700	456.000	455.600	35.710	8.015	7.619	0.000	1984.000
2	10:37:30	223.500	465.600	458.900	33.610	7.464	7.553	0.000	1979.000
3	10:37:49	220.100	453.600	455.300	33.780	7.884	7.196	0.000	1992.000
x		222.400	458.400	456.600	34.370	7.788	7.456	0.000	1985.000
σ		2.007	6.388	2.011	1.164	0.288	0.228	0.000	6.168
%RSD		0.902	1.393	0.441	3.386	3.696	3.053	0.000	0.311
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:37:11	81.694%	1058.000	1110.000	68.948%	49.780	49.080	46.280	40.040
2	10:37:30	81.125%	1064.000	1123.000	67.348%	49.920	49.740	46.060	41.060
3	10:37:49	79.472%	1066.000	1136.000	65.961%	49.580	49.160	46.900	40.690
x		80.764%	1063.000	1123.000	67.419%	49.760	49.330	46.410	40.600
σ		1.154%	4.166	12.670	1.494%	0.173	0.357	0.437	0.513
%RSD		1.429	0.392	1.128	2.217	0.348	0.723	0.941	1.265
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:37:11	78.491%	1914.000	446.200	445.700	2038.000	2050.000	85.703%	86.910%
2	10:37:30	76.944%	1916.000	452.100	451.900	2045.000	2050.000	86.668%	87.436%
3	10:37:49	76.890%	1899.000	447.800	444.500	2040.000	2045.000	85.361%	86.572%
x		77.442%	1910.000	448.700	447.400	2041.000	2049.000	85.911%	86.973%
σ		0.909%	9.206	3.020	3.968	3.666	2.846	0.678%	0.435%
%RSD		1.174	0.482	0.673	0.887	0.180	0.139	0.789	0.500
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	10:37:11	55.810	57.450	23.130	23.410	23.370	61.978%		
2	10:37:30	56.350	58.360	23.330	23.760	23.470	62.421%		
3	10:37:49	55.990	58.200	23.690	23.550	23.700	62.626%		
x		56.050	58.000	23.380	23.570	23.510	62.341%		
σ		0.276	0.487	0.281	0.176	0.169	0.331%		
%RSD		0.493	0.839	1.200	0.747	0.717	0.531		

180-38987-H-1-C MSD 12/3/2014 10:40:23 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:40:42	77.096%	48.250	1589.000	1561.000	0.000	80050.000	67840.000	66190.000
2	10:41:01	70.608%	49.030	1657.000	1608.000	0.000	78270.000	67980.000	65590.000
3	10:41:20	67.988%	48.240	1543.000	1524.000	0.000	75480.000	64340.000	64370.000
x		71.897%	48.510	1596.000	1564.000	0.000	77940.000	66720.000	65380.000
σ		4.689%	0.456	57.290	41.900	0.000	2302.000	2061.000	928.600
%RSD		6.522	0.939	3.589	2.678	0.000	2.954	3.088	1.420

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:40:42	1806.000	11760.000	0.000	57560.000	122000.000	117200.000	74.032%	972.400
2	10:41:01	1745.000	11390.000	0.000	56730.000	123200.000	117900.000	71.642%	975.300
3	10:41:20	1745.000	11200.000	0.000	56700.000	123000.000	116500.000	68.770%	988.500
x		1765.000	11450.000	0.000	57000.000	122800.000	117200.000	71.481%	978.700
σ		35.150	282.900	0.000	488.900	637.700	665.600	2.635%	8.587
%RSD		1.991	2.470	0.000	0.858	0.519	0.568	3.686	0.877

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:40:42	482.900	208.300	2605.000	2486.000	2666.000	492.000	495.700	228.700
2	10:41:01	485.000	205.700	2587.000	2486.000	2686.000	489.700	496.500	226.100
3	10:41:20	491.700	205.100	2583.000	2457.000	2625.000	485.700	493.100	226.800
x		486.500	206.400	2592.000	2476.000	2659.000	489.100	495.100	227.200
σ		4.636	1.673	11.530	16.710	30.870	3.177	1.782	1.360
%RSD		0.953	0.811	0.445	0.675	1.161	0.649	0.360	0.599

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:40:42	223.900	460.600	457.900	33.740	7.628	7.679	0.000	2013.000
2	10:41:01	224.400	460.000	452.000	34.660	7.793	6.192	0.000	2023.000
3	10:41:20	224.000	460.400	460.800	33.740	7.820	6.695	0.000	2014.000
x		224.100	460.300	456.900	34.050	7.747	6.855	0.000	2016.000
σ		0.248	0.280	4.467	0.530	0.104	0.757	0.000	5.226
%RSD		0.111	0.061	0.978	1.557	1.338	11.040	0.000	0.259

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:40:42	79.276%	1097.000	1152.000	66.969%	49.940	49.840	47.760	40.010
2	10:41:01	78.548%	1104.000	1170.000	65.523%	51.190	50.230	47.760	41.130
3	10:41:20	76.799%	1109.000	1173.000	64.154%	50.130	49.400	48.280	41.180
x		78.208%	1103.000	1165.000	65.548%	50.420	49.820	47.930	40.770
σ		1.273%	6.040	11.540	1.407%	0.676	0.413	0.300	0.664
%RSD		1.628	0.547	0.990	2.147	1.341	0.829	0.626	1.628

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:40:42	76.293%	1991.000	458.000	455.300	2054.000	2075.000	84.132%	84.701%
2	10:41:01	75.484%	1990.000	464.600	461.300	2072.000	2070.000	84.833%	86.288%
3	10:41:20	74.386%	1987.000	463.900	462.000	2060.000	2067.000	84.296%	85.180%
x		75.388%	1989.000	462.200	459.500	2062.000	2071.000	84.420%	85.390%
σ		0.957%	2.047	3.641	3.675	9.082	3.847	0.367%	0.814%
%RSD		1.270	0.103	0.788	0.800	0.441	0.186	0.435	0.954

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:40:42	56.530	58.790	23.330	23.730	23.560	61.210%
2	10:41:01	56.660	58.930	23.380	23.760	23.720	61.314%
3	10:41:20	57.220	59.580	23.670	23.920	23.930	60.725%
x		56.800	59.100	23.460	23.800	23.740	61.083%
σ		0.365	0.417	0.182	0.100	0.184	0.315%
%RSD		0.643	0.706	0.777	0.421	0.775	0.515

180-38987-H-1-A PDS 12/3/2014 10:43:54 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:44:13	77.308%	49.110	1567.000	1514.000	0.000	75570.000	66020.000	66290.000
2	10:44:32	69.654%	50.560	1672.000	1628.000	0.000	76880.000	66430.000	65260.000
3	10:44:51	67.506%	48.120	1578.000	1562.000	0.000	76490.000	64040.000	63810.000
x		71.490%	49.260	1606.000	1568.000	0.000	76310.000	65490.000	65120.000
σ		5.152%	1.228	58.020	57.250	0.000	672.300	1279.000	1244.000
%RSD		7.206	2.492	3.614	3.651	0.000	0.881	1.953	1.911

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:44:13	1830.000	11900.000	0.000	56850.000	118400.000	112500.000	73.556%	1009.000
2	10:44:32	1797.000	11540.000	0.000	56050.000	116600.000	110900.000	71.060%	994.300
3	10:44:51	1804.000	11300.000	0.000	56570.000	118400.000	113700.000	66.168%	1009.000
x		1810.000	11580.000	0.000	56490.000	117800.000	112400.000	70.262%	1004.000
σ		17.360	303.600	0.000	409.200	1065.000	1402.000	3.758%	8.478
%RSD		0.959	2.621	0.000	0.724	0.904	1.248	5.349	0.844

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:44:13	496.600	205.900	2128.000	2243.000	2406.000	489.300	507.100	230.900
2	10:44:32	489.900	206.100	2153.000	2286.000	2488.000	491.500	505.800	229.300
3	10:44:51	496.400	206.200	2151.000	2295.000	2446.000	489.900	502.800	231.700
x		494.300	206.100	2144.000	2275.000	2447.000	490.300	505.200	230.600
σ		3.762	0.144	14.090	27.990	40.830	1.125	2.238	1.224
%RSD		0.761	0.070	0.657	1.230	1.669	0.229	0.443	0.531

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:44:13	233.200	465.000	470.900	34.010	7.730	6.771	0.000	1941.000
2	10:44:32	226.000	458.900	461.800	33.590	7.884	7.531	0.000	1929.000
3	10:44:51	229.800	472.900	469.600	35.200	8.167	7.346	0.000	1932.000
x		229.700	465.600	467.400	34.270	7.927	7.216	0.000	1934.000
σ		3.583	6.992	4.954	0.834	0.221	0.396	0.000	6.573
%RSD		1.560	1.502	1.060	2.435	2.793	5.493	0.000	0.340

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:44:13	78.427%	1125.000	1181.000	66.442%	51.050	50.630	47.030	41.380
2	10:44:32	76.381%	1129.000	1190.000	64.706%	51.570	50.320	48.180	41.170
3	10:44:51	76.150%	1123.000	1188.000	63.719%	51.180	50.970	47.750	40.470
x		76.986%	1125.000	1186.000	64.956%	51.270	50.640	47.650	41.010
σ		1.253%	3.051	4.747	1.379%	0.275	0.324	0.583	0.476
%RSD		1.627	0.271	0.400	2.123	0.536	0.639	1.223	1.161

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:44:13	74.643%	2043.000	475.000	473.500	2063.000	2074.000	82.824%	83.585%
2	10:44:32	74.469%	2031.000	475.400	471.000	2034.000	2055.000	83.000%	83.781%
3	10:44:51	74.205%	2039.000	473.900	469.400	2062.000	2064.000	83.327%	84.646%
x		74.439%	2038.000	474.800	471.300	2053.000	2064.000	83.050%	84.004%
σ		0.221%	6.478	0.789	2.075	16.490	9.532	0.255%	0.564%
%RSD		0.296	0.318	0.166	0.440	0.803	0.462	0.308	0.672

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:44:13	55.890	58.210	23.600	23.970	23.880	60.632%
2	10:44:32	56.280	58.860	23.640	23.880	23.840	60.947%
3	10:44:51	56.900	59.350	23.940	24.060	23.980	60.958%
x		56.360	58.800	23.730	23.970	23.900	60.846%
σ		0.511	0.575	0.184	0.091	0.075	0.185%
%RSD		0.906	0.978	0.775	0.379	0.313	0.305

180-39026-I-1-A 12/3/2014 10:47:26 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:47:45	75.685%	-0.009	251.000	237.700	0.000	58600.000	9574.000	9522.000
2	10:48:04	68.742%	-0.005	251.900	243.900	0.000	59260.000	9485.000	9511.000
3	10:48:23	66.429%	-0.004	249.700	247.800	0.000	59190.000	9549.000	9562.000
x		70.286%	-0.006	250.900	243.100	0.000	59010.000	9536.000	9532.000
σ		4.817%	0.002	1.081	5.060	0.000	363.200	45.950	26.810
%RSD		6.854	37.780	0.431	2.081	0.000	0.616	0.482	0.281

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:47:45	35.070	5161.000	0.000	18320.000	60160.000	58070.000	76.195%	1.421
2	10:48:04	34.840	5283.000	0.000	18810.000	61830.000	60180.000	71.276%	1.497
3	10:48:23	33.800	5049.000	0.000	18520.000	61000.000	58850.000	69.514%	1.108
x		34.570	5164.000	0.000	18550.000	61000.000	59030.000	72.328%	1.342
σ		0.673	116.700	0.000	246.400	837.400	1065.000	3.463%	0.206
%RSD		1.946	2.259	0.000	1.328	1.373	1.805	4.787	15.360

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:47:45	257.300	3.814	8.580	49.530	131.400	0.110	0.227	1.730
2	10:48:04	258.800	3.733	8.489	45.300	129.900	0.144	0.258	1.833
3	10:48:23	258.800	3.687	8.557	46.210	127.100	0.095	0.411	1.842
x		258.300	3.745	8.542	47.010	129.400	0.116	0.299	1.802
σ		0.894	0.064	0.047	2.227	2.187	0.026	0.099	0.062
%RSD		0.346	1.711	0.555	4.738	1.689	21.930	32.980	3.448

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:47:45	1.283	1.632	1.651	3.238	2.786	2.015	0.000	275.200
2	10:48:04	1.501	1.452	1.381	4.270	2.307	1.813	0.000	273.200
3	10:48:23	1.040	1.604	1.617	2.568	2.349	3.164	0.000	277.400
x		1.275	1.562	1.550	3.359	2.481	2.331	0.000	275.300
σ		0.231	0.096	0.147	0.857	0.265	0.729	0.000	2.101
%RSD		18.090	6.172	9.481	25.510	10.690	31.280	0.000	0.763

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:47:45	81.309%	8.343	9.093	72.763%	-0.035	-0.016	0.022	0.002
2	10:48:04	80.983%	7.874	8.394	70.578%	-0.025	-0.016	-0.141	-0.075
3	10:48:23	78.489%	7.038	7.712	69.678%	-0.013	-0.020	-0.100	-0.083
x		80.260%	7.752	8.400	71.007%	-0.024	-0.017	-0.073	-0.052
σ		1.543%	0.661	0.690	1.586%	0.011	0.003	0.085	0.047
%RSD		1.922	8.526	8.220	2.234	45.320	14.670	116.500	90.140

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:47:45	80.051%	4.578	0.669	0.581	38.300	38.110	87.598%	88.406%
2	10:48:04	79.528%	3.746	0.539	0.651	38.170	37.840	87.930%	89.356%
3	10:48:23	79.162%	3.145	0.594	0.552	37.610	37.700	88.667%	89.827%
x		79.580%	3.823	0.601	0.595	38.030	37.880	88.065%	89.196%
σ		0.447%	0.720	0.065	0.051	0.367	0.211	0.547%	0.724%
%RSD		0.561	18.830	10.900	8.615	0.966	0.557	0.621	0.811

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:47:45	0.061	0.064	0.631	0.609	0.619	68.906%
2	10:48:04	0.065	0.062	0.638	0.656	0.643	68.145%
3	10:48:23	0.053	0.047	0.667	0.656	0.641	69.084%
x		0.060	0.058	0.645	0.641	0.634	68.711%
σ		0.006	0.009	0.020	0.027	0.014	0.499%
%RSD		10.490	15.930	3.022	4.239	2.141	0.726

CCV 1408349 12/3/2014 10:51:06 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:51:06	81.882%	102.100	110.400	108.500	0.000	45400.000	45240.000	45130.000
2	10:51:25	75.368%	105.800	105.500	105.900	0.000	44800.000	45210.000	45110.000
3	10:51:44	71.553%	106.300	110.400	109.000	0.000	45810.000	46160.000	45700.000
x		76.268%	104.713%	108.760%	107.798%	0.000	90.677%	91.077%	90.632%
σ		5.223%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		6.848	2.157	2.578	1.518	0.000	1.126	1.187	0.740

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:51:06	456.100	4284.000	0.000	45500.000	46820.000	45020.000	81.243%	94.280
2	10:51:25	449.300	4241.000	0.000	46590.000	48560.000	46320.000	77.729%	91.090
3	10:51:44	461.300	4275.000	0.000	46740.000	48130.000	45920.000	74.328%	91.900
x		91.116%	85.336%	0.000	92.559%	95.672%	91.506%	77.766%	92.423%
σ		n/a	n/a	0.000	n/a	n/a	n/a	3.457%	n/a
%RSD		1.318	0.534	0.000	1.462	1.893	1.450	4.446	1.792

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:51:06	91.020	94.190	481.400	23770.000	24310.000	96.040	95.520	97.730
2	10:51:25	92.700	92.950	485.200	23910.000	24370.000	94.390	97.350	96.730
3	10:51:44	94.860	95.500	490.400	24120.000	24680.000	96.120	95.440	97.030
x		92.860%	94.211%	97.134%	95.722%	97.812%	95.518%	96.105%	97.162%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.070	1.353	0.937	0.738	0.819	1.021	1.124	0.526

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:51:06	97.990	102.000	102.500	95.710	102.700	103.100	0.000	95.290
2	10:51:25	96.320	100.600	97.660	94.500	99.690	98.630	0.000	94.600
3	10:51:44	96.890	100.700	101.400	96.850	98.710	99.680	0.000	93.610
x		97.065%	101.098%	100.520%	95.685%	100.349%	100.459%	0.000	94.504%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.877	0.746	2.531	1.229	2.049	2.313	0.000	0.894

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:51:06	76.899%	87.880	90.790	70.448%	100.700	99.010	98.190	98.220
2	10:51:25	77.880%	94.200	96.920	69.957%	101.200	99.630	98.510	99.080
3	10:51:44	77.472%	97.630	99.500	69.473%	99.730	98.790	100.000	96.540
x		77.417%	93.236%	95.734%	69.960%	100.522%	99.147%	98.904%	97.943%
σ		0.493%	n/a	n/a	0.487%	n/a	n/a	n/a	n/a
%RSD		0.637	5.308	4.674	0.697	0.723	0.438	0.983	1.318

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:51:06	78.047%	94.790	90.580	90.950	93.520	94.310	83.878%	84.857%
2	10:51:25	77.694%	94.980	92.040	92.190	94.370	93.060	85.646%	86.462%
3	10:51:44	79.276%	94.080	92.200	92.150	94.070	93.120	84.426%	87.015%
x		78.339%	94.617%	91.607%	91.764%	93.987%	93.496%	84.650%	86.112%
σ		0.831%	n/a	n/a	n/a	n/a	n/a	0.905%	1.121%
%RSD		1.060	0.499	0.972	0.771	0.458	0.754	1.069	1.302

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:51:06	102.100	106.300	104.100	104.100	103.900	74.032%
2	10:51:25	104.700	108.700	106.400	107.700	106.700	73.547%
3	10:51:44	105.000	109.400	107.100	108.100	107.700	73.544%
x		103.928%	108.136%	105.858%	106.622%	106.112%	73.708%
σ		n/a	n/a	n/a	n/a	n/a	0.281%
%RSD		1.517	1.494	1.494	2.054	1.877	0.381

CCB3 12/3/2014 10:57:01 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:57:20	98.773%	0.033	4.527	4.840	0.000	10.720	5.645	4.268
2	10:57:39	90.417%	-0.041	5.656	5.748	0.000	11.190	4.456	3.655
3	10:57:58	87.163%	-0.041	4.973	4.435	0.000	11.320	4.158	3.394
x		92.118%	-0.016	5.052	5.007	0.000	11.070	4.753	3.772
σ		5.989%	0.043	0.569	0.672	0.000	0.317	0.787	0.449
%RSD		6.501	266.100	11.250	13.430	0.000	2.866	16.560	11.890
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:57:20	1.959	1.213	0.000	3.592	10.320	3.738	100.398%	0.031
2	10:57:39	2.011	1.085	0.000	2.740	-4.166	3.598	95.412%	-0.152
3	10:57:58	1.863	0.466	0.000	2.682	-0.184	3.199	93.260%	-0.000
x		1.944	0.921	0.000	3.004	1.990	3.511	96.357%	-0.040
σ		0.075	0.399	0.000	0.509	7.483	0.280	3.661%	0.098
%RSD		3.861	43.370	0.000	16.950	376.100	7.963	3.800	241.600
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:57:20	0.224	0.159	0.108	12.640	10.830	-0.020	0.032	-0.042
2	10:57:39	0.336	0.184	0.102	12.140	8.006	-0.006	0.034	0.000
3	10:57:58	0.215	0.168	0.104	9.432	6.251	-0.014	0.011	-0.056
x		0.258	0.171	0.105	11.410	8.362	-0.014	0.026	-0.032
σ		0.068	0.013	0.003	1.727	2.310	0.007	0.012	0.029
%RSD		26.180	7.396	2.808	15.140	27.620	50.320	48.150	89.420
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:57:20	0.004	0.329	0.433	-0.326	-0.050	-0.552	0.000	0.026
2	10:57:39	0.145	0.210	0.338	-0.286	-0.104	-1.027	0.000	0.030
3	10:57:58	0.011	0.325	0.456	-0.244	-0.041	-0.961	0.000	0.018
x		0.053	0.288	0.409	-0.285	-0.065	-0.847	0.000	0.025
σ		0.080	0.068	0.063	0.041	0.034	0.257	0.000	0.006
%RSD		149.000	23.550	15.280	14.440	52.100	30.340	0.000	24.130
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:57:20	93.958%	0.358	0.349	93.144%	-0.031	-0.029	-0.021	-0.026
2	10:57:39	94.934%	0.361	0.346	92.203%	-0.023	-0.024	-0.046	-0.032
3	10:57:58	95.056%	0.333	0.324	92.928%	-0.013	-0.021	-0.046	-0.048
x		94.649%	0.351	0.339	92.758%	-0.022	-0.025	-0.038	-0.035
σ		0.602%	0.015	0.014	0.493%	0.009	0.004	0.015	0.012
%RSD		0.636	4.292	4.058	0.531	41.950	16.820	38.380	32.670
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:57:20	94.889%	-0.139	0.077	0.061	0.054	0.023	95.155%	96.265%
2	10:57:39	96.971%	-0.159	0.087	0.078	0.028	0.056	97.553%	98.772%
3	10:57:58	97.407%	-0.159	0.074	0.055	0.038	0.044	99.211%	99.153%
x		96.422%	-0.153	0.080	0.064	0.040	0.041	97.307%	98.063%
σ		1.346%	0.011	0.007	0.012	0.013	0.016	2.039%	1.569%
%RSD		1.396	7.489	8.757	18.470	33.140	40.090	2.096	1.600
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	10:57:20	0.017	0.009	0.123	0.120	0.124	96.153%		
2	10:57:39	0.004	0.007	0.123	0.125	0.122	96.272%		
3	10:57:58	0.010	0.002	0.145	0.120	0.139	96.405%		
x		0.010	0.006	0.130	0.122	0.128	96.277%		
σ		0.006	0.003	0.013	0.003	0.009	0.126%		
%RSD		61.010	55.050	10.010	2.196	6.938	0.131		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:54	76.523%	-0.009	144.600	135.500	0.000	173000.000	9958.000	9959.000
2	11:01:13	69.461%	-0.041	154.200	141.700	0.000	175400.000	10110.000	10010.000
3	11:01:32	68.469%	-0.005	142.300	133.300	0.000	164800.000	9547.000	9636.000
x		71.484%	-0.018	147.000	136.800	0.000	171100.000	9873.000	9869.000
σ		4.392%	0.020	6.340	4.344	0.000	5541.000	293.200	203.200
%RSD		6.144	107.500	4.312	3.175	0.000	3.239	2.969	2.059
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:54	33.680	2170.000	0.000	20970.000	56440.000	55260.000	76.893%	1.683
2	11:01:13	34.010	2192.000	0.000	21150.000	57690.000	55910.000	71.539%	1.009
3	11:01:32	33.170	2114.000	0.000	21100.000	58270.000	56370.000	68.040%	1.786
x		33.620	2159.000	0.000	21070.000	57470.000	55840.000	72.157%	1.493
σ		0.421	40.480	0.000	95.800	933.200	560.300	4.459%	0.422
%RSD		1.252	1.875	0.000	0.455	1.624	1.003	6.179	28.280
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:54	0.949	0.979	373.900	143.100	221.700	0.274	1.479	2.394
2	11:01:13	3.091	0.915	382.700	142.600	221.600	0.230	1.589	2.586
3	11:01:32	1.089	0.998	381.700	139.100	215.800	0.263	1.451	2.424
x		1.710	0.964	379.400	141.600	219.700	0.256	1.506	2.468
σ		1.199	0.043	4.782	2.147	3.371	0.023	0.073	0.103
%RSD		70.120	4.479	1.260	1.516	1.534	8.995	4.846	4.178
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:54	1.260	10.180	9.643	-0.749	-0.053	0.424	0.000	221.800
2	11:01:13	1.162	9.805	10.290	0.532	-0.163	0.363	0.000	223.500
3	11:01:32	0.851	10.270	9.844	0.360	0.009	-0.040	0.000	226.200
x		1.091	10.090	9.927	0.048	-0.069	0.249	0.000	223.800
σ		0.214	0.248	0.333	0.695	0.087	0.253	0.000	2.212
%RSD		19.590	2.456	3.355	1456.000	126.300	101.400	0.000	0.988
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:54	77.092%	7.442	7.713	67.009%	-0.020	-0.032	0.139	0.081
2	11:01:13	75.757%	7.306	7.697	65.217%	-0.026	-0.032	0.037	0.055
3	11:01:32	74.873%	7.789	7.865	64.208%	-0.006	-0.024	0.029	0.002
x		75.907%	7.512	7.758	65.478%	-0.017	-0.029	0.068	0.046
σ		1.117%	0.249	0.092	1.419%	0.010	0.005	0.062	0.040
%RSD		1.472	3.315	1.189	2.167	60.630	16.050	90.220	87.090
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:54	75.165%	1.896	0.582	0.564	46.110	45.820	82.535%	84.527%
2	11:01:13	73.919%	1.843	0.540	0.488	45.130	45.960	84.559%	86.057%
3	11:01:32	73.907%	1.656	0.418	0.445	45.650	45.560	83.605%	85.069%
x		74.330%	1.798	0.513	0.499	45.630	45.780	83.566%	85.218%
σ		0.723%	0.126	0.085	0.060	0.488	0.203	1.013%	0.776%
%RSD		0.973	7.009	16.510	12.000	1.069	0.443	1.212	0.910
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	11:00:54	0.011	0.012	0.276	0.270	0.272	62.718%		
2	11:01:13	0.013	0.007	0.266	0.261	0.263	61.979%		
3	11:01:32	0.017	0.005	0.278	0.254	0.261	62.103%		
x		0.014	0.008	0.274	0.261	0.265	62.267%		
σ		0.003	0.004	0.007	0.008	0.006	0.396%		
%RSD		19.650	43.170	2.421	3.032	2.128	0.636		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:04:27	74.979%	-0.008	144.200	145.100	0.000	179500.000	10310.000	10230.000
2	11:04:46	73.439%	0.026	136.800	135.500	0.000	167700.000	9909.000	9637.000
3	11:05:05	69.359%	-0.041	136.100	134.000	0.000	167700.000	9835.000	9746.000
x		72.592%	-0.008	139.000	138.200	0.000	171600.000	10020.000	9872.000
σ		2.904%	0.033	4.476	6.035	0.000	6830.000	254.500	316.800
%RSD		4.000	437.700	3.219	4.367	0.000	3.980	2.540	3.209

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:04:27	34.500	2244.000	0.000	21600.000	58490.000	57310.000	73.199%	5.560
2	11:04:46	31.890	2165.000	0.000	21760.000	60130.000	58390.000	69.613%	1.644
3	11:05:05	33.920	2168.000	0.000	21650.000	58980.000	56930.000	67.102%	1.987
x		33.440	2192.000	0.000	21670.000	59200.000	57540.000	69.971%	3.064
σ		1.368	45.120	0.000	77.640	842.500	753.300	3.064%	2.169
%RSD		4.092	2.058	0.000	0.358	1.423	1.309	4.379	70.790

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:04:27	3.147	1.068	511.400	152.200	254.000	0.315	1.993	2.342
2	11:04:46	4.026	1.011	516.600	150.000	231.300	0.367	1.716	2.440
3	11:05:05	6.864	0.980	521.100	147.200	231.300	0.340	1.929	2.169
x		4.679	1.020	516.300	149.800	238.900	0.341	1.879	2.317
σ		1.942	0.045	4.839	2.489	13.110	0.026	0.145	0.137
%RSD		41.510	4.405	0.937	1.662	5.490	7.778	7.695	5.924

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:04:27	0.923	14.310	14.530	1.259	-0.035	1.109	0.000	229.500
2	11:04:46	1.081	14.660	14.570	-0.506	0.013	0.352	0.000	229.800
3	11:05:05	1.150	14.350	14.950	1.264	-0.232	-0.117	0.000	228.900
x		1.051	14.440	14.690	0.672	-0.085	0.448	0.000	229.400
σ		0.116	0.187	0.232	1.021	0.130	0.619	0.000	0.450
%RSD		11.060	1.293	1.580	151.800	153.600	138.200	0.000	0.196

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:04:27	74.740%	7.385	7.447	65.022%	-0.018	-0.040	0.078	0.106
2	11:04:46	73.848%	7.351	7.574	63.353%	-0.028	-0.023	0.100	0.099
3	11:05:05	73.560%	7.289	7.566	62.223%	-0.015	-0.014	0.038	0.075
x		74.049%	7.342	7.529	63.533%	-0.020	-0.026	0.072	0.093
σ		0.615%	0.048	0.071	1.408%	0.007	0.013	0.032	0.016
%RSD		0.831	0.657	0.945	2.216	33.780	51.270	44.130	17.330

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:04:27	72.394%	1.091	0.341	0.364	50.330	49.570	80.831%	82.688%
2	11:04:46	71.848%	1.175	0.345	0.332	50.670	50.110	81.727%	83.477%
3	11:05:05	71.412%	1.213	0.307	0.326	50.610	49.660	81.799%	83.216%
x		71.885%	1.160	0.331	0.340	50.540	49.780	81.452%	83.127%
σ		0.492%	0.062	0.021	0.021	0.183	0.291	0.539%	0.402%
%RSD		0.685	5.383	6.305	6.033	0.362	0.585	0.662	0.484

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	11:04:27	0.008	0.003	0.290	0.285	0.283	60.865%
2	11:04:46	0.002	0.003	0.292	0.273	0.279	60.962%
3	11:05:05	-0.002	0.005	0.281	0.266	0.269	61.035%
x		0.003	0.004	0.288	0.275	0.277	60.954%
σ		0.005	0.001	0.006	0.010	0.007	0.085%
%RSD		182.600	38.640	2.078	3.494	2.591	0.140

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:08:00	75.139%	-0.041	141.400	137.900	0.000	60110.000	6825.000	6701.000
2	11:08:19	73.168%	-0.007	144.900	135.200	0.000	59320.000	6713.000	6730.000
3	11:08:38	67.112%	-0.041	145.200	142.900	0.000	61660.000	6817.000	6718.000
x		71.807%	-0.030	143.800	138.700	0.000	60360.000	6785.000	6716.000
σ		4.183%	0.019	2.135	3.912	0.000	1188.000	62.550	14.450
%RSD		5.826	65.340	1.484	2.821	0.000	1.969	0.922	0.215

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:08:00	52.930	2463.000	0.000	14270.000	52990.000	50840.000	72.893%	0.764
2	11:08:19	52.390	2394.000	0.000	14140.000	53170.000	51960.000	69.819%	1.204
3	11:08:38	51.840	2381.000	0.000	14210.000	54570.000	51910.000	66.411%	1.100
x		52.390	2413.000	0.000	14200.000	53570.000	51570.000	69.708%	1.023
σ		0.544	44.060	0.000	65.950	865.400	632.900	3.243%	0.230
%RSD		1.039	1.826	0.000	0.464	1.615	1.227	4.652	22.490

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:08:00	4.026	1.256	10.720	618.800	686.200	0.828	4.296	1.225
2	11:08:19	7.613	1.218	10.790	614.500	694.200	0.776	3.841	1.120
3	11:08:38	6.212	1.226	10.980	622.400	698.700	0.715	4.076	1.083
x		5.950	1.233	10.830	618.600	693.100	0.773	4.071	1.143
σ		1.808	0.020	0.136	3.966	6.290	0.057	0.227	0.074
%RSD		30.380	1.626	1.255	0.641	0.908	7.319	5.585	6.463

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:08:00	0.677	10.400	10.140	0.732	0.239	-0.333	0.000	184.100
2	11:08:19	0.726	9.987	9.961	-0.285	-0.047	-0.329	0.000	182.800
3	11:08:38	0.675	9.589	9.644	-1.614	0.060	-1.014	0.000	182.800
x		0.693	9.992	9.914	-0.389	0.084	-0.559	0.000	183.200
σ		0.029	0.405	0.249	1.177	0.145	0.394	0.000	0.752
%RSD		4.134	4.057	2.514	302.400	172.000	70.560	0.000	0.411

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:08:00	75.312%	4.946	4.911	67.673%	-0.033	-0.044	0.031	0.065
2	11:08:19	76.151%	4.837	5.114	67.049%	-0.031	-0.035	0.011	0.010
3	11:08:38	75.710%	4.919	5.378	66.105%	-0.018	-0.034	-0.022	0.041
x		75.725%	4.900	5.134	66.942%	-0.027	-0.037	0.006	0.039
σ		0.419%	0.057	0.234	0.790%	0.008	0.005	0.027	0.027
%RSD		0.554	1.156	4.563	1.179	30.000	14.240	418.500	70.260

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:08:00	74.850%	1.168	0.395	0.358	10.550	11.050	84.088%	85.014%
2	11:08:19	75.233%	1.204	0.457	0.425	10.510	10.690	84.831%	86.498%
3	11:08:38	75.267%	1.195	0.399	0.378	10.750	10.700	85.313%	86.309%
x		75.117%	1.189	0.417	0.387	10.600	10.810	84.744%	85.941%
σ		0.232%	0.019	0.035	0.035	0.128	0.206	0.617%	0.808%
%RSD		0.309	1.578	8.290	8.910	1.206	1.909	0.728	0.940

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	11:08:00	0.003	-0.003	0.187	0.140	0.156	65.847%
2	11:08:19	0.000	-0.005	0.178	0.176	0.172	65.971%
3	11:08:38	0.006	-0.003	0.171	0.150	0.171	66.611%
x		0.003	-0.004	0.179	0.155	0.166	66.143%
σ		0.003	0.001	0.008	0.019	0.009	0.410%
%RSD		100.400	20.640	4.397	11.970	5.247	0.620

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:11:31	83.899%	0.846	54.050	53.410	0.000	31970.000	10480.000	10290.000
2	11:11:50	75.007%	1.044	57.740	53.730	0.000	31400.000	10380.000	10430.000
3	11:12:09	73.477%	1.168	54.360	53.330	0.000	31130.000	10030.000	9972.000
x		77.461%	1.019	55.380	53.490	0.000	31500.000	10300.000	10230.000
σ		5.628%	0.163	2.049	0.209	0.000	431.300	235.000	236.800
%RSD		7.265	15.960	3.700	0.392	0.000	1.369	2.282	2.314
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:11:31	15150.000	26050.000	0.000	7334.000	21980.000	21120.000	71.385%	522.700
2	11:11:50	14820.000	25730.000	0.000	7323.000	21900.000	21220.000	68.011%	526.200
3	11:12:09	14740.000	25140.000	0.000	7314.000	22610.000	21190.000	65.901%	525.100
x		14900.000	25640.000	0.000	7324.000	22160.000	21180.000	68.432%	524.700
σ		219.600	459.200	0.000	10.010	389.000	49.100	2.766%	1.806
%RSD		1.474	1.791	0.000	0.137	1.755	0.232	4.042	0.344
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:11:31	29.080	32.600	1502.000	22680.000	22930.000	7.901	16.430	9.728
2	11:11:50	33.970	33.180	1505.000	22760.000	23320.000	7.862	16.530	9.464
3	11:12:09	26.370	32.400	1490.000	22500.000	23170.000	7.555	16.110	9.587
x		29.810	32.730	1499.000	22650.000	23140.000	7.773	16.360	9.593
σ		3.855	0.404	7.929	133.100	197.100	0.190	0.220	0.132
%RSD		12.930	1.233	0.529	0.588	0.852	2.439	1.342	1.376
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:11:31	9.650	54.770	54.740	1.376	-0.480	-2.453	0.000	130.400
2	11:11:50	9.261	55.200	55.200	1.511	-0.444	-2.244	0.000	129.600
3	11:12:09	9.168	56.360	54.020	1.322	-0.402	-2.132	0.000	129.300
x		9.359	55.440	54.650	1.403	-0.442	-2.276	0.000	129.800
σ		0.256	0.818	0.593	0.097	0.039	0.163	0.000	0.564
%RSD		2.731	1.475	1.084	6.933	8.761	7.153	0.000	0.434
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:11:31	80.688%	1.557	1.501	66.278%	0.029	-0.001	0.072	0.075
2	11:11:50	81.624%	1.498	1.586	65.730%	0.023	-0.004	0.054	0.024
3	11:12:09	80.401%	1.462	1.532	65.121%	0.043	0.027	0.048	0.021
x		80.904%	1.505	1.540	65.710%	0.032	0.007	0.058	0.040
σ		0.640%	0.048	0.043	0.579%	0.010	0.017	0.012	0.030
%RSD		0.791	3.185	2.785	0.881	31.580	232.300	21.470	75.350
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:11:31	73.413%	1.243	0.274	0.215	217.600	220.000	82.079%	83.422%
2	11:11:50	74.666%	1.209	0.274	0.235	220.100	218.900	82.914%	84.771%
3	11:12:09	73.386%	1.343	0.264	0.315	221.600	219.000	83.991%	85.016%
x		73.822%	1.265	0.271	0.255	219.800	219.300	82.995%	84.403%
σ		0.731%	0.070	0.006	0.053	2.019	0.609	0.958%	0.858%
%RSD		0.990	5.528	2.210	20.810	0.919	0.278	1.155	1.017
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	11:11:31	0.132	0.143	10.480	9.594	10.080	66.276%		
2	11:11:50	0.158	0.145	10.610	9.550	10.090	67.100%		
3	11:12:09	0.117	0.147	10.710	9.963	10.180	66.801%		
x		0.136	0.145	10.600	9.703	10.120	66.725%		
σ		0.020	0.002	0.114	0.227	0.058	0.417%		
%RSD		15.010	1.602	1.073	2.340	0.572	0.625		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:17:43	92.671%	1.203	6.080	6.598	0.000	94.690	96.730	96.620
2	11:18:02	88.540%	1.176	6.696	6.419	0.000	92.150	92.690	96.140
3	11:18:21	89.090%	0.896	7.179	6.071	0.000	89.760	89.980	90.820
x		90.100%	109.167%	133.034%	127.252%	0.000	92.201%	93.135%	94.526%
σ		2.243%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.490	15.550	8.281	4.211	0.000	2.674	3.649	3.405
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:17:43	33.460	426.300	0.000	88.950	107.800	90.680	89.783%	4.256
2	11:18:02	31.680	421.500	0.000	89.890	84.140	97.360	87.076%	5.378
3	11:18:21	30.170	418.200	0.000	89.290	97.330	93.160	84.660%	4.239
x		105.900%	84.397%	0.000	89.378%	96.424%	93.732%	87.173%	92.482%
σ		n/a	n/a	0.000	n/a	n/a	n/a	2.563%	n/a
%RSD		5.184	0.965	0.000	0.535	12.290	3.608	2.940	14.120
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:17:43	1.101	2.133	4.904	48.790	49.980	0.474	1.065	1.974
2	11:18:02	1.419	2.076	4.762	47.430	51.410	0.441	0.966	2.111
3	11:18:21	1.278	2.146	4.957	46.240	48.610	0.429	1.065	1.967
x		126.577%	105.898%	97.485%	94.973%	99.999%	89.653%	103.190%	100.871%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		12.570	1.760	2.068	2.684	2.800	5.170	5.560	4.039
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:17:43	1.701	5.453	5.209	0.799	5.150	4.364	0.000	4.615
2	11:18:02	2.088	5.101	5.557	0.923	5.321	3.731	0.000	4.720
3	11:18:21	2.286	5.303	5.718	0.879	4.926	3.936	0.000	4.706
x		101.253%	105.718%	109.894%	86.686%	102.644%	80.209%	0.000	93.608%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		14.690	3.341	4.730	7.277	3.865	8.052	0.000	1.223
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:17:43	82.040%	4.754	4.918	79.934%	0.986	0.998	0.990	1.012
2	11:18:02	82.933%	4.613	4.790	80.327%	0.953	1.000	0.952	1.033
3	11:18:21	81.866%	5.014	4.947	79.451%	1.032	0.976	1.037	0.978
x		82.280%	95.872%	97.704%	79.904%	99.028%	99.089%	99.310%	100.760%
σ		0.572%	n/a	n/a	0.439%	n/a	n/a	n/a	n/a
%RSD		0.696	4.239	1.711	0.549	4.026	1.349	4.281	2.782
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:17:43	84.332%	4.104	1.691	1.703	9.070	9.319	85.818%	87.138%
2	11:18:02	85.327%	4.803	1.733	1.725	9.180	8.886	87.912%	89.097%
3	11:18:21	85.017%	4.166	1.672	1.650	9.244	9.110	89.313%	90.313%
x		84.892%	87.150%	84.928%	84.641%	91.645%	91.051%	87.681%	88.849%
σ		0.509%	n/a	n/a	n/a	n/a	n/a	1.758%	1.602%
%RSD		0.599	8.880	1.845	2.266	0.959	2.381	2.006	1.803
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	11:17:43	0.990	0.955	1.002	0.937	0.978	87.829%		
2	11:18:02	0.935	0.963	1.000	0.954	0.985	88.200%		
3	11:18:21	0.990	0.985	1.064	0.990	1.017	88.037%		
x		97.144%	96.723%	102.175%	96.015%	99.324%	88.022%		
σ		n/a	n/a	n/a	n/a	n/a	0.186%		
%RSD		3.273	1.622	3.570	2.784	2.124	0.211		

MB 180-126750/1-A 12/3/2014 11:20:56 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:21:15	87.836%	-0.013	0.960	0.994	0.000	3.471	0.347	0.809
2	11:21:35	83.118%	-0.041	1.459	1.145	0.000	4.215	1.447	0.653
3	11:21:54	79.046%	-0.010	1.200	1.470	0.000	5.204	0.896	0.801
x		83.333%	-0.021	1.206	1.203	0.000	4.297	0.897	0.754
σ		4.399%	0.017	0.250	0.243	0.000	0.870	0.550	0.087
%RSD		5.279	80.200	20.680	20.190	0.000	20.240	61.310	11.600

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:21:15	1.908	11.670	0.000	-0.540	6.697	6.820	85.718%	0.291
2	11:21:35	1.748	11.420	0.000	0.180	2.793	8.195	82.321%	0.086
3	11:21:54	1.626	11.230	0.000	0.519	2.947	6.533	81.073%	0.205
x		1.761	11.440	0.000	0.053	4.146	7.183	83.037%	0.194
σ		0.141	0.220	0.000	0.541	2.211	0.888	2.404%	0.103
%RSD		8.036	1.923	0.000	1021.000	53.330	12.370	2.895	53.150

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:21:15	1.073	0.429	0.053	2.200	2.877	-0.026	0.014	-0.045
2	11:21:35	0.848	0.423	0.022	1.785	0.827	-0.021	0.015	-0.071
3	11:21:54	1.095	0.297	0.025	0.310	0.889	-0.024	0.016	0.001
x		1.005	0.383	0.033	1.432	1.531	-0.024	0.015	-0.038
σ		0.137	0.074	0.017	0.993	1.166	0.002	0.001	0.036
%RSD		13.590	19.420	51.530	69.350	76.190	10.080	4.712	95.160

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:21:15	0.009	0.619	0.769	-0.881	-0.005	-1.859	0.000	0.032
2	11:21:35	0.063	0.402	0.988	-0.341	-0.652	-1.340	0.000	0.049
3	11:21:54	-0.012	0.572	0.616	-0.102	-0.267	-0.492	0.000	0.035
x		0.020	0.531	0.791	-0.441	-0.308	-1.230	0.000	0.039
σ		0.038	0.114	0.187	0.399	0.325	0.690	0.000	0.009
%RSD		193.900	21.500	23.620	90.500	105.600	56.050	0.000	23.230

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:21:15	84.636%	0.002	0.006	82.357%	-0.032	-0.031	-0.029	-0.037
2	11:21:35	83.631%	-0.026	-0.023	81.655%	-0.027	-0.026	-0.010	-0.014
3	11:21:54	84.578%	-0.018	-0.032	80.625%	-0.032	-0.033	-0.072	-0.046
x		84.282%	-0.014	-0.016	81.545%	-0.030	-0.030	-0.037	-0.032
σ		0.564%	0.014	0.020	0.871%	0.003	0.004	0.032	0.017
%RSD		0.669	102.800	123.200	1.068	9.045	12.650	85.720	51.860

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:21:15	86.602%	-0.145	-0.073	-0.098	0.038	0.023	89.812%	90.571%
2	11:21:35	87.086%	-0.172	-0.068	-0.110	0.000	0.025	92.893%	93.286%
3	11:21:54	87.319%	-0.192	-0.088	-0.107	0.011	0.028	93.743%	94.087%
x		87.003%	-0.170	-0.076	-0.105	0.016	0.025	92.149%	92.648%
σ		0.366%	0.023	0.011	0.006	0.020	0.003	2.069%	1.843%
%RSD		0.420	13.670	13.870	6.090	121.600	10.130	2.245	1.989

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	11:21:15	-0.001	-0.008	-0.007	-0.002	-0.007	85.693%
2	11:21:35	-0.004	-0.008	0.045	-0.022	-0.000	85.398%
3	11:21:54	-0.002	-0.008	-0.016	-0.009	-0.013	87.003%
x		-0.002	-0.008	0.007	-0.011	-0.007	86.031%
σ		0.001	0.000	0.033	0.010	0.006	0.854%
%RSD		54.830	2.355	443.000	95.390	92.210	0.993

LB 180-126471/11-B 12/3/2014 11:24:27 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:24:46	87.235%	-0.041	67.240	68.260	0.000	5591.000	26.200	25.230
2	11:25:05	84.541%	-0.041	63.480	63.590	0.000	5316.000	25.510	24.730
3	11:25:24	79.845%	-0.010	67.040	68.540	0.000	5401.000	23.350	23.080
x		83.874%	-0.031	65.920	66.800	0.000	5436.000	25.020	24.340
σ		3.740%	0.018	2.115	2.779	0.000	140.700	1.486	1.125
%RSD		4.459	57.850	3.208	4.160	0.000	2.589	5.938	4.619
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:24:46	4.182	539.200	0.000	23.140	121.700	121.400	84.302%	-0.059
2	11:25:05	4.483	531.800	0.000	23.440	120.400	119.200	79.245%	0.450
3	11:25:24	3.862	519.900	0.000	20.450	100.800	116.900	78.640%	0.071
x		4.175	530.300	0.000	22.340	114.300	119.100	80.729%	0.154
σ		0.311	9.738	0.000	1.644	11.710	2.257	3.109%	0.265
%RSD		7.438	1.836	0.000	7.358	10.240	1.894	3.851	171.900
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:24:46	0.437	0.550	0.049	1.871	2.156	-0.024	0.116	0.103
2	11:25:05	0.381	0.568	0.049	-0.482	1.580	-0.021	0.068	0.155
3	11:25:24	-0.063	0.609	0.050	0.751	0.954	-0.021	0.078	0.153
x		0.252	0.576	0.050	0.713	1.563	-0.022	0.088	0.137
σ		0.274	0.030	0.001	1.177	0.601	0.002	0.025	0.030
%RSD		108.700	5.264	1.487	165.000	38.440	9.020	28.970	21.690
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:24:46	0.151	0.455	0.939	-0.497	-0.530	-0.954	0.000	0.077
2	11:25:05	0.107	0.605	0.735	-0.609	-0.137	-1.638	0.000	0.083
3	11:25:24	0.008	0.708	0.802	-0.574	-0.290	-1.789	0.000	0.080
x		0.089	0.589	0.825	-0.560	-0.319	-1.460	0.000	0.080
σ		0.073	0.127	0.104	0.057	0.198	0.445	0.000	0.003
%RSD		82.130	21.590	12.610	10.270	62.120	30.480	0.000	3.805
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:24:46	81.540%	-0.044	-0.022	78.786%	-0.040	-0.043	0.030	0.019
2	11:25:05	81.631%	-0.001	-0.035	78.247%	-0.042	-0.035	-0.061	-0.042
3	11:25:24	82.243%	-0.028	-0.033	78.978%	-0.026	-0.038	-0.067	-0.052
x		81.805%	-0.024	-0.030	78.670%	-0.036	-0.039	-0.033	-0.025
σ		0.382%	0.022	0.007	0.379%	0.009	0.004	0.055	0.039
%RSD		0.467	88.680	22.450	0.482	24.710	10.410	167.400	154.100
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:24:46	83.715%	-0.268	-0.103	-0.100	0.568	0.573	86.673%	88.035%
2	11:25:05	84.280%	-0.277	-0.093	-0.102	0.540	0.570	88.007%	89.071%
3	11:25:24	84.479%	-0.260	-0.094	-0.100	0.589	0.511	89.786%	91.417%
x		84.158%	-0.268	-0.097	-0.101	0.566	0.551	88.155%	89.507%
σ		0.397%	0.009	0.005	0.001	0.025	0.035	1.562%	1.733%
%RSD		0.471	3.204	5.618	1.081	4.382	6.365	1.772	1.936
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	11:24:46	-0.007	-0.009	0.001	0.005	0.003	81.888%		
2	11:25:05	-0.004	-0.010	0.003	-0.004	-0.000	82.563%		
3	11:25:24	-0.006	-0.010	-0.005	-0.008	-0.008	82.957%		
x		-0.006	-0.010	-0.001	-0.003	-0.002	82.469%		
σ		0.001	0.001	0.004	0.007	0.005	0.541%		
%RSD		24.620	7.671	855.900	262.000	350.800	0.656		

LCS 180-126750/2-A 12/3/2014 11:27:57 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:16	83.227%	44.010	863.500	851.700	0.000	43770.000	42980.000	42200.000
2	11:28:35	75.560%	44.600	859.800	854.000	0.000	43180.000	41780.000	41310.000
3	11:28:54	73.066%	43.230	869.400	867.800	0.000	41850.000	40960.000	40920.000
x		77.284%	43.950	864.200	857.800	0.000	42930.000	41910.000	41480.000
σ		5.295%	0.685	4.832	8.733	0.000	982.700	1017.000	657.300
%RSD		6.852	1.559	0.559	1.018	0.000	2.289	2.428	1.585

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:16	1717.000	7496.000	0.000	46020.000	49570.000	47610.000	71.608%	959.600
2	11:28:35	1718.000	7251.000	0.000	45710.000	49960.000	48860.000	67.371%	957.800
3	11:28:54	1716.000	7274.000	0.000	46260.000	49900.000	48910.000	65.431%	948.800
x		1717.000	7340.000	0.000	46000.000	49810.000	48460.000	68.137%	955.400
σ		0.797	135.400	0.000	274.000	210.600	734.800	3.159%	5.782
%RSD		0.046	1.845	0.000	0.596	0.423	1.516	4.636	0.605

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:16	481.900	195.400	496.200	998.300	1066.000	491.900	478.400	233.500
2	11:28:35	485.300	196.800	511.700	1004.000	1087.000	499.600	487.500	235.200
3	11:28:54	486.000	198.800	510.000	1003.000	1081.000	492.100	469.800	230.400
x		484.400	197.000	505.900	1002.000	1078.000	494.600	478.600	233.000
σ		2.202	1.688	8.512	3.041	11.180	4.376	8.896	2.394
%RSD		0.455	0.857	1.682	0.304	1.037	0.885	1.859	1.027

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:16	230.200	412.300	410.400	29.760	6.898	4.298	0.000	979.400
2	11:28:35	234.500	416.300	420.800	29.790	6.734	5.074	0.000	993.500
3	11:28:54	230.200	413.100	407.100	30.030	6.874	5.762	0.000	980.800
x		231.600	413.900	412.800	29.860	6.835	5.044	0.000	984.600
σ		2.502	2.152	7.155	0.147	0.088	0.732	0.000	7.781
%RSD		1.080	0.520	1.733	0.491	1.294	14.520	0.000	0.790

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:16	72.685%	1069.000	1106.000	63.132%	50.980	50.220	44.120	37.300
2	11:28:35	72.380%	1069.000	1112.000	62.998%	50.800	50.490	44.640	38.700
3	11:28:54	71.980%	1074.000	1123.000	61.966%	51.290	50.390	45.930	38.440
x		72.348%	1071.000	1114.000	62.699%	51.030	50.370	44.900	38.140
σ		0.354%	2.852	8.680	0.638%	0.248	0.136	0.929	0.747
%RSD		0.489	0.266	0.779	1.018	0.486	0.270	2.070	1.957

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:16	72.446%	1931.000	433.400	430.500	1982.000	1988.000	79.873%	81.708%
2	11:28:35	71.620%	1957.000	445.400	442.800	1986.000	1997.000	81.976%	83.193%
3	11:28:54	71.865%	1943.000	436.300	432.300	1983.000	1997.000	82.004%	83.580%
x		71.977%	1944.000	438.300	435.200	1984.000	1994.000	81.285%	82.827%
σ		0.424%	13.470	6.267	6.640	2.392	5.003	1.222%	0.988%
%RSD		0.589	0.693	1.430	1.526	0.121	0.251	1.504	1.193

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:16	55.870	57.570	22.820	22.980	22.950	62.468%
2	11:28:35	56.470	58.980	23.140	23.480	23.370	62.450%
3	11:28:54	56.820	58.980	23.300	23.660	23.420	62.989%
x		56.390	58.510	23.090	23.370	23.250	62.636%
σ		0.477	0.812	0.248	0.349	0.261	0.306%
%RSD		0.846	1.388	1.076	1.492	1.122	0.488

LCSD 180-126750/3-A 12/3/2014 11:31:28 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:31:47	81.091%	40.670	822.700	805.400	0.000	41220.000	40690.000	41320.000
2	11:32:06	71.392%	43.340	812.700	824.000	0.000	41520.000	39970.000	40270.000
3	11:32:25	66.298%	44.830	901.100	867.500	0.000	42480.000	40850.000	40000.000
x		72.927%	42.950	845.500	832.300	0.000	41740.000	40500.000	40530.000
σ		7.515%	2.106	48.390	31.870	0.000	662.700	470.600	697.400
%RSD		10.305	4.905	5.723	3.829	0.000	1.588	1.162	1.721
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:31:47	1681.000	7291.000	0.000	45280.000	48060.000	47080.000	68.687%	949.500
2	11:32:06	1662.000	7145.000	0.000	45310.000	48440.000	47350.000	65.953%	948.800
3	11:32:25	1643.000	7187.000	0.000	44890.000	48630.000	47160.000	64.230%	929.500
x		1662.000	7208.000	0.000	45160.000	48380.000	47200.000	66.290%	942.600
σ		18.680	75.340	0.000	232.600	291.600	138.700	2.247%	11.360
%RSD		1.124	1.045	0.000	0.515	0.603	0.294	3.390	1.205
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:31:47	478.900	191.500	489.200	980.300	1043.000	477.800	465.200	229.300
2	11:32:06	464.600	191.500	498.000	973.800	1047.000	478.300	459.700	224.300
3	11:32:25	472.800	188.600	497.000	958.400	1039.000	472.900	454.900	225.400
x		472.100	190.500	494.700	970.900	1043.000	476.400	460.000	226.300
σ		7.137	1.685	4.814	11.240	4.171	2.975	5.189	2.612
%RSD		1.512	0.884	0.973	1.158	0.400	0.625	1.128	1.154
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:31:47	227.800	398.500	391.400	28.030	6.326	5.330	0.000	967.200
2	11:32:06	223.900	399.200	388.400	28.280	6.538	4.684	0.000	970.100
3	11:32:25	219.600	392.000	389.900	30.260	6.207	4.708	0.000	971.300
x		223.800	396.600	389.900	28.860	6.357	4.907	0.000	969.500
σ		4.135	3.947	1.498	1.224	0.168	0.366	0.000	2.132
%RSD		1.848	0.995	0.384	4.240	2.634	7.459	0.000	0.220
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:31:47	71.886%	1054.000	1106.000	63.447%	49.010	48.600	43.230	35.280
2	11:32:06	71.745%	1071.000	1106.000	62.325%	49.960	49.710	44.130	37.270
3	11:32:25	70.928%	1059.000	1103.000	61.670%	49.590	49.520	44.750	38.110
x		71.520%	1061.000	1105.000	62.481%	49.520	49.280	44.040	36.880
σ		0.517%	8.925	1.563	0.899%	0.476	0.593	0.761	1.455
%RSD		0.723	0.841	0.141	1.439	0.962	1.204	1.728	3.944
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:31:47	71.928%	1928.000	426.700	429.400	1923.000	1942.000	81.164%	82.953%
2	11:32:06	71.506%	1930.000	431.500	431.800	1938.000	1938.000	81.153%	83.658%
3	11:32:25	71.433%	1934.000	432.400	433.100	1935.000	1947.000	81.950%	84.409%
x		71.622%	1931.000	430.200	431.400	1932.000	1942.000	81.423%	83.673%
σ		0.267%	3.246	3.066	1.861	8.367	4.656	0.457%	0.728%
%RSD		0.373	0.168	0.713	0.431	0.433	0.240	0.561	0.870
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	11:31:47	55.600	57.080	22.210	22.810	22.520	62.668%		
2	11:32:06	55.140	57.300	22.440	22.860	22.690	63.324%		
3	11:32:25	54.220	56.810	22.290	22.800	22.500	64.486%		
x		54.990	57.060	22.310	22.830	22.570	63.493%		
σ		0.706	0.249	0.119	0.034	0.105	0.921%		
%RSD		1.284	0.437	0.534	0.149	0.466	1.450		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:35:17	79.143%	0.677	659.900	675.300	0.000	51140.000	2867.000	2830.000
2	11:35:37	72.395%	1.046	690.400	677.600	0.000	50590.000	2787.000	2753.000
3	11:35:56	68.066%	1.400	713.600	697.500	0.000	50130.000	2765.000	2780.000
x		73.202%	1.041	688.000	683.500	0.000	50620.000	2806.000	2788.000
σ		5.582%	0.362	26.930	12.220	0.000	506.700	53.860	38.920
%RSD		7.626	34.750	3.914	1.788	0.000	1.001	1.919	1.396
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:35:17	13250.000	12750.000	0.000	1724.000	11510.000	11210.000	70.462%	41.020
2	11:35:37	12760.000	12570.000	0.000	1731.000	11840.000	11190.000	68.039%	41.000
3	11:35:56	12850.000	12450.000	0.000	1746.000	12050.000	11290.000	66.007%	37.000
x		12950.000	12590.000	0.000	1734.000	11800.000	11230.000	68.170%	39.670
σ		256.800	150.800	0.000	11.550	269.000	52.220	2.230%	2.318
%RSD		1.983	1.198	0.000	0.666	2.280	0.465	3.272	5.842
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:35:17	15.800	14.660	628.100	9892.000	9807.000	8.491	11.030	17.720
2	11:35:37	17.690	14.620	631.500	9922.000	10040.000	9.073	10.120	17.570
3	11:35:56	17.680	14.390	641.100	9945.000	10010.000	8.715	9.963	17.450
x		17.060	14.560	633.600	9920.000	9953.000	8.760	10.370	17.580
σ		1.086	0.147	6.768	26.340	126.600	0.294	0.578	0.133
%RSD		6.366	1.013	1.068	0.266	1.272	3.352	5.575	0.758
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:35:17	17.010	32.460	32.530	-0.576	-0.654	-3.238	0.000	26.880
2	11:35:37	16.470	33.230	33.000	-0.494	-0.492	-2.736	0.000	26.550
3	11:35:56	17.090	32.990	32.080	0.259	-0.550	-3.201	0.000	26.560
x		16.860	32.890	32.540	-0.271	-0.566	-3.058	0.000	26.660
σ		0.336	0.396	0.458	0.460	0.082	0.280	0.000	0.189
%RSD		1.993	1.202	1.407	170.100	14.450	9.141	0.000	0.708
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:35:17	82.733%	2.763	2.939	66.637%	0.007	0.003	0.118	0.063
2	11:35:37	82.818%	2.365	2.342	66.344%	0.030	0.003	0.054	0.025
3	11:35:56	83.820%	1.705	1.825	66.328%	0.016	-0.010	0.046	0.076
x		83.123%	2.278	2.369	66.437%	0.017	-0.001	0.072	0.055
σ		0.605%	0.534	0.558	0.174%	0.012	0.008	0.040	0.026
%RSD		0.727	23.460	23.540	0.262	67.200	744.800	54.480	47.770
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:35:17	74.282%	4.084	0.123	0.112	377.400	376.600	82.775%	84.759%
2	11:35:37	75.296%	3.548	0.126	0.084	374.900	375.300	86.215%	87.322%
3	11:35:56	75.207%	2.813	0.098	0.071	378.200	378.100	86.794%	88.399%
x		74.928%	3.482	0.116	0.089	376.800	376.700	85.261%	86.827%
σ		0.561%	0.638	0.015	0.021	1.684	1.411	2.173%	1.870%
%RSD		0.749	18.330	13.030	23.670	0.447	0.375	2.548	2.154
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	11:35:17	0.162	0.164	24.670	23.110	23.820	67.733%		
2	11:35:37	0.167	0.148	25.380	23.490	24.250	67.997%		
3	11:35:56	0.146	0.146	25.020	23.400	24.150	68.773%		
x		0.159	0.153	25.030	23.340	24.070	68.168%		
σ		0.011	0.010	0.358	0.203	0.228	0.540%		
%RSD		6.747	6.537	1.430	0.869	0.949	0.793		

CCV 1408349 12/3/2014 11:38:37 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:38:37	88.288%	101.800	109.200	104.200	0.000	46900.000	46840.000	46810.000
2	11:38:57	76.949%	104.100	107.700	107.500	0.000	46950.000	46610.000	47260.000
3	11:39:16	75.921%	99.860	111.900	108.000	0.000	47560.000	46230.000	45630.000
x		80.386%	101.925%	109.613%	106.555%	0.000	94.273%	93.115%	93.134%
σ		6.863%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		8.537	2.068	1.934	1.923	0.000	0.787	0.660	1.811

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:38:37	463.400	4377.000	0.000	47990.000	49010.000	47510.000	77.006%	92.790
2	11:38:57	458.800	4279.000	0.000	47170.000	48450.000	48250.000	71.847%	97.590
3	11:39:16	464.200	4286.000	0.000	47550.000	51100.000	48930.000	68.276%	97.950
x		92.430%	86.278%	0.000	95.147%	99.034%	96.465%	72.376%	96.110%
σ		n/a	n/a	0.000	n/a	n/a	n/a	4.389%	n/a
%RSD		0.632	1.275	0.000	0.863	2.823	1.479	6.064	2.993

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:38:37	93.400	97.000	492.700	24630.000	24980.000	98.990	99.130	100.700
2	11:38:57	97.900	98.920	500.900	24690.000	25180.000	97.420	97.550	97.660
3	11:39:16	95.340	100.500	510.100	25300.000	25700.000	99.350	100.500	100.300
x		95.548%	98.806%	100.250%	99.483%	101.149%	98.591%	99.051%	99.574%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.363	1.770	1.738	1.490	1.458	1.040	1.473	1.678

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:38:37	100.100	104.100	100.700	93.520	100.300	98.260	0.000	94.590
2	11:38:57	98.520	103.100	101.000	94.760	99.070	97.660	0.000	94.990
3	11:39:16	97.170	104.400	103.600	96.360	102.600	99.250	0.000	95.110
x		98.604%	103.868%	101.777%	94.881%	100.636%	98.392%	0.000	94.896%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.495	0.640	1.588	1.500	1.762	0.816	0.000	0.284

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:38:37	74.453%	89.030	89.840	67.973%	99.690	99.660	99.450	99.340
2	11:38:57	73.670%	92.850	96.650	66.448%	99.910	98.550	99.060	97.710
3	11:39:16	72.459%	96.800	100.300	65.891%	99.140	98.250	98.880	97.550
x		73.527%	92.896%	95.584%	66.771%	99.579%	98.819%	99.129%	98.200%
σ		1.004%	n/a	n/a	1.078%	n/a	n/a	n/a	n/a
%RSD		1.366	4.182	5.535	1.614	0.401	0.754	0.293	1.010

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:38:37	74.313%	94.830	90.460	90.610	94.020	94.260	80.027%	81.449%
2	11:38:57	75.605%	93.830	92.770	92.480	93.600	94.090	81.831%	83.122%
3	11:39:16	75.285%	94.510	92.040	92.490	92.720	93.500	81.341%	83.312%
x		75.068%	94.390%	91.755%	91.858%	93.448%	93.950%	81.066%	82.628%
σ		0.673%	n/a	n/a	n/a	n/a	n/a	0.933%	1.025%
%RSD		0.896	0.537	1.286	1.179	0.712	0.421	1.151	1.241

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	11:38:37	101.200	105.500	103.600	103.600	103.200	72.355%
2	11:38:57	102.600	106.900	104.600	106.600	105.500	71.967%
3	11:39:16	103.700	108.400	106.500	108.800	107.300	71.559%
x		102.496%	106.934%	104.894%	106.332%	105.357%	71.961%
σ		n/a	n/a	n/a	n/a	n/a	0.398%
%RSD		1.234	1.379	1.420	2.458	1.934	0.553

CCB4 12/3/2014 11:44:35 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:44:54	96.257%	-0.015	4.859	3.977	0.000	9.838	4.726	5.089
2	11:45:14	93.961%	-0.015	3.582	3.046	0.000	10.860	4.961	4.240
3	11:45:34	92.638%	-0.014	3.837	3.242	0.000	10.830	5.200	4.713
x		94.285%	-0.015	4.093	3.422	0.000	10.510	4.962	4.681
σ		1.831%	0.000	0.676	0.491	0.000	0.583	0.237	0.425
%RSD		1.942	3.237	16.510	14.340	0.000	5.551	4.785	9.086

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:44:54	1.769	0.722	0.000	2.528	-0.119	3.243	91.684%	-0.098
2	11:45:14	2.227	0.743	0.000	1.391	3.990	2.927	90.558%	0.058
3	11:45:34	2.085	1.086	0.000	0.596	6.050	4.460	90.281%	-0.018
x		2.027	0.850	0.000	1.505	3.307	3.544	90.841%	-0.019
σ		0.234	0.204	0.000	0.971	3.141	0.810	0.743%	0.078
%RSD		11.550	23.990	0.000	64.530	94.960	22.840	0.818	405.000

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:44:54	0.264	0.112	0.120	11.560	13.060	-0.009	0.053	-0.096
2	11:45:14	0.202	0.130	0.114	9.284	10.880	-0.011	0.053	-0.072
3	11:45:34	0.175	0.188	0.128	7.302	8.511	-0.009	-0.011	-0.084
x		0.214	0.143	0.121	9.381	10.820	-0.010	0.031	-0.084
σ		0.046	0.040	0.007	2.129	2.276	0.001	0.037	0.012
%RSD		21.430	28.020	6.031	22.700	21.040	8.594	117.500	14.610

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:44:54	-0.033	0.237	0.370	-0.212	0.045	-0.631	0.000	0.033
2	11:45:14	0.011	0.360	0.387	-0.250	-0.409	-0.544	0.000	0.025
3	11:45:34	0.005	0.356	0.493	-0.005	-0.150	-0.217	0.000	0.031
x		-0.006	0.318	0.417	-0.155	-0.171	-0.464	0.000	0.029
σ		0.024	0.070	0.067	0.132	0.228	0.218	0.000	0.004
%RSD		423.100	21.940	16.050	84.870	133.200	47.020	0.000	14.360

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:44:54	86.004%	0.327	0.356	85.040%	-0.031	-0.035	0.017	0.022
2	11:45:14	87.963%	0.370	0.342	86.002%	-0.019	-0.027	0.023	0.011
3	11:45:34	87.632%	0.281	0.348	85.842%	-0.016	-0.021	0.005	-0.009
x		87.200%	0.326	0.348	85.628%	-0.022	-0.027	0.015	0.008
σ		1.048%	0.045	0.007	0.515%	0.008	0.007	0.009	0.016
%RSD		1.202	13.680	2.030	0.602	35.130	24.780	61.920	191.800

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:44:54	87.906%	-0.147	0.111	0.078	0.016	0.053	89.377%	90.642%
2	11:45:14	89.929%	-0.112	0.097	0.124	0.016	0.028	92.096%	93.678%
3	11:45:34	90.944%	-0.173	0.095	0.092	0.036	0.045	91.891%	93.635%
x		89.593%	-0.144	0.101	0.098	0.023	0.042	91.121%	92.651%
σ		1.546%	0.031	0.009	0.024	0.012	0.013	1.514%	1.740%
%RSD		1.726	21.460	8.402	24.070	51.670	30.890	1.662	1.878

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	11:44:54	0.001	0.004	0.155	0.159	0.156	92.492%
2	11:45:14	0.005	0.004	0.166	0.169	0.161	92.865%
3	11:45:34	0.004	0.004	0.161	0.157	0.161	92.773%
x		0.003	0.004	0.161	0.162	0.159	92.710%
σ		0.002	0.000	0.005	0.006	0.003	0.195%
%RSD		66.790	1.499	3.351	3.855	1.900	0.210

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:48:30	92.068%	0.714	583.700	573.400	0.000	60680.000	1465.000	1466.000
2	11:48:49	82.367%	0.768	603.300	595.400	0.000	60540.000	1436.000	1448.000
3	11:49:08	74.929%	0.550	596.000	584.000	0.000	60900.000	1491.000	1453.000
x		83.122%	0.678	594.300	584.300	0.000	60710.000	1464.000	1456.000
σ		8.594%	0.114	9.918	11.000	0.000	181.000	27.510	9.433
%RSD		10.339	16.780	1.669	1.883	0.000	0.298	1.879	0.648

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:48:30	6072.000	10810.000	0.000	883.900	7884.000	7384.000	76.839%	21.560
2	11:48:49	5946.000	10550.000	0.000	918.500	7845.000	7490.000	73.427%	21.080
3	11:49:08	6017.000	10590.000	0.000	915.800	7760.000	7549.000	69.725%	21.880
x		6012.000	10650.000	0.000	906.100	7829.000	7474.000	73.330%	21.500
σ		63.340	143.500	0.000	19.260	63.410	83.520	3.558%	0.402
%RSD		1.054	1.348	0.000	2.126	0.810	1.117	4.852	1.870

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:48:30	5.594	8.644	349.700	5222.000	5177.000	6.640	6.954	8.387
2	11:48:49	11.180	8.216	354.800	5218.000	5175.000	6.688	5.980	8.452
3	11:49:08	9.391	8.470	358.100	5284.000	5253.000	6.500	6.427	8.194
x		8.721	8.443	354.200	5241.000	5202.000	6.609	6.454	8.345
σ		2.851	0.216	4.206	37.290	44.640	0.097	0.487	0.134
%RSD		32.690	2.552	1.187	0.712	0.858	1.471	7.548	1.609

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:48:30	8.098	16.490	17.400	0.910	-0.552	-2.094	0.000	19.140
2	11:48:49	7.850	17.110	16.960	0.330	-0.515	-2.734	0.000	19.030
3	11:49:08	7.537	16.950	16.410	-0.068	-0.308	-2.380	0.000	19.290
x		7.829	16.850	16.920	0.391	-0.458	-2.403	0.000	19.150
σ		0.281	0.321	0.496	0.492	0.132	0.321	0.000	0.131
%RSD		3.592	1.904	2.930	125.900	28.730	13.350	0.000	0.685

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:48:30	82.831%	0.612	0.709	69.516%	0.004	-0.019	0.049	0.070
2	11:48:49	82.806%	0.542	0.659	69.256%	0.015	0.002	0.100	0.116
3	11:49:08	81.682%	0.533	0.605	68.140%	0.005	0.008	-0.025	-0.008
x		82.440%	0.562	0.658	68.971%	0.008	-0.003	0.041	0.059
σ		0.656%	0.043	0.052	0.731%	0.006	0.014	0.063	0.062
%RSD		0.796	7.666	7.896	1.060	77.550	495.700	153.000	105.200

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:48:30	75.492%	1.211	0.348	0.310	162.600	164.500	84.298%	85.328%
2	11:48:49	76.118%	1.094	0.237	0.220	165.000	164.100	85.027%	87.278%
3	11:49:08	75.969%	1.093	0.204	0.218	166.800	164.200	85.321%	87.424%
x		75.860%	1.133	0.263	0.249	164.800	164.300	84.882%	86.677%
σ		0.327%	0.068	0.075	0.053	2.111	0.238	0.527%	1.170%
%RSD		0.431	5.986	28.690	21.120	1.281	0.145	0.621	1.350

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	11:48:30	0.092	0.073	13.060	12.250	12.640	66.692%
2	11:48:49	0.068	0.072	13.680	12.550	13.040	66.883%
3	11:49:08	0.073	0.067	13.370	12.270	12.780	68.614%
x		0.078	0.071	13.370	12.360	12.820	67.396%
σ		0.013	0.003	0.310	0.171	0.199	1.059%
%RSD		16.440	4.714	2.316	1.382	1.556	1.571

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:52:01	82.650%	0.407	657.200	662.900	0.000	51060.000	1150.000	1162.000
2	11:52:21	73.899%	0.922	689.100	673.400	0.000	52310.000	1150.000	1141.000
3	11:52:41	67.052%	0.614	721.400	709.000	0.000	52200.000	1160.000	1173.000
x		74.534%	0.647	689.200	681.800	0.000	51860.000	1154.000	1159.000
σ		7.818%	0.259	32.130	24.160	0.000	692.300	5.847	16.290
%RSD		10.489	40.050	4.662	3.544	0.000	1.335	0.507	1.406
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:52:01	5821.000	8732.000	0.000	833.600	5278.000	4980.000	74.832%	25.680
2	11:52:21	5661.000	8619.000	0.000	830.600	5334.000	4997.000	71.039%	23.410
3	11:52:41	5789.000	8600.000	0.000	828.700	5174.000	5035.000	69.514%	20.480
x		5757.000	8650.000	0.000	831.000	5262.000	5004.000	71.795%	23.190
σ		84.740	71.490	0.000	2.439	81.180	28.140	2.738%	2.606
%RSD		1.472	0.827	0.000	0.293	1.543	0.562	3.814	11.240
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:52:01	9.019	8.310	201.100	5710.000	5694.000	3.985	5.043	8.982
2	11:52:21	9.487	8.035	203.000	5655.000	5672.000	4.223	4.923	8.675
3	11:52:41	7.103	7.910	202.100	5664.000	5619.000	4.023	4.631	8.718
x		8.536	8.085	202.100	5676.000	5662.000	4.077	4.866	8.792
σ		1.263	0.204	0.921	29.260	38.140	0.128	0.212	0.167
%RSD		14.800	2.529	0.456	0.515	0.674	3.147	4.360	1.895
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:52:01	8.734	16.530	16.570	0.545	-0.376	-2.640	0.000	9.908
2	11:52:21	9.001	16.210	16.510	0.844	-0.275	-2.204	0.000	10.040
3	11:52:41	8.533	15.960	16.590	0.646	-0.251	-2.132	0.000	9.848
x		8.756	16.230	16.560	0.678	-0.301	-2.325	0.000	9.931
σ		0.235	0.286	0.040	0.152	0.067	0.275	0.000	0.096
%RSD		2.681	1.760	0.243	22.410	22.120	11.840	0.000	0.970
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:52:01	80.906%	0.314	0.299	69.360%	-0.008	-0.016	-0.015	0.008
2	11:52:21	81.277%	0.205	0.305	69.231%	0.001	-0.004	-0.090	-0.072
3	11:52:41	81.265%	0.274	0.237	68.640%	-0.010	-0.004	-0.060	-0.071
x		81.149%	0.264	0.280	69.077%	-0.006	-0.008	-0.055	-0.045
σ		0.211%	0.055	0.038	0.384%	0.006	0.007	0.038	0.046
%RSD		0.260	20.910	13.480	0.555	106.500	82.380	68.820	102.500
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:52:01	75.423%	0.699	0.047	0.069	141.500	143.200	85.341%	86.965%
2	11:52:21	77.052%	0.775	0.065	0.074	143.900	142.600	86.687%	88.301%
3	11:52:41	77.733%	0.830	0.088	0.104	141.300	142.300	88.078%	89.224%
x		76.736%	0.768	0.067	0.082	142.200	142.700	86.702%	88.163%
σ		1.187%	0.066	0.021	0.019	1.411	0.461	1.369%	1.136%
%RSD		1.547	8.585	30.650	22.960	0.992	0.323	1.579	1.289
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	11:52:01	0.073	0.061	12.130	11.200	11.490	67.326%		
2	11:52:21	0.062	0.069	12.140	11.100	11.600	68.680%		
3	11:52:41	0.057	0.067	12.090	11.510	11.720	69.870%		
x		0.064	0.066	12.120	11.270	11.600	68.625%		
σ		0.008	0.004	0.028	0.213	0.117	1.273%		
%RSD		12.850	6.332	0.232	1.891	1.011	1.855		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:55:34	78.197%	0.558	723.300	717.100	0.000	65860.000	964.700	944.700
2	11:55:53	72.238%	0.536	714.700	715.400	0.000	63850.000	929.700	906.300
3	11:56:12	68.781%	0.173	724.500	711.600	0.000	62480.000	891.500	897.000
x		73.072%	0.422	720.800	714.700	0.000	64060.000	928.600	916.000
σ		4.763%	0.216	5.356	2.843	0.000	1702.000	36.620	25.300
%RSD		6.519	51.180	0.743	0.398	0.000	2.657	3.943	2.762
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:55:34	5065.000	10910.000	0.000	887.500	4093.000	3971.000	71.458%	43.410
2	11:55:53	4949.000	10650.000	0.000	878.700	4046.000	3866.000	70.027%	48.280
3	11:56:12	4870.000	10450.000	0.000	875.400	4008.000	3901.000	66.731%	46.530
x		4961.000	10670.000	0.000	880.500	4049.000	3912.000	69.405%	46.070
σ		98.140	232.600	0.000	6.284	43.020	53.260	2.424%	2.467
%RSD		1.978	2.180	0.000	0.714	1.063	1.361	3.493	5.354
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:55:34	6.480	8.687	65.540	4423.000	4343.000	2.054	3.500	5.438
2	11:55:53	6.345	8.579	64.820	4343.000	4320.000	2.058	3.634	5.221
3	11:56:12	6.239	8.970	65.810	4388.000	4361.000	2.006	3.705	5.552
x		6.355	8.745	65.390	4385.000	4341.000	2.039	3.613	5.404
σ		0.121	0.202	0.509	40.230	20.320	0.029	0.104	0.168
%RSD		1.904	2.310	0.778	0.917	0.468	1.426	2.887	3.113
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:55:34	4.860	13.340	13.340	2.163	-0.193	-0.654	0.000	5.179
2	11:55:53	4.859	13.050	12.820	-0.154	-0.404	-2.046	0.000	5.017
3	11:56:12	4.772	13.310	13.560	1.018	-0.281	-2.201	0.000	5.298
x		4.831	13.230	13.240	1.009	-0.292	-1.634	0.000	5.164
σ		0.050	0.157	0.380	1.158	0.106	0.852	0.000	0.141
%RSD		1.043	1.188	2.867	114.800	36.090	52.170	0.000	2.735
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:55:34	77.213%	0.482	0.472	69.645%	-0.019	-0.019	-0.034	-0.030
2	11:55:53	78.248%	0.522	0.533	68.947%	-0.011	-0.015	-0.011	-0.029
3	11:56:12	76.511%	0.504	0.519	67.279%	-0.012	-0.011	-0.043	-0.046
x		77.324%	0.503	0.508	68.624%	-0.014	-0.015	-0.029	-0.035
σ		0.874%	0.020	0.032	1.216%	0.004	0.004	0.017	0.010
%RSD		1.130	3.990	6.310	1.772	29.420	28.240	56.710	27.340
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:55:34	76.358%	0.711	0.094	0.063	67.130	67.550	86.317%	87.650%
2	11:55:53	76.799%	0.694	0.082	0.105	67.230	67.750	87.264%	89.151%
3	11:56:12	76.645%	0.698	0.091	0.069	66.820	67.720	86.797%	89.133%
x		76.601%	0.701	0.089	0.079	67.060	67.670	86.793%	88.645%
σ		0.224%	0.009	0.006	0.023	0.213	0.112	0.474%	0.861%
%RSD		0.292	1.245	7.127	28.850	0.318	0.165	0.546	0.972
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	11:55:34	0.086	0.086	7.029	6.403	6.678	68.297%		
2	11:55:53	0.065	0.079	6.893	6.325	6.611	69.828%		
3	11:56:12	0.079	0.069	6.739	6.324	6.609	70.488%		
x		0.076	0.078	6.887	6.351	6.633	69.538%		
σ		0.011	0.009	0.145	0.045	0.039	1.124%		
%RSD		13.850	11.100	2.104	0.712	0.590	1.617		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:59:06	73.708%	0.392	840.200	814.500	0.000	61410.000	1172.000	1162.000
2	11:59:26	71.383%	0.543	819.200	813.000	0.000	60320.000	1153.000	1153.000
3	11:59:45	71.047%	0.443	802.900	804.900	0.000	59220.000	1111.000	1107.000
x		72.046%	0.460	820.800	810.800	0.000	60320.000	1145.000	1140.000
σ		1.449%	0.077	18.660	5.210	0.000	1095.000	31.460	29.550
%RSD		2.011	16.740	2.273	0.643	0.000	1.816	2.747	2.591

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:59:06	6876.000	11880.000	0.000	1371.000	4405.000	4282.000	70.447%	54.170
2	11:59:26	6720.000	11380.000	0.000	1342.000	4375.000	4302.000	68.703%	39.270
3	11:59:45	6519.000	11150.000	0.000	1358.000	4325.000	4255.000	66.987%	40.750
x		6705.000	11470.000	0.000	1357.000	4368.000	4280.000	68.712%	44.730
σ		179.000	374.100	0.000	14.700	40.690	23.330	1.730%	8.212
%RSD		2.669	3.262	0.000	1.083	0.931	0.545	2.517	18.360

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:59:06	10.240	11.530	176.300	5398.000	5349.000	2.924	5.676	8.745
2	11:59:26	12.660	11.160	174.800	5345.000	5343.000	2.878	5.968	8.529
3	11:59:45	9.811	11.170	175.900	5361.000	5365.000	2.899	5.731	8.765
x		10.900	11.290	175.700	5368.000	5352.000	2.900	5.792	8.680
σ		1.534	0.212	0.804	27.220	11.700	0.023	0.156	0.131
%RSD		14.070	1.878	0.458	0.507	0.219	0.799	2.684	1.509

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:59:06	8.000	16.560	17.400	1.192	-0.251	-1.606	0.000	9.524
2	11:59:26	8.200	17.170	18.230	1.056	-0.408	-2.561	0.000	10.080
3	11:59:45	7.715	17.040	17.710	1.549	-0.430	-1.058	0.000	9.735
x		7.972	16.930	17.780	1.266	-0.363	-1.742	0.000	9.779
σ		0.244	0.321	0.422	0.254	0.098	0.760	0.000	0.279
%RSD		3.056	1.898	2.375	20.100	26.980	43.660	0.000	2.854

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:59:06	77.754%	0.341	0.421	68.157%	0.006	-0.035	0.018	-0.012
2	11:59:26	77.676%	0.384	0.345	67.809%	-0.005	-0.003	0.007	0.012
3	11:59:45	76.738%	0.296	0.310	67.038%	0.007	-0.010	-0.059	-0.026
x		77.389%	0.340	0.359	67.668%	0.003	-0.016	-0.011	-0.009
σ		0.566%	0.044	0.057	0.573%	0.007	0.017	0.042	0.020
%RSD		0.731	13.020	15.850	0.846	244.900	102.600	369.000	227.700

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:59:06	75.570%	0.583	0.101	0.063	116.500	116.300	84.661%	86.542%
2	11:59:26	76.194%	0.605	0.041	0.069	117.400	117.100	86.724%	88.391%
3	11:59:45	76.050%	0.745	0.072	0.057	116.900	116.300	86.506%	89.125%
x		75.938%	0.644	0.071	0.063	116.900	116.600	85.964%	88.019%
σ		0.327%	0.088	0.030	0.006	0.476	0.479	1.134%	1.331%
%RSD		0.430	13.610	42.190	8.814	0.407	0.411	1.319	1.512

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	11:59:06	0.087	0.088	7.474	6.965	7.149	69.395%
2	11:59:26	0.090	0.085	7.590	7.003	7.248	69.269%
3	11:59:45	0.086	0.086	7.666	7.015	7.317	69.324%
x		0.087	0.086	7.577	6.994	7.238	69.329%
σ		0.002	0.001	0.096	0.026	0.084	0.063%
%RSD		2.457	1.682	1.273	0.374	1.166	0.091

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:02:40	75.044%	0.909	607.700	591.200	0.000	66870.000	2318.000	2267.000
2	12:02:59	66.993%	0.835	609.900	610.300	0.000	66510.000	2259.000	2223.000
3	12:03:21	62.785%	1.242	624.600	611.400	0.000	66770.000	2289.000	2287.000
x		68.274%	0.995	614.000	604.300	0.000	66720.000	2289.000	2259.000
σ		6.229%	0.217	9.177	11.340	0.000	186.400	29.600	32.570
%RSD		9.124	21.760	1.495	1.876	0.000	0.279	1.293	1.442
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:02:40	9255.000	13980.000	0.000	1378.000	13810.000	12920.000	70.313%	30.990
2	12:02:59	9131.000	13490.000	0.000	1347.000	13690.000	13040.000	67.238%	28.390
3	12:03:21	9309.000	13620.000	0.000	1368.000	13430.000	13150.000	64.671%	29.420
x		9232.000	13700.000	0.000	1364.000	13640.000	13030.000	67.407%	29.600
σ		91.210	250.900	0.000	15.580	193.600	114.300	2.825%	1.306
%RSD		0.988	1.832	0.000	1.142	1.419	0.877	4.191	4.413
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:02:40	14.550	11.330	333.500	8233.000	8198.000	6.507	8.347	11.680
2	12:02:59	11.590	11.020	337.200	8185.000	8263.000	6.539	8.037	12.130
3	12:03:21	12.990	11.130	338.500	8265.000	8382.000	6.326	7.926	11.850
x		13.040	11.160	336.400	8228.000	8281.000	6.457	8.103	11.890
σ		1.482	0.158	2.566	40.020	92.990	0.115	0.218	0.228
%RSD		11.370	1.412	0.763	0.486	1.123	1.786	2.693	1.919
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:02:40	10.780	25.860	25.950	1.240	-0.420	-3.930	0.000	36.810
2	12:02:59	12.030	25.900	25.280	1.374	-0.507	-2.905	0.000	36.960
3	12:03:21	11.360	24.340	24.610	0.145	-0.645	-3.500	0.000	37.310
x		11.390	25.370	25.280	0.920	-0.524	-3.445	0.000	37.030
σ		0.621	0.886	0.670	0.674	0.114	0.515	0.000	0.258
%RSD		5.454	3.494	2.650	73.350	21.660	14.940	0.000	0.698
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:02:40	83.475%	0.510	0.460	66.794%	0.022	-0.002	0.087	0.053
2	12:02:59	82.155%	0.377	0.613	65.785%	0.012	0.001	0.065	0.048
3	12:03:21	81.745%	0.485	0.658	64.691%	0.009	-0.004	0.029	0.058
x		82.458%	0.457	0.577	65.757%	0.014	-0.002	0.060	0.053
σ		0.904%	0.071	0.104	1.052%	0.007	0.002	0.029	0.005
%RSD		1.096	15.450	18.020	1.600	45.040	156.100	48.360	8.889
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:02:40	75.063%	0.473	0.084	0.056	229.900	233.300	84.964%	86.145%
2	12:02:59	74.909%	0.588	0.056	0.045	236.900	233.400	85.098%	87.564%
3	12:03:21	75.479%	0.619	0.105	0.037	233.500	233.400	86.959%	88.370%
x		75.150%	0.560	0.082	0.046	233.500	233.300	85.674%	87.359%
σ		0.295%	0.077	0.024	0.010	3.463	0.055	1.115%	1.126%
%RSD		0.393	13.730	29.930	20.770	1.484	0.023	1.302	1.289
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	12:02:40	0.163	0.166	20.060	18.580	19.350	67.076%		
2	12:02:59	0.174	0.162	20.480	18.880	19.540	67.897%		
3	12:03:21	0.183	0.173	20.520	19.080	19.770	67.835%		
x		0.174	0.167	20.350	18.850	19.550	67.603%		
σ		0.010	0.006	0.255	0.253	0.213	0.457%		
%RSD		5.712	3.525	1.253	1.343	1.090	0.676		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:06:17	74.308%	0.190	822.700	821.700	0.000	58760.000	711.000	686.600
2	12:06:36	68.972%	0.315	802.300	821.600	0.000	55540.000	693.800	675.800
3	12:06:55	66.155%	0.329	830.100	815.700	0.000	54830.000	663.400	664.600
x		69.812%	0.278	818.400	819.700	0.000	56380.000	689.400	675.700
σ		4.141%	0.076	14.390	3.446	0.000	2093.000	24.110	11.000
%RSD		5.931	27.410	1.759	0.420	0.000	3.713	3.497	1.628

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:06:17	4109.000	8475.000	0.000	737.400	2818.000	2662.000	71.439%	28.180
2	12:06:36	4072.000	8308.000	0.000	722.900	2715.000	2649.000	67.004%	27.870
3	12:06:55	3879.000	8013.000	0.000	725.100	2819.000	2641.000	66.653%	23.290
x		4020.000	8265.000	0.000	728.500	2784.000	2651.000	68.365%	26.450
σ		123.200	234.000	0.000	7.808	60.020	10.330	2.668%	2.736
%RSD		3.064	2.831	0.000	1.072	2.156	0.390	3.902	10.350

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:06:17	6.290	7.732	125.200	3261.000	3203.000	1.894	3.728	5.041
2	12:06:36	8.958	7.806	126.400	3286.000	3313.000	1.946	3.561	5.065
3	12:06:55	10.920	7.622	125.700	3288.000	3325.000	1.804	3.971	5.208
x		8.724	7.720	125.800	3279.000	3280.000	1.881	3.753	5.105
σ		2.325	0.093	0.611	14.930	67.510	0.072	0.206	0.091
%RSD		26.660	1.199	0.486	0.456	2.058	3.819	5.494	1.775

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:06:17	4.495	11.010	10.780	0.450	-0.546	-1.833	0.000	3.762
2	12:06:36	4.918	11.180	11.880	0.845	-0.362	-1.584	0.000	3.902
3	12:06:55	4.382	10.570	11.180	0.250	-0.321	-1.749	0.000	3.827
x		4.598	10.920	11.280	0.515	-0.410	-1.722	0.000	3.830
σ		0.282	0.314	0.553	0.303	0.120	0.127	0.000	0.070
%RSD		6.136	2.876	4.903	58.810	29.230	7.362	0.000	1.823

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:06:17	78.934%	0.263	0.250	69.950%	0.000	-0.022	0.028	-0.011
2	12:06:36	77.165%	0.304	0.265	68.663%	-0.010	-0.027	-0.061	-0.048
3	12:06:55	76.588%	0.425	0.373	68.014%	-0.003	-0.001	-0.098	-0.058
x		77.562%	0.331	0.296	68.876%	-0.004	-0.017	-0.044	-0.039
σ		1.222%	0.084	0.067	0.986%	0.005	0.014	0.065	0.025
%RSD		1.576	25.480	22.650	1.431	127.800	80.750	147.400	63.140

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:06:17	77.871%	0.260	0.008	0.002	66.190	65.950	87.906%	89.367%
2	12:06:36	77.877%	0.270	0.024	0.017	65.220	65.730	87.765%	89.782%
3	12:06:55	77.359%	0.392	0.023	0.022	65.940	66.620	88.833%	91.164%
x		77.703%	0.307	0.018	0.014	65.780	66.100	88.168%	90.105%
σ		0.297%	0.073	0.009	0.010	0.502	0.464	0.580%	0.941%
%RSD		0.383	23.820	50.560	74.030	0.763	0.702	0.658	1.044

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	12:06:17	0.049	0.044	4.585	4.188	4.372	70.986%
2	12:06:36	0.050	0.052	4.665	4.326	4.419	71.114%
3	12:06:55	0.058	0.054	4.690	4.261	4.519	71.456%
x		0.052	0.050	4.647	4.259	4.436	71.185%
σ		0.005	0.005	0.055	0.069	0.075	0.243%
%RSD		9.821	9.904	1.173	1.627	1.687	0.342

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:50	79.774%	0.919	292.200	299.200	0.000	52850.000	2430.000	2418.000
2	12:10:09	70.866%	1.276	300.200	296.500	0.000	51820.000	2400.000	2392.000
3	12:10:28	67.792%	0.901	306.800	303.100	0.000	51330.000	2426.000	2430.000
x		72.811%	1.032	299.700	299.600	0.000	52000.000	2418.000	2413.000
σ		6.223%	0.211	7.336	3.345	0.000	775.900	16.230	19.690
%RSD		8.547	20.500	2.447	1.117	0.000	1.492	0.671	0.816

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:50	5369.000	6891.000	0.000	958.300	26850.000	25910.000	70.894%	14.510
2	12:10:09	5206.000	6786.000	0.000	941.600	26820.000	25890.000	67.237%	12.230
3	12:10:28	5303.000	6634.000	0.000	947.000	27340.000	25940.000	64.177%	11.910
x		5292.000	6770.000	0.000	948.900	27000.000	25910.000	67.436%	12.880
σ		81.960	129.400	0.000	8.511	291.500	24.770	3.363%	1.418
%RSD		1.549	1.911	0.000	0.897	1.080	0.096	4.987	11.010

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:50	10.450	6.722	729.000	4216.000	4214.000	8.632	8.847	10.400
2	12:10:09	10.110	6.350	731.700	4223.000	4274.000	8.464	9.511	9.996
3	12:10:28	8.742	6.550	752.000	4333.000	4351.000	8.637	9.142	10.580
x		9.766	6.541	737.600	4257.000	4280.000	8.578	9.167	10.330
σ		0.903	0.186	12.560	65.380	68.670	0.098	0.333	0.300
%RSD		9.249	2.850	1.703	1.536	1.605	1.146	3.630	2.909

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:50	10.010	19.410	18.700	1.066	-0.863	-2.677	0.000	67.990
2	12:10:09	9.462	18.680	18.640	1.456	-0.640	-3.126	0.000	68.080
3	12:10:28	10.090	19.690	19.470	1.913	-0.355	-2.445	0.000	68.940
x		9.855	19.260	18.940	1.478	-0.620	-2.749	0.000	68.340
σ		0.342	0.521	0.465	0.424	0.255	0.346	0.000	0.527
%RSD		3.473	2.704	2.454	28.680	41.100	12.590	0.000	0.772

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:50	85.667%	0.581	0.716	67.038%	-0.017	-0.022	0.020	0.168
2	12:10:09	85.131%	0.543	0.683	67.041%	-0.006	-0.009	0.202	0.138
3	12:10:28	84.691%	0.697	0.673	66.389%	0.017	0.000	0.176	0.144
x		85.163%	0.607	0.691	66.823%	-0.002	-0.010	0.133	0.150
σ		0.489%	0.080	0.022	0.375%	0.017	0.011	0.098	0.016
%RSD		0.574	13.220	3.229	0.561	839.000	108.300	74.000	10.460

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:50	75.069%	0.301	0.056	0.033	287.200	283.700	85.492%	86.443%
2	12:10:09	76.195%	0.446	0.021	0.051	288.800	288.000	87.010%	88.274%
3	12:10:28	75.792%	0.364	0.005	0.050	284.300	286.200	87.260%	88.927%
x		75.686%	0.370	0.027	0.045	286.800	285.900	86.587%	87.881%
σ		0.570%	0.072	0.026	0.010	2.309	2.171	0.957%	1.288%
%RSD		0.754	19.530	95.100	23.110	0.805	0.759	1.105	1.465

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:50	0.049	0.050	19.710	18.130	18.820	66.991%
2	12:10:09	0.049	0.054	19.700	18.150	18.960	68.471%
3	12:10:28	0.040	0.046	19.800	18.080	18.980	69.082%
x		0.046	0.050	19.740	18.120	18.920	68.181%
σ		0.005	0.004	0.057	0.034	0.089	1.075%
%RSD		10.930	7.877	0.287	0.189	0.471	1.577

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:20	76.301%	0.281	735.300	717.400	0.000	56010.000	845.500	848.700
2	12:13:39	69.524%	0.241	750.200	729.200	0.000	54400.000	837.100	833.100
3	12:13:59	66.514%	0.474	732.600	727.700	0.000	54550.000	818.100	798.000
x		70.780%	0.332	739.400	724.800	0.000	54990.000	833.600	826.600
σ		5.013%	0.125	9.479	6.430	0.000	887.000	14.030	25.950
%RSD		7.082	37.510	1.282	0.887	0.000	1.613	1.683	3.139

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:20	4441.000	7769.000	0.000	720.600	3670.000	3383.000	72.427%	22.820
2	12:13:39	4351.000	7545.000	0.000	716.200	3355.000	3358.000	68.713%	21.260
3	12:13:59	4212.000	7466.000	0.000	714.500	3525.000	3307.000	66.852%	22.430
x		4335.000	7594.000	0.000	717.100	3517.000	3349.000	69.331%	22.170
σ		115.200	157.100	0.000	3.118	157.900	38.560	2.839%	0.809
%RSD		2.659	2.069	0.000	0.435	4.489	1.151	4.094	3.648

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:20	8.647	7.996	237.900	3560.000	3523.000	2.823	3.822	6.217
2	12:13:39	7.938	8.057	238.500	3527.000	3546.000	2.845	3.987	6.070
3	12:13:59	8.853	7.920	241.100	3554.000	3525.000	2.786	4.143	6.144
x		8.479	7.991	239.200	3547.000	3531.000	2.818	3.984	6.144
σ		0.480	0.069	1.718	17.530	12.380	0.030	0.160	0.073
%RSD		5.661	0.859	0.718	0.494	0.350	1.061	4.023	1.193

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:20	5.257	11.990	12.270	-0.590	-0.169	-2.664	0.000	5.657
2	12:13:39	5.749	11.710	12.070	-0.562	-0.436	-2.387	0.000	5.690
3	12:13:59	5.311	12.200	12.240	0.307	-0.312	-1.801	0.000	5.841
x		5.439	11.960	12.190	-0.282	-0.305	-2.284	0.000	5.729
σ		0.270	0.250	0.109	0.510	0.134	0.441	0.000	0.098
%RSD		4.960	2.085	0.892	181.000	43.710	19.290	0.000	1.711

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:20	80.885%	0.176	0.157	70.231%	-0.007	-0.023	-0.030	-0.004
2	12:13:39	79.889%	0.162	0.188	69.427%	-0.006	-0.008	-0.021	-0.004
3	12:13:59	79.974%	0.166	0.137	69.434%	-0.007	-0.003	-0.051	-0.002
x		80.249%	0.168	0.161	69.697%	-0.007	-0.011	-0.034	-0.004
σ		0.552%	0.008	0.026	0.462%	0.001	0.010	0.016	0.001
%RSD		0.688	4.472	15.910	0.663	12.970	92.660	45.500	31.030

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:20	78.384%	0.341	0.005	-0.000	94.620	95.010	87.456%	88.754%
2	12:13:39	78.925%	0.379	0.012	-0.011	96.400	95.090	89.343%	90.496%
3	12:13:59	79.074%	0.429	-0.011	-0.006	97.190	96.010	89.622%	91.584%
x		78.794%	0.383	0.002	-0.006	96.070	95.370	88.807%	90.278%
σ		0.363%	0.044	0.012	0.005	1.316	0.559	1.178%	1.428%
%RSD		0.461	11.610	548.100	95.040	1.370	0.587	1.327	1.581

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:20	0.042	0.050	6.425	6.192	6.323	70.021%
2	12:13:39	0.045	0.054	6.752	6.228	6.473	70.850%
3	12:13:59	0.054	0.049	6.844	6.348	6.514	71.058%
x		0.047	0.051	6.674	6.256	6.437	70.643%
σ		0.006	0.003	0.220	0.082	0.100	0.549%
%RSD		13.010	5.297	3.300	1.303	1.559	0.777

180-39247-A-10-D 12/3/2014 12:16:31 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:16:50	74.650%	0.255	443.800	444.800	0.000	56250.000	1279.000	1269.000
2	12:17:10	71.010%	0.270	422.000	436.100	0.000	55090.000	1245.000	1243.000
3	12:17:29	63.040%	0.153	447.400	453.900	0.000	55450.000	1271.000	1255.000
x		69.567%	0.226	437.700	444.900	0.000	55600.000	1265.000	1256.000
σ		5.938%	0.064	13.750	8.904	0.000	597.300	17.600	12.850
%RSD		8.536	28.260	3.141	2.001	0.000	1.074	1.391	1.023

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:16:50	2963.000	10000.000	0.000	1486.000	14770.000	14340.000	70.508%	43.470
2	12:17:10	2922.000	9748.000	0.000	1476.000	15190.000	14410.000	67.493%	35.420
3	12:17:29	2867.000	9803.000	0.000	1493.000	15370.000	14460.000	64.038%	38.320
x		2918.000	9851.000	0.000	1485.000	15110.000	14400.000	67.346%	39.070
σ		48.230	134.900	0.000	8.648	309.300	62.970	3.238%	4.080
%RSD		1.653	1.369	0.000	0.582	2.047	0.437	4.807	10.440

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:16:50	3.312	6.763	108.200	2894.000	2912.000	1.445	3.445	3.665
2	12:17:10	6.494	6.736	110.200	2928.000	2932.000	1.439	3.064	3.430
3	12:17:29	3.212	6.793	111.100	2922.000	2940.000	1.505	3.262	3.376
x		4.339	6.764	109.800	2914.000	2928.000	1.463	3.257	3.490
σ		1.867	0.028	1.463	18.260	14.150	0.036	0.191	0.154
%RSD		43.020	0.420	1.332	0.626	0.483	2.485	5.849	4.410

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:16:50	3.062	10.060	10.110	1.213	-0.349	-1.041	0.000	24.440
2	12:17:10	2.978	10.000	10.330	0.569	-0.570	-1.444	0.000	24.220
3	12:17:29	2.942	10.250	10.380	2.276	-0.173	-1.588	0.000	24.120
x		2.994	10.110	10.280	1.353	-0.364	-1.358	0.000	24.260
σ		0.061	0.133	0.142	0.862	0.199	0.284	0.000	0.164
%RSD		2.053	1.312	1.381	63.710	54.620	20.900	0.000	0.678

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:16:50	76.137%	1.581	1.817	68.271%	-0.005	-0.026	-0.009	-0.011
2	12:17:10	76.136%	1.562	1.863	67.413%	-0.014	-0.017	-0.135	-0.076
3	12:17:29	75.388%	1.550	1.684	66.341%	-0.004	-0.023	-0.098	-0.068
x		75.887%	1.565	1.788	67.342%	-0.008	-0.022	-0.081	-0.052
σ		0.432%	0.015	0.093	0.967%	0.005	0.005	0.065	0.035
%RSD		0.569	0.987	5.207	1.436	67.880	21.190	80.060	68.800

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:16:50	76.622%	0.261	0.050	0.024	41.250	40.990	84.853%	86.627%
2	12:17:10	76.432%	0.288	-0.002	-0.018	40.670	40.840	86.509%	88.807%
3	12:17:29	76.131%	0.327	0.039	0.042	41.070	40.560	87.157%	88.443%
x		76.395%	0.292	0.029	0.016	41.000	40.800	86.173%	87.959%
σ		0.248%	0.033	0.027	0.031	0.295	0.221	1.189%	1.168%
%RSD		0.324	11.250	94.000	192.300	0.721	0.542	1.379	1.328

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	12:16:50	0.053	0.037	3.118	2.989	3.042	70.343%
2	12:17:10	0.038	0.049	3.255	3.062	3.127	70.261%
3	12:17:29	0.051	0.054	3.325	3.037	3.153	70.183%
x		0.048	0.047	3.233	3.029	3.108	70.262%
σ		0.008	0.008	0.106	0.037	0.058	0.080%
%RSD		17.120	18.180	3.267	1.227	1.866	0.114

180-39247-A-10-D SD@5 12/3/2014 12:20:02 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:21	76.961%	-0.009	108.700	103.700	0.000	11000.000	257.700	263.800
2	12:20:41	71.602%	0.027	113.000	110.300	0.000	11280.000	261.800	268.700
3	12:21:00	70.195%	0.029	99.720	101.900	0.000	10720.000	258.100	263.800
x		72.920%	0.016	107.100	105.300	0.000	11000.000	259.200	265.400
σ		3.570%	0.021	6.770	4.442	0.000	284.300	2.283	2.822
%RSD		4.896	136.600	6.319	4.218	0.000	2.584	0.881	1.063
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:21	604.600	2234.000	0.000	286.200	2945.000	2744.000	77.081%	6.747
2	12:20:41	616.600	2230.000	0.000	289.200	2837.000	2790.000	73.730%	6.454
3	12:21:00	628.600	2224.000	0.000	293.800	2948.000	2792.000	70.507%	4.937
x		616.600	2229.000	0.000	289.800	2910.000	2776.000	73.772%	6.046
σ		12.020	5.230	0.000	3.837	62.990	26.980	3.287%	0.971
%RSD		1.950	0.235	0.000	1.324	2.165	0.972	4.456	16.070
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:21	2.272	1.444	21.380	579.300	587.600	0.261	0.644	0.799
2	12:20:41	1.714	1.495	22.150	592.000	596.600	0.303	0.632	0.767
3	12:21:00	2.220	1.496	22.530	582.800	603.500	0.303	0.632	0.731
x		2.069	1.478	22.020	584.700	595.900	0.289	0.636	0.766
σ		0.308	0.029	0.586	6.581	7.960	0.024	0.007	0.034
%RSD		14.900	1.993	2.659	1.126	1.336	8.419	1.084	4.489
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:21	0.776	2.877	3.078	0.065	-0.360	-1.240	0.000	4.826
2	12:20:41	0.634	2.869	3.265	0.256	-0.259	-1.218	0.000	4.866
3	12:21:00	0.816	2.951	3.176	0.003	-0.428	-1.749	0.000	4.866
x		0.742	2.899	3.173	0.108	-0.349	-1.402	0.000	4.852
σ		0.096	0.045	0.093	0.132	0.085	0.300	0.000	0.023
%RSD		12.890	1.552	2.945	122.600	24.420	21.430	0.000	0.477
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:21	79.081%	0.236	0.281	75.943%	-0.037	-0.034	-0.029	-0.038
2	12:20:41	78.313%	0.204	0.330	75.213%	-0.040	-0.034	0.030	0.017
3	12:21:00	78.463%	0.231	0.243	74.627%	0.002	-0.041	-0.064	-0.050
x		78.619%	0.224	0.285	75.261%	-0.025	-0.036	-0.021	-0.023
σ		0.407%	0.017	0.044	0.659%	0.023	0.004	0.047	0.036
%RSD		0.518	7.762	15.320	0.876	93.210	10.620	225.200	152.300
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:21	82.620%	-0.299	-0.072	-0.080	7.778	8.278	87.299%	89.155%
2	12:20:41	82.697%	-0.285	-0.084	-0.073	7.560	8.061	89.068%	90.516%
3	12:21:00	82.584%	-0.272	-0.089	-0.073	7.983	8.338	89.431%	90.688%
x		82.634%	-0.285	-0.082	-0.075	7.773	8.226	88.599%	90.119%
σ		0.057%	0.014	0.009	0.004	0.211	0.145	1.141%	0.840%
%RSD		0.069	4.753	10.940	5.289	2.719	1.768	1.288	0.932
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	12:20:21	-0.003	-0.001	0.635	0.594	0.617	83.136%		
2	12:20:41	0.000	-0.002	0.663	0.613	0.650	83.740%		
3	12:21:00	0.001	-0.001	0.664	0.602	0.618	83.561%		
x		-0.001	-0.002	0.654	0.603	0.628	83.479%		
σ		0.002	0.001	0.017	0.010	0.019	0.310%		
%RSD		402.100	50.940	2.555	1.596	3.020	0.371		

CCV 1408349 12/3/2014 12:23:41 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:23:41	97.179%	99.250	91.360	92.250	0.000	45890.000	46160.000	46510.000
2	12:24:00	88.214%	102.800	100.800	96.840	0.000	46770.000	46690.000	47070.000
3	12:24:19	86.241%	101.900	93.220	92.250	0.000	45350.000	45980.000	45820.000
x		90.544%	101.304%	95.129%	93.782%	0.000	92.007%	92.556%	92.934%
σ		5.830%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		6.439	1.802	5.262	2.826	0.000	1.564	0.799	1.346

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:23:41	461.000	4195.000	0.000	46870.000	48090.000	47990.000	84.146%	91.460
2	12:24:00	467.000	4227.000	0.000	48040.000	50230.000	47730.000	77.013%	91.600
3	12:24:19	461.800	4092.000	0.000	46630.000	49010.000	48010.000	75.643%	94.990
x		92.654%	83.427%	0.000	94.356%	98.221%	95.827%	78.934%	92.685%
σ		n/a	n/a	0.000	n/a	n/a	n/a	4.565%	n/a
%RSD		0.700	1.691	0.000	1.607	2.183	0.324	5.784	2.160

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:23:41	96.330	98.190	489.100	24400.000	24680.000	98.470	98.330	100.100
2	12:24:00	99.150	100.900	507.400	25170.000	25710.000	101.200	100.400	102.700
3	12:24:19	97.510	97.860	505.400	24910.000	25530.000	99.090	98.770	99.570
x		97.665%	98.985%	100.124%	99.313%	101.232%	99.594%	99.173%	100.786%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.451	1.694	2.011	1.597	2.171	1.456	1.112	1.631

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:23:41	100.300	104.100	105.700	98.850	102.300	102.400	0.000	97.650
2	12:24:00	102.000	108.800	109.200	100.900	105.200	103.900	0.000	97.760
3	12:24:19	99.670	108.400	104.600	99.660	102.400	103.700	0.000	98.560
x		100.653%	107.094%	106.517%	99.800%	103.279%	103.363%	0.000	97.991%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.206	2.420	2.269	1.025	1.609	0.786	0.000	0.505

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:23:41	76.780%	88.130	89.480	70.007%	102.800	103.200	101.300	101.500
2	12:24:00	75.570%	92.430	95.100	68.207%	104.500	103.000	104.100	102.800
3	12:24:19	74.687%	96.930	101.200	67.451%	103.500	102.200	101.800	101.700
x		75.679%	92.496%	95.249%	68.555%	103.602%	102.794%	102.391%	101.985%
σ		1.051%	n/a	n/a	1.313%	n/a	n/a	n/a	n/a
%RSD		1.389	4.755	6.140	1.916	0.806	0.537	1.445	0.688

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:23:41	76.703%	93.060	91.080	90.950	96.780	97.700	82.368%	82.799%
2	12:24:00	76.395%	93.600	90.770	89.930	97.330	96.110	82.342%	83.625%
3	12:24:19	76.571%	94.110	92.280	92.680	96.890	97.240	83.749%	84.673%
x		76.557%	93.591%	91.376%	91.188%	96.999%	97.016%	82.820%	83.699%
σ		0.154%	n/a	n/a	n/a	n/a	n/a	0.805%	0.939%
%RSD		0.202	0.559	0.872	1.523	0.300	0.844	0.972	1.122

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	12:23:41	106.400	109.700	107.100	106.800	107.200	72.024%
2	12:24:00	106.000	111.200	109.200	110.400	109.500	72.713%
3	12:24:19	107.300	112.100	109.700	110.700	110.200	72.633%
x		106.587%	110.999%	108.651%	109.309%	108.953%	72.457%
σ		n/a	n/a	n/a	n/a	n/a	0.377%
%RSD		0.611	1.087	1.254	1.977	1.398	0.520

CCB5 12/3/2014 12:29:36 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:29:56	98.482%	0.009	4.502	3.720	0.000	13.030	5.921	5.854
2	12:30:15	94.971%	-0.015	3.419	2.819	0.000	13.970	5.691	5.199
3	12:30:34	97.919%	-0.016	2.714	2.647	0.000	13.410	4.686	5.418
x		97.124%	-0.007	3.545	3.062	0.000	13.470	5.433	5.490
σ		1.886%	0.014	0.901	0.577	0.000	0.473	0.657	0.334
%RSD		1.942	198.200	25.410	18.830	0.000	3.514	12.090	6.077
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:29:56	2.193	1.248	0.000	2.773	-0.049	6.942	90.462%	0.007
2	12:30:15	2.503	1.194	0.000	2.483	0.038	5.287	89.278%	0.141
3	12:30:34	2.502	0.376	0.000	2.710	-1.888	4.364	86.573%	0.098
x		2.399	0.939	0.000	2.655	-0.633	5.531	88.771%	0.082
σ		0.179	0.489	0.000	0.153	1.088	1.306	1.993%	0.068
%RSD		7.449	52.050	0.000	5.755	171.900	23.620	2.246	83.050
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:29:56	0.282	0.065	0.117	9.398	11.480	-0.015	0.021	-0.052
2	12:30:15	0.157	0.103	0.127	5.328	9.855	-0.013	0.022	-0.032
3	12:30:34	0.037	0.100	0.112	5.532	9.271	-0.020	0.047	-0.041
x		0.159	0.089	0.119	6.753	10.200	-0.016	0.030	-0.042
σ		0.122	0.021	0.008	2.293	1.145	0.004	0.015	0.010
%RSD		77.030	23.980	6.712	33.960	11.220	23.140	49.360	24.780
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:29:56	0.086	0.543	0.613	-0.568	-0.300	-1.448	0.000	0.036
2	12:30:15	0.029	0.599	0.812	-0.627	-0.204	-1.695	0.000	0.028
3	12:30:34	0.032	0.510	0.744	0.144	-0.225	0.364	0.000	0.031
x		0.049	0.551	0.723	-0.350	-0.243	-0.926	0.000	0.032
σ		0.032	0.045	0.101	0.429	0.050	1.124	0.000	0.004
%RSD		65.020	8.169	14.020	122.500	20.690	121.400	0.000	12.410
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:29:56	84.649%	0.208	0.268	83.884%	-0.023	-0.023	0.073	0.038
2	12:30:15	84.948%	0.280	0.236	83.686%	-0.008	-0.021	0.030	0.021
3	12:30:34	85.830%	0.290	0.242	83.893%	-0.003	-0.005	0.020	0.001
x		85.142%	0.259	0.248	83.821%	-0.012	-0.017	0.041	0.020
σ		0.614%	0.045	0.017	0.117%	0.010	0.010	0.028	0.018
%RSD		0.721	17.300	6.784	0.140	87.710	60.320	69.390	93.330
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:29:56	87.044%	-0.237	0.115	0.104	0.028	0.035	88.133%	88.826%
2	12:30:15	87.866%	-0.197	0.107	0.094	0.032	0.041	90.551%	91.491%
3	12:30:34	89.418%	-0.231	0.063	0.059	0.021	0.058	91.621%	92.578%
x		88.110%	-0.222	0.095	0.086	0.027	0.045	90.102%	90.965%
σ		1.205%	0.022	0.028	0.024	0.006	0.012	1.787%	1.930%
%RSD		1.368	9.819	29.200	27.780	21.020	26.210	1.983	2.122
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	12:29:56	0.009	0.005	0.155	0.166	0.154	91.397%		
2	12:30:15	0.009	0.003	0.197	0.162	0.174	91.057%		
3	12:30:34	0.008	0.003	0.168	0.190	0.183	91.552%		
x		0.009	0.004	0.173	0.173	0.170	91.336%		
σ		0.000	0.001	0.021	0.015	0.015	0.253%		
%RSD		3.827	21.950	12.390	8.639	8.608	0.277		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:33:29	89.820%	-0.013	2.368	2.807	0.000	10.780	9.161	9.811
2	12:33:48	83.278%	-0.041	3.979	2.840	0.000	11.700	10.840	9.195
3	12:34:07	79.982%	0.021	3.655	2.509	0.000	14.130	10.340	9.367
x		84.360%	-0.011	3.334	2.719	0.000	12.200	10.110	9.458
σ		5.008%	0.031	0.852	0.182	0.000	1.729	0.862	0.318
%RSD		5.936	275.000	25.570	6.708	0.000	14.170	8.528	3.358
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:33:29	8.366	30.120	0.000	-0.640	14.070	22.040	81.234%	0.119
2	12:33:48	8.334	29.710	0.000	-0.575	29.100	20.760	77.692%	0.104
3	12:34:07	8.701	30.070	0.000	0.075	22.970	26.930	75.283%	-0.040
x		8.467	29.960	0.000	-0.380	22.050	23.240	78.070%	0.061
σ		0.203	0.223	0.000	0.395	7.555	3.255	2.993%	0.088
%RSD		2.404	0.743	0.000	104.100	34.260	14.000	3.834	143.700
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:33:29	0.033	0.245	0.156	4.988	8.450	-0.018	0.034	0.078
2	12:33:48	-0.036	0.160	0.116	4.242	6.478	-0.022	0.044	0.040
3	12:34:07	0.245	0.257	0.159	2.123	6.292	-0.022	0.027	0.042
x		0.081	0.221	0.144	3.785	7.074	-0.021	0.035	0.053
σ		0.146	0.053	0.024	1.487	1.196	0.003	0.009	0.021
%RSD		180.700	24.110	16.620	39.280	16.910	12.270	24.890	39.870
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:33:29	0.121	0.512	0.706	-0.502	-0.582	-0.752	0.000	0.076
2	12:33:48	-0.008	0.447	0.826	-0.487	-0.148	-1.938	0.000	0.079
3	12:34:07	0.162	0.604	0.688	-0.317	-0.296	-1.652	0.000	0.073
x		0.091	0.521	0.740	-0.435	-0.342	-1.447	0.000	0.076
σ		0.089	0.079	0.075	0.103	0.220	0.619	0.000	0.003
%RSD		97.270	15.140	10.160	23.660	64.340	42.770	0.000	4.149
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:33:29	79.342%	0.106	0.149	77.629%	-0.036	-0.023	0.059	0.038
2	12:33:48	79.806%	0.084	0.113	77.225%	-0.025	-0.032	-0.043	-0.033
3	12:34:07	80.747%	0.022	0.032	77.010%	-0.028	-0.032	-0.036	-0.037
x		79.965%	0.070	0.098	77.288%	-0.030	-0.029	-0.007	-0.010
σ		0.716%	0.043	0.060	0.314%	0.006	0.005	0.057	0.042
%RSD		0.896	61.640	61.630	0.407	19.460	18.170	848.000	402.500
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:33:29	82.241%	-0.151	0.065	0.068	0.046	0.053	86.860%	87.848%
2	12:33:48	83.461%	-0.116	0.082	0.031	0.023	0.036	88.436%	89.448%
3	12:34:07	82.893%	-0.172	0.038	0.032	0.040	0.043	89.449%	90.612%
x		82.865%	-0.146	0.062	0.044	0.036	0.044	88.248%	89.302%
σ		0.610%	0.028	0.022	0.021	0.012	0.008	1.305%	1.388%
%RSD		0.736	19.150	36.060	48.240	33.010	19.240	1.479	1.554
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	12:33:29	0.000	-0.002	0.068	0.077	0.071	83.043%		
2	12:33:48	-0.003	-0.006	0.058	0.044	0.051	83.201%		
3	12:34:07	-0.005	-0.008	0.059	0.078	0.063	83.940%		
x		-0.003	-0.005	0.062	0.066	0.062	83.395%		
σ		0.003	0.004	0.005	0.019	0.010	0.479%		
%RSD		103.700	65.800	8.475	29.100	16.140	0.574		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:37:02	68.955%	41.680	827.700	842.800	0.000	44690.000	42640.000	42970.000
2	12:37:21	63.781%	44.920	858.600	829.000	0.000	44020.000	42910.000	42670.000
3	12:37:40	59.246%	45.010	857.800	839.700	0.000	43590.000	41900.000	41780.000
x		63.994%	43.870	848.000	837.200	0.000	44100.000	42490.000	42470.000
σ		4.858%	1.896	17.630	7.236	0.000	557.000	520.400	622.000
%RSD		7.592	4.322	2.079	0.864	0.000	1.263	1.225	1.465

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:37:02	1757.000	6552.000	0.000	49480.000	53640.000	51200.000	60.774%	989.100
2	12:37:21	1746.000	6557.000	0.000	49300.000	53160.000	51780.000	59.055%	998.900
3	12:37:40	1693.000	6384.000	0.000	48890.000	53410.000	51340.000	56.454%	1013.000
x		1732.000	6498.000	0.000	49220.000	53400.000	51440.000	58.761%	1000.000
σ		34.030	98.380	0.000	301.000	244.600	303.500	2.175%	12.170
%RSD		1.965	1.514	0.000	0.612	0.458	0.590	3.701	1.217

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:37:02	509.100	207.800	545.100	1106.000	1194.000	532.700	510.700	250.300
2	12:37:21	505.900	206.300	536.800	1088.000	653.100	522.800	505.200	250.900
3	12:37:40	505.000	206.700	547.900	1094.000	1194.000	526.000	501.700	247.100
x		506.600	206.900	543.300	1096.000	1014.000	527.200	505.900	249.400
σ		2.168	0.781	5.736	8.980	312.300	5.094	4.550	2.011
%RSD		0.428	0.378	1.056	0.819	30.810	0.966	0.899	0.806

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:37:02	254.000	422.900	426.000	32.260	7.805	6.866	0.000	1199.000
2	12:37:21	249.500	421.100	427.600	32.630	7.590	9.003	0.000	1194.000
3	12:37:40	248.300	418.100	414.900	33.280	8.335	8.797	0.000	1188.000
x		250.600	420.700	422.800	32.720	7.910	8.222	0.000	1194.000
σ		2.995	2.463	6.950	0.519	0.384	1.179	0.000	5.593
%RSD		1.195	0.585	1.644	1.586	4.849	14.340	0.000	0.469

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:37:02	56.609%	1175.000	1176.000	62.328%	50.070	48.960	43.570	36.230
2	12:37:21	56.137%	1183.000	1182.000	60.575%	50.020	49.380	43.290	36.670
3	12:37:40	56.143%	1177.000	1185.000	60.131%	49.810	49.300	43.560	37.600
x		56.296%	1179.000	1181.000	61.011%	49.960	49.210	43.480	36.830
σ		0.271%	3.944	4.685	1.162%	0.137	0.225	0.158	0.700
%RSD		0.482	0.335	0.397	1.904	0.275	0.457	0.364	1.900

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:37:02	68.081%	1991.000	431.700	427.000	2018.000	2019.000	78.164%	79.634%
2	12:37:21	68.148%	1980.000	430.200	427.400	2018.000	2022.000	78.702%	80.411%
3	12:37:40	67.794%	1990.000	436.700	427.900	2023.000	2022.000	79.073%	81.193%
x		68.008%	1987.000	432.900	427.400	2020.000	2021.000	78.646%	80.413%
σ		0.188%	6.066	3.432	0.445	3.128	1.993	0.457%	0.779%
%RSD		0.276	0.305	0.793	0.104	0.155	0.099	0.581	0.969

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	12:37:02	57.510	59.220	23.380	24.090	23.790	59.305%
2	12:37:21	57.740	60.180	23.590	24.100	23.960	59.194%
3	12:37:40	57.330	59.690	23.800	23.950	23.920	59.840%
x		57.530	59.700	23.590	24.050	23.890	59.446%
σ		0.208	0.477	0.212	0.087	0.091	0.345%
%RSD		0.361	0.799	0.899	0.362	0.382	0.580

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:40:33	55.113%	4.823	172.400	179.100	0.000	84050.000	56690.000	55260.000
2	12:40:52	49.867%	4.586	180.800	178.700	0.000	85180.000	56690.000	56690.000
3	12:41:12	45.731%	5.093	177.900	174.400	0.000	83390.000	55390.000	56120.000
x		50.237%	4.834	177.000	177.400	0.000	84210.000	56260.000	56020.000
σ		4.702%	0.254	4.283	2.602	0.000	903.900	750.900	720.300
%RSD		9.359	5.251	2.419	1.467	0.000	1.073	1.335	1.286

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:40:33	68330.000	5222.000	0.000	16110.000	87310.000	83340.000	57.811%	2709.000
2	12:40:52	70090.000	5220.000	0.000	16480.000	86930.000	82700.000	54.897%	2716.000
3	12:41:12	69870.000	5275.000	0.000	16580.000	87520.000	82690.000	52.866%	2685.000
x		69430.000	5239.000	0.000	16390.000	87250.000	82910.000	55.192%	2703.000
σ		957.200	31.360	0.000	248.400	294.300	373.500	2.485%	16.250
%RSD		1.379	0.599	0.000	1.516	0.337	0.451	4.503	0.601

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:40:33	894.300	5100.000	1296.000	219900.000	220400.000	80.600	2989.000	6530.000
2	12:40:52	834.100	5000.000	1305.000	219700.000	218200.000	79.490	2986.000	6487.000
3	12:41:12	857.100	5052.000	1308.000	219200.000	217600.000	79.120	2918.000	6370.000
x		861.900	5050.000	1303.000	219600.000	218800.000	79.740	2964.000	6463.000
σ		30.390	50.080	6.307	341.400	1477.000	0.770	40.320	82.740
%RSD		3.526	0.992	0.484	0.156	0.675	0.965	1.360	1.280

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:40:33	6942.000	10950.000	10690.000	97.380	13.200	8.591	0.000	648.400
2	12:40:52	6966.000	10940.000	10630.000	94.150	12.040	7.298	0.000	647.700
3	12:41:12	6840.000	10950.000	10730.000	97.320	12.130	7.708	0.000	652.500
x		6916.000	10940.000	10680.000	96.280	12.460	7.866	0.000	649.500
σ		66.790	7.292	49.610	1.847	0.644	0.660	0.000	2.566
%RSD		0.966	0.067	0.464	1.918	5.174	8.395	0.000	0.395

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:40:33	104.877%	135.900	158.000	54.504%	231.500	227.100	327.200	317.000
2	12:40:52	104.170%	135.700	156.700	53.243%	232.700	228.100	331.900	317.500
3	12:41:12	101.868%	135.500	159.900	52.107%	234.200	226.500	328.900	316.100
x		103.638%	135.700	158.200	53.284%	232.800	227.200	329.300	316.900
σ		1.573%	0.214	1.602	1.199%	1.346	0.771	2.402	0.709
%RSD		1.518	0.158	1.013	2.250	0.578	0.339	0.729	0.224

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:40:33	65.634%	1048.000	50.490	50.910	10680.000	10740.000	75.840%	75.917%
2	12:40:52	65.335%	1046.000	51.540	50.890	10660.000	10700.000	75.669%	76.624%
3	12:41:12	64.879%	1053.000	51.540	49.810	10660.000	10690.000	75.603%	76.364%
x		65.283%	1049.000	51.190	50.540	10670.000	10710.000	75.704%	76.302%
σ		0.380%	3.803	0.610	0.629	11.160	29.500	0.122%	0.357%
%RSD		0.583	0.363	1.191	1.245	0.105	0.276	0.161	0.468

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	12:40:33	4.397	4.468	17790.000	16670.000	17250.000	55.520%
2	12:40:52	4.263	4.551	17720.000	16650.000	17250.000	55.683%
3	12:41:12	4.348	4.471	17720.000	16690.000	17240.000	55.983%
x		4.336	4.496	17740.000	16670.000	17240.000	55.729%
σ		0.068	0.047	38.740	22.640	4.128	0.235%
%RSD		1.571	1.046	0.218	0.136	0.024	0.421

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:44:05	62.114%	1.376	42.840	42.090	0.000	16570.000	12000.000	12050.000
2	12:44:25	58.527%	0.960	42.060	40.800	0.000	16580.000	11940.000	11890.000
3	12:44:44	55.263%	1.194	37.740	41.870	0.000	15940.000	11460.000	11510.000
x		58.635%	1.176	40.880	41.590	0.000	16360.000	11800.000	11810.000
σ		3.427%	0.208	2.746	0.691	0.000	364.600	299.600	275.800
%RSD		5.845	17.720	6.717	1.661	0.000	2.228	2.539	2.334
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:44:05	14580.000	1103.000	0.000	3208.000	16890.000	15840.000	62.741%	543.600
2	12:44:25	14340.000	1149.000	0.000	3194.000	16800.000	15960.000	60.420%	552.700
3	12:44:44	13800.000	1118.000	0.000	3077.000	16610.000	15920.000	57.764%	543.300
x		14240.000	1123.000	0.000	3159.000	16760.000	15910.000	60.308%	546.500
σ		398.000	23.340	0.000	71.790	144.900	64.560	2.490%	5.327
%RSD		2.795	2.078	0.000	2.272	0.864	0.406	4.129	0.975
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:44:05	182.500	1097.000	284.300	49340.000	47590.000	17.840	717.000	1875.000
2	12:44:25	186.100	1096.000	285.000	48930.000	47820.000	18.290	708.600	1846.000
3	12:44:44	182.800	1100.000	289.800	49230.000	47700.000	18.220	711.200	1860.000
x		183.800	1097.000	286.300	49170.000	47700.000	18.120	712.200	1861.000
σ		1.989	2.203	2.976	212.500	113.800	0.243	4.306	14.440
%RSD		1.082	0.201	1.039	0.432	0.239	1.343	0.605	0.776
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:44:05	1843.000	3388.000	3343.000	30.080	4.251	2.550	0.000	175.500
2	12:44:25	1832.000	3395.000	3381.000	28.810	4.426	1.965	0.000	172.200
3	12:44:44	1847.000	3429.000	3389.000	29.250	4.266	2.052	0.000	175.700
x		1841.000	3404.000	3371.000	29.380	4.314	2.189	0.000	174.500
σ		7.606	21.780	24.600	0.645	0.097	0.316	0.000	1.988
%RSD		0.413	0.640	0.730	2.194	2.247	14.420	0.000	1.139
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:44:05	77.604%	30.110	31.880	63.532%	47.720	47.880	76.080	72.640
2	12:44:25	78.596%	30.520	31.390	64.012%	47.620	47.430	73.950	71.760
3	12:44:44	76.264%	29.870	32.040	62.680%	47.960	47.230	74.200	74.220
x		77.488%	30.170	31.770	63.408%	47.770	47.510	74.740	72.880
σ		1.171%	0.331	0.337	0.674%	0.174	0.334	1.162	1.246
%RSD		1.511	1.097	1.062	1.064	0.365	0.702	1.555	1.710
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:44:05	74.522%	208.500	11.330	11.070	2052.000	2080.000	81.907%	83.623%
2	12:44:25	75.798%	206.400	11.330	11.170	2060.000	2066.000	84.291%	85.039%
3	12:44:44	73.763%	209.500	11.800	11.470	2086.000	2095.000	84.658%	86.153%
x		74.695%	208.100	11.490	11.240	2066.000	2080.000	83.619%	84.938%
σ		1.028%	1.549	0.273	0.205	18.030	14.640	1.494%	1.268%
%RSD		1.377	0.745	2.372	1.823	0.873	0.704	1.786	1.493
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	12:44:05	0.854	0.851	3505.000	3283.000	3389.000	73.730%		
2	12:44:25	0.844	0.853	3510.000	3305.000	3401.000	74.911%		
3	12:44:44	0.829	0.864	3549.000	3308.000	3416.000	74.666%		
x		0.842	0.856	3521.000	3299.000	3402.000	74.436%		
σ		0.013	0.007	24.070	14.000	13.620	0.623%		
%RSD		1.488	0.828	0.684	0.424	0.401	0.837		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:47:38	40.844%	45.900	937.900	928.600	0.000	140700.000	99480.000	98510.000
2	12:47:57	36.452%	44.890	934.300	878.700	0.000	128200.000	91680.000	89710.000
3	12:48:16	29.923%	51.540	951.000	944.700	0.000	132800.000	94410.000	94760.000
x		35.740%	47.440	941.100	917.300	0.000	133900.000	95190.000	94330.000
σ		5.495%	3.583	8.778	34.410	0.000	6318.000	3962.000	4418.000
%RSD		15.376	7.553	0.933	3.751	0.000	4.718	4.162	4.684
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:47:38	98440.000	8463.000	0.000	67160.000	132700.000	128100.000	48.035%	4191.000
2	12:47:57	90250.000	7958.000	0.000	65510.000	137100.000	130700.000	44.499%	4122.000
3	12:48:16	96520.000	8245.000	0.000	69000.000	141400.000	133500.000	40.597%	4175.000
x		95070.000	8222.000	0.000	67220.000	137100.000	130800.000	44.377%	4163.000
σ		4284.000	253.300	0.000	1747.000	4378.000	2732.000	3.720%	35.910
%RSD		4.507	3.081	0.000	2.599	3.194	2.089	8.384	0.863
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:47:38	1459.000	5224.000	1908.000	283200.000	284400.000	472.800	2895.000	6360.000
2	12:47:57	1457.000	5184.000	1921.000	282900.000	286200.000	472.900	2912.000	6366.000
3	12:48:16	1499.000	5298.000	1965.000	291200.000	291700.000	480.300	2945.000	6419.000
x		1472.000	5235.000	1931.000	285800.000	287400.000	475.300	2917.000	6381.000
σ		23.940	58.070	29.860	4724.000	3797.000	4.303	25.460	32.250
%RSD		1.627	1.109	1.546	1.653	1.321	0.905	0.873	0.505
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:47:38	6869.000	11030.000	10650.000	140.200	17.090	13.110	0.000	1244.000
2	12:47:57	6785.000	11020.000	10760.000	136.900	17.750	13.790	0.000	1253.000
3	12:48:16	6886.000	11340.000	11030.000	139.600	19.050	12.480	0.000	1257.000
x		6847.000	11130.000	10820.000	138.900	17.960	13.130	0.000	1251.000
σ		53.760	180.900	197.500	1.752	0.995	0.654	0.000	6.778
%RSD		0.785	1.625	1.826	1.262	5.538	4.980	0.000	0.542
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:47:38	95.558%	951.300	1111.000	46.407%	252.600	245.100	314.500	309.000
2	12:47:57	93.697%	957.800	1127.000	45.274%	253.200	246.300	310.500	306.100
3	12:48:16	90.782%	955.200	1127.000	43.424%	253.500	246.300	348.900	328.500
x		93.346%	954.800	1121.000	45.035%	253.100	245.900	324.600	314.500
σ		2.407%	3.275	9.292	1.506%	0.408	0.698	21.140	12.200
%RSD		2.579	0.343	0.829	3.343	0.161	0.284	6.512	3.878
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:47:38	58.513%	2785.000	328.500	327.800	11070.000	11140.000	67.218%	67.707%
2	12:47:57	57.923%	2803.000	333.400	330.900	11120.000	11190.000	67.576%	68.115%
3	12:48:16	56.538%	2790.000	334.400	331.200	11040.000	11140.000	66.635%	67.014%
x		57.658%	2793.000	332.100	330.000	11070.000	11160.000	67.143%	67.612%
σ		1.014%	8.953	3.144	1.904	40.940	31.830	0.475%	0.557%
%RSD		1.759	0.321	0.947	0.577	0.370	0.285	0.707	0.823
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	12:47:38	56.140	57.410	17570.000	16500.000	17070.000	48.354%		
2	12:47:57	57.260	58.680	17690.000	16590.000	17240.000	47.862%		
3	12:48:16	56.670	58.060	17600.000	16420.000	17030.000	48.516%		
x		56.690	58.050	17620.000	16500.000	17110.000	48.244%		
σ		0.558	0.633	63.360	85.350	108.100	0.341%		
%RSD		0.984	1.091	0.360	0.517	0.632	0.706		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:51:13	38.449%	39.030	849.400	833.900	0.000	120600.000	87070.000	89680.000
2	12:51:32	31.999%	43.220	918.500	886.000	0.000	127400.000	93510.000	91370.000
3	12:51:51	27.750%	45.530	957.300	967.500	0.000	132600.000	95780.000	94860.000
x		32.733%	42.590	908.400	895.800	0.000	126900.000	92120.000	91970.000
σ		5.387%	3.295	54.690	67.320	0.000	6048.000	4518.000	2639.000
%RSD		16.458	7.736	6.020	7.515	0.000	4.768	4.904	2.869
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:51:13	90460.000	7559.000	0.000	64400.000	132300.000	127200.000	44.883%	4114.000
2	12:51:32	90770.000	7515.000	0.000	64640.000	131800.000	125800.000	42.629%	4114.000
3	12:51:51	95370.000	7590.000	0.000	66380.000	134600.000	127800.000	39.347%	4048.000
x		92200.000	7555.000	0.000	65140.000	132900.000	126900.000	42.286%	4092.000
σ		2749.000	37.590	0.000	1082.000	1465.000	1062.000	2.783%	38.100
%RSD		2.982	0.498	0.000	1.660	1.102	0.837	6.582	0.931
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:51:13	1528.000	5180.000	1891.000	245700.000	245200.000	460.400	2823.000	6168.000
2	12:51:32	1533.000	5107.000	1895.000	246400.000	244600.000	457.200	2779.000	6064.000
3	12:51:51	1511.000	5130.000	1938.000	257000.000	254500.000	475.600	2897.000	6260.000
x		1524.000	5139.000	1908.000	249700.000	248100.000	464.400	2833.000	6164.000
σ		11.760	37.580	26.140	6329.000	5558.000	9.818	59.580	98.460
%RSD		0.772	0.731	1.370	2.535	2.240	2.114	2.103	1.597
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:51:13	6619.000	10920.000	10700.000	137.700	16.840	12.280	0.000	1228.000
2	12:51:32	6528.000	10930.000	10640.000	136.100	17.920	11.820	0.000	1232.000
3	12:51:51	6621.000	11110.000	10800.000	139.100	17.830	13.350	0.000	1241.000
x		6589.000	10990.000	10710.000	137.600	17.530	12.480	0.000	1234.000
σ		53.010	109.000	80.630	1.463	0.597	0.785	0.000	6.597
%RSD		0.804	0.992	0.753	1.063	3.406	6.287	0.000	0.535
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:51:13	92.752%	917.100	1080.000	46.264%	260.200	252.300	334.100	315.100
2	12:51:32	92.792%	928.300	1092.000	44.579%	263.700	255.100	303.500	289.700
3	12:51:51	89.060%	854.800	976.300	50.490%	235.300	235.100	319.200	311.400
x		91.535%	900.100	1050.000	47.111%	253.100	247.500	318.900	305.400
σ		2.143%	39.610	63.690	3.045%	15.470	10.840	15.300	13.720
%RSD		2.341	4.401	6.069	6.464	6.113	4.378	4.797	4.492
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:51:13	58.114%	2759.000	332.700	328.100	11610.000	11670.000	68.564%	68.740%
2	12:51:32	57.985%	2756.000	332.000	327.400	11560.000	11620.000	69.287%	69.415%
3	12:51:51	56.679%	2757.000	330.900	329.200	11560.000	11540.000	68.175%	68.751%
x		57.593%	2757.000	331.900	328.200	11580.000	11610.000	68.675%	68.969%
σ		0.794%	1.842	0.925	0.891	26.100	67.660	0.564%	0.387%
%RSD		1.378	0.067	0.279	0.272	0.226	0.583	0.822	0.560
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	12:51:13	55.570	56.870	15580.000	14660.000	15150.000	49.067%		
2	12:51:32	55.210	56.800	15650.000	14690.000	15180.000	49.275%		
3	12:51:51	55.690	57.000	15590.000	14660.000	15180.000	48.995%		
x		55.490	56.890	15610.000	14670.000	15170.000	49.112%		
σ		0.252	0.105	37.060	14.130	14.370	0.145%		
%RSD		0.454	0.184	0.237	0.096	0.095	0.296		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:54:45	32.811%	49.260	1020.000	1030.000	0.000	128000.000	96060.000	95630.000
2	12:55:04	28.888%	47.590	1046.000	999.000	0.000	123300.000	90120.000	89110.000
3	12:55:24	26.772%	47.270	1009.000	997.300	0.000	119100.000	89280.000	89040.000
x		29.490%	48.040	1025.000	1009.000	0.000	123500.000	91820.000	91260.000
σ		3.064%	1.067	18.970	18.190	0.000	4431.000	3693.000	3783.000
%RSD		10.390	2.221	1.851	1.803	0.000	3.589	4.022	4.145
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:54:45	67720.000	12070.000	0.000	62570.000	132600.000	129100.000	41.394%	3506.000
2	12:55:04	65920.000	11590.000	0.000	61470.000	134500.000	127600.000	37.899%	3599.000
3	12:55:24	64190.000	11390.000	0.000	62080.000	135900.000	128300.000	35.687%	3590.000
x		65940.000	11680.000	0.000	62040.000	134300.000	128300.000	38.327%	3565.000
σ		1761.000	347.700	0.000	550.500	1678.000	719.500	2.877%	51.140
%RSD		2.670	2.975	0.000	0.887	1.249	0.561	7.507	1.434
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:54:45	1270.000	5121.000	1755.000	217800.000	216900.000	511.000	3287.000	6461.000
2	12:55:04	1247.000	5100.000	1782.000	221600.000	219200.000	507.100	3275.000	6406.000
3	12:55:24	1278.000	5106.000	1811.000	224100.000	220500.000	511.800	3334.000	6534.000
x		1265.000	5109.000	1783.000	221200.000	218900.000	510.000	3299.000	6467.000
σ		16.050	11.130	27.990	3143.000	1833.000	2.547	31.210	64.340
%RSD		1.268	0.218	1.570	1.421	0.838	0.499	0.946	0.995
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:54:45	6893.000	11210.000	10860.000	117.800	17.980	12.550	0.000	1300.000
2	12:55:04	6953.000	11340.000	10940.000	121.600	17.800	12.290	0.000	1310.000
3	12:55:24	7049.000	11570.000	11210.000	120.900	17.630	13.830	0.000	1311.000
x		6965.000	11370.000	11000.000	120.100	17.800	12.890	0.000	1307.000
σ		78.740	179.300	182.100	2.047	0.175	0.824	0.000	5.838
%RSD		1.130	1.577	1.655	1.705	0.982	6.394	0.000	0.447
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:54:45	86.715%	1040.000	1214.000	44.619%	268.400	262.400	359.700	341.700
2	12:55:04	83.950%	968.500	1091.000	49.829%	246.000	245.400	347.400	337.000
3	12:55:24	82.038%	963.100	1093.000	48.898%	244.400	244.800	348.400	338.100
x		84.234%	990.600	1133.000	47.782%	252.900	250.900	351.800	338.900
σ		2.351%	43.040	70.630	2.779%	13.420	9.983	6.804	2.424
%RSD		2.792	4.345	6.235	5.816	5.304	3.980	1.934	0.715
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:54:45	57.177%	2944.000	474.400	470.300	12190.000	12150.000	68.193%	68.477%
2	12:55:04	55.693%	2967.000	479.600	474.300	12290.000	12300.000	67.895%	68.838%
3	12:55:24	54.639%	2950.000	485.400	477.800	12160.000	12270.000	67.539%	68.629%
x		55.836%	2954.000	479.800	474.100	12210.000	12240.000	67.876%	68.648%
σ		1.275%	12.000	5.472	3.713	66.760	78.580	0.328%	0.181%
%RSD		2.283	0.406	1.140	0.783	0.547	0.642	0.483	0.264
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	12:54:45	58.230	60.410	17470.000	16410.000	16950.000	49.930%		
2	12:55:04	59.000	61.260	17480.000	16440.000	16970.000	49.805%		
3	12:55:24	59.000	61.280	17450.000	16390.000	16940.000	49.893%		
x		58.740	60.980	17470.000	16410.000	16960.000	49.876%		
σ		0.445	0.496	10.310	28.940	12.020	0.064%		
%RSD		0.757	0.813	0.059	0.176	0.071	0.129		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:58:19	27.995%	8.068	209.900	208.600	0.000	81430.000	54390.000	54330.000
2	12:58:38	22.638%	8.243	228.700	228.100	0.000	81700.000	53790.000	54010.000
3	12:58:58	20.903%	9.626	203.200	220.100	0.000	78660.000	54460.000	54650.000
x		23.845%	8.646	213.900	218.900	0.000	80600.000	54210.000	54330.000
σ		3.697%	0.853	13.220	9.804	0.000	1682.000	367.100	321.700
%RSD		15.505	9.870	6.179	4.478	0.000	2.087	0.677	0.592
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:58:19	77810.000	6470.000	0.000	18580.000	82210.000	79350.000	39.887%	3055.000
2	12:58:38	77970.000	6391.000	0.000	19080.000	83460.000	81090.000	36.637%	3010.000
3	12:58:58	77700.000	6173.000	0.000	18650.000	82900.000	80700.000	32.869%	3027.000
x		77830.000	6345.000	0.000	18770.000	82860.000	80380.000	36.464%	3031.000
σ		136.400	153.800	0.000	270.800	627.600	917.200	3.512%	22.490
%RSD		0.175	2.424	0.000	1.443	0.757	1.141	9.632	0.742
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:58:19	611.800	3193.000	1926.000	299000.000	295300.000	112.400	986.200	5181.000
2	12:58:38	573.600	3140.000	1925.000	299300.000	301500.000	113.200	984.500	5114.000
3	12:58:58	575.800	3131.000	1979.000	307900.000	305000.000	114.600	1011.000	5314.000
x		587.100	3155.000	1943.000	302000.000	300600.000	113.400	993.800	5203.000
σ		21.440	33.620	31.030	5058.000	4912.000	1.124	14.670	101.600
%RSD		3.651	1.066	1.597	1.675	1.634	0.991	1.476	1.952
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:58:19	5566.000	14870.000	14370.000	187.100	20.740	14.790	0.000	609.000
2	12:58:38	5516.000	14940.000	14470.000	188.600	21.720	14.240	0.000	613.500
3	12:58:58	5666.000	15390.000	15110.000	195.200	21.650	15.570	0.000	619.500
x		5583.000	15060.000	14650.000	190.300	21.370	14.870	0.000	614.000
σ		75.930	281.200	403.700	4.340	0.547	0.665	0.000	5.285
%RSD		1.360	1.866	2.755	2.280	2.560	4.476	0.000	0.861
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:58:19	98.757%	94.560	112.600	44.200%	162.500	158.200	211.400	198.700
2	12:58:38	94.519%	94.980	111.400	42.460%	162.000	157.100	212.100	197.500
3	12:58:58	91.531%	86.820	100.400	47.025%	147.900	146.700	203.800	196.000
x		94.936%	92.120	108.100	44.562%	157.500	154.000	209.100	197.400
σ		3.631%	4.591	6.717	2.304%	8.314	6.333	4.606	1.349
%RSD		3.825	4.984	6.212	5.170	5.280	4.112	2.202	0.684
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:58:19	56.491%	1349.000	47.870	48.020	11720.000	11720.000	69.321%	69.815%
2	12:58:38	55.799%	1322.000	48.140	47.360	11640.000	11650.000	68.668%	69.603%
3	12:58:58	53.851%	1358.000	48.440	48.300	11800.000	11870.000	67.940%	69.094%
x		55.380%	1343.000	48.150	47.900	11720.000	11750.000	68.643%	69.504%
σ		1.368%	18.760	0.280	0.480	78.270	111.500	0.691%	0.371%
%RSD		2.471	1.397	0.582	1.001	0.668	0.950	1.006	0.533
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	12:58:19	8.756	9.065	20620.000	19080.000	19860.000	52.328%		
2	12:58:38	8.831	8.968	20750.000	19170.000	19950.000	52.147%		
3	12:58:58	8.691	8.954	20760.000	19170.000	19960.000	51.981%		
x		8.760	8.996	20710.000	19140.000	19920.000	52.152%		
σ		0.070	0.061	77.920	48.250	54.970	0.173%		
%RSD		0.802	0.675	0.376	0.252	0.276	0.333		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:01:51	20.365%	6.713	173.900	163.500	0.000	65530.000	54070.000	54370.000
2	13:02:11	17.894%	9.363	169.500	163.500	0.000	61550.000	51350.000	51570.000
3	13:02:30	16.041%	7.784	179.500	159.100	0.000	57200.000	49280.000	50100.000
x		18.100%	7.953	174.300	162.000	0.000	61430.000	51570.000	52020.000
σ		2.170%	1.333	4.971	2.514	0.000	4165.000	2403.000	2170.000
%RSD		11.986	16.760	2.852	1.551	0.000	6.780	4.661	4.172

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:01:51	96520.000	5187.000	0.000	20940.000	91800.000	88670.000	33.646%	4214.000
2	13:02:11	89940.000	4883.000	0.000	20910.000	92100.000	89170.000	29.889%	4186.000
3	13:02:30	89030.000	4842.000	0.000	20840.000	93340.000	89480.000	27.257%	4149.000
x		91830.000	4971.000	0.000	20900.000	92420.000	89110.000	30.264%	4183.000
σ		4087.000	188.400	0.000	50.590	818.200	407.700	3.211%	32.630
%RSD		4.451	3.791	0.000	0.242	0.885	0.458	10.610	0.780

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:01:51	318.400	564.800	1697.000	294900.000	287500.000	90.830	340.600	3572.000
2	13:02:11	328.300	585.600	1772.000	308200.000	300000.000	94.860	345.900	4138.000
3	13:02:30	316.800	581.300	1781.000	308500.000	306300.000	94.260	351.700	4147.000
x		321.200	577.300	1750.000	303900.000	297900.000	93.320	346.100	3952.000
σ		6.229	11.010	46.290	7776.000	9564.000	2.170	5.576	329.100
%RSD		1.940	1.907	2.646	2.559	3.210	2.326	1.611	8.327

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:01:51	3790.000	7955.000	7756.000	183.500	20.050	12.130	0.000	418.600
2	13:02:11	4006.000	8264.000	8016.000	186.300	19.830	12.160	0.000	420.500
3	13:02:30	4024.000	8400.000	8151.000	187.000	19.940	11.390	0.000	423.900
x		3940.000	8207.000	7975.000	185.600	19.940	11.890	0.000	421.000
σ		129.900	228.000	200.700	1.869	0.108	0.435	0.000	2.642
%RSD		3.298	2.779	2.517	1.007	0.543	3.656	0.000	0.628

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:01:51	96.544%	62.010	75.260	46.327%	66.420	64.980	27.140	22.490
2	13:02:11	93.309%	62.620	74.400	44.481%	65.760	65.880	27.510	23.730
3	13:02:30	90.791%	63.680	74.890	42.985%	65.790	65.560	26.600	21.950
x		93.548%	62.770	74.850	44.598%	65.990	65.480	27.080	22.720
σ		2.884%	0.846	0.430	1.674%	0.373	0.456	0.455	0.912
%RSD		3.083	1.348	0.574	3.754	0.565	0.696	1.679	4.015

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:01:51	52.631%	1029.000	29.100	28.790	3555.000	3457.000	68.047%	69.456%
2	13:02:11	51.540%	1044.000	29.320	29.480	3583.000	3474.000	67.320%	68.873%
3	13:02:30	50.411%	1037.000	29.030	29.440	3564.000	3454.000	66.668%	68.555%
x		51.528%	1037.000	29.150	29.240	3567.000	3461.000	67.345%	68.961%
σ		1.110%	7.121	0.150	0.385	14.380	10.550	0.690%	0.457%
%RSD		2.154	0.687	0.514	1.317	0.403	0.305	1.024	0.662

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:01:51	5.654	5.834	11650.000	10960.000	11320.000	54.414%
2	13:02:11	5.740	5.959	11750.000	11060.000	11410.000	53.814%
3	13:02:30	5.738	5.895	11730.000	11020.000	11390.000	53.736%
x		5.711	5.896	11710.000	11010.000	11370.000	53.988%
σ		0.049	0.063	56.270	47.920	48.330	0.371%
%RSD		0.862	1.061	0.480	0.435	0.425	0.687

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:05:22	25.711%	8.713	64.240	67.980	0.000	24100.000	39310.000	39260.000
2	13:05:41	22.266%	9.811	69.930	68.220	0.000	23150.000	38480.000	38940.000
3	13:06:01	20.727%	7.316	64.760	69.430	0.000	22860.000	36620.000	37650.000
x		22.901%	8.613	66.310	68.540	0.000	23370.000	38140.000	38620.000
σ		2.552%	1.251	3.145	0.774	0.000	649.900	1376.000	854.600
%RSD		11.143	14.520	4.743	1.130	0.000	2.781	3.607	2.213
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:05:22	90360.000	2158.000	0.000	18780.000	12750.000	12330.000	35.377%	2312.000
2	13:05:41	86950.000	2113.000	0.000	18640.000	12780.000	12180.000	33.027%	2288.000
3	13:06:01	87260.000	2079.000	0.000	17990.000	12520.000	12180.000	31.205%	2293.000
x		88190.000	2117.000	0.000	18470.000	12680.000	12230.000	33.203%	2298.000
σ		1890.000	39.580	0.000	419.800	146.300	88.820	2.091%	12.750
%RSD		2.143	1.870	0.000	2.273	1.154	0.726	6.299	0.555
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:05:22	213.700	172.700	2621.000	274300.000	270400.000	122.300	245.600	220.800
2	13:05:41	220.000	173.400	2643.000	273800.000	270100.000	123.400	239.400	221.900
3	13:06:01	221.600	178.200	2637.000	274900.000	269600.000	122.700	241.900	224.300
x		218.400	174.800	2634.000	274300.000	270000.000	122.800	242.300	222.300
σ		4.196	3.023	11.400	571.500	413.000	0.584	3.117	1.808
%RSD		1.921	1.730	0.433	0.208	0.153	0.475	1.287	0.813
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:05:22	215.300	572.000	546.300	38.360	-0.968	-7.454	0.000	58.260
2	13:05:41	216.200	578.500	559.500	39.230	-0.950	-6.566	0.000	58.730
3	13:06:01	215.100	582.500	571.900	38.270	-1.130	-6.697	0.000	58.630
x		215.500	577.700	559.200	38.620	-1.016	-6.906	0.000	58.540
σ		0.542	5.295	12.830	0.530	0.099	0.479	0.000	0.249
%RSD		0.251	0.917	2.294	1.372	9.765	6.942	0.000	0.424
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:05:22	115.144%	2.036	2.554	50.678%	0.531	0.477	0.975	0.767
2	13:05:41	110.857%	2.217	2.621	49.059%	0.494	0.423	0.971	0.684
3	13:06:01	107.579%	2.097	2.782	47.778%	0.578	0.400	0.824	0.660
x		111.193%	2.117	2.653	49.172%	0.534	0.433	0.923	0.704
σ		3.794%	0.092	0.117	1.453%	0.042	0.039	0.086	0.056
%RSD		3.412	4.334	4.425	2.956	7.923	9.067	9.351	7.977
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:05:22	55.830%	8.855	1.123	1.088	345.600	341.400	72.626%	72.314%
2	13:05:41	54.749%	8.765	1.279	1.136	349.300	343.900	72.122%	73.325%
3	13:06:01	54.107%	8.410	1.240	1.029	344.500	341.500	71.548%	72.635%
x		54.895%	8.676	1.214	1.085	346.500	342.200	72.099%	72.758%
σ		0.870%	0.235	0.081	0.054	2.537	1.410	0.540%	0.516%
%RSD		1.585	2.712	6.706	4.939	0.732	0.412	0.748	0.710
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	13:05:22	1.115	1.164	172.800	160.200	168.900	52.896%		
2	13:05:41	1.137	1.192	176.000	163.400	170.600	52.573%		
3	13:06:01	1.146	1.212	176.000	163.700	170.300	52.634%		
x		1.133	1.189	174.900	162.400	169.900	52.701%		
σ		0.016	0.024	1.810	1.935	0.917	0.171%		
%RSD		1.445	2.009	1.035	1.191	0.539	0.325		

CCV 1408349 12/3/2014 1:08:42 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:08:42	45.972%	108.400	97.780	97.030	0.000	45880.000	46470.000	46390.000
2	13:09:01	42.504%	109.900	100.800	93.690	0.000	44920.000	46280.000	44710.000
3	13:09:21	38.537%	108.300	100.500	97.730	0.000	45870.000	45120.000	45150.000
x		42.338%	108.884%	99.688%	96.149%	0.000	91.116%	91.914%	90.833%
σ		3.720%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		8.786	0.842	1.663	2.249	0.000	1.212	1.593	1.913
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:08:42	467.500	4106.000	0.000	49720.000	52610.000	51460.000	45.749%	104.700
2	13:09:01	439.000	3924.000	0.000	48670.000	52910.000	50820.000	42.894%	99.170
3	13:09:21	454.000	3980.000	0.000	49140.000	52900.000	51520.000	41.491%	99.210
x		90.702%	80.065%	0.000	98.356%	105.605%	102.535%	43.378%	101.043%
σ		n/a	n/a	0.000	n/a	n/a	n/a	2.170%	n/a
%RSD		3.141	2.330	0.000	1.064	0.324	0.762	5.002	3.174
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:08:42	103.100	104.500	547.600	27250.000	27210.000	105.600	103.100	105.200
2	13:09:01	104.800	107.200	561.500	27760.000	27910.000	104.500	104.600	106.300
3	13:09:21	99.660	104.800	562.600	27730.000	27730.000	105.300	101.400	105.300
x		102.533%	105.513%	111.442%	110.320%	110.462%	105.127%	103.014%	105.611%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.558	1.395	1.500	1.033	1.305	0.555	1.573	0.602
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:08:42	106.800	116.000	114.700	103.500	107.400	106.800	0.000	103.800
2	13:09:01	104.400	118.500	116.300	106.300	110.000	110.000	0.000	103.100
3	13:09:21	104.300	118.600	116.500	105.000	111.400	111.400	0.000	103.000
x		105.148%	117.715%	115.840%	104.918%	109.581%	109.404%	0.000	103.303%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.323	1.254	0.868	1.341	1.864	2.175	0.000	0.450
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:08:42	52.340%	93.750	96.260	47.460%	109.300	108.700	110.900	109.200
2	13:09:01	52.218%	96.330	101.600	47.148%	110.000	108.300	111.800	108.900
3	13:09:21	51.814%	100.900	106.600	46.130%	109.800	107.300	111.200	108.700
x		52.124%	96.989%	101.497%	46.912%	109.717%	108.094%	111.313%	108.916%
σ		0.275%	n/a	n/a	0.695%	n/a	n/a	n/a	n/a
%RSD		0.529	3.729	5.101	1.482	0.323	0.673	0.430	0.263
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:08:42	55.891%	100.400	97.110	96.800	100.800	99.410	68.409%	70.534%
2	13:09:01	55.910%	99.030	98.990	97.440	102.600	98.270	69.831%	71.423%
3	13:09:21	56.537%	98.120	98.180	96.680	98.180	99.170	70.096%	72.110%
x		56.113%	99.196%	98.093%	96.974%	100.528%	98.950%	69.445%	71.356%
σ		0.368%	n/a	n/a	n/a	n/a	n/a	0.907%	0.790%
%RSD		0.655	1.173	0.964	0.419	2.202	0.612	1.306	1.107
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	13:08:42	109.600	114.500	113.200	113.700	113.100	61.571%		
2	13:09:01	112.200	118.400	116.800	118.400	117.200	61.021%		
3	13:09:21	113.000	118.800	116.200	118.100	117.800	61.471%		
x		111.589%	117.255%	115.403%	116.750%	116.050%	61.355%		
σ		n/a	n/a	n/a	n/a	n/a	0.293%		
%RSD		1.615	2.049	1.643	2.250	2.209	0.478		

CCB6 12/3/2014 1:14:38 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:14:57	63.428%	-0.041	2.521	2.780	0.000	15.930	6.913	7.399
2	13:15:17	56.371%	-0.041	0.881	2.535	0.000	20.960	8.463	6.410
3	13:15:36	55.202%	0.047	3.357	2.445	0.000	22.560	8.102	9.197
x		58.334%	-0.011	2.253	2.587	0.000	19.820	7.826	7.669
σ		4.450%	0.051	1.260	0.173	0.000	3.462	0.811	1.413
%RSD		7.629	444.500	55.910	6.692	0.000	17.470	10.360	18.430

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:14:57	2.961	1.375	0.000	2.983	2.546	4.629	63.551%	-0.006
2	13:15:17	3.726	2.546	0.000	4.838	9.089	6.329	60.471%	0.043
3	13:15:36	4.271	1.675	0.000	6.135	6.301	10.490	59.266%	0.009
x		3.653	1.865	0.000	4.652	5.979	7.148	61.096%	0.016
σ		0.658	0.608	0.000	1.584	3.284	3.014	2.210%	0.025
%RSD		18.010	32.600	0.000	34.050	54.920	42.170	3.617	160.100

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:14:57	0.138	0.086	0.181	8.296	17.200	-0.017	0.091	4.075
2	13:15:17	0.083	0.074	0.203	7.681	16.560	-0.008	0.004	4.005
3	13:15:36	0.046	0.104	0.216	9.606	14.760	-0.004	0.050	3.912
x		0.089	0.088	0.200	8.528	16.170	-0.010	0.048	3.997
σ		0.047	0.015	0.018	0.984	1.265	0.007	0.044	0.082
%RSD		52.450	17.210	8.929	11.530	7.821	69.860	90.630	2.051

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:14:57	3.919	0.828	1.023	-0.287	-0.299	-1.410	0.000	0.040
2	13:15:17	4.862	0.541	0.576	-0.504	-0.390	-2.083	0.000	0.047
3	13:15:36	3.811	0.708	0.819	0.031	-0.359	-1.246	0.000	0.051
x		4.197	0.692	0.806	-0.254	-0.349	-1.580	0.000	0.046
σ		0.578	0.144	0.224	0.269	0.046	0.443	0.000	0.006
%RSD		13.770	20.840	27.750	106.200	13.270	28.070	0.000	12.050

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:14:57	67.678%	0.334	0.235	67.575%	-0.005	-0.004	0.043	0.022
2	13:15:17	67.776%	0.289	0.233	67.279%	-0.022	-0.022	-0.032	-0.023
3	13:15:36	67.172%	0.292	0.232	66.884%	-0.007	-0.016	0.022	-0.006
x		67.542%	0.305	0.233	67.246%	-0.011	-0.014	0.011	-0.002
σ		0.324%	0.025	0.002	0.346%	0.009	0.009	0.038	0.023
%RSD		0.480	8.243	0.655	0.515	80.170	68.470	349.000	1133.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:14:57	71.628%	-0.202	0.149	0.087	0.074	0.105	78.574%	79.699%
2	13:15:17	72.857%	-0.186	0.154	0.043	0.116	0.092	79.654%	81.797%
3	13:15:36	73.378%	-0.203	0.125	0.104	0.128	0.151	80.649%	82.984%
x		72.621%	-0.197	0.142	0.078	0.106	0.116	79.626%	81.493%
σ		0.899%	0.010	0.016	0.031	0.028	0.031	1.038%	1.663%
%RSD		1.238	4.958	10.970	40.050	26.900	26.730	1.303	2.041

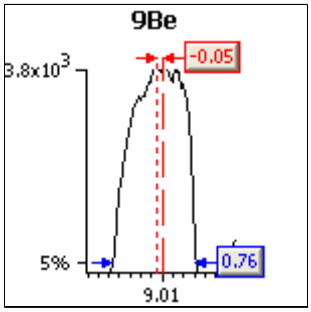
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:14:57	0.014	0.008	0.383	0.336	0.349	81.751%
2	13:15:17	0.008	0.009	0.333	0.351	0.350	82.367%
3	13:15:36	0.013	0.011	0.392	0.383	0.395	83.123%
x		0.012	0.010	0.369	0.356	0.365	82.414%
σ		0.003	0.002	0.032	0.024	0.026	0.687%
%RSD		29.510	16.460	8.724	6.693	7.092	0.834

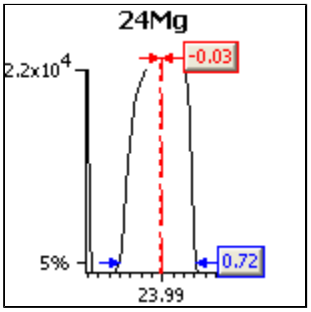
Performance Report

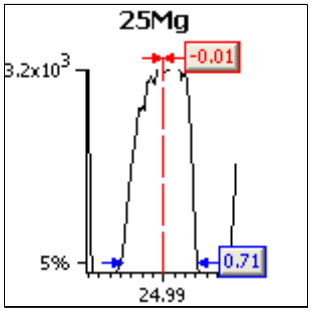
Sample details
Sample name : ITUNE
Acquired at : 12/3/2014 7:36:44 AM
Report name : EPA ILMO5.2/6020A 2.1 [3/15/2013 11:49:53 AM]

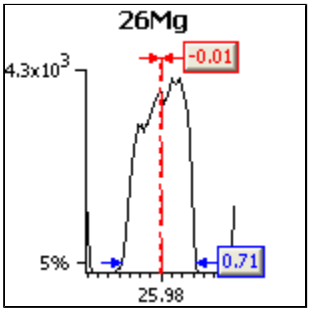
Mass Calibration verification

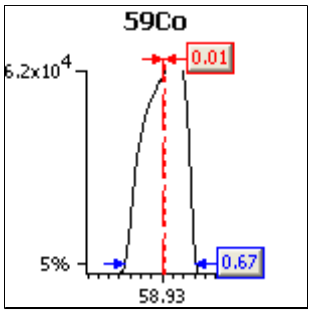
Acquisition parameters
Sweeps : 25
Dwell : 2.0 mSecs
Point spacing : 0.02 amu
Peak width measured at 5% of the peak maximum

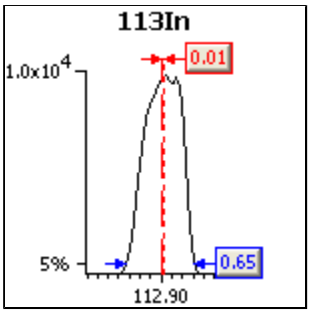


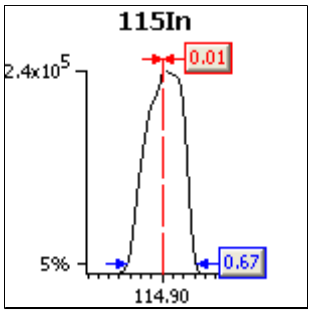


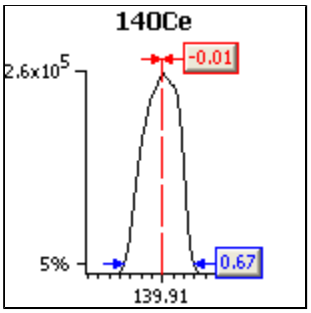


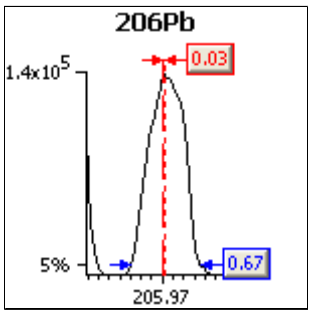


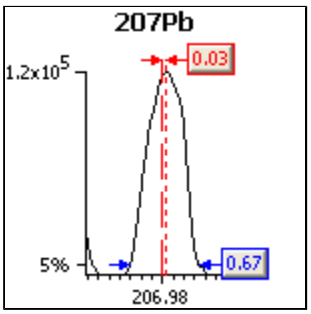


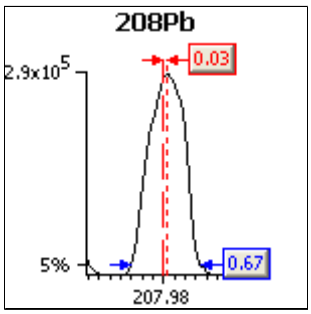












Analyte	Limits			Results	
	Max. width	Min. width	Max. error	Peak width	Peak error
9Be	0.90	0.45	0.10	0.76	-0.05
24Mg	0.90	0.45	0.10	0.72	-0.03
25Mg	0.90	0.45	0.10	0.71	-0.01
26Mg	0.90	0.45	0.10	0.71	-0.01
59Co	0.90	0.45	0.10	0.67	0.01
113In	0.90	0.45	0.10	0.65	0.01
115In	0.90	0.45	0.10	0.67	0.01
140Ce	0.90	0.45	0.10	0.67	-0.01
206Pb	0.90	0.45	0.10	0.67	0.03
207Pb	0.90	0.45	0.10	0.67	0.03
208Pb	0.90	0.45	0.10	0.67	0.03

Sample details
Sample name : ITUNE
Acquired at : 12/3/2014 7:36:44 AM
Report name : EPA ILMO5.2/6020A 2.1 [3/15/2013 11:49:53 AM]

Tune conditions

Major	
Extraction	-149
Lens 1	2.0
Focus	25.5
D1	-48.6
Pole Bias	3.0
Hexapole Bias	-3.0
Nebuliser	0.80
Sampling Depth	200

Minor	
Lens 2	-22.7
Lens 3	-199.2
Forward power	1302
Horizontal	86
Vertical	500
D2	-198
DA	-80.0
Cool	16.0
Auxiliary	1.00

Global	
Standard resolution	n/a
High resolution	n/a
Analogue Detector	n/a
PC Detector	n/a

Add. Gases	
He/H2	0.00
He/NH3	0.00

Sensitivity and stability results

Acquisition parameters
Sweeps : 150

Run	Time	5Bkg	9Be	24Mg	25Mg	26Mg	56Ar O	59Co	137Ba++
Dwell (mSecs)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Limits	%RSD	-	5.0%	5.0%	5.0%	5.0%	-	5.0%	-
	Countrate	-	>500	>500	>500	>500	-	>5000	-
1	7:37:32 AM	1	3636	24527	3149	3767	239069	59576	2
2	7:38:57 AM	1	3595	24020	3250	3623	235237	58954	3
3	7:40:23 AM	1	3562	24004	3050	3731	233755	58919	1
4	7:41:48 AM	1	3731	24428	3226	3709	236714	59284	1
5	7:43:13 AM	0	3785	24914	3258	3717	241226	59572	1
x		1	3662	24379	3186	3709	237200	59261	1
σ		0.17	93.65	380.86	87.66	53.18	2985.71	319.17	0.87
%RSD		31.566	2.558	1.562	2.751	1.434	1.259	0.539	59.265

Run	Time	138Ba++	101Bkg	113In	115In	138Ba	140Ce	156Ce O	206Pb
Dwell (mSecs)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Limits	%RSD	-	-	5.0%	5.0%	-	5.0%	-	5.0%
	Countrate	-	-	>200	>5000	-	>10000	-	>500
1	7:37:32 AM	14	0	10306	235788	1861	252012	6963	133870
2	7:38:57 AM	12	0	10230	236424	1871	253836	7024	135207
3	7:40:23 AM	12	0	10254	237008	1718	255362	7045	136949
4	7:41:48 AM	13	0	10117	238797	1833	254280	7085	137348
5	7:43:13 AM	12	0	10292	240116	1808	255726	7327	137714
x		13	0	10240	237626	1818	254243	7089	136218
σ		0.90	0.10	74.87	1787.12	61.20	1466.04	140.34	1626.80
%RSD		7.158	52.973	0.731	0.752	3.366	0.577	1.980	1.194

Run	Time	207Pb	208Pb	220Bkg
Dwell (mSecs)		0.0	0.0	0.0
Limits	%RSD	5.0%	5.0%	-
	Countrate	>500	>500	<2500
1	7:37:32 AM	117712	284793	0
2	7:38:57 AM	119373	289793	0
3	7:40:23 AM	120460	293714	0
4	7:41:48 AM	120353	294082	0
5	7:43:13 AM	121050	294116	0
x		119790	291300	0
σ		1308.10	4065.37	0.12
%RSD		1.092	1.396	55.902

Ratio results

Run	Time	156Ce O/140Ce
Ratio limits		<0.0500
1	7:37:32 AM	0
2	7:38:57 AM	0

3	7:40:23 AM	0
4	7:41:48 AM	0
5	7:43:13 AM	0
x		0.0279
σ		0.00
%RSD		1.5919

Result : The performance report passed.

TestAmerica Pittsburgh Atomic Absorption Data for Mercury

Instrument: HG HYDRA AA

HYDRA II

Analyst Name: Lauren E Tyburski

Analysis Date: 11/20/2014

File ID: B411260 #12657

Matrix: Water

Analytical Method(s): 245.1 / 7470A / 7470AD.O.D. / 7471A / 7471A D.O.D. / 7471B

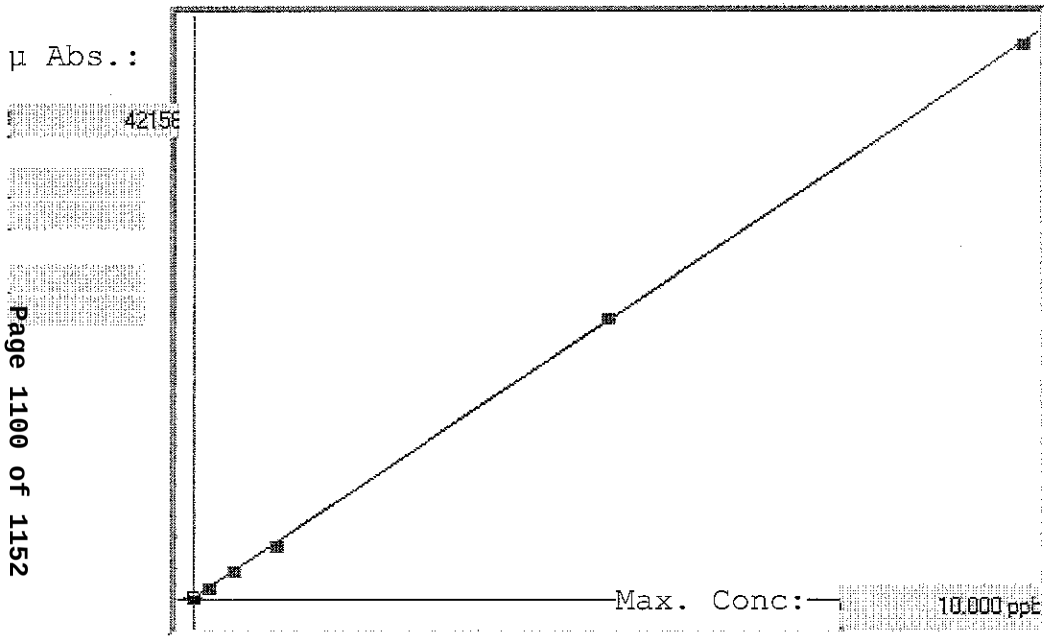
Job Number/SDG

39009
39026
39050
39058
39143
39146
39148
39171
39173
39175
39183
39188
39189
39209
39213
39215
39218
39220
39227

Lauren E McGrath
11/26/2014
R411260

METHG

Linear



A= 0.0000e+000

B= 2.3712e-004

C= -2.3950e-002

Rho= 0.9999505

Accept=Accepted

Accepted ☐Date=

11/26/14 16:55

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
blank	0.000	0.019	0.019	180	0.000	180				
.2ppb	0.200	0.194	-0.006	919	0.0 %	919				
.5ppb	0.500	0.503	0.003	2223	0.0 %	2223				
1.0ppb	1.000	0.948	-0.052	4099	0.0 %	4099				
5.0ppb	5.000	5.063	0.063	21455	0.0 %	21455				
10.0ppb	10.000	9.973	-0.027	42158	0.0 %	42158				

R41126D

Method: METHG Operator: Admin Date of Analysis: 26 Nov 2014 16:39:10

Seq ID	Type	Sample ID	Extended ID	Date	Conc.	Units	Stnd Conc	µ Abs.	Method	Chapter
14988	Std	blank - 1		26 Nov 2014 16:44:28	-	ppb	0.0000	180	METHG	R41126D
14989	Std	.2ppb - 1		26 Nov 2014 16:46:11	-	ppb	0.2000	919	METHG	R41126D
14990	Std	.5ppb - 1		26 Nov 2014 16:47:54	-	ppb	0.5000	2223	METHG	R41126D
14991	Std	1.0ppb - 1		26 Nov 2014 16:49:39	-	ppb	1.0000	4099	METHG	R41126D
14992	Std	5.0ppb - 1		26 Nov 2014 16:51:24	-	ppb	5.0000	21455	METHG	R41126D
14993	Std	10.0ppb - 1		26 Nov 2014 16:53:14	-	ppb	10.0000	42158	METHG	R41126D
14994	CK STND	ICV - 1		26 Nov 2014 16:55:23	97.6% 2.4400	ppb		10391	METHG	R41126D
14995	CK STND	ICB - 1		26 Nov 2014 16:57:41	-0.0998	ppb		-320	METHG	R41126D
14996	CK STND	CRA - 1		26 Nov 2014 16:59:42	88.2% 0.1764	ppb		845	METHG	R41126D
14997	CK STND	CCV - 1		26 Nov 2014 17:01:23	104.0% 5.2006	ppb		22033	METHG	R41126D
14998	CK STND	CCB - 1		26 Nov 2014 17:03:07	-0.0918	ppb		-286	METHG	R41126D
14999	SMPL	180-39009-C-24-B - 1		26 Nov 2014 17:05:17	-0.0230	ppb		4	METHG	R41126D
15000	SMPL	180-39222-B-1-A - 1		26 Nov 2014 17:06:59	-0.0164	ppb		32	METHG	R41126D
15001	SMPL	180-39222-B-2-A - 1		26 Nov 2014 17:08:41	-0.0185	ppb		23	METHG	R41126D
15002	SMPL	MB 180-126586/1-A - 1		26 Nov 2014 17:10:22	-0.1024	ppb		-331	METHG	R41126D
15003	SMPL	LCS 180-126586/2-A - 1		26 Nov 2014 17:12:04	2.2787	ppb		9711	METHG	R41126D
15004	SMPL	180-39213-J-1-B - 1		26 Nov 2014 17:13:45	-0.0498	ppb		-109	METHG	R41126D
15005	SMPL	180-39213-J-2-B - 1		26 Nov 2014 17:15:46	0.0593	ppb		351	METHG	R41126D
15006	SMPL	180-39213-J-3-D - 1		26 Nov 2014 17:17:28	0.2575	ppb		1187	METHG	R41126D
15007	SMPL	180-39213-J-3-E MS - 1		26 Nov 2014 17:19:12	1.2795	ppb		5497	METHG	R41126D
15008	SMPL	180-39213-J-3-F MSD - 1		26 Nov 2014 17:20:57	1.2058	ppb		5186	METHG	R41126D
15009	CK STND	CCV - 1		26 Nov 2014 17:22:52	96.6% 4.8283	ppb		20463	METHG	R41126D
15010	CK STND	CCB - 1		26 Nov 2014 17:24:47	-0.1005	ppb		-323	METHG	R41126D
15011	SMPL	180-39213-J-4-B - 1		26 Nov 2014 17:26:56	-0.0292	ppb		-22	METHG	R41126D
15012	SMPL	180-39213-J-5-B - 1		26 Nov 2014 17:28:38	0.7069	ppb		3082	METHG	R41126D
15013	SMPL	180-39213-J-6-B - 1		26 Nov 2014 17:30:22	-0.1072	ppb		-351	METHG	R41126D
15014	SMPL	180-39026-I-1-B - 1		26 Nov 2014 17:32:07	-0.0187	ppb		22	METHG	R41126D
15015	SMPL	180-39026-I-2-B - 1		26 Nov 2014 17:33:50	-0.0157	ppb		35	METHG	R41126D
15016	SMPL	180-39026-I-3-B - 1		26 Nov 2014 17:35:32	-0.0168	ppb		30	METHG	R41126D
15017	SMPL	180-39026-I-4-B - 1		26 Nov 2014 17:37:14	-0.0154	ppb		36	METHG	R41126D
15018	SMPL	180-39050-D-1-B - 1		26 Nov 2014 17:38:56	-0.0126	ppb		48	METHG	R41126D
15019	SMPL	180-39050-D-2-B - 1		26 Nov 2014 17:40:39	-0.0175	ppb		27	METHG	R41126D
15020	SMPL	180-39050-D-3-B - 1		26 Nov 2014 17:42:21	0.0052	ppb		123	METHG	R41126D
15021	CK STND	CCV - 1		26 Nov 2014 17:44:03	89.9% 4.4972	ppb		19067	METHG	R41126D
15022	CK STND	CCB - 1		26 Nov 2014 17:45:46	-0.0970	ppb		-308	METHG	R41126D
15023	SMPL	180-39050-D-4-B - 1		26 Nov 2014 17:47:55	-0.0282	ppb		-18	METHG	R41126D
15024	SMPL	MB 180-126542/1-A - 1		26 Nov 2014 17:49:38	-0.0244	ppb		-2	METHG	R41126D
15025	SMPL	LCS 180-126542/2-A - 1		26 Nov 2014 17:51:21	2.4701	ppb		10518	METHG	R41126D
15026	SMPL	LB 180-126234/6-D - 1		26 Nov 2014 17:53:04	-0.0486	ppb		-104	METHG	R41126D
15027	SMPL	180-39171-A-1-I - 1		26 Nov 2014 17:55:05	-0.0287	ppb		-20	METHG	R41126D
15028	SMPL	180-39171-A-1-J MS - 1		26 Nov 2014 17:56:46	2.0829	ppb		8885	METHG	R41126D
15029	SMPL	180-39171-A-1-K MSD - 1		26 Nov 2014 17:58:29	1.4969	ppb		6414	METHG	R41126D
15030	SMPL	180-39058-A-1-E - 1		26 Nov 2014 18:00:37	-0.1036	ppb		-336	METHG	R41126D
15031	SMPL	180-39146-A-1-E - 1		26 Nov 2014 18:02:45	-0.0268	ppb		-12	METHG	R41126D
15032	SMPL	180-39148-A-1-E - 1		26 Nov 2014 18:04:28	-0.0209	ppb		13	METHG	R41126D
15033	CK STND	CCV - 1		26 Nov 2014 18:06:10	90.4% 4.5200	ppb		19163	METHG	R41126D
15034	CK STND	CCB - 1		26 Nov 2014 18:07:52	-0.1202	ppb		-406	METHG	R41126D
15035	SMPL	180-39175-A-1-E - 1		26 Nov 2014 18:09:59	-0.0154	ppb		36	METHG	R41126D
15036	SMPL	MB 180-126545/1-A - 1		26 Nov 2014 18:11:42	-0.0254	ppb		-6	METHG	R41126D
15037	SMPL	LCS 180-126545/2-A - 1		26 Nov 2014 18:13:24	2.5868	ppb		11010	METHG	R41126D
15038	SMPL	LB 180-126311/10-D - 1		26 Nov 2014 18:15:07	-0.0249	ppb		-4	METHG	R41126D
15039	SMPL	180-39209-A-2-P - 1		26 Nov 2014 18:17:07	-0.0187	ppb		22	METHG	R41126D
15040	SMPL	180-39209-A-2-Q MS - 1		26 Nov 2014 18:18:50	6.0682	ppb		25692	METHG	R41126D
15041	SMPL	180-39209-A-2-R MSD - 1		26 Nov 2014 18:20:34	5.4763	ppb		23196	METHG	R41126D
15042	SMPL	180-39143-A-3-D - 1		26 Nov 2014 18:22:44	-0.1216	ppb		-412	METHG	R41126D

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R41126D

Method: METHG Operator: Admin Date of Analysis: 26 Nov 2014 16:39:10

Seq ID	Type	Sample ID	Extended ID	Date	Conc.	Units	Stnd Conc	µ Abs	Method	Chapter
15043	SMPL	180-39215-A-1-C - 1		26 Nov 2014 18:24:54	-0.0247	ppb		-3	METHG	R41126D
15044	SMPL	180-39218-A-1-C - 1		26 Nov 2014 18:26:36	-0.0130	ppb		46	METHG	R41126D
15045	CK STND	CCV - 1		26 Nov 2014 18:28:19	99.3% 4.9649	ppb		21039	METHG	R41126D
15046	CK STND	CCB - 1		26 Nov 2014 18:30:01	-0.1145	ppb		-382	METHG	R41126D
15047	SMPL	180-39220-A-1-E - 1		26 Nov 2014 18:32:09	-0.0261	ppb		-9	METHG	R41126D
15048	SMPL	LCS 180-126544/2-A - 1		26 Nov 2014 18:33:51	2.7900	ppb		11867	METHG	R41126D
15049	SMPL	LCSD 180-126544/3-A - 1		26 Nov 2014 18:35:33	2.7437	ppb		11672	METHG	R41126D
15050	SMPL	180-39173-A-1-C - 1		26 Nov 2014 18:37:34	-0.0835	ppb		-251	METHG	R41126D
15051	SMPL	180-39183-A-1-D - 1		26 Nov 2014 18:39:34	-0.0133	ppb		45	METHG	R41126D
15052	SMPL	180-39189-A-1-D - 1		26 Nov 2014 18:41:17	-0.0138	ppb		43	METHG	R41126D
15053	SMPL	180-39188-A-1-C - 1		26 Nov 2014 18:43:00	-0.0299	ppb		-25	METHG	R41126D
15054	SMPL	MB 180-126544/1-A - 1		26 Nov 2014 18:44:43	-0.0237	ppb		1	METHG	R41126D
15055	CK STND	CCV - 1		26 Nov 2014 18:46:27	(L)67.6% 3.3780	ppb		14347	METHG	R41126D
15056	CK STND	CCB - 1		26 Nov 2014 18:48:09	-0.1245	ppb		-424	METHG	R41126D

Samples not reported

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Rack	Cup	Sample ID	Extended ID	Wt.	Vol.
1	1	180-39009-C-24-B		1.0000	1.0000
1	2	180-39222-B-1-A		1.0000	1.0000
1	3	180-39222-B-2-A		1.0000	1.0000
1	4	MB 180-126586/1-A		1.0000	1.0000
1	5	LCS 180-126586/2-A		1.0000	1.0000
1	6	180-39213-J-1-B		1.0000	1.0000
1	7	180-39213-J-2-B		1.0000	1.0000
1	8	180-39213-J-3-D		1.0000	1.0000
1	9	180-39213-J-3-E MS		1.0000	1.0000
1	10	180-39213-J-3-F MSD		1.0000	1.0000
1	11	180-39213-J-4-B		1.0000	1.0000
1	12	180-39213-J-5-B		1.0000	1.0000
1	13	180-39213-J-6-B		1.0000	1.0000
1	14	180-39026-I-1-B		1.0000	1.0000
1	15	180-39026-I-2-B		1.0000	1.0000
1	16	180-39026-I-3-B		1.0000	1.0000
1	17	180-39026-I-4-B		1.0000	1.0000
1	18	180-39050-D-1-B		1.0000	1.0000
1	19	180-39050-D-2-B		1.0000	1.0000
1	20	180-39050-D-3-B		1.0000	1.0000
1	21	180-39050-D-4-B		1.0000	1.0000
1	22	MB 180-126542/1-A		1.0000	1.0000
1	23	LCS 180-126542/2-A		1.0000	1.0000
1	24	LB 180-126234/6-D		1.0000	1.0000
1	25	180-39171-A-1-I		1.0000	1.0000
1	26	180-39171-A-1-J MS		1.0000	1.0000
1	27	180-39171-A-1-K MSD		1.0000	1.0000
1	28	180-39058-A-1-E		1.0000	1.0000
1	29	180-39146-A-1-E		1.0000	1.0000
1	30	180-39148-A-1-E		1.0000	1.0000
1	31	180-39175-A-1-E		1.0000	1.0000
1	32	MB 180-126545/1-A		1.0000	1.0000
1	33	LCS 180-126545/2-A		1.0000	1.0000
1	34	LB 180-126311/10-D		1.0000	1.0000
1	35	180-39209-A-2-P		1.0000	1.0000
1	36	180-39209-A-2-Q MS		1.0000	1.0000
1	37	180-39209-A-2-R MSD		1.0000	1.0000
1	38	180-39143-A-3-D		1.0000	1.0000
1	39	180-39215-A-1-C		1.0000	1.0000

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Rack	Cup	Sample ID	Extended ID	Wt.	Vol.
1	40	180-39218-A-1-C		1.0000	1.0000
1	41	180-39220-A-1-E		1.0000	1.0000
1	42	LCS 180-126544/2-A		1.0000	1.0000
1	43	LCSD 180-126544/3-A		1.0000	1.0000
1	44	180-39173-A-1-C		1.0000	1.0000
1	45	180-39183-A-1-D		1.0000	1.0000
1	46	180-39189-A-1-D		1.0000	1.0000
1	47	180-39188-A-1-C		1.0000	1.0000
1	48	MB 180-126544/1-A		1.0000	1.0000
1	49			1.0000	1.0000
1	50			1.0000	1.0000
1	51			1.0000	1.0000
1	52			1.0000	1.0000
1	53			1.0000	1.0000
1	54			1.0000	1.0000
1	55			1.0000	1.0000
1	56			1.0000	1.0000
1	57			1.0000	1.0000
1	58			1.0000	1.0000
1	59			1.0000	1.0000
1	60			1.0000	1.0000
2	1			1.0000	1.0000
2	2			1.0000	1.0000
2	3			1.0000	1.0000
2	4			1.0000	1.0000
2	5			1.0000	1.0000
2	6			1.0000	1.0000
2	7			1.0000	1.0000
2	8			1.0000	1.0000
2	9			1.0000	1.0000
2	10			1.0000	1.0000
2	11			1.0000	1.0000
2	12			1.0000	1.0000
2	13			1.0000	1.0000
2	14			1.0000	1.0000
2	15			1.0000	1.0000
2	16			1.0000	1.0000
2	17			1.0000	1.0000
2	18			1.0000	1.0000

Date: 11/26/2014
lyst: LOM
rument: Hydra II
hods: 7470A

Job #s/Batch(s) Analyzed:
1. 39009
2. 39026
3. 39050
39215
4. 39038
5. 39143
6. 39146
7. 39148
39218
8. 39171
9. 39173
10. 39175
11. 39183
39220
12. 39188
13. 39189
14. 39204
15. 39213
39222

Review Item	Yes (√)	No (√)	N/A (√)	2nd Level Review (√)	Comments
A. Calibration/Instrument Run QC 1. Instrument calibrated per manufacturer's instructions and at SOP specified levels?	✓			✓	
2. ICV/CCV analyzed at appropriate frequency and within control limits?	✓			✓	
3. ICB/CCB analyzed at appropriate frequency and within +/- RL or < LOD for DoD?	✓			✓	
4. RLV/ CRA run? (7470A/7471A/B/DoD – 50-150%)	✓			✓	
B. Sample Results 1. Were samples with concentrations > the high calibration standard diluted and reanalyzed?			✓	✓	
2. All reported results bracketed by in control QC?	✓			✓	
3. Sample analyses done within holding time?	✓			✓	
C. Preparation/Matrix QC 1. LCS done per prep batch and within QC limits?	✓			✓	
2. Method blank done per prep batch and < RL or <1/2 RL for DoD?	✓			✓	
3. MS run at required frequency and within limits?		✓		✓	
4. MSD or DU run at required frequency and RPD within SOP limits?		✓		✓	
D. Other 1. Are all nonconformances documented appropriately?			✓	✓	
2. Current IDL/MDL data on file?	✓			✓	
3. Calculations and transcriptions checked for error?	✓			✓	
4. All client/project specific requirements met?	✓			✓	
5. Date/Time of analysis verified as correct?	✓			✓	

General Comments:

Analyst: Lauren E McGrath Date: 11/26/2014

Second-Level Review: [signature] Date: 11-28-14

METALS BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Batch Number: 126109 Batch Start Date: 11/23/14 09:30 Batch Analyst: Becker, Sandy L

Batch Method: 3005A Batch End Date: 11/23/14 13:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAPITTICPMS 00018	MTAPITTMSA 00022	MTAPITTMSC 00028	
MB 180-126109/1		3005A, 6020A		50 mL	50 mL				
LCS 180-126109/3		3005A, 6020A		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
180-39026-I-1	ST-018-111614	3005A, 6020A	R	50 mL	50 mL				
180-39026-I-2	ST-UNNAMED-111614	3005A, 6020A	R	50 mL	50 mL				
180-39026-I-3	ST-DUP1-111614	3005A, 6020A	R	50 mL	50 mL				
180-39026-I-4	ST-014-111614	3005A, 6020A	R	50 mL	50 mL				

Batch Notes	
Batch Comment	Metals D2
First End time	1330
Lot # of hydrochloric acid	2.5mL 1347478
Lot # of Nitric Acid	1mL 1335607
Hot Block ID number	#1
Oven, Bath or Block Temperature 1	95
Pipette ID	F1204715U
Person who witnessed spiking	SLB
First Start time	0930
ID number of the thermometer	IP1-14 CF=0.0 A2
Digestion Tube/Cup Lot #	1404094
Uncorrected Temperature	95 Celsius

Basis	Basis Description
R	Total Recoverable

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.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Batch Number: 126586 Batch Start Date: 11/26/14 11:00 Batch Analyst: McGrath, Lauren E

Batch Method: 7470A Batch End Date: 11/26/14 13:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MHgworkingCal 00930			
MB 180-126586/1		7470A, 7470A		50 mL	50 mL				
LCS 180-126586/2		7470A, 7470A		50 mL	50 mL	1.25 mL			
180-39026-I-1	ST-018-111614	7470A, 7470A	T	50 mL	50 mL				
180-39026-I-2	ST-UNNAMED-111614	7470A, 7470A	T	50 mL	50 mL				
180-39026-I-3	ST-DUP1-111614	7470A, 7470A	T	50 mL	50 mL				
180-39026-I-4	ST-014-111614	7470A, 7470A	T	50 mL	50 mL				

Batch Notes	
Hydroxylamine Hydrochloride Lot	3ML 1321961 hg disp c6
Digestion End Time	1300
Digestion Start Time	1100
Sulfuric Acid Lot Number	2.5ML 1285209 hg disp 7n8924
Lot # of hydrochloric acid	1322223
Lot # of Nitric Acid	1.25ML 1285208 hg disp n1
Hot Block ID number	#3
Potassium Persulfate Lot Number	4ML 1321960 hg disp ks4
Potassium Permanganate Lot Number	7.5ML 1321959 hg disp kmN04
NaCl Lot #	1217635
Oven, Bath or Block Temperature 1	94 Celsius
Pipette ID	J0922
Repittetor Volume Check	YES
Stannous Chloride Lot Number	1321963
Temperature	94
ID number of the thermometer	IP 31 (0.0) D1
Digestion Tube/Cup Lot #	1404094
Uncorrected Temperature	94 Celsius
Visual ck - digestate F.V. consistency	YES

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.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Batch Number: 126586 Batch Start Date: 11/26/14 11:00 Batch Analyst: McGrath, Lauren E

Batch Method: 7470A Batch End Date: 11/26/14 13:00

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.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Batch Number: 126589 Batch Start Date: 11/26/14 11:00 Batch Analyst: McGrath, Lauren E

Batch Method: 7470A Batch End Date: 11/26/14 13:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MHgworkingCal 00930	MHgWorkingicv 00908		
ICV 180-126589/7		7470A, 7470A		50 mL	50 mL		1.25 mL		
ICB 180-126589/8		7470A, 7470A		50 mL	50 mL				
CRA 180-126589/9		7470A, 7470A		50 mL	50 mL	0.1 mL			
CCV 180-126589/10		7470A, 7470A		50 mL	50 mL	2.5 mL			
CCB 180-126589/11		7470A, 7470A		50 mL	50 mL				

Batch Notes	
Hydroxylamine Hydrochloride Lot	3ML 1321961 hg disp c6
Digestion End Time	1300
Digestion Start Time	1100
Sulfuric Acid Lot Number	2.5ML 1285209 hg disp 7n8924
Lot # of hydrochloric acid	1322223
Lot # of Nitric Acid	1.25ML 1285208 hg disp n1
Hot Block ID number	#1
Potassium Persulfate Lot Number	4ML 1321960 hg disp ks4
Potassium Permanganate Lot Number	7.5ML 1321959 hg disp kmN04
NaCl Lot #	1217635
Oven, Bath or Block Temperature 1	94 Celsius
Pipette ID	J0922
Repittetor Volume Check	YES
Stannous Chloride Lot Number	1321963
Temperature	94
ID number of the thermometer	IP 29 (0.0) D1
Digestion Tube/Cup Lot #	1404094
Uncorrected Temperature	94 Celsius
Visual ck - digestate F.V. consistency	YES

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.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Batch Number: 126589 Batch Start Date: 11/26/14 11:00 Batch Analyst: McGrath, Lauren E

Batch Method: 7470A Batch End Date: 11/26/14 13:00

Basis	Basis Description

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.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-39026-1

SDG No.:

Project: Sparrows Point Trust Offshore Investigat

Client Sample ID	Lab Sample ID
ST-018-111614	180-39026-1
ST-UNNAMED-111614	180-39026-2
ST-DUP1-111614	180-39026-3
ST-014-111614	180-39026-4

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: ST-018-111614 Lab Sample ID: 180-39026-1

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG ID.:

Matrix: Water Date Sampled: 11/16/2014 18:08

Reporting Basis: WET Date Received: 11/18/2014 09:35

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	40	10	2.5	ug/L			1	9014
	HEM (Oil & Grease)	2.0	5.2	1.6	mg/L	J		1	1664B
	Total Suspended Solids	3.6	2.0	2.0	mg/L			1	SM 2540D

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: ST-UNNAMED-111614 Lab Sample ID: 180-39026-2

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG ID.:

Matrix: Water Date Sampled: 11/16/2014 18:55

Reporting Basis: WET Date Received: 11/18/2014 09:35

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	ND	10	2.5	ug/L			1	9014
	HEM (Oil & Grease)	2.0	5.2	1.6	mg/L	J		1	1664B
	Total Suspended Solids	2.0	2.0	2.0	mg/L			1	SM 2540D

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: ST-DUP1-111614 Lab Sample ID: 180-39026-3

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG ID.:

Matrix: Water Date Sampled: 11/16/2014 00:00

Reporting Basis: WET Date Received: 11/18/2014 09:35

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	ND	10	2.5	ug/L			1	9014
	HEM (Oil & Grease)	2.0	5.2	1.6	mg/L	J		1	1664B
	Total Suspended Solids	3.2	2.0	2.0	mg/L			1	SM 2540D

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: ST-014-111614 Lab Sample ID: 180-39026-4

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG ID.:

Matrix: Water Date Sampled: 11/16/2014 19:15

Reporting Basis: WET Date Received: 11/18/2014 09:35

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	4.3	10	2.5	ug/L	J		1	9014
	HEM (Oil & Grease)	ND	5.2	1.6	mg/L			1	1664B
	Total Suspended Solids	2.4	2.0	2.0	mg/L			1	SM 2540D

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Analyst: PGJ Batch Start Date: 11/26/2014

Reporting Units: ug/L Analytical Batch No.: 126605

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	13:39	Cyanide, Total	202	200	101	90-110		WCN0.2ICV_00293
2	ICB	13:41	Cyanide, Total	ND					
15	CCV	14:09	Cyanide, Total	93.9	100	94	90-110		WCN0.1L3_00008
16	CCB	14:11	Cyanide, Total	ND					
27	CCV	14:35	Cyanide, Total	97.5	100	98	90-110		WCN0.1L3_00008
28	CCB	14:37	Cyanide, Total	ND					
39	CCV	15:01	Cyanide, Total	98.5	100	99	90-110		WCN0.1L3_00008
40	CCB	15:03	Cyanide, Total	ND					

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 126598	Date: 11/26/2014 09:50	Prep Batch: 126560	Date: 11/26/2014 09:50				
1664B	MB 180-126560/1-A	HEM (Oil & Grease)	ND		mg/L	5.0	1
Batch ID: 126605	Date: 11/26/2014 14:31	Prep Batch: 126579	Date: 11/26/2014 11:15				
9014	MB 180-126579/4-A	Cyanide, Total	ND		ug/L	10	1
Batch ID: 125730	Date: 11/19/2014 14:43						
SM 2540D	MB 180-125730/2	Total Suspended Solids	ND		mg/L	2.0	1

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 126605	Date: 11/26/2014 14:39		Prep Batch: 126579		Date: 11/26/2014 11:15						
9014	180-39026-1	Cyanide, Total	40		ug/L						
9014	180-39026-1 MS	Cyanide, Total	140		ug/L	100	100	75-125			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 126605	Date: 11/26/2014 14:41		Prep Batch: 126579		Date: 11/26/2014 11:15						
9014	180-39026-1 MSD	Cyanide, Total	139		ug/L	100	99	75-125	1	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 126598	Date: 11/26/2014 09:50		Prep Batch: 126560			Date: 11/26/2014 09:50					
						LCS Source: WHemPSP_00172					
1664B	LCS 180-126560/2-A	HEM (Oil & Grease)	32.0		mg/L	40.0	80	78-114			
Batch ID: 126605	Date: 11/26/2014 14:28		Prep Batch: 126579			Date: 11/26/2014 11:15					
						LCS Source: WCN10Si_00464					
9014	LCS 180-126579/3-A	Cyanide, Total	194		ug/L	200	97	85-115			
Batch ID: 125730	Date: 11/19/2014 14:43										
						LCS Source: WResPSP_00028					
SM 2540D	LCS 180-125730/1	Total Suspended Solids	50.0		mg/L	56.9	88	80-120			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

7A-IN
LOW LEVEL CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 126605	Date: 11/26/2014 14:24		Prep Batch: 126579			Date: 11/26/2014 11:15					
						LCS Source: WCN0.5L1_00456					
9014	LLCS 180-126579/1-A	Cyanide, Total	47.6		ug/L	50.0	95	90-110			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

7A-IN
HIGH LEVEL CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 126605	Date: 11/26/2014 14:26		Prep Batch: 126579		Date: 11/26/2014 11:15						
					LCS Source: WCN10Pi_00459						
9014	HLCS 180-126579/2-A	Cyanide, Total	243		ug/L	250	97	90-110			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-39026-1

SDG Number:

Matrix: Water Instrument ID: SEAL2

Method: 9014 MDL Date: 10/15/2014 12:58

Prep Method: 9010C

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Cyanide, Total		10	2.5

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-39026-1

SDG Number:

Matrix: Water Instrument ID: SEAL2

Method: 9014 XMDL Date: 10/15/2014 12:59

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Cyanide, Total		10	2.5

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-39026-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: 1664B MDL Date: 01/27/2011 15:53

Prep Method: 1664B

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
HEM (Oil & Grease)		5	1.4986

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-39026-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: 1664B XMDL Date: 01/27/2011 15:53

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
HEM (Oil & Grease)		5	1.4986

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-39026-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: SM 2540D MDL Date: 01/28/2010 13:00

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Total Suspended Solids		2	2

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-39026-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: SM 2540D XMDL Date: 01/28/2010 13:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Suspended Solids		2	2

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Prep Method: 9010C

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LLCS 180-126579/1-A	11/26/2014 11:15	126579		50	50
HLCS 180-126579/2-A	11/26/2014 11:15	126579		50	50
LCS 180-126579/3-A	11/26/2014 11:15	126579		50	50
MB 180-126579/4-A	11/26/2014 11:15	126579		50	50
180-39026-1	11/26/2014 11:15	126579		50	50
180-39026-1 MS	11/26/2014 11:15	126579		50	50
180-39026-1 MSD	11/26/2014 11:15	126579		50	50
180-39026-2	11/26/2014 11:15	126579		50	50
180-39026-3	11/26/2014 11:15	126579		50	50
180-39026-4	11/26/2014 11:15	126579		50	50

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Prep Method: 1664B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 180-126560/1-A	11/26/2014 09:50	126560		1000	1000
LCS 180-126560/2-A	11/26/2014 09:50	126560		1000	1000
180-39026-1	11/26/2014 11:59	126560		960	1000
180-39026-2	11/26/2014 11:59	126560		960	1000
180-39026-3	11/26/2014 11:59	126560		960	1000
180-39026-4	11/26/2014 11:59	126560		960	1000

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Instrument ID: SEAL2 Method: 9014

Start Date: 11/26/2014 13:39 End Date: 11/26/2014 15:13

Lab Sample ID	D/F	Type	Time	Analytes																			
				CN																			
ICV 180-126605/1	1		13:39	X																			
ICB 180-126605/2	1		13:41	X																			
CCV 180-126605/3			13:43																				
CCB 180-126605/4			13:45																				
ZZZZZZ			13:48																				
ZZZZZZ			13:50																				
ZZZZZZ			13:52																				
ZZZZZZ			13:54																				
ZZZZZZ			13:56																				
ZZZZZZ			13:58																				
ZZZZZZ			14:01																				
ZZZZZZ			14:03																				
ZZZZZZ			14:05																				
ZZZZZZ			14:07																				
CCV 180-126605/15	1		14:09	X																			
CCB 180-126605/16	1		14:11	X																			
ZZZZZZ			14:13																				
ZZZZZZ			14:16																				
ZZZZZZ			14:18																				
ZZZZZZ			14:20																				
ZZZZZZ			14:22																				
LLCS 180-126579/1-A	1	T	14:24	X																			
HLCS 180-126579/2-A	1	T	14:26	X																			
LCS 180-126579/3-A	1	T	14:28	X																			
MB 180-126579/4-A	1	T	14:31	X																			
180-39026-1	1	T	14:33	X																			
CCV 180-126605/27	1		14:35	X																			
CCB 180-126605/28	1		14:37	X																			
180-39026-1 MS	1	T	14:39	X																			
180-39026-1 MSD	1	T	14:41	X																			
180-39026-2	1	T	14:43	X																			
180-39026-3	1	T	14:46	X																			
180-39026-4	1	T	14:48	X																			
ZZZZZZ			14:50																				
ZZZZZZ			14:52																				
ZZZZZZ			14:54																				
ZZZZZZ			14:56																				
ZZZZZZ			14:58																				
CCV 180-126605/39	1		15:01	X																			
CCB 180-126605/40	1		15:03	X																			
ZZZZZZ			15:05																				
ZZZZZZ			15:06																				

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Instrument ID: SEAL2 Method: 9014

Start Date: 11/26/2014 13:39 End Date: 11/26/2014 15:13

Lab Sample ID	D / F	Type	Time	Analytes																			
				CN																			
ZZZZZZ			15:08																				
ZZZZZZ			15:10																				
CCV 180-126605/45			15:11																				
CCB 180-126605/46			15:13																				

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Instrument ID: NOEQUIP Method: 1664B

Start Date: 11/26/2014 09:50 End Date: 11/26/2014 11:59

				Analytes																			
Lab Sample ID	D/F	Type	Time	HEM																			
MB 180-126560/1-A	1	T	09:50	X																			
LCS 180-126560/2-A	1	T	09:50	X																			
ZZZZZZ			09:50																				
ZZZZZZ			09:50																				
ZZZZZZ			09:50																				
ZZZZZZ			09:50																				
ZZZZZZ			09:50																				
ZZZZZZ			09:50																				
ZZZZZZ			09:50																				
ZZZZZZ			09:50																				
ZZZZZZ			09:50																				
ZZZZZZ			09:50																				
ZZZZZZ			09:50																				
180-39026-1	1	T	11:59	X																			
180-39026-2	1	T	11:59	X																			
180-39026-3	1	T	11:59	X																			
180-39026-4	1	T	11:59	X																			
ZZZZZZ			11:59																				
ZZZZZZ			11:59																				
ZZZZZZ			11:59																				

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh   Job No.: 180-39026-1

SDG No.:

Instrument ID: NOEQUIP   Method: SM 2540D

Start Date: 11/19/2014 14:43   End Date: 11/19/2014 14:43

Lab Sample ID	D/F	Type	Time	Analytes: TSS
LCS 180-125730/1	1	T	14:43	X
MB 180-125730/2	1	T	14:43	X
ZZZZZZ			14:43	
ZZZZZZ			14:43	
ZZZZZZ			14:43	
180-39026-1	1	T	14:43	X
180-39026-2	1	T	14:43	X
180-39026-3	1	T	14:43	X
180-39026-4	1	T	14:43	X
ZZZZZZ			14:43	
ZZZZZZ			14:43	
ZZZZZZ			14:43	
ZZZZZZ			14:43	
ZZZZZZ			14:43	
ZZZZZZ			14:43	
ZZZZZZ			14:43	
ZZZZZZ			14:43	
ZZZZZZ			14:43	
ZZZZZZ			14:43	
ZZZZZZ			14:43	
ZZZZZZ			14:43	
ZZZZZZ			14:43	
ZZZZZZ			14:43	
ZZZZZZ			14:43	

Prep Types

T = Total/NA

AQ2 Report

Serial Number: SEAL 2
Report Requested By: Test America
Date & Time: 11/26/2014 15:20:34
Tray Number: 1
Tray Name: 14.11.26 (12-36)

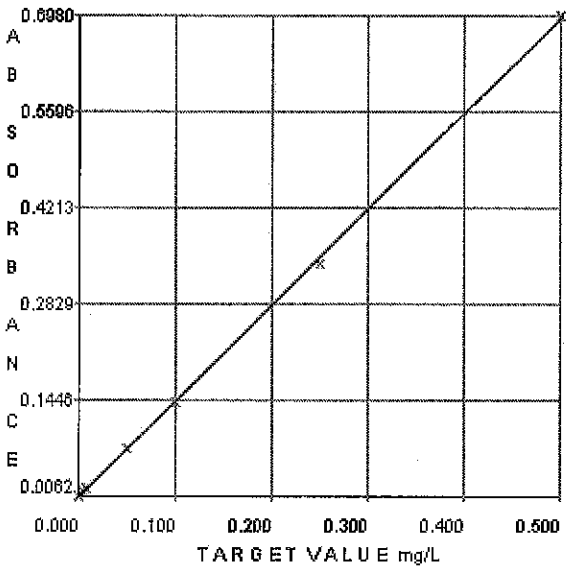
CYANIDE

Calibration Chart

Type	Observed	Calculated	Target	% Error
S1	0.0062	0.0008	0.0000	
S90	0.0142	0.0066	0.0050	32.5217
S91	0.0188	0.0100	0.0100	-0.1346
S92	0.0755	0.0511	0.0500	2.1636
S93	0.1421	0.0994	0.1000	-0.5680
S94	0.3414	0.2441	0.2500	-2.3640
S95	0.6980	0.5029	0.5000	0.5889
S0	0.0059	0.0006	0.0000	

Polynomial Order: 1
Correlation Coefficient: 0.9999
Carryover: -0.1
Date & Time: 11/26/2014 10:38:46

Calibration Graph



Reagents

Name	Batch	Prepared By	Expiry Date
CN - Phos Buff	1390860	Test America	11/03/2015 21:00:00
CN - Chl-T	1419077	Test America	12/02/2014 21:00:00
CN - PyrBrbA	1304925	Test America	02/28/2015 21:00:00

Cup	Type	ID	Result	Units	Raw Data	Test Dil.	Cup Dil.	User	Time/Date
1	C15	ICV	0.2020	mg/L	0.283348				11/26/2014 13:39:31
2	C17	ICB	0.0009	mg/L	0.006304				11/26/2014 13:41:40
	C11	C C V	0.0968	mg/L	0.138401				11/26/2014 13:43:48
	C12	C C B	0.0009	mg/L	0.006282				11/26/2014 13:45:57
3	U1	LLCS 180-1265771-A	0.0494	mg/L	0.073206				11/26/2014 13:48:06
4	U2	HLCS 180-1265772-A	0.2359	mg/L	0.330147				11/26/2014 13:50:15
5	U3	LCS 180-1265773-A	1.0423	mg/L	0.148684		x 10.000		11/26/2014 13:52:24
6	U4	MB 180-1265774-A	0.0010	mg/L	0.006509				11/26/2014 13:54:33
7	U5	180-38906-A-19-C	0.1570	mg/L	0.221421				11/26/2014 13:56:44
8	U6	180-38906-A-20-C	0.0715	mg/L	0.103610				11/26/2014 13:58:55
9	U7	180-38906-A-21-C	0.1175	mg/L	0.167034				11/26/2014 14:01:04
10	U8	180-38906-A-22-C	0.0120	mg/L	0.021573				11/26/2014 14:03:13
11	U9	180-38906-A-23-G	0.1647	mg/L	0.232001				11/26/2014 14:05:22
12	U10	180-38906-A-23-H MS	0.3206	mg/L	0.446738				11/26/2014 14:07:31
	C11	C C V	0.0939	mg/L	0.134399				11/26/2014 14:09:40

	C12	C C B	0.0007	mg/L	0.006056		11/26/2014 14:11:48
13	U34	180-38906-A-23-I MS	0.2747	mg/L	0.383580		11/26/2014 14:13:57
14	U11	180-38906-A-24-C	0.2599	mg/L	0.363147		11/26/2014 14:16:06
15	U12	180-38906-A-25-C	0.1383	mg/L	0.195609		11/26/2014 14:18:14
16	U13	180-38906-A-26-C	0.0018	mg/L	0.007628		11/26/2014 14:20:22
17	U14	180-38906-A-27-C	0.1109	mg/L	0.157854		11/26/2014 14:22:32
18	U15	LLCS 180-1265791-A	0.0476	mg/L	0.070675		11/26/2014 14:24:43
19	U16	HLCS 180-1265792-A	0.2428	mg/L	0.339533		11/26/2014 14:26:51
20	U17	LCS 180-1265793-A	0.1943	mg/L	0.272750		11/26/2014 14:28:59
21	U18	MB 180-1265794-A	0.0012	mg/L	0.006718		11/26/2014 14:31:07
22	U19	180-39026-H-1-A	0.0402	mg/L	0.060539		11/26/2014 14:33:15
	C11	C C V	0.0975	mg/L	0.139431		11/26/2014 14:35:23
	C12	C C B	0.0007	mg/L	0.006101		11/26/2014 14:37:31
23	U20	180-39026-H-1-B MS	0.1402	mg/L	0.198219		11/26/2014 14:39:40
24	U21	180-39026-H-1-C MSD	0.1392	mg/L	0.196874		11/26/2014 14:41:47
25	U22	180-39026-H-2-A	0.0018	mg/L	0.007591		11/26/2014 14:43:56
26	U23	180-39026-H-3-A	0.0023	mg/L	0.008211		11/26/2014 14:46:04
27	U24	180-39026-H-4-A	0.0043	mg/L	0.011038		11/26/2014 14:48:14
28	U25	LLCS 180-1265801-A	0.0497	mg/L	0.073526		11/26/2014 14:50:25
29	U26	HLCS 180-1265802-A	0.2405	mg/L	0.336411		11/26/2014 14:52:33
30	U27	LCS 180-1265803-A	1.1033	mg/L	0.157085	x 10.000	11/26/2014 14:54:41
31	U28	MB 180-1265804-A	0.0014	mg/L	0.007032		11/26/2014 14:56:49
32	U29	180-39209-A-2-S	0.0023	mg/L	0.008260		11/26/2014 14:58:57
	C11	C C V	0.0985	mg/L	0.140790		11/26/2014 15:01:08
	C12	C C B	0.0008	mg/L	0.006133		11/26/2014 15:03:19
33	U30	180-39248-A-2-A	0.1319	mg/L	0.186862		11/26/2014 15:05:07
34	U31	180-39248-A-2-B MS	0.1979	mg/L	0.277695		11/26/2014 15:06:55
35	U32	180-39248-A-2-C MSD	0.2001	mg/L	0.280777		11/26/2014 15:08:35
36	U33	460-86631-A-1-B	0.0061	mg/L	0.013426		11/26/2014 15:10:14
	C11	C C V	0.1003	mg/L	0.143232		11/26/2014 15:11:54
	C12	C C B	0.0010	mg/L	0.006474		11/26/2014 15:13:36

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Batch Number: 126579 Batch Start Date: 11/26/14 11:15 Batch Analyst: Johnson, Paul

Batch Method: 9010C Batch End Date: 11/26/14 12:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	SulfideCheck	ChlorineCheck	WCN0.5L1 00456	WCN10Pi 00459
LLCS 180-126579/1		9010C, 9014		50 mL	50 mL			5 mL	
HLCS 180-126579/2		9010C, 9014		50 mL	50 mL				1.25 mL
LCS 180-126579/3		9010C, 9014		50 mL	50 mL				
MB 180-126579/4		9010C, 9014		50 mL	50 mL				
180-39026-H-1	ST-018-111614	9010C, 9014	T	50 mL	50 mL	N	N		
180-39026-H-1 MS	ST-018-111614	9010C, 9014	T	50 mL	50 mL	N	N		
180-39026-H-1 MSD	ST-018-111614	9010C, 9014	T	50 mL	50 mL	N	N		
180-39026-H-2	ST-UNNAMED-111614	9010C, 9014	T	50 mL	50 mL	N	N		
180-39026-H-3	ST-DUP1-111614	9010C, 9014	T	50 mL	50 mL	N	N		
180-39026-H-4	ST-014-111614	9010C, 9014	T	50 mL	50 mL	N	N		

Lab Sample ID	Client Sample ID	Method Chain	Basis	WCN10Si 00464					
LLCS 180-126579/1		9010C, 9014							
HLCS 180-126579/2		9010C, 9014							
LCS 180-126579/3		9010C, 9014		1 mL					
MB 180-126579/4		9010C, 9014							
180-39026-H-1	ST-018-111614	9010C, 9014	T						
180-39026-H-1 MS	ST-018-111614	9010C, 9014	T	0.5 mL					
180-39026-H-1 MSD	ST-018-111614	9010C, 9014	T	0.5 mL					
180-39026-H-2	ST-UNNAMED-111614	9010C, 9014	T						
180-39026-H-3	ST-DUP1-111614	9010C, 9014	T						
180-39026-H-4	ST-014-111614	9010C, 9014	T						

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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Batch Number: 126579 Batch Start Date: 11/26/14 11:15 Batch Analyst: Johnson, Paul

Batch Method: 9010C Batch End Date: 11/26/14 12:45

Batch Notes	
Distillation Temperature	150 Degrees C
KI-Starch Paper Lot #	1276531
Lead Acetate Lot #	1276537
Magnesium Chloride Dispenser ID	42145
Magnesium Chloride Lot Number	1390859
NaOH Dispenser ID	10J62292
Sodium Hydroxide Reagent ID Number	1323151
Pipette ID	J1207624U
Sulfamic Acid Reagent ID Number	955307
Sulfuric Acid Dispenser ID	21014
Sulfuric Acid Reagent ID Number	1414463

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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Batch Number: 126605 Batch Start Date: 11/26/14 13:39 Batch Analyst: Johnson, Paul

Batch Method: 9014 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	WCN0.1L3 00008	WCN0.2ICV 00293			
ICV 180-126605/1		9014		10 mL		10 mL			
CCV 180-126605/15		9014		10 mL	10 mL				
CCV 180-126605/27		9014		10 mL	10 mL				
CCV 180-126605/39		9014		10 mL	10 mL				

Batch Notes	
Buffer Reagent ID Number	1250915
Chloramine-T Reagent ID Number	1419077
NaOH Lot #	1323151
Pipette ID	J1207624U
Pyridine-Barbituric Acid Reagent ID	1304925

Basis	Basis Description

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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Batch Number: 126560 Batch Start Date: 11/26/14 09:50 Batch Analyst: Klingman, Neil A

Batch Method: 1664B Batch End Date: 11/26/14 14:52

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	Final pH	GrossWeight	TareWeight	InitialAmount	FinalAmount
MB 180-126560/1		1664B, 1664B		2.00 SU	2.00 SU	1000 g	0 g	1000 mL	1000 mL
LCS 180-126560/2		1664B, 1664B		2.00 SU	2.00 SU	1000 g	0 g	1000 mL	1000 mL
180-39026-A-1	ST-018-111614	1664B, 1664B	T	2.00 SU	2.00 SU	960 g	0 g	960 mL	1000 mL
180-39026-A-2	ST-UNNAMED-111614	1664B, 1664B	T	2.00 SU	2.00 SU	960 g	0 g	960 mL	1000 mL
180-39026-A-3	ST-DUP1-111614	1664B, 1664B	T	2.00 SU	2.00 SU	960 g	0 g	960 mL	1000 mL
180-39026-A-4	ST-014-111614	1664B, 1664B	T	2.00 SU	2.00 SU	960 g	0 g	960 mL	1000 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	ReceiverTube	WHemPSP 00172				
MB 180-126560/1		1664B, 1664B		2.3526 g					
LCS 180-126560/2		1664B, 1664B		2.3420 g	10 mL				
180-39026-A-1	ST-018-111614	1664B, 1664B	T	2.3500 g					
180-39026-A-2	ST-UNNAMED-111614	1664B, 1664B	T	2.3893 g					
180-39026-A-3	ST-DUP1-111614	1664B, 1664B	T	2.3569 g					
180-39026-A-4	ST-014-111614	1664B, 1664B	T	2.3598 g					

Batch Notes	
Batch Comment	pH strip lot HC419379
Person's name who did the concentration	NAK
Disk Lot Number	UCT 110098-GJ
Evaporator Temperature	48 Degrees C
Extraction Analyst	NAK
Glass Wool ID	26013999
Hexane Lot#	1345111
Manifold ID	UCT
Methanol Lot Number	1400460
Nominal Amount Used	1000 mL
Sufficient volume for MS/MSD?	Yes

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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Batch Number: 126560 Batch Start Date: 11/26/14 09:50 Batch Analyst: Klingman, Neil A

Batch Method: 1664B Batch End Date: 11/26/14 14:52

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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Batch Number: 126598 Batch Start Date: 11/26/14 13:31 Batch Analyst: Klingman, Neil A

Batch Method: 1664B Batch End Date: 11/26/14 16:12

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	ReceiverTube	HEMWgt1	HEMWgt2	Residue	Residue2
MB 180-126560/1-A		1664B		1000 mL	2.3526 g	2.3531 g	2.3530 g	0.0005 g	0.0004 g
LCS 180-126560/2-A		1664B		1000 mL	2.3420 g	2.3740 g	2.3740 g	0.032 g	0.032 g
180-39026-A-1-A	ST-018-111614	1664B	T	1000 mL	2.3500 g	2.3519 g	2.3519 g	0.0019 g	0.0019 g
180-39026-A-2-A	ST-UNNAMED-111614	1664B	T	1000 mL	2.3893 g	2.3913 g	2.3912 g	0.002 g	0.0019 g
180-39026-A-3-A	ST-DUP1-111614	1664B	T	1000 mL	2.3569 g	2.3588 g	2.3588 g	0.0019 g	0.0019 g
180-39026-A-4-A	ST-014-111614	1664B	T	1000 mL	2.3598 g	2.3610 g	2.3610 g	0.0012 g	0.0012 g

Lab Sample ID	Client Sample ID	Method Chain	Basis	Weight2OK	CalcMsg				
MB 180-126560/1-A		1664B		Pass 0.0005g	HEM OK. SGT-HEM not calculated.				
LCS 180-126560/2-A		1664B		Pass 0.0005g	HEM OK. SGT-HEM not calculated.				
180-39026-A-1-A	ST-018-111614	1664B	T	Pass 0.0005g	HEM OK. SGT-HEM not calculated.				
180-39026-A-2-A	ST-UNNAMED-111614	1664B	T	Pass 0.0005g	HEM OK. SGT-HEM not calculated.				
180-39026-A-3-A	ST-DUP1-111614	1664B	T	Pass 0.0005g	HEM OK. SGT-HEM not calculated.				
180-39026-A-4-A	ST-014-111614	1664B	T	Pass 0.0005g	HEM OK. SGT-HEM not calculated.				

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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Batch Number: 126598 Batch Start Date: 11/26/14 13:31 Batch Analyst: Klingman, Neil A

Batch Method: 1664B Batch End Date: 11/26/14 16:12

Batch Notes	
Balance ID	1126020829
Cal check after 1st Weighing - 1g	1.0001 g
Cal check after 1st Weighing - 2 mg	0.0200 g
Cal check after 2nd Weighing - 1g	1.0001 g
Cal check after 2nd Weighing - 2 mg	0.0200 g
Calibration Check After 1st Weighing	5.0000 g
Calibration Check After 2nd Weighing	5.0000 g
Calibration Check Before 1st Weighing	5.0000 g
Calibration Check Before 2nd Weighing	5.0000 g
Cal check before 1st Weighing - 1g	1.0001 g
Cal check before 1st Weighing - 2 mg	0.0200 g
Cal check before 2nd Weighing - 1g	1.0001 g
Cal check before 2nd Weighing - 2 mg	0.0200 g
Batch Comment	pH strip lot HC419379
Prep Solvent Volume Used	40 ml
Perform Calculation (0=No, 1=Yes)	1
Solvent	hexane 1345111

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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Batch Number: 125730 Batch Start Date: 11/19/14 14:43 Batch Analyst: Swanson, Jim

Batch Method: SM 2540D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	CrucibleID	TareWeight	InitialAmount	Weight1	Weight2
LCS 180-125730/1		SM 2540D		250 mL	B0228562 0.1120	0.1120 g	50 mL	0.1145 g	0.1145 g
MB 180-125730/2		SM 2540D		250 mL	B0228561 0.1119	0.1119 g	250 mL	0.1119 g	0.1119 g
180-39026-G-1	ST-018-111614	SM 2540D	T	250 mL	B0228557 0.1124	0.1124 g	250 mL	0.1133 g	0.1133 g
180-39026-G-2	ST-UNNAMED-111614	SM 2540D	T	250 mL	B0228556 0.1128	0.1128 g	250 mL	0.1133 g	0.1133 g
180-39026-G-3	ST-DUP1-111614	SM 2540D	T	250 mL	B0228555 0.1131	0.1131 g	250 mL	0.1139 g	0.1139 g
180-39026-G-4	ST-014-111614	SM 2540D	T	250 mL	B0228554 0.1136	0.1136 g	250 mL	0.1143 g	0.1142 g

Lab Sample ID	Client Sample ID	Method Chain	Basis	Weight3	WeightOne%Diff	Residue	Residue2	ResDishWt	DishWeight
LCS 180-125730/1		SM 2540D		0 g	PASS <0.5mg	0.0025 g	0.0025 g	0.1145 g	0.112 g
MB 180-125730/2		SM 2540D		0 g	PASS <0.5mg	0 g	0 g	0.1119 g	0.1119 g
180-39026-G-1	ST-018-111614	SM 2540D	T	0 g	PASS <0.5mg	0.0009 g	0.0009 g	0.1133 g	0.1124 g
180-39026-G-2	ST-UNNAMED-111614	SM 2540D	T	0 g	PASS <0.5mg	0.0005 g	0.0005 g	0.1133 g	0.1128 g
180-39026-G-3	ST-DUP1-111614	SM 2540D	T	0 g	PASS <0.5mg	0.0008 g	0.0008 g	0.1139 g	0.1131 g
180-39026-G-4	ST-014-111614	SM 2540D	T	0 g	PASS <0.5mg	0.0007 g	0.0006 g	0.1142 g	0.1136 g

Lab Sample ID	Client Sample ID	Method Chain	Basis	WResPSP 00028					
LCS 180-125730/1		SM 2540D		50 mL					
MB 180-125730/2		SM 2540D							
180-39026-G-1	ST-018-111614	SM 2540D	T						
180-39026-G-2	ST-UNNAMED-111614	SM 2540D	T						
180-39026-G-3	ST-DUP1-111614	SM 2540D	T						
180-39026-G-4	ST-014-111614	SM 2540D	T						

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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-39026-1

SDG No.:

Batch Number: 125730 Batch Start Date: 11/19/14 14:43 Batch Analyst: Swanson, Jim

Batch Method: SM 2540D Batch End Date:

Batch Notes	
Balance ID	1126020829
Batch Comment	Weights(mg) Set up: 2, 1000 , 5000, Final 2, 1000 , 5000
Constant Weight (WT2) Date/Time in Oven	11/19/14@19:00
Constant Weight (WT2) Date/Time Out	11/19/14@20:00
Constant Weight (WT2) Temp In	103.2 Celsius
Constant Weight (WT2) Temp Out	103.2 Celsius
Uncorrected CW (Wt2) Temp In	103 Celsius
Uncorrected CW (Wt2) Temp Out	103 Celsius
Corrected Temperature in Oven	103.2 Celsius
Corrected Temperature out of Oven	103.2 Celsius
Date/Time Samples placed in Oven	11/19/14@16:30
Date/Time Samples removed from Oven	11/19/14@17:30
Filter Paper Lot Number	Whatman 206914
Nominal Amount Used	250 mL
Oven ID	ov 02
Perform Calculation (0=No, 1=Yes)	1
ID number of the thermometer	Wet C
Uncorrected In Temperature	103 Celsius
Uncorrected Out Temperature	103 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

Client:	Project Manager:	Parameters/Method Numbers for Analysis	Chain of Custody Record
EA Engineering Science, and Technology, Inc.	**Frank Barranco**		Laboratory: **TestAmerica - Pittsburgh**
	Phone: 410-329-5137		30
225 Schilling Circle, Suite 400	Field Contact:		Pi
Hunt Valley, MD 21031	**Mike Durbano**		pl
	Phone: (609) 332-0534		fa
Project Name: Sparrows Point	TestAmerica Quote #: 18010139-1		180-39026 Chain of Custody
Project#: 15131.01			**ATTN: Carrie Gamber**

Page 1 of 1

Site Water

Date	Time	Water	Sediment	Sample Identification	No. of Containers	PPL VOCs (SW846 8260C)	PPL SVOCs/PAHs (SW846 8270D LL)	PPL Metals (SW846 6020A)	Mercury (SW846 7470A)	PCB Aroclors (SW846 8082A LL)	Cyanide (SW846 9014)	Oil and Grease (EPA Method 1644B)	Suspended Solids (SW846 2540D)	Remarks
11/16/14	1805	X		ST-018-111614	13	X	X	X	X	X	X	X	X	SEE PROJECT SPECIFIC ANALYTE LIST
11/16/14	1855	X		ST-Unnamed-111614	13	X	X	X	X	X	X	X	X	+ 1 trip blank per cooler for 018, 014, and Unnamed
11/16/14	—	X		ST-DUP1-111614	13	X	X	X	X	X	X	X	X	
11/16/14	1915	X		ST-014-111614	13	X	X	X	X	X	X	X	X	

Sampled by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time
Mandi Durbano	11/17/14 1446		11/18/14 935
Relinquished by: (Signature)	Date/Time	Received by Laboratory: (Signature)	Date/Time

STORMWATER
SPARROW'S POINT

MIKE DURBANO
4105847000 5907
EA ENG SCIENCE TECH
225 SCHILLING CIRCLE
HUNT VALLEY MD 21031

50 LBS

1 OF 3

SHIP TO:

SAMPLE RECIEVING
4129637058
TEST AMERICA
301 ALPHA DR.
PITTSBURGH PA 15238-2907

22

180-39026 Waybill

UPS NEXT DAY AIR

TRACKING #: 1Z 288 682 01 9307 9911

1

Uncorrected temp 3.7 °C
Thermometer ID #7

CF 0.0 Initials

PT-WI-SR-001 effective 7/26/13

BILLING: P/P
UPS CARBON NEUTRAL SHIPMENT

Department Code: 2123
Project Phase AND Task: 1513101 0004
GS 16.7.04. WNTNV50 57.0A 10/2014

11/17/2014 3:07 PM

FOR UPS SHIPPING ONLY

1 of 3

FOR UPS SHIPPING ONLY

MIKE DURBANO
4105847000 5907
BA ENG SCIENCE TECH
225 SCHILLING CIRCLE
HUNT VALLEY MD 21031

50 LBS

2 OF 3

SHIP TO:
SAMPLE RECIEVING
4129637058
TEST AMERICA
301 ALPHA DR.
PITTSBURGH PA 15238-2907

PA 152 9-22

UPS NEXT DAY AIR **1**

TRACKING #: 1Z 288 682 01 9484 5528

Uncorrected temp 2-2 °C
Thermometer ID
CF 0.0 Initials

PT-WI-SR-001 effective 7/26/13

BILLING: P/P
UPS CARBON NEUTRAL SHIPMENT

Department Code: 2123
Project Phase AND Task: 151310 0004
GS 16.7.04

WNTNV50 57.0A 10/2014

TM

FOR UPS SHIPPING ONLY

MIKE DURBANO
4105847000 5907
EA ENG SCIENCE TECH
225 SCHILLING CIRCLE
HUNT VALLEY MD 21031

50 LBS

3 OF 3

SHIP TO:
SAMPLE RECIEVING
4129637058
TEST AMERICA
301 ALPHA DR.
PITTSBURGH PA 15238-2907

PA 152 9-22

UPS NEXT DAY AIR **1**

TRACKING #: 1Z 288 682 01 9379 1730

Uncorrected temp 30 °C
Thermometer ID AM

CF Initials

PT-WI-SR-001 effective 7/26/13

BILLING: P/P
UPS CA RBON NEUTRAL SHIPMENT

Department Code: 2123
Project Phase AND Task: 1513101 0004
CS 16.7.04.

WNTNV50 57.0A 10/2014

TM

Login Sample Receipt Checklist

Client: EA Engineering, Science, and Technology

Job Number: 180-39026-1

Login Number: 39026

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Kovitch, Christina M

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