TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 180-34362-1

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
7/21/2014 4:45 PM

Carrie L Gamber, Senior Project Manager
301 Alpha Drive, Pittsburgh, PA, 15238
(412)963-2428
carrie.gamber@testamericainc.com
07/21/2014

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CASE NARRATIVE

Client: EA Engineering, Science, and Technology

Project: Sparrows Point Trust Offshore Investigation

Report Number: 180-34362-1

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 06/27/2014; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 4.8 C.

VOLATILES
Methylene Chloride failed the recovery criteria low for LCSD 180-110699/9.

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

METALS
The following samples were diluted due to the nature of the sample matrix: H108-PZM003 (180-34362-1), H108-PZM060 (180-34362-4), RW19-PZM020 (180-34362-5), RW19-PZM050 (180-34362-3), RW19-PZP000 (180-34362-2). Elevated reporting limits (RLs) are provided.

Antimony was detected in method blank MB 180-111726/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Mercury was detected in method blank MB 180-111612/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

CYANIDE
The following sample was diluted to bring the concentration of target analytes within the calibration range: RW19-PZP000 (180-34362-2). Elevated reporting limits (RLs) are provided.

Cyanide, Total failed the recovery criteria low for the MS of sample RW19-PZM020 (180-34362-5) in batch 180-111072.

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Instrument ID: CHHP4 Analysis Batch Number: 98677

Lab Sample ID: IC 180-98677/4 Client Sample ID:

Date Analyzed: 06/24/13 11:49 Lab File ID: 4062405.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dioxane-d8 (IS)	8.41	Peak Tail	gordonk	03/04/14 12:08
Cyclohexanone	11.92	Peak Tail	gordonk	03/04/14 12:08
2-Methylnaphthalene	16.74	Poor chromatography	gordonk	03/04/14 12:08

Lab Sample ID: ICIS 180-98677/5 Client Sample ID:

Date Analyzed: 06/24/13 12:17 Lab File ID: 4062406.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isopropyl alcohol	4.27	Peak Tail	gordonk	03/04/14 12:05
2-Methylnaphthalene	16.72	Peak Tail	gordonk	03/04/14 12:05

Lab Sample ID: IC 180-98677/6 Client Sample ID:

Date Analyzed: 06/24/13 12:47 Lab File ID: 4062407.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dioxane-d8 (IS)	8.40	Peak Tail	gordonk	03/04/14 12:09

Lab Sample ID: IC 180-98677/7 Client Sample ID:

Date Analyzed: 06/24/13 13:14 Lab File ID: 4062408.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dioxane-d8 (IS)	8.41	Poor chromatography	gordonk	03/04/14 12:10
2-Methylnaphthalene	16.68	Peak Tail	gordonk	03/04/14 12:10

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Instrument ID: CHHP4 Analysis Batch Number: 98677

Lab Sample ID: IC 180-98677/2 Client Sample ID:

Date Analyzed: 06/24/13 15:03 Lab File ID: 4062412.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethanol	3.39	Poor chromatography	gordonk	03/04/14 12:15
Isopropyl alcohol	4.30	Poor chromatography	gordonk	03/04/14 12:15
Ethyl acetate	6.52	Poor chromatography	gordonk	03/04/14 12:15
Isooctane	7.51	Poor chromatography	gordonk	03/04/14 12:15
n-Butanol	8.13	Poor chromatography	gordonk	03/04/14 12:15
Ethyl acrylate	8.24	Poor chromatography	gordonk	03/04/14 12:15
Dioxane-d8 (IS)	8.41	Peak Tail	gordonk	03/04/14 12:15
Methyl methacrylate	8.45	Poor chromatography	gordonk	03/04/14 12:15
2-Nitropropane	8.84	Poor chromatography	gordonk	03/04/14 12:15
2-Chloroethyl vinyl ether	8.93	Poor chromatography	gordonk	03/04/14 12:15
n-Butyl acetate	10.22	Poor chromatography	gordonk	03/04/14 12:15
Cyclohexanone	11.96	Poor chromatography	gordonk	03/04/14 12:15
Benzyl chloride	13.33	Poor chromatography	gordonk	03/04/14 12:15
1,3,5-Trichlorobenzene	14.54	Poor chromatography	gordonk	03/04/14 12:15
2-Methylnaphthalene	16.75	Poor chromatography	gordonk	03/04/14 12:15

Lab Sample ID: IC 180-98677/3 Client Sample ID:

Date Analyzed: 06/24/13 15:43 Lab File ID: 4062413.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isopropyl alcohol	4.26	Peak Tail	gordonk	03/04/14 12:18
Ethyl acrylate	8.22	Peak Tail	gordonk	03/04/14 12:18
Dioxane-d8 (IS)	8.40	Peak Tail	gordonk	03/04/14 12:18
2-Chloroethyl vinyl ether	8.92	Peak Tail	gordonk	03/04/14 12:18
Cyclohexanone	11.95	Peak Tail	gordonk	03/04/14 12:18
2-Methylnaphthalene	16.78	Peak Tail	gordonk	03/04/14 12:18

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Instrument ID: CHHP4 Analysis Batch Number: 107478

Lab Sample ID: IC 180-107478/3 Client Sample ID:

Date Analyzed: 06/03/14 11:03 Lab File ID: 4060303.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acrolein	3.67	Poor chromatography	journetp	06/03/14 13:59
trans-1,4-Dichloro-2-butene	12.24	Poor chromatography	journetp	06/03/14 13:49

Lab Sample ID: IC 180-107478/4 Client Sample ID:

Date Analyzed: 06/03/14 11:43 Lab File ID: 4060304.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acrolein	3.67	Poor chromatography	journetp	06/03/14 13:54
trans-1,4-Dichloro-2-butene	12.22	Poor chromatography	journetp	06/03/14 13:50

Lab Sample ID: IC 180-107478/5 Client Sample ID:

Date Analyzed: 06/03/14 12:13 Lab File ID: 4060305.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acrolein	3.69	Poor chromatography	journetp	06/03/14 14:07
trans-1,4-Dichloro-2-butene	12.19	Poor chromatography	journetp	06/03/14 13:50

Lab Sample ID: ICIS 180-107478/6 Client Sample ID:

Date Analyzed: 06/03/14 12:43 Lab File ID: 4060306.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acrolein	3.67	Poor chromatography	journetp	06/03/14 14:00
trans-1,4-Dichloro-2-butene	12.18	Poor chromatography	journetp	06/03/14 13:51

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Instrument ID: CHHP4 Analysis Batch Number: 107478

Lab Sample ID: IC 180-107478/7 Client Sample ID:

Date Analyzed: 06/03/14 13:14 Lab File ID: 4060307.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acrolein	3.67	Poor chromatography	journetp	06/03/14 13:57
trans-1,4-Dichloro-2-butene	12.18	Poor chromatography	journetp	06/03/14 13:52

Lab Sample ID: IC 180-107478/8 Client Sample ID:

Date Analyzed: 06/03/14 13:44 Lab File ID: 4060308.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
trans-1,4-Dichloro-2-butene	12.21	Poor chromatography	journetp	06/03/14 13:34

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Instrument ID: CHHP4 Analysis Batch Number: 110699

Lab Sample ID: 180-34362-6 Client Sample ID:

Date Analyzed: 07/08/14 12:23 Lab File ID: 4070807.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorobenzene-d5	10.77	Poor chromatography	zukowskim	07/08/14 12:18

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Instrument ID: CH731 Analysis Batch Number: 107633

Lab Sample ID: IC 180-107633/3 Client Sample ID:

Date Analyzed: 06/05/14 08:25 Lab File ID: V0605003.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	1.80	Poor chromatography	piccolinov	06/05/14 10:20
N-Nitrosodimethylamine	2.46	Poor chromatography	piccolinov	06/05/14 10:20
Pyridine	2.58	Poor chromatography	piccolinov	06/05/14 10:20
Methyl methanesulfonate	4.68	Poor chromatography	piccolinov	06/05/14 10:20
Benzidine	11.85	Poor chromatography	piccolinov	06/05/14 10:20
Di-n-octyl phthalate	15.09	Poor chromatography	piccolinov	06/05/14 10:20
Benzo[b]fluoranthene	15.97	Poor chromatography	piccolinov	06/05/14 10:20
Benzo[k]fluoranthene	16.02	Poor chromatography	piccolinov	06/05/14 10:20

Lab Sample ID: IC 180-107633/4 Client Sample ID:

Date Analyzed: 06/05/14 08:54 Lab File ID: V0605004.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Pyridine	2.54	Poor chromatography	piccolinov	06/05/14 10:38
Benzoic acid	7.17	Poor chromatography	piccolinov	06/05/14 10:38
Dibenz(a,h)anthracene	18.97	Poor chromatography	piccolinov	06/05/14 10:38

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Instrument ID: CH731 Analysis Batch Number: 107633

Lab Sample ID: IC 180-107633/5 Client Sample ID:

Date Analyzed: 06/05/14 09:23 Lab File ID: V0605005.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Pyridine	2.52	Poor chromatography	piccolino v	06/05/14 12:01
Benzidine	11.84	Poor chromatography	piccolino v	06/05/14 12:01

Lab Sample ID: ICIS 180-107633/6 Client Sample ID:

Date Analyzed: 06/05/14 09:51 Lab File ID: V0605006.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Pyridine	2.52	Poor chromatography	piccolino v	06/05/14 12:02

Lab Sample ID: IC 180-107633/9 Client Sample ID:

Date Analyzed: 06/05/14 11:17 Lab File ID: V0605009.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	06/05/14 12:58

Lab Sample ID: IC 180-107633/10 Client Sample ID:

Date Analyzed: 06/05/14 11:45 Lab File ID: V0605010.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	06/06/14 06:30

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Instrument ID: CH731 Analysis Batch Number: 110717

Lab Sample ID: CCVIS 180-110717/3 Client Sample ID:

Date Analyzed: 07/08/14 14:00 Lab File ID: V0708003.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzyl alcohol	6.37	Poor chromatography	piccolino v	07/09/14 02:48
2,2'-oxybis[1-chloropropane]	6.50	Poor chromatography	piccolino v	07/09/14 02:48
Benzoic acid	7.18	Poor chromatography	piccolino v	07/09/14 02:48

Lab Sample ID: LCSD 180-110402/3-A Client Sample ID:

Date Analyzed: 07/08/14 17:20 Lab File ID: V0708010.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
N-Nitrosodimethylamine	2.39	Poor chromatography	piccolino v	07/09/14 02:57

Lab Sample ID: 180-34362-1 Client Sample ID: H108-PZM003

Date Analyzed: 07/08/14 22:34 Lab File ID: V0708021.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[a]anthracene	13.88	Poor chromatography	piccolino v	07/09/14 03:06
Chrysene	13.94	Poor chromatography	piccolino v	07/09/14 03:06

SAMPLE SUMMARY

Client: EA Engineering, Science, and Technology Job Number: 180-34362-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
180-34362-1	H108-PZM003	Water	06/26/2014 0955	06/27/2014 0850
180-34362-2	RW19-PZP000	Water	06/26/2014 1010	06/27/2014 0850
180-34362-3	RW19-PZM050	Water	06/26/2014 1105	06/27/2014 0850
180-34362-4	H108-PZM060	Water	06/26/2014 1130	06/27/2014 0850
180-34362-5	RW19-PZM020	Water	06/26/2014 1155	06/27/2014 0850
180-34362-6	062614-TB	Water	06/26/2014 0830	06/27/2014 0850

EXECUTIVE SUMMARY - Detections

Client: EA Engineering, Science, and Technology Job Number: 180-34362-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
180-34362-1	**H108-PZM003**					
Acenaphthylene		0.21	J	0.23	ug/L	8270D LL
Anthracene		0.15	J	0.23	ug/L	8270D LL
Benzo[a]anthracene		0.21	J	0.23	ug/L	8270D LL
Bis(2-ethylhexyl) phthalate		11		2.3	ug/L	8270D LL
Butyl benzyl phthalate		0.39	J	1.1	ug/L	8270D LL
Chrysene		0.22	J	0.23	ug/L	8270D LL
Fluoranthene		0.32		0.23	ug/L	8270D LL
Phenanthrene		0.20	J	0.23	ug/L	8270D LL
Pyrene		0.25		0.23	ug/L	8270D LL
Mercury		0.057	J B	0.20	ug/L	7470A
Cyanide, Total		21		10	ug/L	9014
Total Recoverable						
Arsenic		14		5.0	ug/L	6020A
Cadmium		0.86	J	5.0	ug/L	6020A
Chromium		52		10	ug/L	6020A
Lead		92		5.0	ug/L	6020A
Beryllium		2.2	J	5.0	ug/L	6020A
Thallium		0.32	J	5.0	ug/L	6020A
Antimony		0.96	J B	10	ug/L	6020A
Nickel		16		5.0	ug/L	6020A
Zinc		210		25	ug/L	6020A
Copper		35		10	ug/L	6020A
180-34362-2	**RW19-PZP000**					
Anthracene		0.093	J	0.19	ug/L	8270D LL
Bis(2-ethylhexyl) phthalate		2.2		1.9	ug/L	8270D LL
Butyl benzyl phthalate		0.37	J	0.96	ug/L	8270D LL
Di-n-butyl phthalate		0.30	J	0.96	ug/L	8270D LL
Phenanthrene		0.15	J	0.19	ug/L	8270D LL
Mercury		0.050	J B	0.20	ug/L	7470A
Cyanide, Total		1000		100	ug/L	9014
Total Recoverable						
Arsenic		18		5.0	ug/L	6020A
Chromium		35		10	ug/L	6020A
Lead		2.2	J	5.0	ug/L	6020A
Thallium		0.11	J	5.0	ug/L	6020A
Antimony		1.7	J B	10	ug/L	6020A
Nickel		1.6	J	5.0	ug/L	6020A
Zinc		11	J	25	ug/L	6020A
Copper		2.4	J	10	ug/L	6020A

EXECUTIVE SUMMARY - Detections

Client: EA Engineering, Science, and Technology Job Number: 180-34362-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
180-34362-3	**RW19-PZM050**					
Bis(2-ethylhexyl) phthalate		3.2		2.0	ug/L	8270D LL
Butyl benzyl phthalate		2.5		1.0	ug/L	8270D LL
Di-n-butyl phthalate		1.4		1.0	ug/L	8270D LL
Mercury		0.055	J B	0.20	ug/L	7470A
Total Recoverable						
Cadmium		0.87	J	5.0	ug/L	6020A
Chromium		19		10	ug/L	6020A
Lead		1.5	J	5.0	ug/L	6020A
Antimony		2.0	J B	10	ug/L	6020A
Nickel		11		5.0	ug/L	6020A
Zinc		170		25	ug/L	6020A
Copper		2.6	J	10	ug/L	6020A
180-34362-4	**H108-PZM060**					
Bis(2-ethylhexyl) phthalate		14		2.0	ug/L	8270D LL
Butyl benzyl phthalate		0.32	J	1.0	ug/L	8270D LL
Mercury		0.053	J B	0.20	ug/L	7470A
Total Recoverable						
Arsenic		26		5.0	ug/L	6020A
Lead		0.14	J	5.0	ug/L	6020A
180-34362-5	**RW19-PZM020**					
Bis(2-ethylhexyl) phthalate		16		1.9	ug/L	8270D LL
Butyl benzyl phthalate		2.4		0.96	ug/L	8270D LL
Di-n-butyl phthalate		0.25	J	0.96	ug/L	8270D LL
Mercury		0.058	J B	0.20	ug/L	7470A
Total Recoverable						
Arsenic		65		5.0	ug/L	6020A
Cadmium		38		5.0	ug/L	6020A
Chromium		3.6	J	10	ug/L	6020A
Lead		0.50	J	5.0	ug/L	6020A
Selenium		3.5	J	25	ug/L	6020A
Nickel		13		5.0	ug/L	6020A
Zinc		5800		25	ug/L	6020A
Copper		5.4	J	10	ug/L	6020A

METHOD SUMMARY

Client: EA Engineering, Science, and Technology Job Number: 180-34362-1

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
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
Cyanide	TAL PIT	SW846 9014	
Cyanide, Distillation	TAL PIT		SW846 9010C

Lab References:

TAL PIT = TestAmerica Pittsburgh

Method References:

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: 180-34362-1

Method	Analyst	Analyst ID
SW846 8260C	Zukowski, Mike	MAZ
SW846 8270D LL	Piccolino, Vincent	VVP
SW846 6020A	Ferguson, Caitlin N	CNS
SW846 7470A	McGrath, Lauren E	LEM
SW846 9014	Johnson, Paul	PGJ

Client: EA Engineering, Science, and Technology | Job Number: 180-34362-1

Client Sample ID: **H108-PZM003**

Lab Sample ID: 180-34362-1 | Date Sampled: 06/26/2014 0955
Client Matrix: Water | Date Received: 06/27/2014 0850

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	180-110534	Instrument ID:	CHHP4
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	4070615.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/07/2014 0722			Final Weight/Volume:	5 mL
Prep Date:	07/07/2014 0722				

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)	95		62 - 123
4-Bromofluorobenzene (Surr)	94		75 - 120
Dibromofluoromethane (Surr)	91		80 - 120
Toluene-d8 (Surr)	99		80 - 120

Client: EA Engineering, Science, and Technology | Job Number: 180-34362-1

Client Sample ID: **RW19-PZP000**

Lab Sample ID: 180-34362-2 | Date Sampled: 06/26/2014 1010
Client Matrix: Water | Date Received: 06/27/2014 0850

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	180-110534	Instrument ID:	CHHP4
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	4070616.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/07/2014 0749			Final Weight/Volume:	5 mL
Prep Date:	07/07/2014 0749				

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)	91		62 - 123
4-Bromofluorobenzene (Surr)	95		75 - 120
Dibromofluoromethane (Surr)	94		80 - 120
Toluene-d8 (Surr)	100		80 - 120

Client: EA Engineering, Science, and Technology | Job Number: 180-34362-1

Client Sample ID: **RW19-PZM050**

Lab Sample ID: 180-34362-3 | Date Sampled: 06/26/2014 1105
Client Matrix: Water | Date Received: 06/27/2014 0850

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	180-110534	Instrument ID:	CHHP4
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	4070617.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/07/2014 0816			Final Weight/Volume:	5 mL
Prep Date:	07/07/2014 0816				

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)	96		62 - 123
4-Bromofluorobenzene (Surr)	92		75 - 120
Dibromofluoromethane (Surr)	90		80 - 120
Toluene-d8 (Surr)	94		80 - 120

Client: EA Engineering, Science, and Technology | Job Number: 180-34362-1

Client Sample ID: **H108-PZM060**

Lab Sample ID: 180-34362-4 | Date Sampled: 06/26/2014 1130
Client Matrix: Water | Date Received: 06/27/2014 0850

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	180-110534	Instrument ID:	CHHP4
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	4070618.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/07/2014 0844			Final Weight/Volume:	5 mL
Prep Date:	07/07/2014 0844				

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)	94		62 - 123
4-Bromofluorobenzene (Surr)	108		75 - 120
Dibromofluoromethane (Surr)	89		80 - 120
Toluene-d8 (Surr)	110		80 - 120

Client: EA Engineering, Science, and Technology | Job Number: 180-34362-1

Client Sample ID: **RW19-PZM020**

Lab Sample ID: 180-34362-5 | Date Sampled: 06/26/2014 1155
Client Matrix: Water | Date Received: 06/27/2014 0850

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	180-110534	Instrument ID:	CHHP4
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	4070619.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/07/2014 0911			Final Weight/Volume:	5 mL
Prep Date:	07/07/2014 0911				

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)	97		62 - 123
4-Bromofluorobenzene (Surr)	92		75 - 120
Dibromofluoromethane (Surr)	98		80 - 120
Toluene-d8 (Surr)	107		80 - 120

Client: EA Engineering, Science, and Technology | Job Number: 180-34362-1

Client Sample ID: **062614-TB**

Lab Sample ID: 180-34362-6 | Date Sampled: 06/26/2014 0830
Client Matrix: Water | Date Received: 06/27/2014 0850

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	180-110699	Instrument ID:	CHHP4
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	4070807.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/08/2014 1223			Final Weight/Volume:	5 mL
Prep Date:	07/08/2014 1223				

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)	83		62 - 123
4-Bromofluorobenzene (Surr)	89		75 - 120
Dibromofluoromethane (Surr)	87		80 - 120
Toluene-d8 (Surr)	104		80 - 120

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

Client Sample ID: **H108-PZM003**

Lab Sample ID: 180-34362-1
Client Matrix: Water

Date Sampled: 06/26/2014 0955
Date Received: 06/27/2014 0850

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

Analysis Method:	8270D LL	Analysis Batch:	180-110717	Instrument ID:	CH731
Prep Method:	3520C	Prep Batch:	180-110402	Lab File ID:	V0708021.D
Dilution:	1.0			Initial Weight/Volume:	220 mL
Analysis Date:	07/08/2014 2234			Final Weight/Volume:	0.25 mL
Prep Date:	07/03/2014 0730			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.033	0.23
Acenaphthylene	0.21	J	0.024	0.23
Anthracene	0.15	J	0.021	0.23
Benzidine	ND		5.4	23
Benzo[a]anthracene	0.21	J	0.042	0.23
Benzo[b]fluoranthene	ND		0.055	0.23
Benzo[k]fluoranthene	ND		0.034	0.23
Benzoic acid	ND		1.9	5.7
Benzo[g,h,i]perylene	ND		0.033	0.23
Benzo[a]pyrene	ND		0.032	0.23
Bis(2-chloroethoxy)methane	ND		0.15	1.1
Bis(2-chloroethyl)ether	ND		0.036	1.1
Bis(2-ethylhexyl) phthalate	11		0.50	2.3
2,2'-oxybis[1-chloropropane]	ND		0.027	1.1
4-Bromophenyl phenyl ether	ND		0.13	1.1
4-Chlorophenyl phenyl ether	ND		0.091	1.1
2-Chloronaphthalene	ND		0.035	0.23
Butyl benzyl phthalate	0.39	J	0.24	1.1
Chrysene	0.22	J	0.035	0.23
Dibenz(a,h)anthracene	ND		0.030	0.23
Di-n-butyl phthalate	ND		0.28	1.1
Di-n-octyl phthalate	ND		0.23	1.1
Diethyl phthalate	ND		0.34	1.1
Dimethyl phthalate	ND		0.21	1.1
3,3'-Dichlorobenzidine	ND		0.17	1.1
2,4-Dinitrotoluene	ND		0.24	1.1
2,6-Dinitrotoluene	ND		0.16	1.1
2-Chlorophenol	ND		0.26	1.1
2,4-Dichlorophenol	ND		0.076	1.1
2,4-Dimethylphenol	ND		0.19	1.1
2,4-Dinitrophenol	ND		2.8	5.7
2-Nitrophenol	ND		0.13	1.1
2,4,6-Trichlorophenol	ND		0.34	1.1
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.14	1.1
1,2,4-Trichlorobenzene	ND		0.097	1.1
4-Chloro-3-methylphenol	ND		0.19	1.1
4-Nitrophenol	ND		0.91	5.7
4,6-Dinitro-2-methylphenol	ND		1.8	5.7
Fluoranthene	0.32		0.024	0.23
Fluorene	ND		0.027	0.23
Hexachlorobenzene	ND		0.069	1.1
Hexachlorobutadiene	ND		0.11	1.1
Hexachlorocyclopentadiene	ND		0.15	1.1
Hexachloroethane	ND		0.16	1.1
Indeno[1,2,3-cd]pyrene	ND		0.049	0.23
Isophorone	ND		0.084	1.1

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

Client Sample ID: **H108-PZM003**

Lab Sample ID: 180-34362-1
Client Matrix: Water

Date Sampled: 06/26/2014 0955
Date Received: 06/27/2014 0850

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

Analysis Method:	8270D LL	Analysis Batch:	180-110717	Instrument ID:	CH731
Prep Method:	3520C	Prep Batch:	180-110402	Lab File ID:	V0708021.D
Dilution:	1.0			Initial Weight/Volume:	220 mL
Analysis Date:	07/08/2014 2234			Final Weight/Volume:	0.25 mL
Prep Date:	07/03/2014 0730			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	ND		0.026	0.23
Nitrobenzene	ND		0.17	2.3
N-Nitrosodi-n-propylamine	ND		0.057	1.1
N-Nitrosodimethylamine	ND		0.14	1.1
N-Nitrosodiphenylamine	ND		0.14	1.1
Phenanthrene	0.20	J	0.047	0.23
Pyrene	0.25		0.026	0.23
Pentachlorophenol	ND		0.57	1.1
Phenol	ND		0.063	1.1

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	83		30 - 150
2-Fluorobiphenyl	86		30 - 150
2-Fluorophenol (Surr)	56		30 - 150
Nitrobenzene-d5 (Surr)	94		30 - 150
Phenol-d5 (Surr)	58		30 - 150
Terphenyl-d14 (Surr)	45		10 - 150

Client: EA Engineering, Science, and Technology | Job Number: 180-34362-1

Client Sample ID: **RW19-PZP000**

Lab Sample ID: 180-34362-2 | Date Sampled: 06/26/2014 1010
Client Matrix: Water | Date Received: 06/27/2014 0850

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

Analysis Method:	8270D LL	Analysis Batch:	180-110717	Instrument ID:	CH731
Prep Method:	3520C	Prep Batch:	180-110402	Lab File ID:	V0708022.D
Dilution:	1.0			Initial Weight/Volume:	260 mL
Analysis Date:	07/08/2014 2302			Final Weight/Volume:	0.25 mL
Prep Date:	07/03/2014 0730			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.028	0.19
Acenaphthylene	ND		0.021	0.19
Anthracene	0.093	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	2.2		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	0.37	J	0.21	0.96
Chrysene	ND		0.030	0.19
Dibenz(a,h)anthracene	ND		0.026	0.19
Di-n-butyl phthalate	0.30	J	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: 180-34362-1

Client Sample ID: **RW19-PZP000**

Lab Sample ID: 180-34362-2
Client Matrix: Water

Date Sampled: 06/26/2014 1010
Date Received: 06/27/2014 0850

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

Analysis Method:	8270D LL	Analysis Batch:	180-110717	Instrument ID:	CH731
Prep Method:	3520C	Prep Batch:	180-110402	Lab File ID:	V0708022.D
Dilution:	1.0			Initial Weight/Volume:	260 mL
Analysis Date:	07/08/2014 2302			Final Weight/Volume:	0.25 mL
Prep Date:	07/03/2014 0730			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	0.15	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)	85		30 - 150
2-Fluorobiphenyl	80		30 - 150
2-Fluorophenol (Surr)	57		30 - 150
Nitrobenzene-d5 (Surr)	85		30 - 150
Phenol-d5 (Surr)	60		30 - 150
Terphenyl-d14 (Surr)	89		10 - 150

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

Client Sample ID: **RW19-PZM050**

Lab Sample ID: 180-34362-3
Client Matrix: Water

Date Sampled: 06/26/2014 1105
Date Received: 06/27/2014 0850

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

Analysis Method:	8270D LL	Analysis Batch:	180-110717	Instrument ID:	CH731
Prep Method:	3520C	Prep Batch:	180-110402	Lab File ID:	V0708023.D
Dilution:	1.0			Initial Weight/Volume:	250 mL
Analysis Date:	07/08/2014 2330			Final Weight/Volume:	0.25 mL
Prep Date:	07/03/2014 0730			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	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	3.2		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	2.5		0.21	1.0
Chrysene	ND		0.031	0.20
Dibenz(a,h)anthracene	ND		0.027	0.20
Di-n-butyl phthalate	1.4		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
Isophorone	ND		0.074	1.0

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

Client Sample ID: **RW19-PZM050**

Lab Sample ID: 180-34362-3
Client Matrix: Water

Date Sampled: 06/26/2014 1105
Date Received: 06/27/2014 0850

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

Analysis Method:	8270D LL	Analysis Batch:	180-110717	Instrument ID:	CH731
Prep Method:	3520C	Prep Batch:	180-110402	Lab File ID:	V0708023.D
Dilution:	1.0			Initial Weight/Volume:	250 mL
Analysis Date:	07/08/2014 2330			Final Weight/Volume:	0.25 mL
Prep Date:	07/03/2014 0730			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
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	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	92		30 - 150
2-Fluorobiphenyl	88		30 - 150
2-Fluorophenol (Surr)	68		30 - 150
Nitrobenzene-d5 (Surr)	93		30 - 150
Phenol-d5 (Surr)	70		30 - 150
Terphenyl-d14 (Surr)	85		10 - 150

Client: EA Engineering, Science, and Technology | Job Number: 180-34362-1

Client Sample ID: **H108-PZM060**

Lab Sample ID: 180-34362-4 | Date Sampled: 06/26/2014 1130
Client Matrix: Water | Date Received: 06/27/2014 0850

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

Analysis Method:	8270D LL	Analysis Batch:	180-110717	Instrument ID:	CH731
Prep Method:	3520C	Prep Batch:	180-110402	Lab File ID:	V0708024.D
Dilution:	1.0			Initial Weight/Volume:	250 mL
Analysis Date:	07/08/2014 2359			Final Weight/Volume:	0.25 mL
Prep Date:	07/03/2014 0730			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	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	14		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	0.32	J	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
Isophorone	ND		0.074	1.0

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

Client Sample ID: **H108-PZM060**

Lab Sample ID: 180-34362-4
Client Matrix: Water

Date Sampled: 06/26/2014 1130
Date Received: 06/27/2014 0850

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

Analysis Method:	8270D LL	Analysis Batch:	180-110717	Instrument ID:	CH731
Prep Method:	3520C	Prep Batch:	180-110402	Lab File ID:	V0708024.D
Dilution:	1.0			Initial Weight/Volume:	250 mL
Analysis Date:	07/08/2014 2359			Final Weight/Volume:	0.25 mL
Prep Date:	07/03/2014 0730			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
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	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	74		30 - 150
2-Fluorobiphenyl	72		30 - 150
2-Fluorophenol (Surr)	52		30 - 150
Nitrobenzene-d5 (Surr)	73		30 - 150
Phenol-d5 (Surr)	54		30 - 150
Terphenyl-d14 (Surr)	90		10 - 150

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

Client Sample ID: **RW19-PZM020**

Lab Sample ID: 180-34362-5
Client Matrix: Water

Date Sampled: 06/26/2014 1155
Date Received: 06/27/2014 0850

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

Analysis Method:	8270D LL	Analysis Batch:	180-110717	Instrument ID:	CH731
Prep Method:	3520C	Prep Batch:	180-110402	Lab File ID:	V0708025.D
Dilution:	1.0			Initial Weight/Volume:	260 mL
Analysis Date:	07/09/2014 0027			Final Weight/Volume:	0.25 mL
Prep Date:	07/03/2014 0730			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	16		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	2.4		0.21	0.96
Chrysene	ND		0.030	0.19
Dibenz(a,h)anthracene	ND		0.026	0.19
Di-n-butyl phthalate	0.25	J	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: 180-34362-1

Client Sample ID: **RW19-PZM020**

Lab Sample ID: 180-34362-5
Client Matrix: Water

Date Sampled: 06/26/2014 1155
Date Received: 06/27/2014 0850

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

Analysis Method:	8270D LL	Analysis Batch:	180-110717	Instrument ID:	CH731
Prep Method:	3520C	Prep Batch:	180-110402	Lab File ID:	V0708025.D
Dilution:	1.0			Initial Weight/Volume:	260 mL
Analysis Date:	07/09/2014 0027			Final Weight/Volume:	0.25 mL
Prep Date:	07/03/2014 0730			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)	106		30 - 150
2-Fluorobiphenyl	101		30 - 150
2-Fluorophenol (Surr)	64		30 - 150
Nitrobenzene-d5 (Surr)	102		30 - 150
Phenol-d5 (Surr)	77		30 - 150
Terphenyl-d14 (Surr)	108		10 - 150

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

Client Sample ID: **H108-PZM003**

Lab Sample ID: 180-34362-1
Client Matrix: Water

Date Sampled: 06/26/2014 0955
Date Received: 06/27/2014 0850

6020A Metals (ICP/MS)-Total Recoverable

Analysis Method:	6020A	Analysis Batch:	180-111971	Instrument ID:	M
Prep Method:	3005A	Prep Batch:	180-111726	Lab File ID:	M40718A.xml
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	07/18/2014 1309			Final Weight/Volume:	50 mL
Prep Date:	07/17/2014 0750				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Arsenic	14		1.5	5.0
Cadmium	0.86	J	0.57	5.0
Chromium	52		2.7	10
Lead	92		0.096	5.0
Selenium	ND		2.1	25
Silver	ND		0.18	5.0
Beryllium	2.2	J	0.18	5.0
Thallium	0.32	J	0.076	5.0
Antimony	0.96	J B	0.094	10
Nickel	16		0.87	5.0
Zinc	210		4.8	25
Copper	35		1.2	10

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	180-111657	Instrument ID:	K
Prep Method:	7470A	Prep Batch:	180-111612	Lab File ID:	R40716A.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	07/16/2014 1240			Final Weight/Volume:	50 mL
Prep Date:	07/16/2014 1018				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.057	J B	0.038	0.20

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

Client Sample ID: **RW19-PZP000**

Lab Sample ID: 180-34362-2
Client Matrix: Water

Date Sampled: 06/26/2014 1010
Date Received: 06/27/2014 0850

6020A Metals (ICP/MS)-Total Recoverable

Analysis Method:	6020A	Analysis Batch:	180-111971	Instrument ID:	M
Prep Method:	3005A	Prep Batch:	180-111726	Lab File ID:	M40718A.xml
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	07/18/2014 1313			Final Weight/Volume:	50 mL
Prep Date:	07/17/2014 0750				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Arsenic	18		1.5	5.0
Cadmium	ND		0.57	5.0
Chromium	35		2.7	10
Lead	2.2	J	0.096	5.0
Selenium	ND		2.1	25
Silver	ND		0.18	5.0
Beryllium	ND		0.18	5.0
Thallium	0.11	J	0.076	5.0
Antimony	1.7	J B	0.094	10
Nickel	1.6	J	0.87	5.0
Zinc	11	J	4.8	25
Copper	2.4	J	1.2	10

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	180-111657	Instrument ID:	K
Prep Method:	7470A	Prep Batch:	180-111612	Lab File ID:	R40716A.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	07/16/2014 1242			Final Weight/Volume:	50 mL
Prep Date:	07/16/2014 1018				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.050	J B	0.038	0.20

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

Client Sample ID: **RW19-PZM050**

Lab Sample ID: 180-34362-3
Client Matrix: Water

Date Sampled: 06/26/2014 1105
Date Received: 06/27/2014 0850

6020A Metals (ICP/MS)-Total Recoverable

Analysis Method:	6020A	Analysis Batch:	180-111971	Instrument ID:	M
Prep Method:	3005A	Prep Batch:	180-111726	Lab File ID:	M40718A.xml
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	07/18/2014 1326			Final Weight/Volume:	50 mL
Prep Date:	07/17/2014 0750				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Arsenic	ND		1.5	5.0
Cadmium	0.87	J	0.57	5.0
Chromium	19		2.7	10
Lead	1.5	J	0.096	5.0
Selenium	ND		2.1	25
Silver	ND		0.18	5.0
Beryllium	ND		0.18	5.0
Thallium	ND		0.076	5.0
Antimony	2.0	J B	0.094	10
Nickel	11		0.87	5.0
Zinc	170		4.8	25
Copper	2.6	J	1.2	10

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	180-111657	Instrument ID:	K
Prep Method:	7470A	Prep Batch:	180-111612	Lab File ID:	R40716A.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	07/16/2014 1244			Final Weight/Volume:	50 mL
Prep Date:	07/16/2014 1018				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.055	J B	0.038	0.20

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

Client Sample ID: **H108-PZM060**

Lab Sample ID: 180-34362-4
Client Matrix: Water

Date Sampled: 06/26/2014 1130
Date Received: 06/27/2014 0850

6020A Metals (ICP/MS)-Total Recoverable

Analysis Method:	6020A	Analysis Batch:	180-111971	Instrument ID:	M
Prep Method:	3005A	Prep Batch:	180-111726	Lab File ID:	M40718A.xml
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	07/18/2014 1330			Final Weight/Volume:	50 mL
Prep Date:	07/17/2014 0750				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Arsenic	26		1.5	5.0
Cadmium	ND		0.57	5.0
Chromium	ND		2.7	10
Lead	0.14	J	0.096	5.0
Selenium	ND		2.1	25
Silver	ND		0.18	5.0
Beryllium	ND		0.18	5.0
Thallium	ND		0.076	5.0
Antimony	ND		0.094	10
Nickel	ND		0.87	5.0
Zinc	ND		4.8	25
Copper	ND		1.2	10

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	180-111657	Instrument ID:	K
Prep Method:	7470A	Prep Batch:	180-111612	Lab File ID:	R40716A.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	07/16/2014 1245			Final Weight/Volume:	50 mL
Prep Date:	07/16/2014 1018				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.053	J B	0.038	0.20

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

Client Sample ID: **RW19-PZM020**

Lab Sample ID: 180-34362-5
Client Matrix: Water

Date Sampled: 06/26/2014 1155
Date Received: 06/27/2014 0850

6020A Metals (ICP/MS)-Total Recoverable

Analysis Method:	6020A	Analysis Batch:	180-111971	Instrument ID:	M
Prep Method:	3005A	Prep Batch:	180-111726	Lab File ID:	M40718A.xml
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	07/18/2014 1334			Final Weight/Volume:	50 mL
Prep Date:	07/17/2014 0750				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Arsenic	65		1.5	5.0
Cadmium	38		0.57	5.0
Chromium	3.6	J	2.7	10
Lead	0.50	J	0.096	5.0
Selenium	3.5	J	2.1	25
Silver	ND		0.18	5.0
Beryllium	ND		0.18	5.0
Thallium	ND		0.076	5.0
Antimony	ND		0.094	10
Nickel	13		0.87	5.0
Zinc	5800		4.8	25
Copper	5.4	J	1.2	10

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	180-111657	Instrument ID:	K
Prep Method:	7470A	Prep Batch:	180-111612	Lab File ID:	R40716A.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	07/16/2014 1247			Final Weight/Volume:	50 mL
Prep Date:	07/16/2014 1018				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.058	J B	0.038	0.20

General Chemistry

Client Sample ID: **H108-PZM003**

Lab Sample ID: 180-34362-1 Date Sampled: 06/26/2014 0955

Client Matrix: Water Date Received: 06/27/2014 0850

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	21		ug/L	3.2	10	1.0	9014
Analysis Batch: 180-111072	Analysis Date: 07/10/2014 1022						
Prep Batch: 180-111006	Prep Date: 07/10/2014 0835						

General Chemistry

Client Sample ID: **RW19-PZP000**

Lab Sample ID: 180-34362-2 Date Sampled: 06/26/2014 1010
Client Matrix: Water Date Received: 06/27/2014 0850

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	1000		ug/L	32	100	10	9014
Analysis Batch: 180-111072	Analysis Date: 07/10/2014 1040						
Prep Batch: 180-111006	Prep Date: 07/10/2014 0835						

General Chemistry

Client Sample ID: **RW19-PZM050**

Lab Sample ID: 180-34362-3 Date Sampled: 06/26/2014 1105
Client Matrix: Water Date Received: 06/27/2014 0850

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	ND		ug/L	3.2	10	1.0	9014
Analysis Batch: 180-111072	Analysis Date: 07/10/2014 1022						
Prep Batch: 180-111006	Prep Date: 07/10/2014 0835						

General Chemistry

Client Sample ID: **H108-PZM060**

Lab Sample ID: 180-34362-4 Date Sampled: 06/26/2014 1130

Client Matrix: Water Date Received: 06/27/2014 0850

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	ND		ug/L	3.2	10	1.0	9014
Analysis Batch: 180-111072	Analysis Date: 07/10/2014 1022						
Prep Batch: 180-111006	Prep Date: 07/10/2014 0835						

General Chemistry

Client Sample ID: **RW19-PZM020**

Lab Sample ID: 180-34362-5 Date Sampled: 06/26/2014 1155

Client Matrix: Water Date Received: 06/27/2014 0850

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	ND		ug/L	3.2	10	1.0	9014
Analysis Batch: 180-111072	Analysis Date: 07/10/2014 1022						
Prep Batch: 180-111006	Prep Date: 07/10/2014 0835						

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

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
180-34362-1	H108-PZM003	91	95	99	94
180-34362-2	RW19-PZP000	94	91	100	95
180-34362-3	RW19-PZM050	90	96	94	92
180-34362-4	H108-PZM060	89	94	110	108
180-34362-5	RW19-PZM020	98	97	107	92
180-34362-6	062614-TB	87	83	104	89
MB 180-110534/10		90	88	100	94
MB 180-110699/6		95	98	116	95
LCS 180-110534/7		95	95	92	113
LCS 180-110699/8		94	96	97	106
LCSD 180-110534/8		91	95	94	108
LCSD 180-110699/9		92	93	95	103

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: 180-34362-1

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
180-34362-1	H108-PZM003	56	58	94	86	83	45
180-34362-2	RW19-PZP000	57	60	85	80	85	89
180-34362-3	RW19-PZM050	68	70	93	88	92	85
180-34362-4	H108-PZM060	52	54	73	72	74	90
180-34362-5	RW19-PZM020	64	77	102	101	106	108
MB 180-110402/1-A		84	73	81	77	68	79
LCS 180-110402/2-A		55	53	66	66	62	62
LCSD 180-110402/3-A		60	57	68	71	64	62

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: 180-34362-1

Method Blank - Batch: 180-110534

Method: 8260C
Preparation: 5030C

Lab Sample ID:	MB 180-110534/10	Analysis Batch:	180-110534	Instrument ID:	CHHP4
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	4070606.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	07/07/2014 0318	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	07/07/2014 0318				
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)	88	62 - 123
4-Bromofluorobenzene (Surr)	94	75 - 120
Dibromofluoromethane (Surr)	90	80 - 120
Toluene-d8 (Surr)	100	80 - 120

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 180-110534

Method: 8260C
Preparation: 5030C

LCS Lab Sample ID:	LCS 180-110534/7	Analysis Batch:	180-110534	Instrument ID:	CHHP4
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	4070608.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	07/07/2014 0412	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	07/07/2014 0412				5 mL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 180-110534/8	Analysis Batch:	180-110534	Instrument ID:	CHHP4
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	4070609.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	07/07/2014 0439	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	07/07/2014 0439				5 mL
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
1,1,1-Trichloroethane	90	93	69 - 134	4	24		
1,1,2,2-Tetrachloroethane	84	85	59 - 136	1	20		
1,1,2-Trichloroethane	90	96	75 - 126	7	23		
1,1-Dichloroethane	96	96	77 - 122	0	22		
1,1-Dichloroethene	93	92	69 - 127	1	20		
1,2-Dichlorobenzene	82	90	75 - 125	9	20		
1,2-Dichloroethane	100	102	63 - 140	2	25		
1,2-Dichloropropane	95	104	75 - 114	9	20		
1,3-Dichlorobenzene	98	108	76 - 125	10	21		
1,4-Dichlorobenzene	83	91	76 - 123	10	20		
Benzene	98	104	80 - 120	6	20		
Bromoform	80	82	49 - 137	2	20		
Bromomethane	88	89	45 - 150	1	23		
Carbon tetrachloride	87	90	63 - 139	3	25		
Chlorobenzene	93	99	83 - 120	7	20		
Chloroform	95	98	77 - 119	2	20		
Chloromethane	89	89	49 - 133	0	20		
Chlorodibromomethane	87	95	64 - 124	10	20		
cis-1,3-Dichloropropene	90	100	74 - 123	11	20		
Dichlorobromomethane	92	102	71 - 119	10	20		
Ethylbenzene	95	103	79 - 124	8	25		
Methylene Chloride	82	80	75 - 120	3	20		
Tetrachloroethene	88	101	78 - 126	13	25		
Toluene	90	102	80 - 124	12	20		
trans-1,2-Dichloroethene	94	95	78 - 120	1	20		
trans-1,3-Dichloropropene	88	96	63 - 122	9	20		
Trichloroethene	97	106	80 - 120	8	20		
Vinyl chloride	89	88	57 - 128	1	26		
Chloroethane	75	76	33 - 150	1	24		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95	95	62 - 123
4-Bromofluorobenzene (Surr)	113	108	75 - 120
Dibromofluoromethane (Surr)	95	91	80 - 120
Toluene-d8 (Surr)	92	94	80 - 120

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 180-110534

Method: 8260C
Preparation: 5030C

LCS Lab Sample ID:	LCS 180-110534/7	Units:	ug/L	LCSD Lab Sample ID:	LCSD 180-110534/8
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	07/07/2014 0412			Analysis Date:	07/07/2014 0439
Prep Date:	07/07/2014 0412			Prep Date:	07/07/2014 0439
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
1,1,1-Trichloroethane	40.0	40.0	35.9	37.3
1,1,2,2-Tetrachloroethane	40.0	40.0	33.6	34.0
1,1,2-Trichloroethane	40.0	40.0	35.8	38.3
1,1-Dichloroethane	40.0	40.0	38.4	38.3
1,1-Dichloroethene	40.0	40.0	37.2	36.8
1,2-Dichlorobenzene	40.0	40.0	32.9	36.0
1,2-Dichloroethane	40.0	40.0	40.1	40.9
1,2-Dichloropropane	40.0	40.0	38.0	41.7
1,3-Dichlorobenzene	40.0	40.0	39.1	43.1
1,4-Dichlorobenzene	40.0	40.0	33.1	36.4
Benzene	40.0	40.0	39.3	41.6
Bromoform	40.0	40.0	32.1	32.8
Bromomethane	40.0	40.0	35.2	35.4
Carbon tetrachloride	40.0	40.0	34.6	35.8
Chlorobenzene	40.0	40.0	37.1	39.7
Chloroform	40.0	40.0	38.1	39.0
Chloromethane	40.0	40.0	35.7	35.7
Chlorodibromomethane	40.0	40.0	34.7	38.2
cis-1,3-Dichloropropene	40.0	40.0	36.0	40.0
Dichlorobromomethane	40.0	40.0	37.0	40.8
Ethylbenzene	40.0	40.0	38.1	41.3
Methylene Chloride	40.0	40.0	32.9	31.9
Tetrachloroethene	40.0	40.0	35.3	40.2
Toluene	40.0	40.0	36.1	40.8
trans-1,2-Dichloroethene	40.0	40.0	37.6	38.0
trans-1,3-Dichloropropene	40.0	40.0	35.3	38.5
Trichloroethene	40.0	40.0	39.0	42.4
Vinyl chloride	40.0	40.0	35.6	35.1
Chloroethane	40.0	40.0	30.1	30.3

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

Method Blank - Batch: 180-110699

Method: 8260C
Preparation: 5030C

Lab Sample ID:	MB 180-110699/6	Analysis Batch:	180-110699	Instrument ID:	CHHP4
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	4070806.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	07/08/2014 1156	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	07/08/2014 1156				
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)	98	62 - 123
4-Bromofluorobenzene (Surr)	95	75 - 120
Dibromofluoromethane (Surr)	95	80 - 120
Toluene-d8 (Surr)	116	80 - 120

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 180-110699

Method: 8260C
Preparation: 5030C

LCS Lab Sample ID:	LCS 180-110699/8	Analysis Batch:	180-110699	Instrument ID:	CHHP4
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	4070808.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	07/08/2014 1251	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	07/08/2014 1251				5 mL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 180-110699/9	Analysis Batch:	180-110699	Instrument ID:	CHHP4
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	4070809.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	07/08/2014 1318	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	07/08/2014 1318				5 mL
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
1,1,1-Trichloroethane	92	85	69 - 134	8	24		
1,1,2,2-Tetrachloroethane	87	83	59 - 136	4	20		
1,1,2-Trichloroethane	96	91	75 - 126	5	23		
1,1-Dichloroethane	98	91	77 - 122	8	22		
1,1-Dichloroethene	93	87	69 - 127	7	20		
1,2-Dichlorobenzene	87	84	75 - 125	3	20		
1,2-Dichloroethane	102	95	63 - 140	7	25		
1,2-Dichloropropane	106	99	75 - 114	7	20		
1,3-Dichlorobenzene	106	100	76 - 125	6	21		
1,4-Dichlorobenzene	86	84	76 - 123	3	20		
Benzene	106	99	80 - 120	7	20		
Bromoform	78	75	49 - 137	4	20		
Bromomethane	83	79	45 - 150	5	23		
Carbon tetrachloride	88	85	63 - 139	4	25		
Chlorobenzene	98	96	83 - 120	2	20		
Chloroform	97	91	77 - 119	7	20		
Chloromethane	90	83	49 - 133	8	20		
Chlorodibromomethane	91	90	64 - 124	1	20		
cis-1,3-Dichloropropene	97	94	74 - 123	4	20		
Dichlorobromomethane	100	94	71 - 119	6	20		
Ethylbenzene	107	102	79 - 124	5	25		
Methylene Chloride	77	71	75 - 120	8	20		*
Tetrachloroethene	96	94	78 - 126	2	25		
Toluene	102	99	80 - 124	3	20		
trans-1,2-Dichloroethene	96	87	78 - 120	10	20		
trans-1,3-Dichloropropene	93	89	63 - 122	4	20		
Trichloroethene	102	99	80 - 120	3	20		
Vinyl chloride	86	79	57 - 128	9	26		
Chloroethane	88	72	33 - 150	20	24		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96	93	62 - 123
4-Bromofluorobenzene (Surr)	106	103	75 - 120
Dibromofluoromethane (Surr)	94	92	80 - 120
Toluene-d8 (Surr)	97	95	80 - 120

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 180-110699

Method: 8260C
Preparation: 5030C

LCS Lab Sample ID:	LCS 180-110699/8	Units: ug/L		LCSD Lab Sample ID:	LCSD 180-110699/9
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	07/08/2014 1251			Analysis Date:	07/08/2014 1318
Prep Date:	07/08/2014 1251			Prep Date:	07/08/2014 1318
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual	
1,1,1-Trichloroethane	40.0	40.0	36.7	33.9	
1,1,2,2-Tetrachloroethane	40.0	40.0	34.6	33.3	
1,1,2-Trichloroethane	40.0	40.0	38.4	36.4	
1,1-Dichloroethane	40.0	40.0	39.3	36.5	
1,1-Dichloroethene	40.0	40.0	37.1	34.7	
1,2-Dichlorobenzene	40.0	40.0	34.6	33.7	
1,2-Dichloroethane	40.0	40.0	40.8	37.9	
1,2-Dichloropropane	40.0	40.0	42.4	39.4	
1,3-Dichlorobenzene	40.0	40.0	42.3	39.9	
1,4-Dichlorobenzene	40.0	40.0	34.6	33.5	
Benzene	40.0	40.0	42.5	39.5	
Bromoform	40.0	40.0	31.3	30.1	
Bromomethane	40.0	40.0	33.3	31.8	
Carbon tetrachloride	40.0	40.0	35.3	33.9	
Chlorobenzene	40.0	40.0	39.4	38.4	
Chloroform	40.0	40.0	39.0	36.3	
Chloromethane	40.0	40.0	36.2	33.3	
Chlorodibromomethane	40.0	40.0	36.2	35.9	
cis-1,3-Dichloropropene	40.0	40.0	38.8	37.4	
Dichlorobromomethane	40.0	40.0	39.9	37.5	
Ethylbenzene	40.0	40.0	42.7	40.7	
Methylene Chloride	40.0	40.0	30.7	28.5	*
Tetrachloroethene	40.0	40.0	38.4	37.7	
Toluene	40.0	40.0	40.9	39.6	
trans-1,2-Dichloroethene	40.0	40.0	38.2	34.8	
trans-1,3-Dichloropropene	40.0	40.0	37.3	35.7	
Trichloroethene	40.0	40.0	40.8	39.5	
Vinyl chloride	40.0	40.0	34.3	31.4	
Chloroethane	40.0	40.0	35.2	28.7	

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

Method Blank - Batch: 180-110402

Method: 8270D LL
Preparation: 3520C

Lab Sample ID:	MB 180-110402/1-A	Analysis Batch:	180-110717	Instrument ID:	CH731
Client Matrix:	Water	Prep Batch:	180-110402	Lab File ID:	V0708005.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	07/08/2014 1457	Units:	ug/L	Final Weight/Volume:	0.25 mL
Prep Date:	07/03/2014 0730			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: 180-34362-1

Method Blank - Batch: 180-110402

Method: 8270D LL
Preparation: 3520C

Lab Sample ID:	MB 180-110402/1-A	Analysis Batch:	180-110717	Instrument ID:	CH731
Client Matrix:	Water	Prep Batch:	180-110402	Lab File ID:	V0708005.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	07/08/2014 1457	Units:	ug/L	Final Weight/Volume:	0.25 mL
Prep Date:	07/03/2014 0730			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)	68	30 - 150
2-Fluorobiphenyl	77	30 - 150
2-Fluorophenol (Surr)	84	30 - 150
Nitrobenzene-d5 (Surr)	81	30 - 150
Phenol-d5 (Surr)	73	30 - 150
Terphenyl-d14 (Surr)	79	10 - 150

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 180-110402

Method: 8270D LL
Preparation: 3520C

LCS Lab Sample ID:	LCS 180-110402/2-A	Analysis Batch:	180-110717	Instrument ID:	CH731
Client Matrix:	Water	Prep Batch:	180-110402	Lab File ID:	V0708009.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	07/08/2014 1651	Units:	ug/L	Final Weight/Volume:	0.25 mL
Prep Date:	07/03/2014 0730			Injection Volume:	2 uL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 180-110402/3-A	Analysis Batch:	180-110717	Instrument ID:	CH731
Client Matrix:	Water	Prep Batch:	180-110402	Lab File ID:	V0708010.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	07/08/2014 1720	Units:	ug/L	Final Weight/Volume:	0.25 mL
Prep Date:	07/03/2014 0730			Injection Volume:	2 uL
Leach Date:	N/A				

	% Rec.					
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Acenaphthene	66	70	30 - 150	7	35		
Acenaphthylene	64	69	30 - 150	8	35		
Anthracene	65	69	30 - 150	6	35		
Benzidine	57	53	10 - 150	8	35	J	J
Benzo[a]anthracene	64	66	30 - 150	3	35		
Benzo[b]fluoranthene	64	69	30 - 150	7	35		
Benzo[k]fluoranthene	66	68	30 - 150	3	35		
Benzoic acid	45	47	10 - 150	6	35		
Benzo[g,h,i]perylene	73	76	30 - 150	5	35		
Benzo[a]pyrene	69	74	30 - 150	7	35		
Bis(2-chloroethoxy)methane	56	61	30 - 150	9	35		
Bis(2-chloroethyl)ether	48	52	30 - 150	8	35		
Bis(2-ethylhexyl) phthalate	58	59	30 - 150	1	35		
2,2'-oxybis[1-chloropropane]	41	43	30 - 150	3	35		
4-Bromophenyl phenyl ether	72	74	30 - 150	3	35		
4-Chlorophenyl phenyl ether	70	76	30 - 150	7	35		
2-Chloronaphthalene	62	64	30 - 150	5	35		
Butyl benzyl phthalate	58	60	30 - 150	3	35		
Chrysene	67	67	30 - 150	0	35		
Dibenz(a,h)anthracene	73	77	30 - 150	5	35		
Di-n-butyl phthalate	65	69	30 - 150	6	35		
Di-n-octyl phthalate	56	59	10 - 150	5	35		
Diethyl phthalate	74	77	30 - 150	4	35		
Dimethyl phthalate	69	74	30 - 150	7	35		
3,3'-Dichlorobenzidine	64	65	10 - 150	2	35		
2,4-Dinitrotoluene	71	73	30 - 150	4	35		
2,6-Dinitrotoluene	67	72	30 - 150	7	35		
2-Chlorophenol	54	58	30 - 150	8	35		
2,4-Dichlorophenol	65	69	30 - 150	6	35		
2,4-Dimethylphenol	67	70	30 - 150	4	35		
2,4-Dinitrophenol	58	62	10 - 150	8	35		
2-Nitrophenol	60	66	30 - 150	8	35		
2,4,6-Trichlorophenol	74	78	30 - 150	6	35		
1,2-Diphenylhydrazine(as Azobenzene)	67	69	30 - 150	3	35		
1,2,4-Trichlorobenzene	67	72	30 - 150	8	35		
4-Chloro-3-methylphenol	61	63	30 - 150	3	35		

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 180-110402

Method: 8270D LL
Preparation: 3520C

LCS Lab Sample ID:	LCS 180-110402/2-A	Analysis Batch:	180-110717	Instrument ID:	CH731
Client Matrix:	Water	Prep Batch:	180-110402	Lab File ID:	V0708009.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	07/08/2014 1651	Units:	ug/L	Final Weight/Volume:	0.25 mL
Prep Date:	07/03/2014 0730			Injection Volume:	2 uL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 180-110402/3-A	Analysis Batch:	180-110717	Instrument ID:	CH731
Client Matrix:	Water	Prep Batch:	180-110402	Lab File ID:	V0708010.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	07/08/2014 1720	Units:	ug/L	Final Weight/Volume:	0.25 mL
Prep Date:	07/03/2014 0730			Injection Volume:	2 uL
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
4-Nitrophenol	95	101	30 - 150	6	35		
4,6-Dinitro-2-methylphenol	67	70	30 - 150	3	35		
Fluoranthene	70	74	30 - 150	6	35		
Fluorene	66	72	30 - 150	9	35		
Hexachlorobenzene	70	73	30 - 150	4	35		
Hexachlorobutadiene	71	73	30 - 150	4	35		
Hexachlorocyclopentadiene	80	85	30 - 150	6	35		
Hexachloroethane	55	60	30 - 150	8	35		
Indeno[1,2,3-cd]pyrene	75	77	30 - 150	3	35		
Isophorone	64	68	30 - 150	7	35		
Naphthalene	58	64	30 - 150	10	35		
Nitrobenzene	64	70	30 - 150	9	35		
N-Nitrosodi-n-propylamine	51	54	30 - 150	7	35		
N-Nitrosodimethylamine	68	73	30 - 150	7	35		
N-Nitrosodiphenylamine	63	69	30 - 150	9	35		
Phenanthrene	63	67	30 - 150	7	35		
Pyrene	59	59	30 - 150	0	35		
Pentachlorophenol	72	74	10 - 150	3	35		
Phenol	52	55	30 - 150	5	35		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	62	64	30 - 150
2-Fluorobiphenyl	66	71	30 - 150
2-Fluorophenol (Surr)	55	60	30 - 150
Nitrobenzene-d5 (Surr)	66	68	30 - 150
Phenol-d5 (Surr)	53	57	30 - 150
Terphenyl-d14 (Surr)	62	62	10 - 150

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 180-110402

Method: 8270D LL
Preparation: 3520C

LCS Lab Sample ID:	LCS 180-110402/2-A	Units:	ug/L	LCSD Lab Sample ID:	LCSD 180-110402/3-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	07/08/2014 1651			Analysis Date:	07/08/2014 1720
Prep Date:	07/03/2014 0730			Prep Date:	07/03/2014 0730
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	13.2	14.1
Acenaphthylene	20.0	20.0	12.7	13.8
Anthracene	20.0	20.0	13.0	13.9
Benzidine	20.0	20.0	11.4 J	10.5 J
Benzo[a]anthracene	20.0	20.0	12.7	13.2
Benzo[b]fluoranthene	20.0	20.0	12.9	13.8
Benzo[k]fluoranthene	20.0	20.0	13.3	13.6
Benzoic acid	20.0	20.0	8.93	9.45
Benzo[g,h,i]perylene	20.0	20.0	14.5	15.2
Benzo[a]pyrene	20.0	20.0	13.9	14.9
Bis(2-chloroethoxy)methane	20.0	20.0	11.1	12.1
Bis(2-chloroethyl)ether	20.0	20.0	9.53	10.4
Bis(2-ethylhexyl) phthalate	20.0	20.0	11.6	11.8
2,2'-oxybis[1-chloropropane]	20.0	20.0	8.29	8.52
4-Bromophenyl phenyl ether	20.0	20.0	14.4	14.8
4-Chlorophenyl phenyl ether	20.0	20.0	14.1	15.1
2-Chloronaphthalene	20.0	20.0	12.3	12.9
Butyl benzyl phthalate	20.0	20.0	11.5	11.9
Chrysene	20.0	20.0	13.4	13.4
Dibenz(a,h)anthracene	20.0	20.0	14.7	15.5
Di-n-butyl phthalate	20.0	20.0	13.0	13.8
Di-n-octyl phthalate	20.0	20.0	11.2	11.8
Diethyl phthalate	20.0	20.0	14.7	15.4
Dimethyl phthalate	20.0	20.0	13.8	14.8
3,3'-Dichlorobenzidine	20.0	20.0	12.7	13.0
2,4-Dinitrotoluene	20.0	20.0	14.1	14.6
2,6-Dinitrotoluene	20.0	20.0	13.4	14.4
2-Chlorophenol	20.0	20.0	10.7	11.6
2,4-Dichlorophenol	20.0	20.0	12.9	13.8
2,4-Dimethylphenol	20.0	20.0	13.4	14.0
2,4-Dinitrophenol	40.0	40.0	23.0	24.8
2-Nitrophenol	20.0	20.0	12.1	13.2
2,4,6-Trichlorophenol	20.0	20.0	14.8	15.7
1,2-Diphenylhydrazine(as Azobenzene)	20.0	20.0	13.5	13.9
1,2,4-Trichlorobenzene	20.0	20.0	13.3	14.5
4-Chloro-3-methylphenol	20.0	20.0	12.2	12.6
4-Nitrophenol	40.0	40.0	38.2	40.4
4,6-Dinitro-2-methylphenol	40.0	40.0	26.9	27.8
Fluoranthene	20.0	20.0	14.1	14.9

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 180-110402

Method: 8270D LL
Preparation: 3520C

LCS Lab Sample ID:	LCS 180-110402/2-A	Units: ug/L		LCSD Lab Sample ID:	LCSD 180-110402/3-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	07/08/2014 1651			Analysis Date:	07/08/2014 1720
Prep Date:	07/03/2014 0730			Prep Date:	07/03/2014 0730
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	13.2	14.4
Hexachlorobenzene	20.0	20.0	14.1	14.6
Hexachlorobutadiene	20.0	20.0	14.1	14.7
Hexachlorocyclopentadiene	20.0	20.0	16.1	17.1
Hexachloroethane	20.0	20.0	11.1	12.0
Indeno[1,2,3-cd]pyrene	20.0	20.0	15.0	15.5
Isophorone	20.0	20.0	12.8	13.7
Naphthalene	20.0	20.0	11.5	12.8
Nitrobenzene	20.0	20.0	12.9	14.1
N-Nitrosodi-n-propylamine	20.0	20.0	10.2	10.8
N-Nitrosodimethylamine	20.0	20.0	13.6	14.6
N-Nitrosodiphenylamine	20.0	20.0	12.6	13.8
Phenanthrene	20.0	20.0	12.5	13.4
Pyrene	20.0	20.0	11.9	11.9
Pentachlorophenol	40.0	40.0	28.7	29.6
Phenol	20.0	20.0	10.5	11.0

Client: EA Engineering, Science, and Technology Job Number: 180-34362-1

Method Blank - Batch: 180-111726

Method: 6020A
Preparation: 3005A
Total Recoverable

Lab Sample ID:	MB 180-111726/1-A	Analysis Batch:	180-111971	Instrument ID:	M
Client Matrix:	Water	Prep Batch:	180-111726	Lab File ID:	M40718A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	07/18/2014 1234	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	07/17/2014 0750				
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	ND		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	0.0330	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: 180-111726

Method: 6020A
Preparation: 3005A
Total Recoverable

Lab Sample ID:	LCS 180-111726/2-A	Analysis Batch:	180-111971	Instrument ID:	M
Client Matrix:	Water	Prep Batch:	180-111726	Lab File ID:	M40718A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	07/18/2014 1238	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	07/17/2014 0750				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	40.0	35.3	88	80 - 120	
Cadmium	50.0	47.5	95	80 - 120	
Chromium	200	195	98	80 - 120	
Lead	20.0	18.8	94	80 - 120	
Selenium	10.0	9.21	92	80 - 120	
Silver	50.0	45.9	92	80 - 120	
Beryllium	50.0	44.7	89	80 - 120	
Thallium	50.0	47.3	95	80 - 120	
Antimony	500	481	96	80 - 120	
Nickel	500	455	91	80 - 120	
Zinc	500	454	91	80 - 120	
Copper	250	224	90	80 - 120	

Client: EA Engineering, Science, and Technology Job Number: 180-34362-1

Method Blank - Batch: 180-111612

Method: 7470A
Preparation: 7470A

Lab Sample ID:	MB 180-111612/1-A	Analysis Batch:	180-111657	Instrument ID:	K
Client Matrix:	Water	Prep Batch:	180-111612	Lab File ID:	R40716A.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	07/16/2014 1235	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	07/16/2014 1018				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.0504	J	0.038	0.20

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 180-111612

Method: 7470A
Preparation: 7470A

LCS Lab Sample ID:	LCS 180-111612/2-A	Analysis Batch:	180-111657	Instrument ID:	K
Client Matrix:	Water	Prep Batch:	180-111612	Lab File ID:	R40716A.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	07/16/2014 1237	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	07/16/2014 1018				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 180-111612/3-A	Analysis Batch:	180-111657	Instrument ID:	K
Client Matrix:	Water	Prep Batch:	180-111612	Lab File ID:	R40716A.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	07/16/2014 1238	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	07/16/2014 1018				
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Mercury	105	104	80 - 120	1	20		

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 180-111612

Method: 7470A
Preparation: 7470A

LCS Lab Sample ID:	LCS 180-111612/2-A	Units:	ug/L	LCSD Lab Sample ID:	LCSD 180-111612/3-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	07/16/2014 1237			Analysis Date:	07/16/2014 1238
Prep Date:	07/16/2014 1018			Prep Date:	07/16/2014 1018
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Mercury	2.50	2.50	2.62	2.59

Client: EA Engineering, Science, and Technology Job Number: 180-34362-1

Method Blank - Batch: 180-111006

Method: 9014
Preparation: 9010C

Lab Sample ID:	MB 180-111006/4-A	Analysis Batch:	180-111072	Instrument ID:	KONELAB1
Client Matrix:	Water	Prep Batch:	180-111006	Lab File ID:	071014CN.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	07/10/2014 1015	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	07/10/2014 0835				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Cyanide, Total	ND		3.2	10

Low Level Control Sample - Batch: 180-111006

Method: 9014
Preparation: 9010C

Lab Sample ID:	LLCS 180-111006/1-A	Analysis Batch:	180-111072	Instrument ID:	KONELAB1
Client Matrix:	Water	Prep Batch:	180-111006	Lab File ID:	071014CN.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	07/10/2014 1015	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	07/10/2014 0835				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cyanide, Total	50.0	50.3	101	90 - 110	

High Level Control Sample - Batch: 180-111006

Method: 9014
Preparation: 9010C

Lab Sample ID:	HLCS 180-111006/2-A	Analysis Batch:	180-111072	Instrument ID:	KONELAB1
Client Matrix:	Water	Prep Batch:	180-111006	Lab File ID:	071014CN.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	07/10/2014 1015	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	07/10/2014 0835				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cyanide, Total	250	240	96	90 - 110	

Lab Control Sample - Batch: 180-111006

Method: 9014
Preparation: 9010C

Lab Sample ID:	LCS 180-111006/3-A	Analysis Batch:	180-111072	Instrument ID:	KONELAB1
Client Matrix:	Water	Prep Batch:	180-111006	Lab File ID:	071014CN.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	07/10/2014 1015	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	07/10/2014 0835				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cyanide, Total	200	210	105	85 - 115	

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

Matrix Spike - Batch: 180-111006

Method: 9014
Preparation: 9010C

Lab Sample ID:	180-34362-5	Analysis Batch:	180-111072	Instrument ID:	KONELAB1
Client Matrix:	Water	Prep Batch:	180-111006	Lab File ID:	071014CN.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	07/10/2014 1022	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	07/10/2014 0835				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Cyanide, Total	ND	100	9.11	9	75 - 125	J F1

DATA REPORTING QUALIFIERS

Client: EA Engineering, Science, and Technology Job Number: 180-34362-1

Lab Section	Qualifier	Description
GC/MS VOA		
	*	LCS or LCSD exceeds the control limits
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.
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		
	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.

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:180-110534					
LCS 180-110534/7	Lab Control Sample	T	Water	8260C	
LCSD 180-110534/8	Lab Control Sample Duplicate	T	Water	8260C	
MB 180-110534/10	Method Blank	T	Water	8260C	
180-34362-1	H108-PZM003	T	Water	8260C	
180-34362-2	RW19-PZP000	T	Water	8260C	
180-34362-3	RW19-PZM050	T	Water	8260C	
180-34362-4	H108-PZM060	T	Water	8260C	
180-34362-5	RW19-PZM020	T	Water	8260C	
Analysis Batch:180-110699					
LCS 180-110699/8	Lab Control Sample	T	Water	8260C	
LCSD 180-110699/9	Lab Control Sample Duplicate	T	Water	8260C	
MB 180-110699/6	Method Blank	T	Water	8260C	
180-34362-6	062614-TB	T	Water	8260C	

Report Basis
T = Total

GC/MS Semi VOA					
Prep Batch: 180-110402					
LCS 180-110402/2-A	Lab Control Sample	T	Water	3520C	
LCSD 180-110402/3-A	Lab Control Sample Duplicate	T	Water	3520C	
MB 180-110402/1-A	Method Blank	T	Water	3520C	
180-34362-1	H108-PZM003	T	Water	3520C	
180-34362-2	RW19-PZP000	T	Water	3520C	
180-34362-3	RW19-PZM050	T	Water	3520C	
180-34362-4	H108-PZM060	T	Water	3520C	
180-34362-5	RW19-PZM020	T	Water	3520C	
Analysis Batch:180-110717					
LCS 180-110402/2-A	Lab Control Sample	T	Water	8270D LL	180-110402
LCSD 180-110402/3-A	Lab Control Sample Duplicate	T	Water	8270D LL	180-110402
MB 180-110402/1-A	Method Blank	T	Water	8270D LL	180-110402
180-34362-1	H108-PZM003	T	Water	8270D LL	180-110402
180-34362-2	RW19-PZP000	T	Water	8270D LL	180-110402
180-34362-3	RW19-PZM050	T	Water	8270D LL	180-110402
180-34362-4	H108-PZM060	T	Water	8270D LL	180-110402
180-34362-5	RW19-PZM020	T	Water	8270D LL	180-110402

Report Basis
T = Total

Client: EA Engineering, Science, and Technology Job Number: 180-34362-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 180-111612					
LCS 180-111612/2-A	Lab Control Sample	T	Water	7470A	
LCSD 180-111612/3-A	Lab Control Sample Duplicate	T	Water	7470A	
MB 180-111612/1-A	Method Blank	T	Water	7470A	
180-34362-1	H108-PZM003	T	Water	7470A	
180-34362-2	RW19-PZP000	T	Water	7470A	
180-34362-3	RW19-PZM050	T	Water	7470A	
180-34362-4	H108-PZM060	T	Water	7470A	
180-34362-5	RW19-PZM020	T	Water	7470A	
Analysis Batch:180-111657					
LCS 180-111612/2-A	Lab Control Sample	T	Water	7470A	180-111612
LCSD 180-111612/3-A	Lab Control Sample Duplicate	T	Water	7470A	180-111612
MB 180-111612/1-A	Method Blank	T	Water	7470A	180-111612
180-34362-1	H108-PZM003	T	Water	7470A	180-111612
180-34362-2	RW19-PZP000	T	Water	7470A	180-111612
180-34362-3	RW19-PZM050	T	Water	7470A	180-111612
180-34362-4	H108-PZM060	T	Water	7470A	180-111612
180-34362-5	RW19-PZM020	T	Water	7470A	180-111612
Prep Batch: 180-111726					
LCS 180-111726/2-A	Lab Control Sample	R	Water	3005A	
MB 180-111726/1-A	Method Blank	R	Water	3005A	
180-34362-1	H108-PZM003	R	Water	3005A	
180-34362-2	RW19-PZP000	R	Water	3005A	
180-34362-3	RW19-PZM050	R	Water	3005A	
180-34362-4	H108-PZM060	R	Water	3005A	
180-34362-5	RW19-PZM020	R	Water	3005A	
Analysis Batch:180-111971					
LCS 180-111726/2-A	Lab Control Sample	R	Water	6020A	180-111726
MB 180-111726/1-A	Method Blank	R	Water	6020A	180-111726
180-34362-1	H108-PZM003	R	Water	6020A	180-111726
180-34362-2	RW19-PZP000	R	Water	6020A	180-111726
180-34362-3	RW19-PZM050	R	Water	6020A	180-111726
180-34362-4	H108-PZM060	R	Water	6020A	180-111726
180-34362-5	RW19-PZM020	R	Water	6020A	180-111726

Report Basis

R = Total Recoverable

T = Total

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Prep Batch: 180-111006					
HLCS 180-111006/2-A	High Level Control Sample	T	Water	9010C	
LCS 180-111006/3-A	Lab Control Sample	T	Water	9010C	
LLCS 180-111006/1-A	Low Level Control Sample	T	Water	9010C	
MB 180-111006/4-A	Method Blank	T	Water	9010C	
180-34362-1	H108-PZM003	T	Water	9010C	
180-34362-2	RW19-PZP000	T	Water	9010C	
180-34362-3	RW19-PZM050	T	Water	9010C	
180-34362-4	H108-PZM060	T	Water	9010C	
180-34362-5	RW19-PZM020	T	Water	9010C	
180-34362-5MS	Matrix Spike	T	Water	9010C	
Analysis Batch:180-111072					
HLCS 180-111006/2-A	High Level Control Sample	T	Water	9014	180-111006
LCS 180-111006/3-A	Lab Control Sample	T	Water	9014	180-111006
LLCS 180-111006/1-A	Low Level Control Sample	T	Water	9014	180-111006
MB 180-111006/4-A	Method Blank	T	Water	9014	180-111006
180-34362-1	H108-PZM003	T	Water	9014	180-111006
180-34362-2	RW19-PZP000	T	Water	9014	180-111006
180-34362-3	RW19-PZM050	T	Water	9014	180-111006
180-34362-4	H108-PZM060	T	Water	9014	180-111006
180-34362-5	RW19-PZM020	T	Water	9014	180-111006
180-34362-5MS	Matrix Spike	T	Water	9014	180-111006

Report Basis

T = Total

Client: EA Engineering, Science, and Technology Job Number: 180-34362-1

Laboratory Chronicle

Lab ID: 180-34362-1 **Client ID: H108-PZM003**

Sample Date/Time: 06/26/2014 09:55 Received Date/Time: 06/27/2014 08:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	180-34362-G-1		180-110534		07/07/2014 07:22	1	TAL PIT	MAZ
A:8260C	180-34362-G-1		180-110534		07/07/2014 07:22	1	TAL PIT	MAZ
P:3520C	180-34362-A-1-A		180-110717	180-110402	07/03/2014 07:30	1	TAL PIT	BJT
A:8270D LL	180-34362-A-1-A		180-110717	180-110402	07/08/2014 22:34	1	TAL PIT	VVP
P:3005A	180-34362-D-1-B ^5		180-111971	180-111726	07/17/2014 07:50	5	TAL PIT	SLB
A:6020A	180-34362-D-1-B ^5		180-111971	180-111726	07/18/2014 13:09	5	TAL PIT	CNS
P:7470A	180-34362-D-1-A		180-111657	180-111612	07/16/2014 10:18	1	TAL PIT	LEM
A:7470A	180-34362-D-1-A		180-111657	180-111612	07/16/2014 12:40	1	TAL PIT	LEM
P:9010C	180-34362-C-1-A		180-111072	180-111006	07/10/2014 08:35	1	TAL PIT	PGJ
A:9014	180-34362-C-1-A		180-111072	180-111006	07/10/2014 10:22	1	TAL PIT	PGJ

Lab ID: 180-34362-2 **Client ID: RW19-PZP000**

Sample Date/Time: 06/26/2014 10:10 Received Date/Time: 06/27/2014 08:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	180-34362-G-2		180-110534		07/07/2014 07:49	1	TAL PIT	MAZ
A:8260C	180-34362-G-2		180-110534		07/07/2014 07:49	1	TAL PIT	MAZ
P:3520C	180-34362-A-2-A		180-110717	180-110402	07/03/2014 07:30	1	TAL PIT	BJT
A:8270D LL	180-34362-A-2-A		180-110717	180-110402	07/08/2014 23:02	1	TAL PIT	VVP
P:3005A	180-34362-D-2-B ^5		180-111971	180-111726	07/17/2014 07:50	5	TAL PIT	SLB
A:6020A	180-34362-D-2-B ^5		180-111971	180-111726	07/18/2014 13:13	5	TAL PIT	CNS
P:7470A	180-34362-D-2-A		180-111657	180-111612	07/16/2014 10:18	1	TAL PIT	LEM
A:7470A	180-34362-D-2-A		180-111657	180-111612	07/16/2014 12:42	1	TAL PIT	LEM
P:9010C	180-34362-C-2-A		180-111072	180-111006	07/10/2014 08:35	10	TAL PIT	PGJ
A:9014	180-34362-C-2-A		180-111072	180-111006	07/10/2014 10:40	10	TAL PIT	PGJ

Lab ID: 180-34362-3 **Client ID: RW19-PZM050**

Sample Date/Time: 06/26/2014 11:05 Received Date/Time: 06/27/2014 08:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	180-34362-G-3		180-110534		07/07/2014 08:16	1	TAL PIT	MAZ
A:8260C	180-34362-G-3		180-110534		07/07/2014 08:16	1	TAL PIT	MAZ
P:3520C	180-34362-A-3-A		180-110717	180-110402	07/03/2014 07:30	1	TAL PIT	BJT
A:8270D LL	180-34362-A-3-A		180-110717	180-110402	07/08/2014 23:30	1	TAL PIT	VVP
P:3005A	180-34362-D-3-B ^5		180-111971	180-111726	07/17/2014 07:50	5	TAL PIT	SLB
A:6020A	180-34362-D-3-B ^5		180-111971	180-111726	07/18/2014 13:26	5	TAL PIT	CNS
P:7470A	180-34362-D-3-A		180-111657	180-111612	07/16/2014 10:18	1	TAL PIT	LEM
A:7470A	180-34362-D-3-A		180-111657	180-111612	07/16/2014 12:44	1	TAL PIT	LEM
P:9010C	180-34362-C-3-A		180-111072	180-111006	07/10/2014 08:35	1	TAL PIT	PGJ
A:9014	180-34362-C-3-A		180-111072	180-111006	07/10/2014 10:22	1	TAL PIT	PGJ

Client: EA Engineering, Science, and Technology Job Number: 180-34362-1

Laboratory Chronicle

Lab ID: 180-34362-4 **Client ID: H108-PZM060**

Sample Date/Time: 06/26/2014 11:30 Received Date/Time: 06/27/2014 08:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	180-34362-G-4		180-110534		07/07/2014 08:44	1	TAL PIT	MAZ
A:8260C	180-34362-G-4		180-110534		07/07/2014 08:44	1	TAL PIT	MAZ
P:3520C	180-34362-B-4-A		180-110717	180-110402	07/03/2014 07:30	1	TAL PIT	BJT
A:8270D LL	180-34362-B-4-A		180-110717	180-110402	07/08/2014 23:59	1	TAL PIT	VVP
P:3005A	180-34362-D-4-B ^5		180-111971	180-111726	07/17/2014 07:50	5	TAL PIT	SLB
A:6020A	180-34362-D-4-B ^5		180-111971	180-111726	07/18/2014 13:30	5	TAL PIT	CNS
P:7470A	180-34362-D-4-A		180-111657	180-111612	07/16/2014 10:18	1	TAL PIT	LEM
A:7470A	180-34362-D-4-A		180-111657	180-111612	07/16/2014 12:45	1	TAL PIT	LEM
P:9010C	180-34362-C-4-A		180-111072	180-111006	07/10/2014 08:35	1	TAL PIT	PGJ
A:9014	180-34362-C-4-A		180-111072	180-111006	07/10/2014 10:22	1	TAL PIT	PGJ

Lab ID: 180-34362-5 **Client ID: RW19-PZM020**

Sample Date/Time: 06/26/2014 11:55 Received Date/Time: 06/27/2014 08:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	180-34362-G-5		180-110534		07/07/2014 09:11	1	TAL PIT	MAZ
A:8260C	180-34362-G-5		180-110534		07/07/2014 09:11	1	TAL PIT	MAZ
P:3520C	180-34362-A-5-A		180-110717	180-110402	07/03/2014 07:30	1	TAL PIT	BJT
A:8270D LL	180-34362-A-5-A		180-110717	180-110402	07/09/2014 00:27	1	TAL PIT	VVP
P:3005A	180-34362-D-5-B ^5		180-111971	180-111726	07/17/2014 07:50	5	TAL PIT	SLB
A:6020A	180-34362-D-5-B ^5		180-111971	180-111726	07/18/2014 13:34	5	TAL PIT	CNS
P:7470A	180-34362-D-5-A		180-111657	180-111612	07/16/2014 10:18	1	TAL PIT	LEM
A:7470A	180-34362-D-5-A		180-111657	180-111612	07/16/2014 12:47	1	TAL PIT	LEM
P:9010C	180-34362-C-5-A		180-111072	180-111006	07/10/2014 08:35	1	TAL PIT	PGJ
A:9014	180-34362-C-5-A		180-111072	180-111006	07/10/2014 10:22	1	TAL PIT	PGJ

Lab ID: 180-34362-5 MS **Client ID: RW19-PZM020**

Sample Date/Time: 06/26/2014 11:55 Received Date/Time: 06/27/2014 08:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:9010C	180-34362-C-5-B MS		180-111072	180-111006	07/10/2014 08:35	1	TAL PIT	PGJ
A:9014	180-34362-C-5-B MS		180-111072	180-111006	07/10/2014 10:22	1	TAL PIT	PGJ

Lab ID: 180-34362-6 **Client ID: 062614-TB**

Sample Date/Time: 06/26/2014 08:30 Received Date/Time: 06/27/2014 08:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	180-34362-B-6		180-110699		07/08/2014 12:23	1	TAL PIT	MAZ
A:8260C	180-34362-B-6		180-110699		07/08/2014 12:23	1	TAL PIT	MAZ

Client: EA Engineering, Science, and Technology Job Number: 180-34362-1

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 180-110534/10		180-110534		07/07/2014 03:18	1	TAL PIT	MAZ
A:8260C	MB 180-110534/10		180-110534		07/07/2014 03:18	1	TAL PIT	MAZ
P:5030C	MB 180-110699/6		180-110699		07/08/2014 11:56	1	TAL PIT	MAZ
A:8260C	MB 180-110699/6		180-110699		07/08/2014 11:56	1	TAL PIT	MAZ
P:3520C	MB 180-110402/1-A		180-110717	180-110402	07/03/2014 07:30	1	TAL PIT	BJT
A:8270D LL	MB 180-110402/1-A		180-110717	180-110402	07/08/2014 14:57	1	TAL PIT	VVP
P:3005A	MB 180-111726/1-A		180-111971	180-111726	07/17/2014 07:50	1	TAL PIT	SLB
A:6020A	MB 180-111726/1-A		180-111971	180-111726	07/18/2014 12:34	1	TAL PIT	CNS
P:7470A	MB 180-111612/1-A		180-111657	180-111612	07/16/2014 10:18	1	TAL PIT	LEM
A:7470A	MB 180-111612/1-A		180-111657	180-111612	07/16/2014 12:35	1	TAL PIT	LEM
P:9010C	MB 180-111006/4-A		180-111072	180-111006	07/10/2014 08:35	1	TAL PIT	PGJ
A:9014	MB 180-111006/4-A		180-111072	180-111006	07/10/2014 10:15	1	TAL PIT	PGJ

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 180-110534/7		180-110534		07/07/2014 04:12	1	TAL PIT	MAZ
A:8260C	LCS 180-110534/7		180-110534		07/07/2014 04:12	1	TAL PIT	MAZ
P:5030C	LCS 180-110699/8		180-110699		07/08/2014 12:51	1	TAL PIT	MAZ
A:8260C	LCS 180-110699/8		180-110699		07/08/2014 12:51	1	TAL PIT	MAZ
P:3520C	LCS 180-110402/2-A		180-110717	180-110402	07/03/2014 07:30	1	TAL PIT	BJT
A:8270D LL	LCS 180-110402/2-A		180-110717	180-110402	07/08/2014 16:51	1	TAL PIT	VVP
P:3005A	LCS 180-111726/2-A		180-111971	180-111726	07/17/2014 07:50	1	TAL PIT	SLB
A:6020A	LCS 180-111726/2-A		180-111971	180-111726	07/18/2014 12:38	1	TAL PIT	CNS
P:7470A	LCS 180-111612/2-A		180-111657	180-111612	07/16/2014 10:18	1	TAL PIT	LEM
A:7470A	LCS 180-111612/2-A		180-111657	180-111612	07/16/2014 12:37	1	TAL PIT	LEM
P:9010C	LCS 180-111006/3-A		180-111072	180-111006	07/10/2014 08:35	1	TAL PIT	PGJ
A:9014	LCS 180-111006/3-A		180-111072	180-111006	07/10/2014 10:15	1	TAL PIT	PGJ

Client: EA Engineering, Science, and Technology Job Number: 180-34362-1

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:5030C	LCSD 180-110534/8		180-110534		07/07/2014 04:39	1	TAL PIT	MAZ
A:8260C	LCSD 180-110534/8		180-110534		07/07/2014 04:39	1	TAL PIT	MAZ
P:5030C	LCSD 180-110699/9		180-110699		07/08/2014 13:18	1	TAL PIT	MAZ
A:8260C	LCSD 180-110699/9		180-110699		07/08/2014 13:18	1	TAL PIT	MAZ
P:3520C	LCSD 180-110402/3-A		180-110717	180-110402	07/03/2014 07:30	1	TAL PIT	BJT
A:8270D LL	LCSD 180-110402/3-A		180-110717	180-110402	07/08/2014 17:20	1	TAL PIT	VVP
P:7470A	LCSD 180-111612/3-A		180-111657	180-111612	07/16/2014 10:18	1	TAL PIT	LEM
A:7470A	LCSD 180-111612/3-A		180-111657	180-111612	07/16/2014 12:38	1	TAL PIT	LEM

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 180-111006/1-A		180-111072	180-111006	07/10/2014 08:35	1	TAL PIT	PGJ
A:9014	LLCS 180-111006/1-A		180-111072	180-111006	07/10/2014 10:15	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 180-111006/2-A		180-111072	180-111006	07/10/2014 08:35	1	TAL PIT	PGJ
A:9014	HLCS 180-111006/2-A		180-111072	180-111006	07/10/2014 10:15	1	TAL PIT	PGJ

Lab References:
TAL PIT = TestAmerica Pittsburgh

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MCCV1X_00064	08/06/14	07/06/14	2% Nitric Acid, Lot 1191081	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_00052	07/23/14	06/23/14	HNO3, Lot 1191081	250 mL	MMSCRI-1B_00003	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
							Zinc	0.005 ppm
					MMSCRI-2_00005	1 mL	Antimony	0.002 ppm
.MMSCRI-1B_00003	10/01/14	Inorganic Ventures, Lot G2-MEB496135			(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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Zinc	1.25 ppm
.MMSCRI-2_00005	10/01/14	Inorganic Ventures, Lot F2-MEB439153			(Purchased Reagent)		Antimony	0.5 ppm
MHgworkingCal_00843	07/17/14	07/16/14	2% Nitric Acid, Lot 0000069571	100 mL	MHgIntcal_00050	1 mL	Mercury	100 ppb
.MHgIntcal_00050	08/02/14	07/02/14	2% Nitric Acid, Lot 0000031507	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_00824	07/17/14	07/16/14	2% Nitric Acid, Lot 0000069571	100 mL	MHgIntICV_00049	1 mL	Mercury	100 ppb
.MHgIntICV_00049	07/28/14	07/02/14	2% Nitric Acid, Lot 0000031507	100 mL	MHGICV-1_00004	1 mL	Mercury	10 ppm
..MHGICV-1_00004	07/28/14	ULTRA SCIENTIFIC, Lot P00139			(Purchased Reagent)		Mercury	1000 ppm
MICSABX_00057	09/01/14	06/18/14	2% Nitric Acid, Lot J38N82	100 mL	M6020ICS-0A_00004	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_00005	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
							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_00004	09/01/14	Inorganic Ventures, Lot G2-MEB476152			(Purchased Reagent)		Al	1000 ppm
							Ca	1000 ppm
							Fe	1000 ppm
							K	1000 ppm
							Mg	1000 ppm
							Mo	20 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Na	1000 ppm
							Ti	20 ppm
.M6020ICS-0B_00005	09/01/14	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_00052	09/01/14	06/18/14	DI Water, Lot J38N82	100 mL	M6020ICS-0A_00004	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_00004	09/01/14	Inorganic Ventures, Lot G2-MEB476152			(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
MICVX_00020	08/06/14	07/06/14	2% Nitric Acid, Lot 25106	250 mg/L	MICPMSICV_00017	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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Selenium	0.08 mg/L
							Silver	0.08 mg/L
							Thallium	0.08 mg/L
							Zinc	0.08 mg/L
.MICPMSICV_00017	11/30/14	SPEX CertiPrep, Lot 4-283NY			(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_00034	08/16/14	07/16/14	DI Water, Lot 1191081	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
							Silver	5 ppm
							Thallium	5 ppm
							Zinc	5 ppm
MSTD3X_00035	08/16/14	07/16/14	2% Nitric Acid, Lot 1191081	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_00017	01/01/15	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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00020	07/01/15	INORGANIC VENTURES, Lot G2-MEB494149			(Purchased Reagent)		Ca	5000 ug/mL
							K	5000 ug/mL
							Mg	5000 ug/mL
							Na	5000 ug/mL
MTAPITTMSC_00026	07/01/15	Inorganic Ventures, Lot G2-MEB494150			(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
OPLVISPKMIX1i_00027	12/23/14	06/23/14	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

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	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_00001	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00001	01/31/15		Restek, Lot A0100635		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
OPQL8270SURi_00019	12/30/14	06/30/14	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_00006	10/28/14	04/28/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00004	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_00003	5 uL	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Benzoic acid	0.4 ug/mL
							Indene	0.2 ug/mL
							N-Nitrosodiphenylamine	0.2 ug/mL
							Benzaldehyde	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
							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_00004	01/06/15	01/06/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00003	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_00003	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_00003	10/28/14	04/28/14	MeCl2, Lot 1053215	20 mL	SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					SVLVlist12_00001	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_00017	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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[k]fluoranthene	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_00007	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd3_00005	800 uL	Benzoic acid	80 ug/mL
					SVLVstd4_00006	400 uL	Indene	40 ug/mL
					SVLVstd5_00007	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd6_00002	800 uL	Benzaldehyde	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					SVNNITROPYROs_00008	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..SV2NAPAMINEs_00002	06/30/17		Ultra Scientific, Lot Ck-1617		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVlist12_00001	02/28/15		Restek, Lot A093658		(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_00017	01/30/15		Restek, Lot A094002		(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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00007	01/31/15		Restek, Lot A097020		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd3_00005	02/28/16		Restek, Lot A093441		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..SVLVstd4_00006	10/31/14		Restek, Lot A093668		(Purchased Reagent)		Indene	2000 ug/mL
..SVLVstd5_00007	02/28/15		Restek, Lot A093442		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd6_00002	10/30/14		Restek, Lot A092457		(Purchased Reagent)		Benzaldehyde	1000 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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..SVNNITROPYROs_00008	03/06/15	Spexcertiprep, Lot C1120306002			(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD10i_00053	06/08/14	06/01/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00004	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_00003	125 uL	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzoic acid	10 ug/mL
							Indene	5 ug/mL
							N-Nitrosodiphenylamine	5 ug/mL
							Benzaldehyde	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_00004	01/06/15	01/06/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00003	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_00003	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_00003	10/28/14	04/28/14	MeCl2, Lot 1053215	20 mL	SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00001	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_00017	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.: 180-34362-1

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.: 180-34362-1

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_00007	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd3_00005	800 uL	Benzoic acid	80 ug/mL
					SVLVstd4_00006	400 uL	Indene	40 ug/mL
					SVLVstd5_00007	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd6_00002	800 uL	Benzaldehyde	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_00008	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..SV2NAPAMINEs_00002	06/30/17		Ultra Scientific, Lot Ck-1617		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVlist12_00001	02/28/15		Restek, Lot A093658		(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_00017	01/30/15		Restek, Lot A094002		(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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-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
							Indeno[1,2,3-cd]pyrene	1000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00007	01/31/15		Restek, Lot A097020		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd3_00005	02/28/16		Restek, Lot A093441		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..SVLVstd4_00006	10/31/14		Restek, Lot A093668		(Purchased Reagent)		Indene	2000 ug/mL
..SVLVstd5_00007	02/28/15		Restek, Lot A093442		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd6_00002	10/30/14		Restek, Lot A092457		(Purchased Reagent)		Benzaldehyde	1000 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_00008	03/06/15		Spexcertiprep, Lot C1120306002		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD10i_00060	07/10/14	07/03/14	MeCl2, Lot 1053215	1 mL	SVTAPITSTCKi_00003	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
							Anthracene	5 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Benzoic acid	10 ug/mL
							N-Nitrosodiphenylamine	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_00003	10/28/14	04/28/14	MeCl2, Lot 1053215	20 mL	SVLVstd1_00017	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
							2,4-Dimethylphenol	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrophenol	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_00007	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
					SVLVstd3_00005	800 uL	Benzoic acid	80 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					SVLVstd5_00007	400 uL	N-Nitrosodiphenylamine	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_00017	01/30/15		Restek, Lot A094002		(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
							Hexachlorocyclopentadiene	1000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00007	01/31/15		Restek, Lot A097020		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SVLVstd3_00005	02/28/16		Restek, Lot A093441		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..SVLVstd5_00007	02/28/15		Restek, Lot A093442		(Purchased Reagent)		N-Nitrosodiphenylamine	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_00004	10/28/14	04/28/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00004	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_00003	25 uL	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
							2,4,6-Trichlorophenol	1 ug/mL
							2,4-Dichlorophenol	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dimethylphenol	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
							Hexachlorocyclopentadiene	1 ug/mL
							Hexachloroethane	1 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Benzoic acid	2 ug/mL
							Indene	1 ug/mL
							N-Nitrosodiphenylamine	1 ug/mL
							Benzaldehyde	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_00004	01/06/15	01/06/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00003	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_00003	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_00003	10/28/14	04/28/14	MeCl2, Lot 1053215	20 mL	SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00001	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_00017	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-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
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00007	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd3_00005	800 uL	Benzoic acid	80 ug/mL
					SVLVstd4_00006	400 uL	Indene	40 ug/mL
					SVLVstd5_00007	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd6_00002	800 uL	Benzaldehyde	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_00008	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..SV2NAPAMINEs_00002	06/30/17	Ultra Scientific, Lot Ck-1617			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVlist12_00001	02/28/15	Restek, Lot A093658			(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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SVLVstd1_00017	01/30/15		Restek, Lot A094002		(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
							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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-ethylhexyl) phthalate	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_00007	01/31/15		Restek, Lot A097020		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd3_00005	02/28/16		Restek, Lot A093441		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..SVLVstd4_00006	10/31/14		Restek, Lot A093668		(Purchased Reagent)		Indene	2000 ug/mL
..SVLVstd5_00007	02/28/15		Restek, Lot A093442		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd6_00002	10/30/14		Restek, Lot A092457		(Purchased Reagent)		Benzaldehyde	1000 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_00008	03/06/15		Spexcertiprep, Lot C1120306002		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD20i_00004	10/28/14	04/28/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00004	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00003	250 uL	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
							Acenaphthene	10 ug/mL
							Acenaphthylene	10 ug/mL
							Acetophenone	10 ug/mL
							Aniline	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Benzoic acid	20 ug/mL
							Indene	10 ug/mL
							N-Nitrosodiphenylamine	10 ug/mL
							Benzaldehyde	10 ug/mL
							2,4,6-Tribromophenol (Surr)	10 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00004	01/06/15	01/06/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00003	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_00003	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_00003	10/28/14	04/28/14	MeCl2, Lot 1053215	20 mL	SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00001	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_00017	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd2_00007	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd3_00005	800 uL	Benzoic acid	80 ug/mL
					SVLVstd4_00006	400 uL	Indene	40 ug/mL
					SVLVstd5_00007	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd6_00002	800 uL	Benzaldehyde	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_00008	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..SV2NAPAMINEs_00002	06/30/17	Ultra Scientific, Lot Ck-1617			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVlist12_00001	02/28/15	Restek, Lot A093658			(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_00017	01/30/15	Restek, Lot A094002			(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.: 180-34362-1

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

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_00007	01/31/15		Restek, Lot A097020		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd3_00005	02/28/16		Restek, Lot A093441		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..SVLVstd4_00006	10/31/14		Restek, Lot A093668		(Purchased Reagent)		Indene	2000 ug/mL
..SVLVstd5_00007	02/28/15		Restek, Lot A093442		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd6_00002	10/30/14		Restek, Lot A092457		(Purchased Reagent)		Benzaldehyde	1000 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_00008	03/06/15		Spexcertiprep, Lot C1120306002		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD4.0i_00005	10/28/14	04/28/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00004	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_00003	50 uL	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Benzoic acid	4 ug/mL
							Indene	2 ug/mL
							N-Nitrosodiphenylamine	2 ug/mL
							Benzaldehyde	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_00004	01/06/15	01/06/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00003	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_00003	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_00003	10/28/14	04/28/14	MeCl2, Lot 1053215	20 mL	SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00001	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_00017	800 uL	1,1'-Biphenyl	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

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	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
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Butyl benzyl phthalate	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_00007	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd3_00005	800 uL	Benzoic acid	80 ug/mL
					SVLVstd4_00006	400 uL	Indene	40 ug/mL
					SVLVstd5_00007	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd6_00002	800 uL	Benzaldehyde	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_00008	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..SV2NAPAMINEs_00002	06/30/17	Ultra Scientific, Lot Ck-1617			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVlist12_00001	02/28/15	Restek, Lot A093658			(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl methanesulfonate	1000 ug/mL
..SVLVstd1_00017	01/30/15		Restek, Lot A094002		(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
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

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	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_00007	01/31/15		Restek, Lot A097020		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd3_00005	02/28/16		Restek, Lot A093441		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..SVLVstd4_00006	10/31/14		Restek, Lot A093668		(Purchased Reagent)		Indene	2000 ug/mL
..SVLVstd5_00007	02/28/15		Restek, Lot A093442		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd6_00002	10/30/14		Restek, Lot A092457		(Purchased Reagent)		Benzaldehyde	1000 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_00008	03/06/15		Spexcertiprep, Lot C1120306002		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD40i_00004	10/28/14	04/28/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00004	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00003	500 uL	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Pyridine	20 ug/mL
							3,3'-Dichlorobenzidine	20 ug/mL
							Atrazine	20 ug/mL
							Benzidine	20 ug/mL
							Caprolactam	20 ug/mL
							Benzoic acid	40 ug/mL
							Indene	20 ug/mL
							N-Nitrosodiphenylamine	20 ug/mL
							Benzaldehyde	20 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,6-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_00004	01/06/15	01/06/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00003	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_00003	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_00003	10/28/14	04/28/14	MeCl2, Lot 1053215	20 mL	SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00001	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_00017	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00007	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd3_00005	800 uL	Benzoic acid	80 ug/mL
					SVLVstd4_00006	400 uL	Indene	40 ug/mL
					SVLVstd5_00007	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd6_00002	800 uL	Benzaldehyde	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_00008	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..SV2NAPAMINEs_00002	06/30/17	Ultra Scientific, Lot Ck-1617			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVlist12_00001	02/28/15	Restek, Lot A093658			(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_00017	01/30/15	Restek, Lot A094002			(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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00007	01/31/15		Restek, Lot A097020		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd3_00005	02/28/16		Restek, Lot A093441		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..SVLVstd4_00006	10/31/14		Restek, Lot A093668		(Purchased Reagent)		Indene	2000 ug/mL
..SVLVstd5_00007	02/28/15		Restek, Lot A093442		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd6_00002	10/30/14		Restek, Lot A092457		(Purchased Reagent)		Benzaldehyde	1000 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_00008	03/06/15		Spexcertiprep, Lot C1120306002		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD60i_00004	10/28/14	04/28/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00004	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_00003	750 uL	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

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	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
							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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Benzoic acid	60 ug/mL
							Indene	30 ug/mL
							N-Nitrosodiphenylamine	30 ug/mL
							Benzaldehyde	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_00004	01/06/15	01/06/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00003	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_00003	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_00003	10/28/14	04/28/14	MeCl2, Lot 1053215	20 mL	SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00001	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					SVLVstd1_00017	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
							Bis(2-chloroethyl)ether	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-ethylhexyl) phthalate	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_00007	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd3_00005	800 uL	Benzoic acid	80 ug/mL
					SVLVstd4_00006	400 uL	Indene	40 ug/mL
					SVLVstd5_00007	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd6_00002	800 uL	Benzaldehyde	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_00008	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..SV2NAPAMINEs_00002	06/30/17	Ultra Scientific, Lot Ck-1617			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVlist12_00001	02/28/15	Restek, Lot A093658			(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
..SVLVstd1_00017	01/30/15		Restek, Lot A094002		(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
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00007	01/31/15		Restek, Lot A097020		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd3_00005	02/28/16		Restek, Lot A093441		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..SVLVstd4_00006	10/31/14		Restek, Lot A093668		(Purchased Reagent)		Indene	2000 ug/mL
..SVLVstd5_00007	02/28/15		Restek, Lot A093442		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd6_00002	10/30/14		Restek, Lot A092457		(Purchased Reagent)		Benzaldehyde	1000 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_00008	03/06/15		Spexcertiprep, Lot C1120306002		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
SVTAPSTD80i_00004	10/28/14	04/28/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00004	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_00003	1000 uL	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
							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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
							Benzoic acid	80 ug/mL
							Indene	40 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzaldehyde	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_00004	01/06/15	01/06/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00003	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_00003	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_00003	10/28/14	04/28/14	MeCl2, Lot 1053215	20 mL	SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00001	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_00017	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							n-Octadecane	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00007	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd3_00005	800 uL	Benzoic acid	80 ug/mL
					SVLVstd4_00006	400 uL	Indene	40 ug/mL
					SVLVstd5_00007	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd6_00002	800 uL	Benzaldehyde	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_00008	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..SV2NAPAMINEs_00002	06/30/17	Ultra Scientific, Lot Ck-1617			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVlist12_00001	02/28/15	Restek, Lot A093658			(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_00017	01/30/15	Restek, Lot A094002			(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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00007	01/31/15		Restek, Lot A097020		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd3_00005	02/28/16		Restek, Lot A093441		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..SVLVstd4_00006	10/31/14		Restek, Lot A093668		(Purchased Reagent)		Indene	2000 ug/mL
..SVLVstd5_00007	02/28/15		Restek, Lot A093442		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd6_00002	10/30/14		Restek, Lot A092457		(Purchased Reagent)		Benzaldehyde	1000 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_00008	03/06/15		Spexcertiprep, Lot C1120306002		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
Voa Acro Pri_00001	06/08/14	05/08/14	Methanol, Lot 49909	50 mL	VOAACRORES_00043	0.0625 mL	Acrolein	25 ug/mL
.VOAACRORES_00043	06/30/14		Restek, Lot A0100019		(Purchased Reagent)		Acrolein	20000 ug/mL
Voa-2clevePRI_00001	03/04/14	02/25/14	Methanol, Lot 49909	10 mL	VOACEVERES_00027	0.25 mL	2-Chloroethyl vinyl ether	50 ug/mL
.VOACEVERES_00027	02/01/16		Restek, Lot A093368		(Purchased Reagent)		2-Chloroethyl vinyl ether	2000 ug/mL
VOA8260INT_00007	03/14/14	02/14/14	Methanol, Lot 49909	10 mL	VOA8260INTRES_00075	1 mL	1,4-Dichlorobenzene-d4	25 ug/mL
							Chlorobenzene-d5	25 ug/mL
							Dioxane-d8 (IS)	500 ug/mL
							Fluorobenzene (IS)	25 ug/mL
							TBA-d9 (IS)	500 ug/mL
.VOA8260INTRES_00075	02/01/18		Restek, Lot A093504		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Dioxane-d8 (IS)	5000 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
VOA8260INT_00012	06/28/14	05/28/14	Methanol, Lot 49909	10 mL	VOA8260INTRES_00066	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_00066	02/01/18		Restek, Lot A093504		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VOA8260SURR_00016	06/28/14	05/28/14	Methanol, Lot 49909	100 mL	VOA8260SURRES_00053	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_00053	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
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_00073	07/10/14	07/03/14	Methanol, Lot 62345	8 mL	VOA8260GAS2ND_00046	0.1 mL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOA2ND_00071	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_00046	11/30/15		Restek, Lot A099261		(Purchased Reagent)		Bromomethane	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
.VOA8260VOA2ND_00071	07/26/14	06/26/14	Methanol, Lot 62345	10 mL	VOA8260MEGA2_00004	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
							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_00004	02/01/16		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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
VOA8260VOAPRI_00071	07/10/14	07/03/14	Methanol, Lot 62345	8 mL	VOA8260GAS1ST_00052	0.1 mL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00069	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_00052	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_00069	07/26/14	06/26/14	Methanol, Lot 62345	10 mL	VOA8260MEGA1_00005	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
..VOA8260MEGA1_00005	02/01/16		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
VOAACRO2ND_00002	08/03/14	07/03/14	Methanol, Lot 34562	100 mL	VOAACRRES2ND_00043	0.125 mL	Acrolein	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.VOAACRRES2ND_00043	10/31/14	Restek, Lot A0104244			(Purchased Reagent)		Acrolein	20000 ug/mL
VOAACROLEINPR_00003	08/01/14	07/01/14	Methanol, Lot 34562	100 mL	VOAACRORES_00048	0.125 mL	Acrolein	25 ug/mL
.VOAACRORES_00048	10/31/14	Restek, Lot A0104246			(Purchased Reagent)		Acrolein	20000 ug/mL
VOAAPPIXPRI_00005	03/28/14	02/28/14	Methanol, Lot 49909	10 mL	VOACYCLORES_00008	0.25 mL	Cyclohexanone	500 ug/mL
					VOALIST2STD1P_00016	0.125 mL	1,2,3-Trimethylbenzene	25 ug/mL
							1,3,5-Trichlorobenzene	25 ug/mL
							2-Chloro-1,3-butadiene	25 ug/mL
							2-Nitropropane	50 ug/mL
							Benzyl chloride	25 ug/mL
							Ethyl acetate	50 ug/mL
							Ethyl acrylate	25 ug/mL
							Isooctane	25 ug/mL
							Isopropyl alcohol	250 ug/mL
							Methacrylonitrile	250 ug/mL
							Methyl methacrylate	50 ug/mL
							n-Butanol	625 ug/mL
							n-Butyl acetate	25 ug/mL
					VOALIST2STD2P_00011	0.125 mL	2-Methylnaphthalene	25 ug/mL
							Pentachloroethane	25 ug/mL
					VOALIST3STD1P_00005	0.125 mL	Acetonitrile	250 ug/mL
							Ethanol	1250 ug/mL
							Isopropyl ether	25 ug/mL
							Propionitrile	250 ug/mL
							Tert-amyl methyl ether	25 ug/mL
							Tert-butyl ethyl ether	25 ug/mL
.VOACYCLORES_00008	02/01/16	Restek, Lot A093361			(Purchased Reagent)		Cyclohexanone	20000 ug/mL
.VOALIST2STD1P_00016	06/30/15	Restek, Lot A0100262			(Purchased Reagent)		1,2,3-Trimethylbenzene	2000 ug/mL
							1,3,5-Trichlorobenzene	2000 ug/mL
							2-Chloro-1,3-butadiene	2000 ug/mL
							2-Nitropropane	4000 ug/mL
							Benzyl chloride	2000 ug/mL
							Ethyl acetate	4000 ug/mL
							Ethyl acrylate	2000 ug/mL
							Isooctane	2000 ug/mL
							Isopropyl alcohol	20000 ug/mL
							Methacrylonitrile	20000 ug/mL
							Methyl methacrylate	4000 ug/mL
							n-Butanol	50000 ug/mL
							n-Butyl acetate	2000 ug/mL
.VOALIST2STD2P_00011	02/01/15	Restek, Lot A093359			(Purchased Reagent)		2-Methylnaphthalene	2000 ug/mL
							Pentachloroethane	2000 ug/mL
.VOALIST3STD1P_00005	12/31/15	Restek, Lot A099930			(Purchased Reagent)		Acetonitrile	20000 ug/mL
							Ethanol	100000 ug/mL
							Isopropyl ether	2000 ug/mL
							Propionitrile	20000 ug/mL
							Tert-amyl methyl ether	2000 ug/mL
							Tert-butyl ethyl ether	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VoaPrimaryRes_00002	06/28/14	06/02/14	Methanol, Lot 49909	8 mL	VOA8260GAS1ST_00048	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_00066	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
							Chlorobromomethane	25 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00048	02/01/15		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_00066	06/28/14	05/28/14	Methanol, Lot 49909	10 mL	VOA8260KET1ST_00022	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					VOA8260MEGA1_00018	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
							Hexachlorobutadiene	200 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00022	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_00018	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
							1,3-Dichloropropane	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dichlorobenzene	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
							Toluene	2000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
VOAVinylAceta_00003	06/28/14	05/28/14	Methanol, Lot 49909	10 mL	VOA8260VARES_00034	0.0625 mL	Vinyl acetate	25 ug/mL
.VOA8260VARES_00034	07/31/14		Restek, Lot A0100736		(Purchased Reagent)		Vinyl acetate	4000 ug/mL
voaW2-clevRes_00008	07/11/14	07/04/14	Methanol, Lot 62345	10 mL	VOACEVERES2ND_00019	0.25 mL	2-Chloroethyl vinyl ether	50 ug/mL
.VOACEVERES2ND_00019	02/01/16		Restek, Lot A093471		(Purchased Reagent)		2-Chloroethyl vinyl ether	2000 ug/mL
WCN0.1CCV_00268	07/12/14	07/07/14	NaOH, Lot 4402720	100 mL	WCN10Pi_00436	1 mL	Cyanide, Total	0.1 mg/L
.WCN10Pi_00436	07/12/14	07/07/14	Sodium Hyroxide, Lot 4402720	100 mL	WCN1000P_00021	1 mL	Cyanide, Total	10 mg/L
..WCN1000P_00021	10/29/14		LabChem Inc., Lot D111-14		(Purchased Reagent)		Cyanide, Total	1000 mg/L
WCN0.2ICV_00266	07/12/14	07/07/14	NaOH, Lot 4402720	100 mL	WCN10Si_00441	2 mL	Cyanide, Total	0.2 mg/L
.WCN10Si_00441	07/12/14	07/07/14	Sodium Hyroxide, Lot 4402720	100 mL	WCN1000S_00014	1 mL	Cyanide, Total	10 mg/L
..WCN1000S_00014	09/30/14		Ricca Chemical Co., Lot 4404246		(Purchased Reagent)		Cyanide, Total	1000 mg/L
WCN0.5L1_00434	07/12/14	07/07/14	Sodium Hyroxide, Lot 4402720	100 mL	WCN10Pi_00436	5 mL	Cyanide, Total	0.5 mg/L
.WCN10Pi_00436	07/12/14	07/07/14	Sodium Hyroxide, Lot 4402720	100 mL	WCN1000P_00021	1 mL	Cyanide, Total	10 mg/L
..WCN1000P_00021	10/29/14		LabChem Inc., Lot D111-14		(Purchased Reagent)		Cyanide, Total	1000 mg/L
WCN10Pi_00436	07/12/14	07/07/14	Sodium Hyroxide, Lot 4402720	100 mL	WCN1000P_00021	1 mL	Cyanide, Total	10 mg/L
.WCN1000P_00021	10/29/14		LabChem Inc., Lot D111-14		(Purchased Reagent)		Cyanide, Total	1000 mg/L
WCN10Si_00441	07/12/14	07/07/14	Sodium Hyroxide, Lot 4402720	100 mL	WCN1000S_00014	1 mL	Cyanide, Total	10 mg/L
.WCN1000S_00014	09/30/14		Ricca Chemical Co., Lot 4404246		(Purchased Reagent)		Cyanide, Total	1000 mg/L

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-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

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

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

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 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.

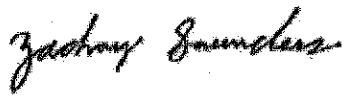
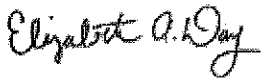
11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations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

SPEXertificate®

Certificate of Reference Material

ACCREDITED
Reference Materials Producer
Cert #2495.01

ACCREDITED
Chemical Testing
Cert #2495.02

Catalog Number: ZCAL-60-250 **Lot No.** 4-283NY

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 mg/L	±5 mg/L	3109a*	Co	2 mg/L	±0.01 mg/L	3113*
K	1000 mg/L	±5 mg/L	3141a*	Cr	2 mg/L	±0.01 mg/L	3112a*
Mg	1000 mg/L	±5 mg/L	3131a*	Cu	2 mg/L	±0.01 mg/L	3114*
Na	1000 mg/L	±5 mg/L	3152a*	Mo	2 mg/L	±0.01 mg/L	3134*
Fe	500 mg/L	±3 mg/L	3126a*	Ni	2 mg/L	±0.01 mg/L	3136*
Si	100 mg/L	±0.5 mg/L	3150*	Pb	2 mg/L	±0.01 mg/L	3128*
Al	10 mg/L	±0.05 mg/L	3101a*	Sb	2 mg/L	±0.01 mg/L	3102a*
Mn	10 mg/L	±0.05 mg/L	3132*	Se	2 mg/L	±0.01 mg/L	3149*
Ag	2 mg/L	±0.01 mg/L	3151*	Sn	2 mg/L	±0.01 mg/L	3161a*
As	2 mg/L	±0.01 mg/L	3103a*	Sr	2 mg/L	±0.01 mg/L	3153a*
B	2 mg/L	±0.01 mg/L	3107*	Ti	2 mg/L	±0.01 mg/L	3162a*
Ba	2 mg/L	±0.01 mg/L	3104a*	Tl	2 mg/L	±0.01 mg/L	3158*
Be	2 mg/L	±0.01 mg/L	3105a*	V	2 mg/L	±0.01 mg/L	3165*
Cd	2 mg/L	±0.01 mg/L	3108*	Zn	2 mg/L	±0.01 mg/L	3168a*

* - Indicates NIST SRM † - Indicates SPEX CertiPrep CRM (when NIST SRM is not available)

SPEX CertiPrep Reference Multi: Lot# ALL8

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	<0.9	Ga	2	Ir	<0.3	Pd	<4	Sc	<10	Tm	<0.01
Bi	<3	Gd	<0.2	La	2	Pr	0.04	Sm	<0.5	U	0.2
Ce	1	Ge	<5	Li	<2	Pt	<1	Ta	7	W	<0.7
Cs	<0.4	Hf	<0.7	Lu	<0.04	Rb	30	Tb	<0.07	Y	0.7
Dy	<0.2	Hg	<0.7	Nb	20	Re	<0.3	Te	<1	Yb	<0.01
Er	<0.2	Ho	<0.07	Nd	<0.4	Rh	<2	Th	0.3	Zr	20
Eu	<0.1	In	<0.7	P	<500	Ru	<1				

RJR
11/15/13

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 2013 Certifying Officer:

INORGANIC VENTURES™
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

983897
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-MSCRI-1B

Lot Number: **G2-MEB496135**

Matrix: 3% HNO3(v/v)

REC'D 10/11/13

25 µg/mL ea:
Ca, K, Mg, Na,

12.5 µg/mL ea:
Fe,

7.5 µg/mL ea:
Al,

2.5 µg/mL ea:
Ba,

1.25 µg/mL ea:
Mn, Se, Sr, Zn,

0.5 µg/mL ea:
Cr3, Cu,

0.25 µg/mL ea:
Ag, As, Be, Cd, Ni, Pb, Tl, V,

0.125 µg/mL ea:
Co

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Aluminum, Al	7.50 ± 0.05 µg/mL	Arsenic, As	0.2501 ± 0.0018 µg/mL	Barium, Ba	2.501 ± 0.017 µg/mL
Beryllium, Be	0.2500 ± 0.0013 µg/mL	Cadmium, Cd	0.2500 ± 0.0017 µg/mL	Calcium, Ca	25.01 ± 0.21 µg/mL
Chromium+3, Cr3	0.5000 ± 0.0032 µg/mL	Cobalt, Co	0.1250 ± 0.0012 µg/mL	Copper, Cu	0.5000 ± 0.0040 µg/mL
Iron, Fe	12.50 ± 0.08 µg/mL	Lead, Pb	0.2500 ± 0.0021 µg/mL	Magnesium, Mg	25.01 ± 0.20 µg/mL
Manganese, Mn	1.251 ± 0.010 µg/mL	Nickel, Ni	0.2501 ± 0.0017 µg/mL	Potassium, K	25.01 ± 0.22 µg/mL
Selenium, Se	1.250 ± 0.011 µg/mL	Silver, Ag	0.2500 ± 0.0021 µg/mL	Sodium, Na	25.01 ± 0.20 µg/mL
Strontium, Sr	1.251 ± 0.010 µg/mL	Thallium, Tl	0.2501 ± 0.0020 µg/mL	Vanadium, V	0.2502 ± 0.0021 µg/mL
Zinc, Zn	1.250 ± 0.010 µg/mL				

Certified Density: 1.015 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	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	892707
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	010728
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	ICP Assay	3158	993012
V	ICP Assay	3165	992706
V	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 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: October 07, 2013

Expiration Date: EXPIRES 01 NOV 2014

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

#983898

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**

Rec'd 10/11/13

Catalog No.: TAPITT-MSCRI-2

Lot Number: **F2-MEB439153**

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

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**

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Antimony, Sb	0.5004 ± 0.0051 µg/mL	Boron, B	1.249 ± 0.009 µg/mL	Molybdenum, Mo	1.250 ± 0.009 µg/mL
Silicon, Si	125.1 ± 0.8 µg/mL	Tin, Sn	1.250 ± 0.009 µg/mL	Titanium, Ti	1.251 ± 0.010 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 (±) = $2 [\Sigma(s_i)^2]^{½}$ 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 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	Calculated		See Sec. 4.2
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: September 14, 2012

Expiration Date: EXPIRES 01 NOV 2014

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Zach Saunders
Product Documentation Technician

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

Certifying Officer: Paul Gaines
PhD., Senior Technical Director

INORGANIC VENTURES™
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Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

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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.

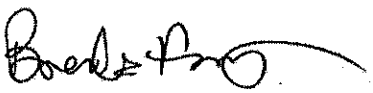
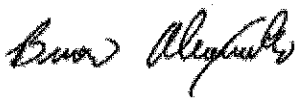
11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations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

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-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

#1052874, 1052875

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 **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)

RJR 12/17/13

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

$(\bar{x})$ = 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#
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 ± 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.

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: December 04, 2013

Expiration Date: EXPIRES 01 Aug 2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Christy Shortridge
Product Documentation Technician

Christy Shortridge

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

Brian Alexander

Certifying Officer: Paul Gaines
PhD., Senior Technical Director

Paul R Gaines

RESTEK

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

www.restek.com

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ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

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

5 VLV INT STD

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 CAS # 3855-82-1 Purity 99%	2,000.0 µg/mL	+/- 11.6282 µg/mL +/- 92.7158 µg/mL +/- 101.3766 µg/mL	Gravimetric Unstressed Stressed
2	Naphthalene-d8 CAS # 1146-65-2 Purity 99%	2,000.0 µg/mL	+/- 11.6282 µg/mL +/- 92.7158 µg/mL +/- 101.3766 µg/mL	Gravimetric Unstressed Stressed
3	Acenaphthene-d10 CAS # 15067-26-2 Purity 97%	2,000.0 µg/mL	+/- 11.6282 µg/mL +/- 92.7163 µg/mL +/- 101.3771 µg/mL	Gravimetric Unstressed Stressed
4	Phenanthrene-d10 CAS # 1517-22-2 Purity 99%	2,000.0 µg/mL	+/- 11.6282 µg/mL +/- 92.7158 µg/mL +/- 101.3766 µg/mL	Gravimetric Unstressed Stressed
5	Chrysene-d12 CAS # 1719-03-5 Purity 98%	2,000.0 µg/mL	+/- 11.6281 µg/mL +/- 92.7150 µg/mL +/- 101.3758 µg/mL	Gravimetric Unstressed Stressed
6	Perylene-d12 CAS # 1520-96-3 Purity 99%	2,000.0 µg/mL	+/- 11.6282 µg/mL +/- 92.7158 µg/mL +/- 101.3766 µg/mL	Gravimetric Unstressed Stressed
Solvent:	Methylene Chloride CAS # 75-09-2 Purity 99%			

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

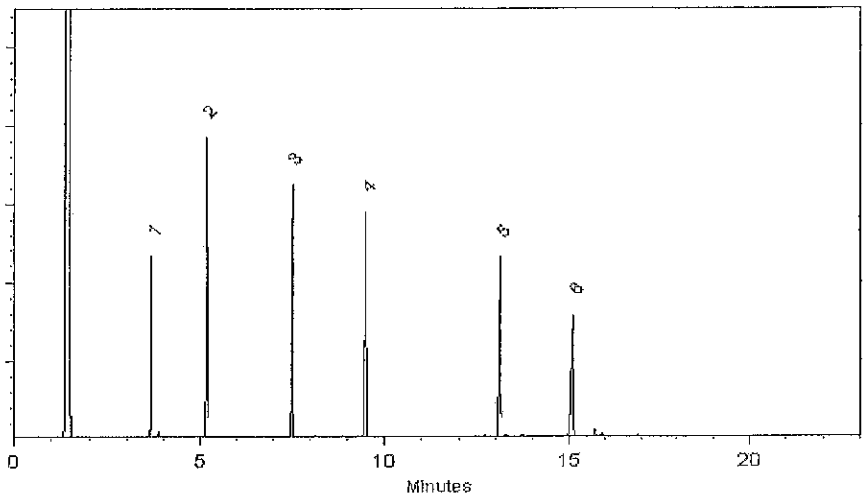
Carrier Gas:
hydrogen-constant pressure 10 psi.

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: 1128342313

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
Fax: (814)353-1309

www.restek.com

CT# 18013-16, 18907-92

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.

5VLVSTD1SEC

Catalog No. : 567672.sec **Lot No.:** A094002

Description : 8270 List 1 / Std #1 MegaMix

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

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

Expiration Date : September 2014 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

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

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

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

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

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

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

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

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

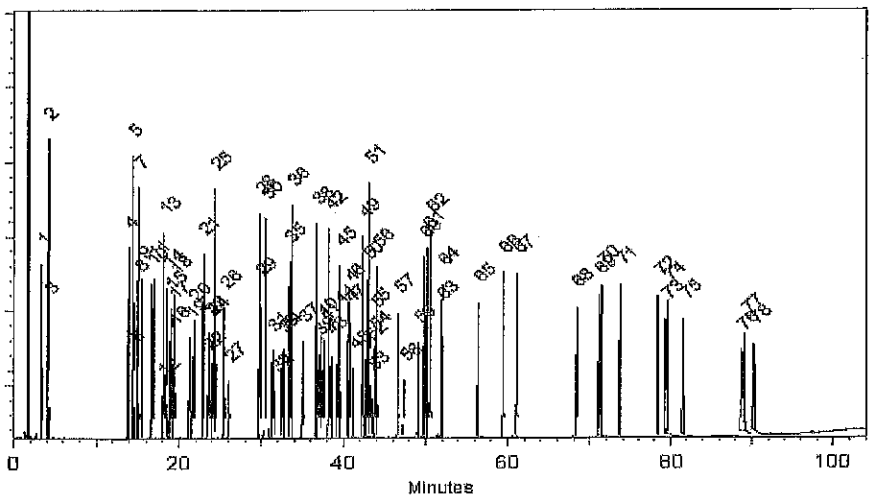
Carrier Gas:
hydrogen-constant pressure 10 psi

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

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
FID



Jennifer L. Pollino - QC Analyst

Date Passed: 27-Mar-2013 **Balance:** 1128353505

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

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ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ 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)

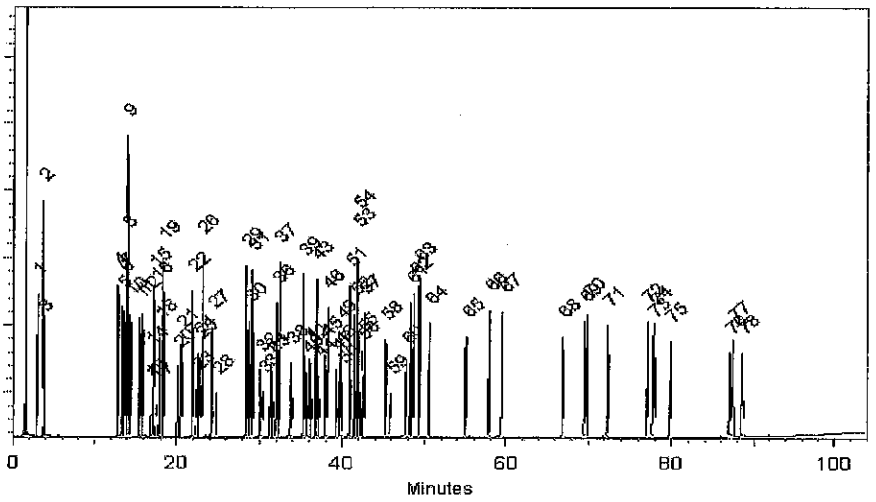
Carrier Gas:
hydrogen-constant pressure 10 psi

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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Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567673 **Lot No.:** A097020

Description : 8270 List 1 / Std #2 Amines

8270 List 1 / Std #2 Amines 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

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

Expiration Date : January 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%	2,001.2 µg/mL	+/- 11.6351 µg/mL +/- 13.3830 µg/mL +/- 32.8662 µg/mL	Gravimetric Unstressed Stressed
2	Atrazine **CAS #** 1912-24-9 (Lot TZ8ED) **Purity** 98%	2,003.0 µg/mL	+/- 11.6457 µg/mL +/- 13.3952 µg/mL +/- 32.8961 µg/mL	Gravimetric Unstressed Stressed
3	Benzidine **CAS #** 92-87-5 (Lot 130627JLM) **Purity** 99%	2,005.0 µg/mL	+/- 11.6572 µg/mL +/- 13.4085 µg/mL +/- 32.9286 µg/mL	Gravimetric Unstressed Stressed
4	3,3'-Dichlorobenzidine **CAS #** 91-94-1 (Lot 130701JLM) **Purity** 99%	2,012.0 µg/mL	+/- 11.6979 µg/mL +/- 13.4553 µg/mL +/- 33.0436 µg/mL	Gravimetric Unstressed Stressed

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

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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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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 VLV STD3

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

Description : 8270 List 1 / Std #3 Benzoic Acid

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

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

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

CERTIFIED VALUES

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

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

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

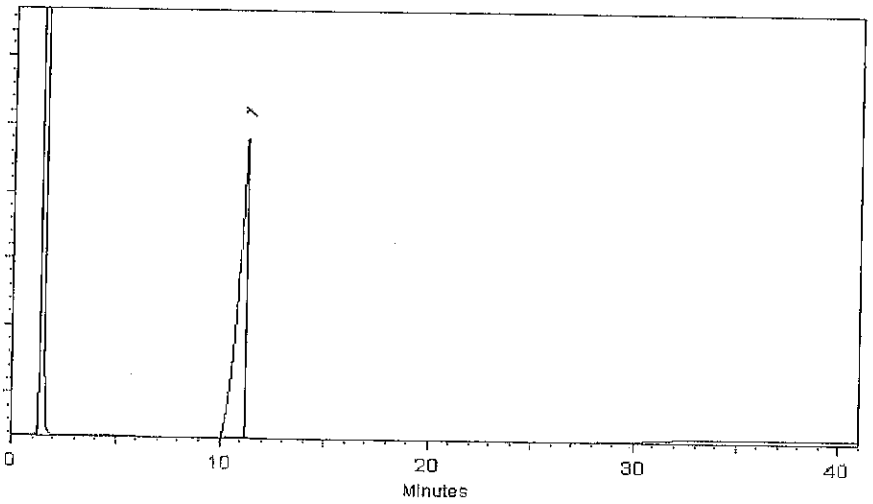
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Jodi E. Breon - QA Analyst

Date Passed: 22-Feb-2013 **Balance:** 1128342313

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

SVLV A093668
SEC
070913

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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. : 567675.sec **Lot No.:** A093668

Description : 8270 List 1 / Std #4 Indene

8270 List 1 / Std #4 Indene 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

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

Expiration Date : August 2014 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Indene	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 95-13-6.SEC		+/- 24.1076	µg/mL	Unstressed
	Purity 99%		+/- 27.2017	µg/mL	Stressed

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

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 of Composition

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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. : 567677 SV LV 5646 **Lot No.:** A092457

Description : 8270 Standard #6

8270 Standard #6 1000 ug/ml, Methylene Chloride, 1 ml/ampul

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

Expiration Date : June 2014 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Benzaldehyde	1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 100-52-7		+/- 26.8894	µg/mL	Unstressed
	Purity 99%		+/- 33.5118	µg/mL	Stressed

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

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Certificate of Analysis

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

Catalog No. : 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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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.:** A0100635

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 : January 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.SEC **Purity** 99%	(Lot E7DWH)	2,004.0 µg/mL	+/- 11.7606 +/- 64.2594 +/- 74.6931	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Indene **CAS #** 95-13-6.SEC **Purity** 99%	(Lot IG5TI)	2,016.0 µg/mL	+/- 11.8310 +/- 64.6442 +/- 75.1403	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Benzoic acid **CAS #** 65-85-0.SEC **Purity** 97%	(Lot QD3UO)	2,014.4 µg/mL	+/- 11.8214 +/- 64.5918 +/- 75.0795	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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5 VIALS SURR SPK

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)

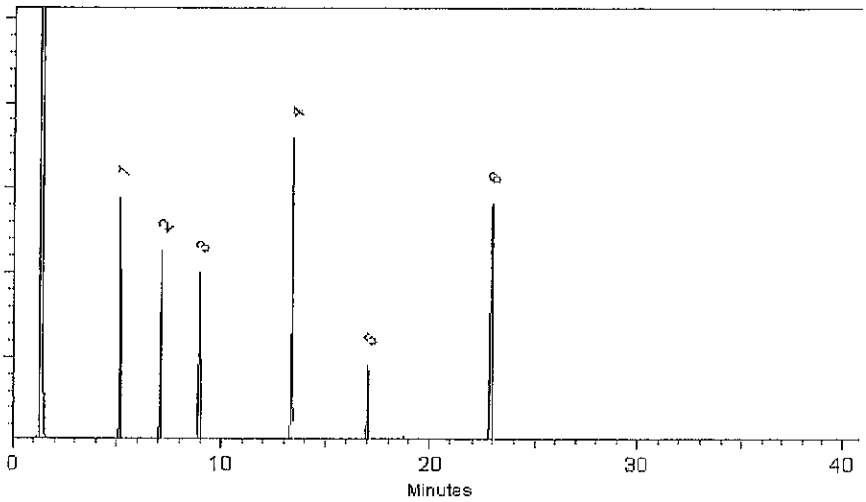
Carrier Gas:
hydrogen-constant pressure 10 psi.

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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Chemical Testing
CERT #2495.02

Catalog Number: S-2755 **Lot No.** C1120306002

Description: 1-Nitrosopyrrolidine

Matrix: Methanol (Purge & Trap Grade)

Manufactured Date: 3-6-2012
Expiration Date: 3-6-2015

This **SPEXOrganics®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Purity	Labeled	Actual†
1-Nitrosopyrrolidine	930-55-2	99%	1000 µg/mL	1000 µg/mL

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Actual concentration based on gravimetric weights used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to +/- 0.6% of the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. 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 information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 3-6-2012 Certifying Officer:

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Certificate of Analysis

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

Catalog No. : 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 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.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)	2,002.2 µg/mL	+/- 16.7616 µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 18348)		+/- 21.2987 µg/mL	Unstressed
	Purity 99%		+/- 24.7536 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,000.6 µg/mL	+/- 15.8216 µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/- 21.2729 µg/mL	Unstressed
	Purity 99%		+/- 24.7262 µg/mL	Stressed
3	Vinyl chloride	2,001.9 µg/mL	+/- 14.6785 µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/- 21.2759 µg/mL	Unstressed
	Purity 99%		+/- 24.7329 µg/mL	Stressed
4	1,3-Butadiene	2,002.8 µg/mL	+/- 16.7307 µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 18349)		+/- 21.3051 µg/mL	Unstressed
	Purity 99%		+/- 24.7611 µg/mL	Stressed
5	Bromomethane (methyl bromide)	1,999.6 µg/mL	+/- 16.2313 µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot Q119-46)		+/- 21.2671 µg/mL	Unstressed
	Purity 99%		+/- 24.7183 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,001.0 µg/mL	+/- 14.6721 µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot Q18B-13)		+/- 21.2666 µg/mL	Unstressed
	Purity 99%		+/- 24.7221 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,004.4 µg/mL	+/- 15.1665 µg/mL	Gravimetric
	CAS # 75-43-4.SEC (Lot SHBC0858V)		+/- 21.3071 µg/mL	Unstressed
	Purity 99%		+/- 24.7678 µg/mL	Stressed
8	Trichlorofluoromethane (CFC-11)	2,001.8 µg/mL	+/- 16.2157 µg/mL	Gravimetric
	CAS # 75-69-4.SEC (Lot Q139-99)		+/- 21.2894 µg/mL	Unstressed
	Purity 99%		+/- 24.7442 µg/mL	Stressed

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

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Catalog No. : 567649 **Lot No.:** A093504

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 : February 2018 **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	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 25725-11-5		+/- 110.6323	µg/mL	Unstressed
	Purity 99%		+/- 111.0833	µg/mL	Stressed
2	Fluorobenzene	250.0 µg/mL	+/- 1.4535	µg/mL	Gravimetric
	CAS # 462-06-6		+/- 5.5316	µg/mL	Unstressed
	Purity 99%		+/- 5.5542	µg/mL	Stressed
3	1,4-Dioxane-d8	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 17647-74-4		+/- 110.6323	µg/mL	Unstressed
	Purity 99%		+/- 111.0833	µg/mL	Stressed
4	Chlorobenzene-d5	250.0 µg/mL	+/- 1.4535	µg/mL	Gravimetric
	CAS # 3114-55-4		+/- 5.5316	µg/mL	Unstressed
	Purity 99%		+/- 5.5542	µg/mL	Stressed
5	1,4-Dichlorobenzene-d4	250.0 µg/mL	+/- 1.4535	µg/mL	Gravimetric
	CAS # 3855-82-1		+/- 5.5316	µg/mL	Unstressed
	Purity 99%		+/- 5.5542	µg/mL	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. : 567649 **Lot No.:** A093504

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 : February 2018 **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	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 25725-11-5		+/- 110.6323	µg/mL	Unstressed
	Purity 99%		+/- 111.0833	µg/mL	Stressed
2	Fluorobenzene	250.0 µg/mL	+/- 1.4535	µg/mL	Gravimetric
	CAS # 462-06-6		+/- 5.5316	µg/mL	Unstressed
	Purity 99%		+/- 5.5542	µg/mL	Stressed
3	1,4-Dioxane-d8	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 17647-74-4		+/- 110.6323	µg/mL	Unstressed
	Purity 99%		+/- 111.0833	µg/mL	Stressed
4	Chlorobenzene-d5	250.0 µg/mL	+/- 1.4535	µg/mL	Gravimetric
	CAS # 3114-55-4		+/- 5.5316	µg/mL	Unstressed
	Purity 99%		+/- 5.5542	µg/mL	Stressed
5	1,4-Dichlorobenzene-d4	250.0 µg/mL	+/- 1.4535	µg/mL	Gravimetric
	CAS # 3855-82-1		+/- 5.5316	µg/mL	Unstressed
	Purity 99%		+/- 5.5542	µg/mL	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. : 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)

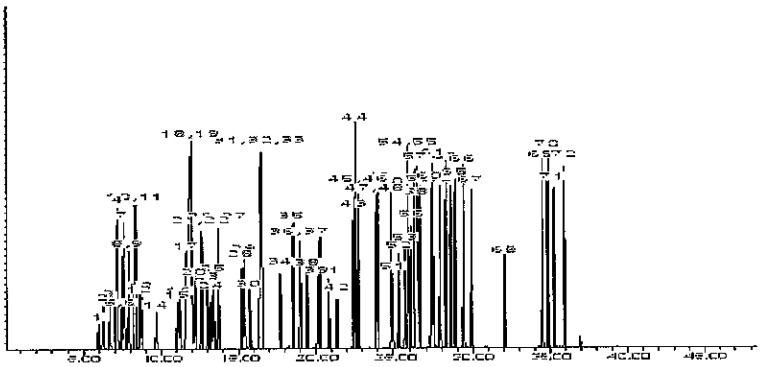
Carrier Gas:
helium-constant pressure 30 psi

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

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

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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 **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)

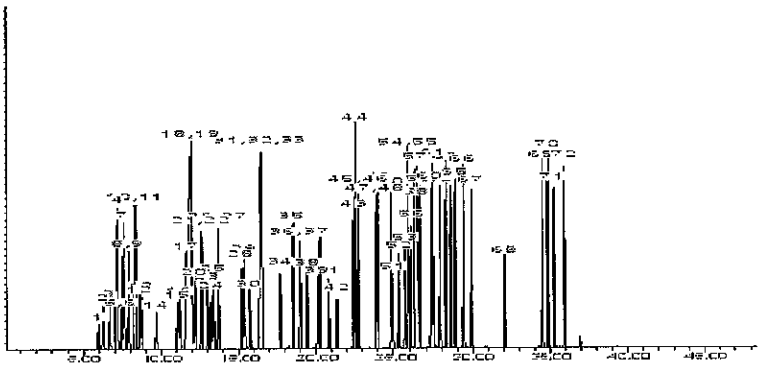
Carrier Gas:
helium-constant pressure 30 psi

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
Fax: (814)353-1309

www.restek.com

ACCREDITED
ISO Guide 34 Accredited
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Certificate #3222.01

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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)

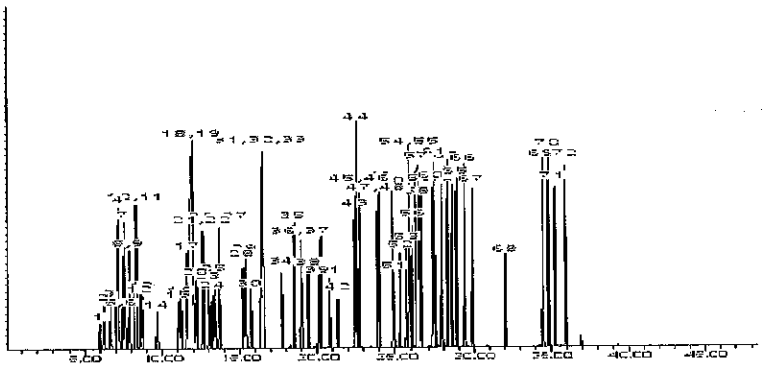
Carrier Gas:
helium-constant pressure 30 psi

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

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

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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%

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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%

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Catalog No. : 567646 **Lot No.:** A0100736

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 : July 31, 2014 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Vinyl acetate	4,016.0 µg/mL	+/- 23.5681 µg/mL	Gravimetric
	CAS # 108-05-4 (Lot 131011JLM)		+/- 213.7467 µg/mL	Unstressed
	Purity 99%		+/- 213.9823 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.

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Catalog No. : 568720 **Lot No.:** A0101387

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 : June 30, 2014 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein	19,750.0 µg/mL	+/- 115.6406	µg/mL	Gravimetric
	CAS # 107-02-8 (Lot 140205JLM)		+/- 633.2471	µg/mL	Unstressed
	Purity 99%		+/- 736.0805	µg/mL	Stressed

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

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Catalog No. : 568720 **Lot No.:** A0104246

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 : October 31, 2014 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)	
1	Acrolein	19,750.0 µg/mL	+/- 115.6406 µg/mL	Gravimetric
	CAS # 107-02-8 (Lot 140429JLM)		+/- 633.2471 µg/mL	Unstressed
	Purity 99%		+/- 736.0805 µg/mL	Stressed

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

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Catalog No. : 568720.sec **Lot No.:** A0104244

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 : October 31, 2014 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	Acrolein		19,750.0	µg/mL	+/-	115.9041	µg/mL	Gravimetric
	CAS # 107-02-8.SEC	(Lot 2600100)			+/-	633.2953	µg/mL	Unstressed
	Purity 99%				+/-	736.1219	µg/mL	Stressed

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

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Catalog No. : 567643 **Lot No.:** A093368

Description : 8260 List 1 / Std #4 2-Chloroethylvinyl Ether

8260 List 1 / Std #4 2-Chloroethylvinyl Ether 2,000 ug/ml, P&T Methanol, 1 ml/ampul

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 110-75-8		+/- 44.2531	µg/mL	Unstressed
	Purity 99%		+/- 44.4335	µg/mL	Stressed

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

Tech Tips:

Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

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Catalog No. : 567643.sec **Lot No.:** A093471

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	+/- 11.6550	µg/mL	Gravimetric
	CAS # 110-75-8.SEC		+/- 44.2601	µg/mL	Unstressed
	Purity 99%		+/- 44.4405	µg/mL	Stressed

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

Tech Tips:

Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

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Catalog No. : 567648 **Lot No.:** A093361

Description : 8260 List 2 / Std #3 Cyclohexanone

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

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Cyclohexanone	20,000.0 µg/mL	+/- 116.2756	µg/mL	Gravimetric
	CAS # 108-94-1		+/- 1,597.3791	µg/mL	Unstressed
	Purity 99%		+/- 1,598.1615	µg/mL	Stressed

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

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Catalog No. : 568722 **Lot No.:** A0100262

Description : 8260 List 2/ Std #1 Additions (2014)

8260 List 2/ Std #1 Additions (2014) 2,000-50,000 µg/ml, P&T Methanol, 1 ml/ampul

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

Expiration Date : June 30, 2015 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Propanol (isopropanol) **CAS #** 67-63-0 (Lot SHBC5752V) **Purity** 99%	20,007.0 µg/mL	+/- 117.1454 µg/mL +/- 1,064.8186 µg/mL +/- 1,065.9927 µg/mL	Gravimetric Unstressed Stressed
2	Chloroprene (2-chloro-1,3-butadiene) **CAS #** 126-99-8 (Lot 130611JLM) **Purity** 99%	2,000.0 µg/mL	+/- 32.2441 µg/mL +/- 110.6029 µg/mL +/- 110.7159 µg/mL	Gravimetric Unstressed Stressed
3	Ethyl acetate **CAS #** 141-78-6 (Lot SHBD3394V) **Purity** 99%	4,002.0 µg/mL	+/- 23.4860 µg/mL +/- 213.0015 µg/mL +/- 213.2364 µg/mL	Gravimetric Unstressed Stressed
4	Methacrylonitrile **CAS #** 126-98-7 (Lot 2194000) **Purity** 99%	20,000.5 µg/mL	+/- 117.1073 µg/mL +/- 1,064.4727 µg/mL +/- 1,065.6464 µg/mL	Gravimetric Unstressed Stressed
5	2,2,4-Trimethylpentane (isooctane) **CAS #** 540-84-1 (Lot SHBB2470V) **Purity** 99%	2,004.5 µg/mL	+/- 11.7635 µg/mL +/- 106.6871 µg/mL +/- 106.8047 µg/mL	Gravimetric Unstressed Stressed
6	1-Butanol **CAS #** 71-36-3 (Lot SHBC1840V) **Purity** 99%	50,001.0 µg/mL	+/- 292.7518 µg/mL +/- 2,661.1667 µg/mL +/- 2,664.1010 µg/mL	Gravimetric Unstressed Stressed
7	1,4-Difluorobenzene **CAS #** 540-36-3 (Lot 13105AO) **Purity** 99%	2,006.5 µg/mL	+/- 11.7753 µg/mL +/- 106.7935 µg/mL +/- 106.9112 µg/mL	Gravimetric Unstressed Stressed
8	Ethyl acrylate **CAS #** 140-88-5 (Lot 10129902) **Purity** 99%	2,005.5 µg/mL	+/- 11.7694 µg/mL +/- 106.7403 µg/mL +/- 106.8580 µg/mL	Gravimetric Unstressed Stressed

9	Methyl methacrylate		4,003.0	µg/mL	+/-	23.4918	µg/mL	Gravimetric
	CAS # 80-62-6	(Lot MKBK0839V)			+/-	213.0548	µg/mL	Unstressed
	Purity 99%				+/-	213.2897	µg/mL	Stressed
10	2-Nitropropane		4,006.6	µg/mL	+/-	23.5129	µg/mL	Gravimetric
	CAS # 79-46-9	(Lot BCBJ4343V)			+/-	213.2456	µg/mL	Unstressed
	Purity 97%				+/-	213.4807	µg/mL	Stressed
11	Butyl acetate		2,001.0	µg/mL	+/-	11.7430	µg/mL	Gravimetric
	CAS # 123-86-4	(Lot SHBC9340V)			+/-	106.5008	µg/mL	Unstressed
	Purity 99%				+/-	106.6182	µg/mL	Stressed
12	1-Chlorohexane		2,007.5	µg/mL	+/-	11.7811	µg/mL	Gravimetric
	CAS # 544-10-5	(Lot 05107LK)			+/-	106.8467	µg/mL	Unstressed
	Purity 99%				+/-	106.9645	µg/mL	Stressed
13	1,2,3-Trimethylbenzene		2,004.0	µg/mL	+/-	11.7607	µg/mL	Gravimetric
	CAS # 526-73-8	(Lot 8776.05-10)			+/-	106.6615	µg/mL	Unstressed
	Purity 97%				+/-	106.7791	µg/mL	Stressed
14	Benzyl chloride		2,009.0	µg/mL	+/-	11.7899	µg/mL	Gravimetric
	CAS # 100-44-7	(Lot 20396EK)			+/-	106.9266	µg/mL	Unstressed
	Purity 99%				+/-	107.0445	µg/mL	Stressed
15	1,3,5-Trichlorobenzene		2,000.0	µg/mL	+/-	11.7371	µg/mL	Gravimetric
	CAS # 108-70-3	(Lot 11319AS)			+/-	106.4475	µg/mL	Unstressed
	Purity 99%				+/-	106.5649	µg/mL	Stressed

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

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Catalog No. : 567719 **Lot No.:** A093359

Description : 8260 List 2 / Std #2

8260 List 2 / Std #2 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	Pentachloroethane	2,000.0 µg/mL	+/- 11.6550	µg/mL	Gravimetric
	CAS # 76-01-7		+/- 24.1205	µg/mL	Unstressed
	Purity 99%		+/- 27.2132	µg/mL	Stressed
2	2-Methylnaphthalene	1,999.9 µg/mL	+/- 11.6546	µg/mL	Gravimetric
	CAS # 91-57-6		+/- 24.1196	µg/mL	Unstressed
	Purity 96%		+/- 27.2121	µg/mL	Stressed

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

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Catalog No. : 568723 **Lot No.:** A099930

Description : 8260 List 3/ Std#1 Polar Additions

8260 List 3/ Std#1 Polar Additions 2,000-100,000 µg/ml, 1 ml/ampul

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Ethanol	100,255.6 µg/mL	+/- 586.9883 µg/mL	Gravimetric
	CAS # 64-17-5 (Lot SHBC8676V)		+/- 3,493.5733 µg/mL	Unstressed
	Purity 99%		+/- 3,613.2792 µg/mL	Stressed
2	Acetonitrile	20,015.9 µg/mL	+/- 117.1976 µg/mL	Gravimetric
	CAS # 75-05-8 (Lot SHBB3177V)		+/- 697.4888 µg/mL	Unstressed
	Purity 98%		+/- 721.3879 µg/mL	Stressed
3	Diisopropyl ether (DIPE)	2,001.6 µg/mL	+/- 11.7465 µg/mL	Gravimetric
	CAS # 108-20-3 (Lot SHBB6268V)		+/- 69.7537 µg/mL	Unstressed
	Purity 99%		+/- 72.1435 µg/mL	Stressed
4	Ethyl-tert-butyl ether (ETBE)	2,008.4 µg/mL	+/- 11.7864 µg/mL	Gravimetric
	CAS # 637-92-3 (Lot MKBP5984V)		+/- 69.9907 µg/mL	Unstressed
	Purity 99%		+/- 72.3885 µg/mL	Stressed
5	Propionitrile	20,039.6 µg/mL	+/- 117.3363 µg/mL	Gravimetric
	CAS # 107-12-0 (Lot BCBK0700V)		+/- 698.3142 µg/mL	Unstressed
	Purity 99%		+/- 722.2416 µg/mL	Stressed
6	tert-Amyl alcohol	20,035.2 µg/mL	+/- 117.3105 µg/mL	Gravimetric
	CAS # 75-85-4 (Lot STBB1898V)		+/- 698.1609 µg/mL	Unstressed
	Purity 99%		+/- 722.0831 µg/mL	Stressed
7	tert-Amyl methyl ether (TAME)	2,005.6 µg/mL	+/- 11.7700 µg/mL	Gravimetric
	CAS # 994-05-8 (Lot OS1028/4V)		+/- 69.8931 µg/mL	Unstressed
	Purity 99%		+/- 72.2876 µg/mL	Stressed

1193863
ID: WCN1000P_00021
Exp:10/29/14 Prpd:PGJ Opn 05/16/14
Cyanide 1000 ppm Primary

1193864
ID: WAvCN1000P_00011
Exp:10/29/14 Prpd:PGJ Opn:05/16/14
Available Cyanide 1000 PP

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CERTIFICATE OF ANALYSIS

Description: CYANIDE STANDARD, 1000ppm (1ml = 1mg CN)

Catalog Number: LC13545
Lot Number: D111-14

Mfg Date: 04/29/2014
Expiration Date: 10/29/2014

ANALYTICAL SECTION

Test	Specification	Test Result
Appearance	clear, colorless solution	Pass Test
Concentration ppm CN	1000ppm +/- 10ppm	1004 ppm
Concentration mg CN/mL	1.000mg/mL +/- 0.010 mg CN/mL	1.004 mg/mL CN
Traceable to NIST	Potassium Chloride	999b

Submitted By: Greg Albright, Chemist Supervisor

Greg Albright

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05/13/2014 11:07:48 AM

Form #17.12 06/19/2012

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RIC 1195709 ID: WCN1000S_00014 Exp:09/30/14 Prpd:PGJ Opn:05/19/14 Cyanide 1000 ppm Secondar EMIC 1195710 ID: WAvCN1000S_00014 Exp:09/30/14 Prpd:PGJ Opn:05/19/14 Available Cyanide 1000 pp MPANY

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Cyanide Standard, 1 mL = 1 mg CN, 1000 ppm CN

Lot Number: 4404246 Product Number: 2543 Expiration Date: SEP 2014 Manufacture Date:4/9/2014

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

Certification Summary

Client: EA Engineering, Science, and Technology
Project/Site: Sparrows Point Trust Offshore Investigat

TestAmerica Job ID: 180-34362-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Pittsburgh	Arkansas DEQ	State Program	6	88-0690
TestAmerica Pittsburgh	California	NELAP	9	4224CA
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
TestAmerica Pittsburgh	Wisconsin	State Program	5	998027800

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.

8260C

Volatile Organic Compounds by GC/MS

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

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 #
H108-PZM003	180-34362-1	91	95	99	94
RW19-PZP000	180-34362-2	94	91	100	95
RW19-PZM050	180-34362-3	90	96	94	92
H108-PZM060	180-34362-4	89	94	110	108
RW19-PZM020	180-34362-5	98	97	107	92
062614-TB	180-34362-6	87	83	104	89
	MB 180-110534/10	90	88	100	94
	MB 180-110699/6	95	98	116	95
	LCS 180-110534/7	95	95	92	113
	LCS 180-110699/8	94	96	97	106
	LCSD 180-110534/8	91	95	94	108
	LCSD 180-110699/9	92	93	95	103

	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.: 180-34362-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 4070608.D

Lab ID: LCS 180-110534/7 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	40.0	35.9	90	69-134	
1,1,2,2-Tetrachloroethane	40.0	33.6	84	59-136	
1,1,2-Trichloroethane	40.0	35.8	90	75-126	
1,1-Dichloroethane	40.0	38.4	96	77-122	
1,1-Dichloroethene	40.0	37.2	93	69-127	
1,2-Dichlorobenzene	40.0	32.9	82	75-125	
1,2-Dichloroethane	40.0	40.1	100	63-140	
1,2-Dichloropropane	40.0	38.0	95	75-114	
1,3-Dichlorobenzene	40.0	39.1	98	76-125	
1,4-Dichlorobenzene	40.0	33.1	83	76-123	
Benzene	40.0	39.3	98	80-120	
Bromoform	40.0	32.1	80	49-137	
Bromomethane	40.0	35.2	88	45-150	
Carbon tetrachloride	40.0	34.6	87	63-139	
Chlorobenzene	40.0	37.1	93	83-120	
Chloroform	40.0	38.1	95	77-119	
Chloromethane	40.0	35.7	89	49-133	
Chlorodibromomethane	40.0	34.7	87	64-124	
cis-1,3-Dichloropropene	40.0	36.0	90	74-123	
Dichlorobromomethane	40.0	37.0	92	71-119	
Ethylbenzene	40.0	38.1	95	79-124	
Methylene Chloride	40.0	32.9	82	75-120	
Tetrachloroethene	40.0	35.3	88	78-126	
Toluene	40.0	36.1	90	80-124	
trans-1,2-Dichloroethene	40.0	37.6	94	78-120	
trans-1,3-Dichloropropene	40.0	35.3	88	63-122	
Trichloroethene	40.0	39.0	97	80-120	
Vinyl chloride	40.0	35.6	89	57-128	
Chloroethane	40.0	30.1	75	33-150	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 4070808.D

Lab ID: LCS 180-110699/8 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	40.0	36.7	92	69-134	
1,1,2,2-Tetrachloroethane	40.0	34.6	87	59-136	
1,1,2-Trichloroethane	40.0	38.4	96	75-126	
1,1-Dichloroethane	40.0	39.3	98	77-122	
1,1-Dichloroethene	40.0	37.1	93	69-127	
1,2-Dichlorobenzene	40.0	34.6	87	75-125	
1,2-Dichloroethane	40.0	40.8	102	63-140	
1,2-Dichloropropane	40.0	42.4	106	75-114	
1,3-Dichlorobenzene	40.0	42.3	106	76-125	
1,4-Dichlorobenzene	40.0	34.6	86	76-123	
Benzene	40.0	42.5	106	80-120	
Bromoform	40.0	31.3	78	49-137	
Bromomethane	40.0	33.3	83	45-150	
Carbon tetrachloride	40.0	35.3	88	63-139	
Chlorobenzene	40.0	39.4	98	83-120	
Chloroform	40.0	39.0	97	77-119	
Chloromethane	40.0	36.2	90	49-133	
Chlorodibromomethane	40.0	36.2	91	64-124	
cis-1,3-Dichloropropene	40.0	38.8	97	74-123	
Dichlorobromomethane	40.0	39.9	100	71-119	
Ethylbenzene	40.0	42.7	107	79-124	
Methylene Chloride	40.0	30.7	77	75-120	
Tetrachloroethene	40.0	38.4	96	78-126	
Toluene	40.0	40.9	102	80-124	
trans-1,2-Dichloroethene	40.0	38.2	96	78-120	
trans-1,3-Dichloropropene	40.0	37.3	93	63-122	
Trichloroethene	40.0	40.8	102	80-120	
Vinyl chloride	40.0	34.3	86	57-128	
Chloroethane	40.0	35.2	88	33-150	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 4070609.D

Lab ID: LCSD 180-110534/8 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	40.0	37.3	93	4	24	69-134	
1,1,2,2-Tetrachloroethane	40.0	34.0	85	1	20	59-136	
1,1,2-Trichloroethane	40.0	38.3	96	7	23	75-126	
1,1-Dichloroethane	40.0	38.3	96	0	22	77-122	
1,1-Dichloroethene	40.0	36.8	92	1	20	69-127	
1,2-Dichlorobenzene	40.0	36.0	90	9	20	75-125	
1,2-Dichloroethane	40.0	40.9	102	2	25	63-140	
1,2-Dichloropropane	40.0	41.7	104	9	20	75-114	
1,3-Dichlorobenzene	40.0	43.1	108	10	21	76-125	
1,4-Dichlorobenzene	40.0	36.4	91	10	20	76-123	
Benzene	40.0	41.6	104	6	20	80-120	
Bromoform	40.0	32.8	82	2	20	49-137	
Bromomethane	40.0	35.4	89	1	23	45-150	
Carbon tetrachloride	40.0	35.8	90	3	25	63-139	
Chlorobenzene	40.0	39.7	99	7	20	83-120	
Chloroform	40.0	39.0	98	2	20	77-119	
Chloromethane	40.0	35.7	89	0	20	49-133	
Chlorodibromomethane	40.0	38.2	95	10	20	64-124	
cis-1,3-Dichloropropene	40.0	40.0	100	11	20	74-123	
Dichlorobromomethane	40.0	40.8	102	10	20	71-119	
Ethylbenzene	40.0	41.3	103	8	25	79-124	
Methylene Chloride	40.0	31.9	80	3	20	75-120	
Tetrachloroethene	40.0	40.2	101	13	25	78-126	
Toluene	40.0	40.8	102	12	20	80-124	
trans-1,2-Dichloroethene	40.0	38.0	95	1	20	78-120	
trans-1,3-Dichloropropene	40.0	38.5	96	9	20	63-122	
Trichloroethene	40.0	42.4	106	8	20	80-120	
Vinyl chloride	40.0	35.1	88	1	26	57-128	
Chloroethane	40.0	30.3	76	1	24	33-150	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 4070809.D

Lab ID: LCSD 180-110699/9 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	40.0	33.9	85	8	24	69-134	
1,1,2,2-Tetrachloroethane	40.0	33.3	83	4	20	59-136	
1,1,2-Trichloroethane	40.0	36.4	91	5	23	75-126	
1,1-Dichloroethane	40.0	36.5	91	8	22	77-122	
1,1-Dichloroethene	40.0	34.7	87	7	20	69-127	
1,2-Dichlorobenzene	40.0	33.7	84	3	20	75-125	
1,2-Dichloroethane	40.0	37.9	95	7	25	63-140	
1,2-Dichloropropane	40.0	39.4	99	7	20	75-114	
1,3-Dichlorobenzene	40.0	39.9	100	6	21	76-125	
1,4-Dichlorobenzene	40.0	33.5	84	3	20	76-123	
Benzene	40.0	39.5	99	7	20	80-120	
Bromoform	40.0	30.1	75	4	20	49-137	
Bromomethane	40.0	31.8	79	5	23	45-150	
Carbon tetrachloride	40.0	33.9	85	4	25	63-139	
Chlorobenzene	40.0	38.4	96	2	20	83-120	
Chloroform	40.0	36.3	91	7	20	77-119	
Chloromethane	40.0	33.3	83	8	20	49-133	
Chlorodibromomethane	40.0	35.9	90	1	20	64-124	
cis-1,3-Dichloropropene	40.0	37.4	94	4	20	74-123	
Dichlorobromomethane	40.0	37.5	94	6	20	71-119	
Ethylbenzene	40.0	40.7	102	5	25	79-124	
Methylene Chloride	40.0	28.5	71	8	20	75-120	*
Tetrachloroethene	40.0	37.7	94	2	25	78-126	
Toluene	40.0	39.6	99	3	20	80-124	
trans-1,2-Dichloroethene	40.0	34.8	87	10	20	78-120	
trans-1,3-Dichloropropene	40.0	35.7	89	4	20	63-122	
Trichloroethene	40.0	39.5	99	3	20	80-120	
Vinyl chloride	40.0	31.4	79	9	26	57-128	
Chloroethane	40.0	28.7	72	20	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.: 180-34362-1

SDG No.:

Lab File ID: 4070606.D Lab Sample ID: MB 180-110534/10

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

Instrument ID: CHHP4 Date Analyzed: 07/07/2014 03:18

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
	LCS 180-110534/7	4070608.D	07/07/2014 04:12
	LCSD 180-110534/8	4070609.D	07/07/2014 04:39
H108-PZM003	180-34362-1	4070615.D	07/07/2014 07:22
RW19-PZP000	180-34362-2	4070616.D	07/07/2014 07:49
RW19-PZM050	180-34362-3	4070617.D	07/07/2014 08:16
H108-PZM060	180-34362-4	4070618.D	07/07/2014 08:44
RW19-PZM020	180-34362-5	4070619.D	07/07/2014 09:11

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Lab File ID: 4070806.D Lab Sample ID: MB 180-110699/6

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

Instrument ID: CHHP4 Date Analyzed: 07/08/2014 11:56

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
062614-TB	180-34362-6	4070807.D	07/08/2014 12:23
	LCS 180-110699/8	4070808.D	07/08/2014 12:51
	LCSD 180-110699/9	4070809.D	07/08/2014 13:18

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Lab File ID: 4062401.D BFB Injection Date: 06/24/2013

Instrument ID: CHHP4 BFB Injection Time: 08:22

Analysis Batch No.: 98677

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.4	
75	30.0 - 60.0 % of mass 95	49.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.2	(0.2)1
174	50.0 - 120.00 % of mass 95	89.3	
175	5.0 - 9.0 % of mass 174	6.7	(7.5)1
176	95.0 - 101.0 % of mass 174	86.3	(96.6)1
177	5.0 - 9.0 % of mass 176	6.0	(7.0)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 180-98677/4	4062405.D	06/24/2013	11:49
	ICIS 180-98677/5	4062406.D	06/24/2013	12:17
	IC 180-98677/6	4062407.D	06/24/2013	12:47
	IC 180-98677/7	4062408.D	06/24/2013	13:14
	IC 180-98677/8	4062409.D	06/24/2013	13:39
	IC 180-98677/2	4062412.D	06/24/2013	15:03
	IC 180-98677/3	4062413.D	06/24/2013	15:43

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Lab File ID: 4060301.D BFB Injection Date: 06/03/2014

Instrument ID: CHHP4 BFB Injection Time: 09:50

Analysis Batch No.: 107478

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.8	
75	30.0 - 60.0 % of mass 95	41.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.6	(0.6)1
174	50.0 - 120.00 % of mass 95	92.0	
175	5.0 - 9.0 % of mass 174	7.1	(7.7)1
176	95.0 - 101.0 % of mass 174	90.6	(98.4)1
177	5.0 - 9.0 % of mass 176	6.0	(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
	IC 180-107478/3	4060303.D	06/03/2014	11:03
	IC 180-107478/4	4060304.D	06/03/2014	11:43
	IC 180-107478/5	4060305.D	06/03/2014	12:13
	ICIS 180-107478/6	4060306.D	06/03/2014	12:43
	IC 180-107478/7	4060307.D	06/03/2014	13:14
	IC 180-107478/8	4060308.D	06/03/2014	13:44
	IC 180-107478/9	4060309.D	06/03/2014	14:15

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Lab File ID: 4070601.D BFB Injection Date: 07/07/2014

Instrument ID: CHHP4 BFB Injection Time: 00:09

Analysis Batch No.: 110534

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.8	
75	30.0 - 60.0 % of mass 95	42.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.3	
173	Less than 2.0 % of mass 174	0.5	(0.5)1
174	50.0 - 120.00 % of mass 95	92.4	
175	5.0 - 9.0 % of mass 174	7.2	(7.8)1
176	95.0 - 101.0 % of mass 174	92.1	(99.7)1
177	5.0 - 9.0 % of mass 176	5.4	(5.8)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-110534/2	4070602.D	07/07/2014	00:53
	CCV 180-110534/3	4070603.D	07/07/2014	01:20
	MB 180-110534/10	4070606.D	07/07/2014	03:18
	LCS 180-110534/7	4070608.D	07/07/2014	04:12
	LCSD 180-110534/8	4070609.D	07/07/2014	04:39
H108-PZM003	180-34362-1	4070615.D	07/07/2014	07:22
RW19-PZP000	180-34362-2	4070616.D	07/07/2014	07:49
RW19-PZM050	180-34362-3	4070617.D	07/07/2014	08:16
H108-PZM060	180-34362-4	4070618.D	07/07/2014	08:44
RW19-PZM020	180-34362-5	4070619.D	07/07/2014	09:11

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Lab File ID: 4070801.D BFB Injection Date: 07/08/2014

Instrument ID: CHHP4 BFB Injection Time: 08:52

Analysis Batch No.: 110699

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.0	
75	30.0 - 60.0 % of mass 95	40.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.2	
173	Less than 2.0 % of mass 174	1.5	(1.5)1
174	50.0 - 120.00 % of mass 95	95.9	
175	5.0 - 9.0 % of mass 174	6.7	(7.0)1
176	95.0 - 101.0 % of mass 174	95.9	(100.0)1
177	5.0 - 9.0 % of mass 176	5.3	(5.6)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 180-110699/3	4070803.D	07/08/2014	10:10
	CCVIS 180-110699/4	4070804.D	07/08/2014	10:37
	MB 180-110699/6	4070806.D	07/08/2014	11:56
062614-TB	180-34362-6	4070807.D	07/08/2014	12:23
	LCS 180-110699/8	4070808.D	07/08/2014	12:51
	LCSD 180-110699/9	4070809.D	07/08/2014	13:18

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Sample No.: CCVIS 180-110534/2 Date Analyzed: 07/07/2014 00:53

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 4070602.D Heated Purge: (Y/N) N

Calibration ID: 16013

		TBA		FB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		137054	4.79	959132	7.67	225637	10.76
UPPER LIMIT							
LOWER LIMIT							
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 180-110534/3		150115	4.76	1132691	7.68	244631	10.76
MB 180-110534/10		138864	4.75	1197437	7.68	266245	10.77
LCS 180-110534/7		134424	4.78	965613	7.67	236320	10.76
LCSD 180-110534/8		147258	4.79	1088977	7.67	254495	10.76
180-34362-1	H108-PZM003	160026	4.76	1128142	7.69	250768	10.77
180-34362-2	RW19-PZP000	153696	4.76	1172950	7.68	255343	10.78
180-34362-3	RW19-PZM050	155255	4.76	1031474	7.69	241429	10.77
180-34362-4	H108-PZM060	149002	4.77	1074376	7.69	213919	10.78
180-34362-5	RW19-PZM020	143942	4.76	1024298	7.68	229284	10.77

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.: 180-34362-1

SDG No.:

Sample No.: CCVIS 180-110534/2 Date Analyzed: 07/07/2014 00:53

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 4070602.D Heated Purge: (Y/N) N

Calibration ID: 16013

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		362209	13.09				
UPPER LIMIT							
LOWER LIMIT							
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 180-110534/3		342603	13.10				
MB 180-110534/10		303788	13.13				
LCS 180-110534/7		382161	13.09				
LCSD 180-110534/8		392514	13.09				
180-34362-1	H108-PZM003	274669	13.13				
180-34362-2	RW19-PZP000	289884	13.13				
180-34362-3	RW19-PZM050	274925	13.12				
180-34362-4	H108-PZM060	277107	13.14				
180-34362-5	RW19-PZM020	231478	13.13				

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.: 180-34362-1

SDG No.:

Sample No.: CCVIS 180-110699/4 Date Analyzed: 07/08/2014 10:37

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 4070804.D Heated Purge: (Y/N) N

Calibration ID: 16013

		TBA		FB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		135265	4.77	1040359	7.68	235507	10.76
UPPER LIMIT							
LOWER LIMIT							
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-110699/6		121267	4.76	934775	7.69	201597	10.77
180-34362-6	062614-TB	118933	4.75	1127577	7.69	243101	10.77
LCS 180-110699/8		137693	4.77	1026625	7.67	243716	10.76
LCSD 180-110699/9		141637	4.79	1125778	7.68	263919	10.76

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.: 180-34362-1

SDG No.:

Sample No.: CCVIS 180-110699/4 Date Analyzed: 07/08/2014 10:37

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 4070804.D Heated Purge: (Y/N) N

Calibration ID: 16013

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		360514	13.09				
UPPER LIMIT							
LOWER LIMIT							
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-110699/6		234085	13.13				
180-34362-6	062614-TB	253413	13.13				
LCS 180-110699/8		354201	13.09				
LCSD 180-110699/9		381904	13.09				

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.: 180-34362-1

SDG No.:

Client Sample ID: H108-PZM003 Lab Sample ID: 180-34362-1

Matrix: Water Lab File ID: 4070615.D

Analysis Method: 8260C Date Collected: 06/26/2014 09:55

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 07:22

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.: 110534 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.: 180-34362-1

SDG No.:

Client Sample ID: H108-PZM003 Lab Sample ID: 180-34362-1

Matrix: Water Lab File ID: 4070615.D

Analysis Method: 8260C Date Collected: 06/26/2014 09:55

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 07:22

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.: 110534 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		62-123
460-00-4	4-Bromofluorobenzene (Surr)	94		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\20140706-2060.b\4070615.D
Lims ID: 180-34362-G-1 Lab Sample ID: 180-34362-1
Client ID: H108-PZM003
Sample Type: Client
Inject. Date: 07-Jul-2014 07:22:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-34362-G-1
Misc. Info.: 180-0002060-015
Operator ID: 430936 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 08-Jul-2014 07:25:02 Calib Date: 03-Jun-2014 14:15:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: zukowskim Date: 08-Jul-2014 07:25:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.761	4.792	-0.031	90	160026	5000.0	
* 2 Fluorobenzene (IS)	96	7.686	7.674	0.012	99	1128142	250.0	
* 3 Chlorobenzene-d5	119	10.769	10.763	0.006	82	250768	250.0	
* 4 1,4-Dichlorobenzene-d4	152	13.129	13.093	0.036	91	274669	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.938	6.932	0.006	59	314389	227.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.309	7.303	0.006	67	265446	237.2	
$ 7 Toluene-d8 (Surr)	98	9.322	9.316	0.006	93	1408123	247.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.949	11.931	0.018	95	425141	234.3	
11 Chloromethane	50		1.976				ND	
12 Vinyl chloride	62		2.128				ND	
14 Bromomethane	94		2.493				ND	
15 Chloroethane	64		2.614				ND	
20 Acrolein	56		3.673				ND	
21 1,1-Dichloroethene	96		3.782				ND	
30 Methylene Chloride	84		4.603				ND	
32 Acrylonitrile	53		5.004				ND	
33 trans-1,2-Dichloroethene	96		5.011				ND	
36 1,1-Dichloroethane	63		5.607				ND	
49 Chloroform	83		6.750				ND	
50 1,1,1-Trichloroethane	97		6.938				ND	
53 Carbon tetrachloride	117		7.127				ND	
54 Benzene	78		7.364				ND	
55 1,2-Dichloroethane	62		7.388				ND	
61 Trichloroethene	130		8.063				ND	
64 1,2-Dichloropropane	63		8.294				ND	
68 Dichlorobromomethane	83		8.586				ND	
70 2-Chloroethyl vinyl ether	63		8.908				ND	
71 cis-1,3-Dichloropropene	75		9.049				ND	
73 Toluene	91		9.383				ND	
74 trans-1,3-Dichloropropene	75		9.608				ND	
76 1,1,2-Trichloroethane	97		9.784				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
77 Tetrachloroethene	164		9.930				ND	
81 Chlorodibromomethane	129		10.180				ND	
84 Chlorobenzene	112		10.788				ND	
86 Ethylbenzene	106		10.891				ND	
90 Bromoform	173		11.609				ND	
93 1,1,2,2-Tetrachloroethane	83		12.059				ND	
105 1,3-Dichlorobenzene	146		13.026				ND	
107 1,4-Dichlorobenzene	146		13.117				ND	
111 1,2-Dichlorobenzene	146		13.500				ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

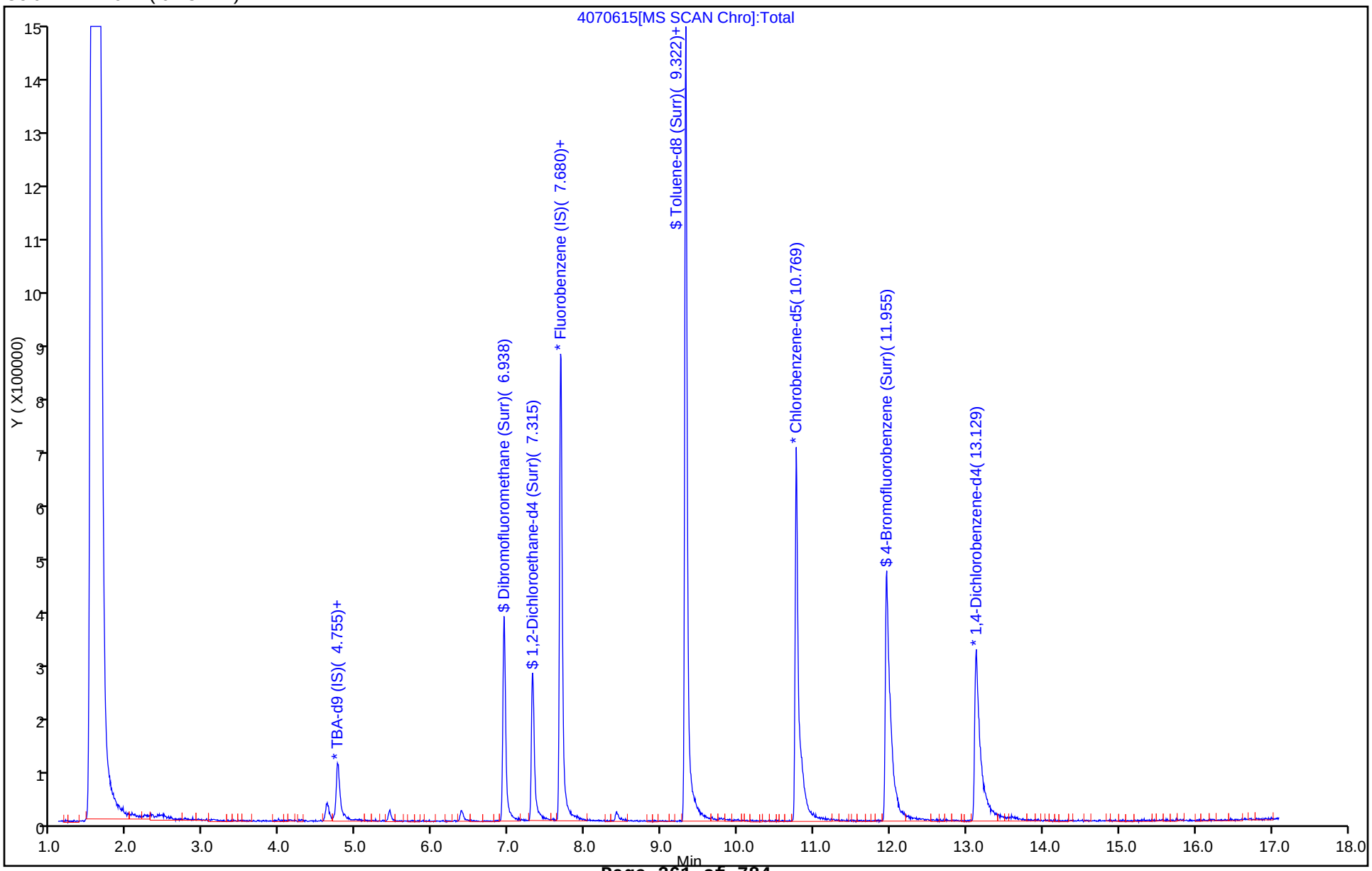
VOA8260INT_00013	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260SURR_00017	Amount Added: 10.00	Units: uL	Run Reagent

Report Date: 08-Jul-2014 07:25:04 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070615.D				
Injection Date:	07-Jul-2014 07:22:30	Instrument ID:	CHHP4	Operator ID:	430936
Lims ID:	180-34362-G-1	Lab Sample ID:	180-34362-1	Worklist Smp#:	15
Client ID:	H108-PZM003				
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)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Client Sample ID: RW19-PZP000 Lab Sample ID: 180-34362-2

Matrix: Water Lab File ID: 4070616.D

Analysis Method: 8260C Date Collected: 06/26/2014 10:10

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 07:49

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.: 110534 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.: 180-34362-1

SDG No.:

Client Sample ID: RW19-PZP000 Lab Sample ID: 180-34362-2

Matrix: Water Lab File ID: 4070616.D

Analysis Method: 8260C Date Collected: 06/26/2014 10:10

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 07:49

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.: 110534 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		62-123
460-00-4	4-Bromofluorobenzene (Surr)	95		75-120
1868-53-7	Dibromofluoromethane (Surr)	94		80-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070616.D
Lims ID: 180-34362-G-2 Lab Sample ID: 180-34362-2
Client ID: RW19-PZP000
Sample Type: Client
Inject. Date: 07-Jul-2014 07:49:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-34362-G-2
Misc. Info.: 180-0002060-016
Operator ID: 430936 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 08-Jul-2014 07:25:27 Calib Date: 03-Jun-2014 14:15:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: zukowskim Date: 08-Jul-2014 07:25:27

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.761	4.792	-0.031	96	153696	5000.0	
*	2 Fluorobenzene (IS)	96	7.680	7.674	0.006	99	1172950	250.0	
*	3 Chlorobenzene-d5	119	10.775	10.763	0.012	82	255343	250.0	
*	4 1,4-Dichlorobenzene-d4	152	13.128	13.093	0.035	92	289884	250.0	
$	5 Dibromofluoromethane (Surr	113	6.938	6.932	0.006	59	336288	234.2	
$	6 1,2-Dichloroethane-d4 (Sur	65	7.315	7.303	0.012	67	265400	228.1	
$	7 Toluene-d8 (Surr)	98	9.322	9.316	0.006	92	1446264	249.6	
$	8 4-Bromofluorobenzene (Surr	95	11.961	11.931	0.030	94	438539	237.3	
	11 Chloromethane	50		1.976				ND	
	12 Vinyl chloride	62		2.128				ND	
	14 Bromomethane	94		2.493				ND	
	15 Chloroethane	64		2.614				ND	
	20 Acrolein	56		3.673				ND	
	21 1,1-Dichloroethene	96		3.782				ND	
	30 Methylene Chloride	84		4.603				ND	
	32 Acrylonitrile	53		5.004				ND	
	33 trans-1,2-Dichloroethene	96		5.011				ND	
	36 1,1-Dichloroethane	63		5.607				ND	
	49 Chloroform	83		6.750				ND	
	50 1,1,1-Trichloroethane	97		6.938				ND	
	53 Carbon tetrachloride	117		7.127				ND	
	54 Benzene	78		7.364				ND	
	55 1,2-Dichloroethane	62		7.388				ND	
	61 Trichloroethene	130		8.063				ND	
	64 1,2-Dichloropropane	63		8.294				ND	
	68 Dichlorobromomethane	83		8.586				ND	
	70 2-Chloroethyl vinyl ether	63		8.908				ND	
	71 cis-1,3-Dichloropropene	75		9.049				ND	
	73 Toluene	91		9.383				ND	
	74 trans-1,3-Dichloropropene	75		9.608				ND	
	76 1,1,2-Trichloroethane	97		9.784				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
77 Tetrachloroethene	164		9.930				ND	
81 Chlorodibromomethane	129		10.180				ND	
84 Chlorobenzene	112		10.788				ND	
86 Ethylbenzene	106		10.891				ND	
90 Bromoform	173		11.609				ND	
93 1,1,2,2-Tetrachloroethane	83		12.059				ND	
105 1,3-Dichlorobenzene	146		13.026				ND	
107 1,4-Dichlorobenzene	146		13.117				ND	
111 1,2-Dichlorobenzene	146		13.500				ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

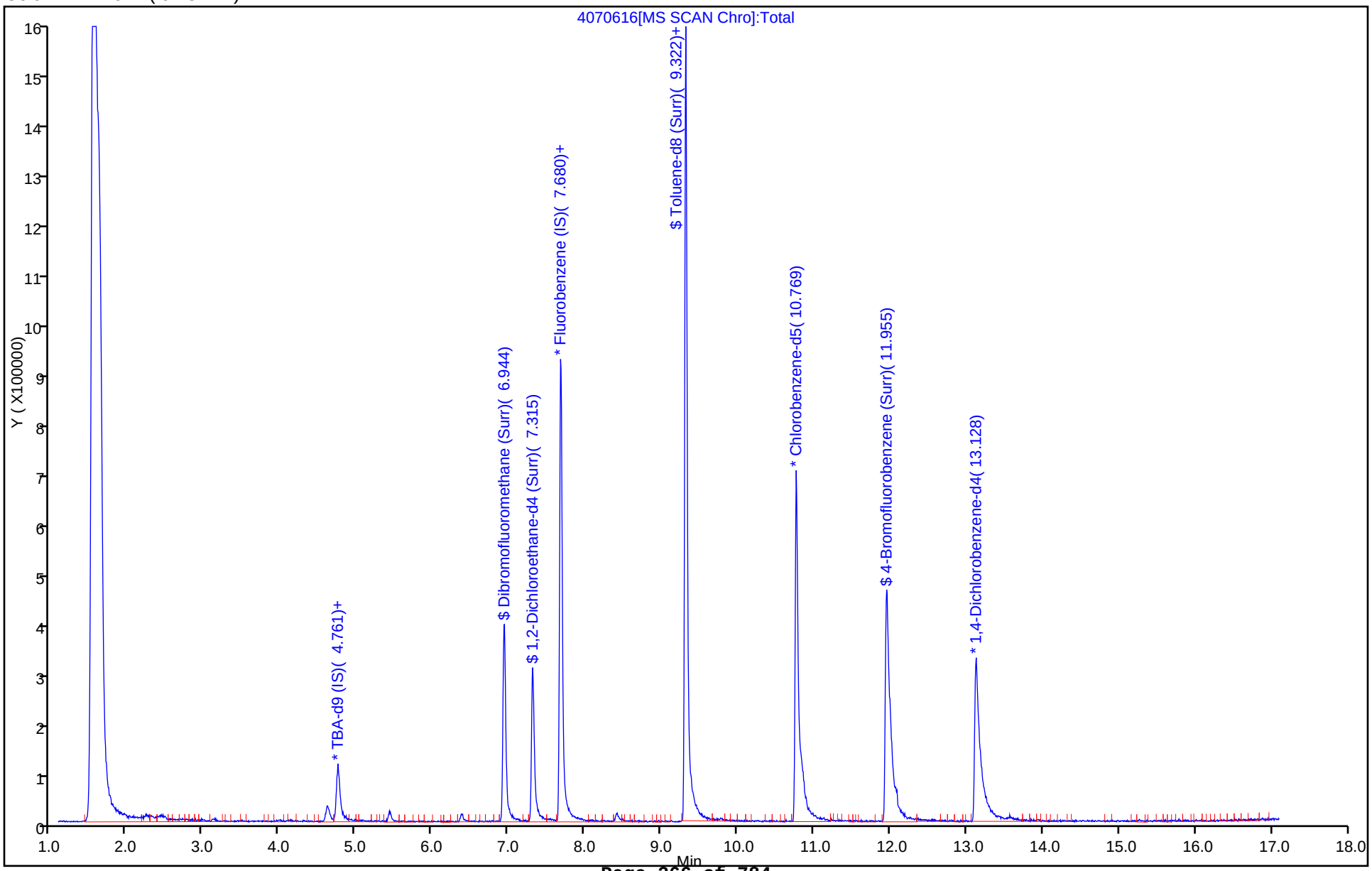
VOA8260INT_00013	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260SURR_00017	Amount Added: 10.00	Units: uL	Run Reagent

Report Date: 08-Jul-2014 07:25:27 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070616.D				
Injection Date:	07-Jul-2014 07:49:30	Instrument ID:	CHHP4	Operator ID:	430936
Lims ID:	180-34362-G-2	Lab Sample ID:	180-34362-2	Worklist Smp#:	16
Client ID:	RW19-PZP000				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
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.: 180-34362-1

SDG No.:

Client Sample ID: RW19-PZM050 Lab Sample ID: 180-34362-3

Matrix: Water Lab File ID: 4070617.D

Analysis Method: 8260C Date Collected: 06/26/2014 11:05

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 08:16

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.: 110534 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.: 180-34362-1

SDG No.:

Client Sample ID: RW19-PZM050 Lab Sample ID: 180-34362-3

Matrix: Water Lab File ID: 4070617.D

Analysis Method: 8260C Date Collected: 06/26/2014 11:05

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 08:16

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.: 110534 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		62-123
460-00-4	4-Bromofluorobenzene (Surr)	92		75-120
1868-53-7	Dibromofluoromethane (Surr)	90		80-120
2037-26-5	Toluene-d8 (Surr)	94		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070617.D
Lims ID: 180-34362-G-3 Lab Sample ID: 180-34362-3
Client ID: RW19-PZM050
Sample Type: Client
Inject. Date: 07-Jul-2014 08:16:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-34362-G-3
Misc. Info.: 180-0002060-017
Operator ID: 430936 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 08-Jul-2014 07:26:07 Calib Date: 03-Jun-2014 14:15:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: zukowskim Date: 08-Jul-2014 07:26:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.760	4.792	-0.032	93	155255	5000.0	
* 2 Fluorobenzene (IS)	96	7.685	7.674	0.011	99	1031474	250.0	
* 3 Chlorobenzene-d5	119	10.768	10.763	0.005	80	241429	250.0	
* 4 1,4-Dichlorobenzene-d4	152	13.121	13.093	0.028	89	274925	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.943	6.932	0.011	59	284377	225.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.314	7.303	0.011	68	244454	238.9	
$ 7 Toluene-d8 (Surr)	98	9.321	9.316	0.005	93	1288699	235.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.954	11.931	0.023	95	403069	230.7	
11 Chloromethane	50		1.976				ND	
12 Vinyl chloride	62		2.128				ND	
14 Bromomethane	94		2.493				ND	
15 Chloroethane	64		2.614				ND	
20 Acrolein	56		3.673				ND	
21 1,1-Dichloroethene	96		3.782				ND	
30 Methylene Chloride	84		4.603				ND	
32 Acrylonitrile	53		5.004				ND	
33 trans-1,2-Dichloroethene	96		5.011				ND	
36 1,1-Dichloroethane	63		5.607				ND	
49 Chloroform	83		6.750				ND	
50 1,1,1-Trichloroethane	97		6.938				ND	
53 Carbon tetrachloride	117		7.127				ND	
54 Benzene	78		7.364				ND	
55 1,2-Dichloroethane	62		7.388				ND	
61 Trichloroethene	130		8.063				ND	
64 1,2-Dichloropropane	63		8.294				ND	
68 Dichlorobromomethane	83		8.586				ND	
70 2-Chloroethyl vinyl ether	63		8.908				ND	
71 cis-1,3-Dichloropropene	75		9.049				ND	
73 Toluene	91		9.383				ND	
74 trans-1,3-Dichloropropene	75		9.608				ND	
76 1,1,2-Trichloroethane	97		9.784				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
77 Tetrachloroethene	164		9.930				ND	
81 Chlorodibromomethane	129		10.180				ND	
84 Chlorobenzene	112		10.788				ND	
86 Ethylbenzene	106		10.891				ND	
90 Bromoform	173		11.609				ND	
93 1,1,2,2-Tetrachloroethane	83		12.059				ND	
105 1,3-Dichlorobenzene	146		13.026				ND	
107 1,4-Dichlorobenzene	146		13.117				ND	
111 1,2-Dichlorobenzene	146		13.500				ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

VOA8260INT_00013	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260SURR_00017	Amount Added: 10.00	Units: uL	Run Reagent

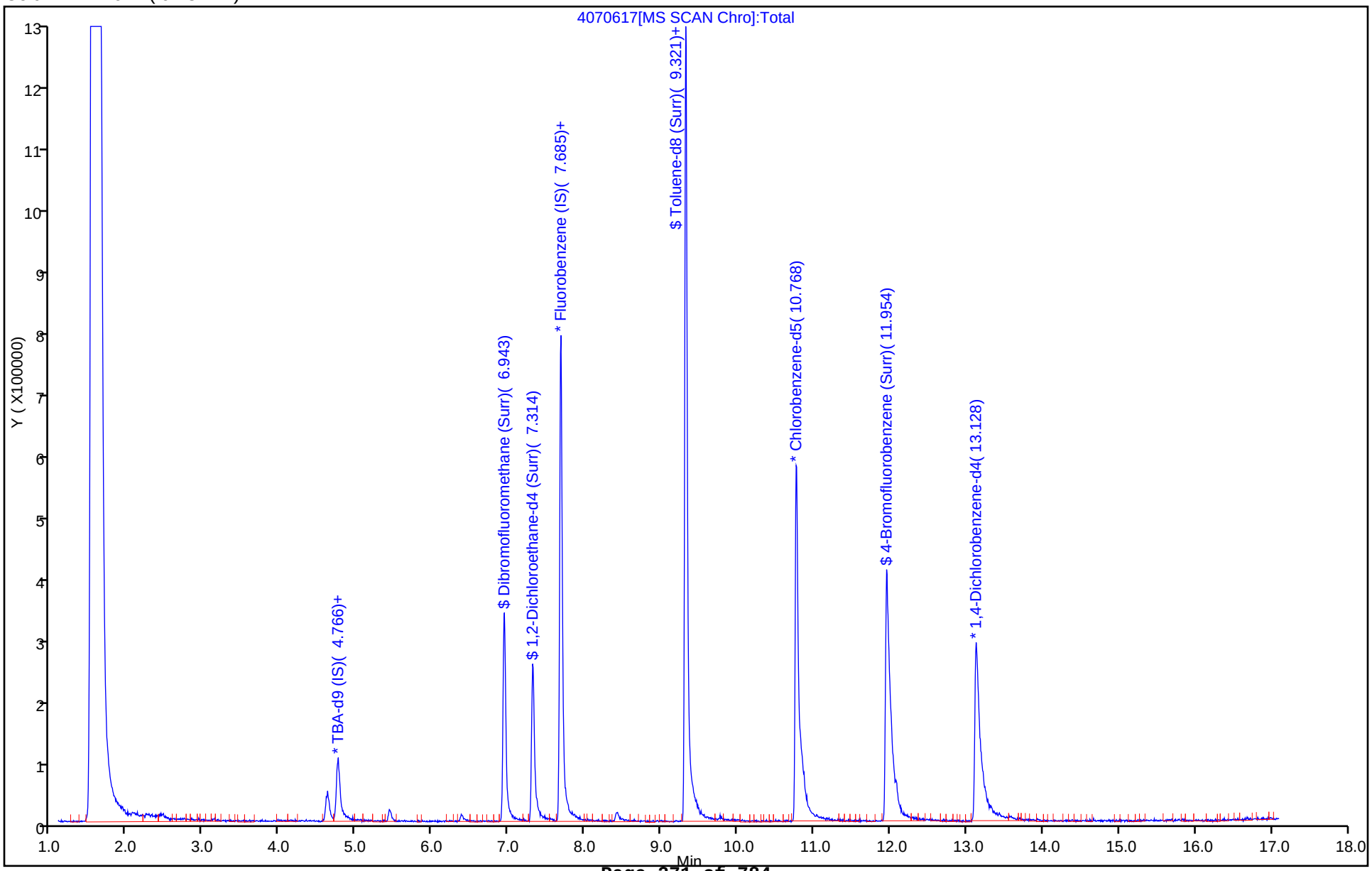
Report Date: 08-Jul-2014 07:26:07 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070617.D

Injection Date:	07-Jul-2014 08:16:30	Instrument ID:	CHHP4	Operator ID:	430936
Lims ID:	180-34362-G-3	Lab Sample ID:	180-34362-3	Worklist Smp#:	17
Client ID:	RW19-PZM050				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
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.: 180-34362-1

SDG No.:

Client Sample ID: H108-PZM060 Lab Sample ID: 180-34362-4

Matrix: Water Lab File ID: 4070618.D

Analysis Method: 8260C Date Collected: 06/26/2014 11:30

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 08:44

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.: 110534 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.: 180-34362-1

SDG No.:

Client Sample ID: H108-PZM060 Lab Sample ID: 180-34362-4

Matrix: Water Lab File ID: 4070618.D

Analysis Method: 8260C Date Collected: 06/26/2014 11:30

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 08:44

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.: 110534 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)	108		75-120
1868-53-7	Dibromofluoromethane (Surr)	89		80-120
2037-26-5	Toluene-d8 (Surr)	110		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070618.D
Lims ID: 180-34362-G-4 Lab Sample ID: 180-34362-4
Client ID: H108-PZM060
Sample Type: Client
Inject. Date: 07-Jul-2014 08:44:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-34362-G-4
Misc. Info.: 180-0002060-018
Operator ID: 430936 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 08-Jul-2014 07:26:29 Calib Date: 03-Jun-2014 14:15:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: zukowskim Date: 08-Jul-2014 07:26:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.767	4.792	-0.025	92	149002	5000.0	
* 2 Fluorobenzene (IS)	96	7.686	7.674	0.012	99	1074376	250.0	
* 3 Chlorobenzene-d5	119	10.775	10.763	0.012	80	213919	250.0	
* 4 1,4-Dichlorobenzene-d4	152	13.135	13.093	0.042	90	277107	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.938	6.932	0.006	60	292575	222.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.315	7.303	0.012	66	249388	234.0	
$ 7 Toluene-d8 (Surr)	98	9.322	9.316	0.006	92	1332914	274.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.955	11.931	0.024	95	416789	269.3	
11 Chloromethane	50		1.976				ND	
12 Vinyl chloride	62		2.128				ND	
14 Bromomethane	94		2.493				ND	
15 Chloroethane	64		2.614				ND	
20 Acrolein	56		3.673				ND	
21 1,1-Dichloroethene	96		3.782				ND	
30 Methylene Chloride	84		4.603				ND	
32 Acrylonitrile	53		5.004				ND	
33 trans-1,2-Dichloroethene	96		5.011				ND	
36 1,1-Dichloroethane	63		5.607				ND	
49 Chloroform	83		6.750				ND	
50 1,1,1-Trichloroethane	97		6.938				ND	
53 Carbon tetrachloride	117		7.127				ND	
54 Benzene	78		7.364				ND	
55 1,2-Dichloroethane	62		7.388				ND	
61 Trichloroethene	130		8.063				ND	
64 1,2-Dichloropropane	63		8.294				ND	
68 Dichlorobromomethane	83		8.586				ND	
70 2-Chloroethyl vinyl ether	63		8.908				ND	
71 cis-1,3-Dichloropropene	75		9.049				ND	
73 Toluene	91		9.383				ND	
74 trans-1,3-Dichloropropene	75		9.608				ND	
76 1,1,2-Trichloroethane	97		9.784				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
77 Tetrachloroethene	164		9.930				ND	
81 Chlorodibromomethane	129		10.180				ND	
84 Chlorobenzene	112		10.788				ND	
86 Ethylbenzene	106		10.891				ND	
90 Bromoform	173		11.609				ND	
93 1,1,2,2-Tetrachloroethane	83		12.059				ND	
105 1,3-Dichlorobenzene	146		13.026				ND	
107 1,4-Dichlorobenzene	146		13.117				ND	
111 1,2-Dichlorobenzene	146		13.500				ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

VOA8260INT_00013	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260SURR_00017	Amount Added: 10.00	Units: uL	Run Reagent

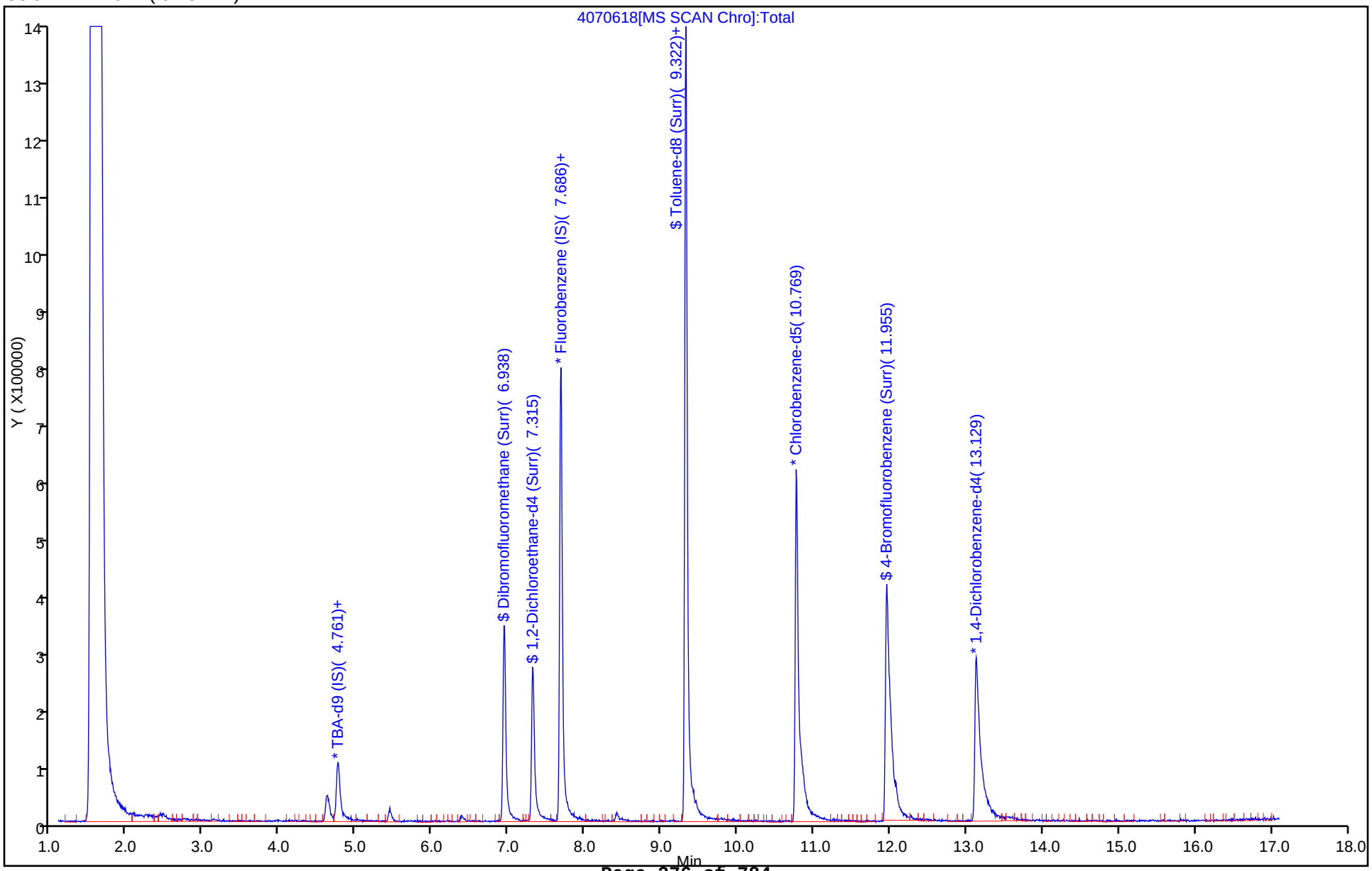
Report Date: 08-Jul-2014 07:26:30 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070618.D

Injection Date:	07-Jul-2014 08:44:30	Instrument ID:	CHHP4	Operator ID:	430936
Lims ID:	180-34362-G-4	Lab Sample ID:	180-34362-4	Worklist Smp#:	18
Client ID:	H108-PZM060				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
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.: 180-34362-1

SDG No.:

Client Sample ID: RW19-PZM020 Lab Sample ID: 180-34362-5

Matrix: Water Lab File ID: 4070619.D

Analysis Method: 8260C Date Collected: 06/26/2014 11:55

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 09:11

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.: 110534 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.: 180-34362-1

SDG No.:

Client Sample ID: RW19-PZM020 Lab Sample ID: 180-34362-5

Matrix: Water Lab File ID: 4070619.D

Analysis Method: 8260C Date Collected: 06/26/2014 11:55

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 09:11

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.: 110534 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		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)	107		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070619.D
Lims ID: 180-34362-G-5 Lab Sample ID: 180-34362-5
Client ID: RW19-PZM020
Sample Type: Client
Inject. Date: 07-Jul-2014 09:11:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-34362-G-5
Misc. Info.: 180-0002060-019
Operator ID: 430936 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 08-Jul-2014 07:26:51 Calib Date: 03-Jun-2014 14:15:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: zukowskim Date: 08-Jul-2014 07:26:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.764	4.792	-0.028	94	143942	5000.0	
* 2 Fluorobenzene (IS)	96	7.683	7.674	0.009	99	1024298	250.0	
* 3 Chlorobenzene-d5	119	10.772	10.763	0.009	81	229284	250.0	
* 4 1,4-Dichlorobenzene-d4	152	13.132	13.093	0.039	90	231478	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.941	6.932	0.009	60	308159	245.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.312	7.303	0.009	72	247386	243.5	
$ 7 Toluene-d8 (Surr)	98	9.319	9.316	0.003	93	1394820	268.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.958	11.931	0.027	95	381201	229.8	
11 Chloromethane	50		1.976				ND	
12 Vinyl chloride	62		2.128				ND	
14 Bromomethane	94		2.493				ND	
15 Chloroethane	64		2.614				ND	
20 Acrolein	56		3.673				ND	
21 1,1-Dichloroethene	96		3.782				ND	
30 Methylene Chloride	84		4.603				ND	
32 Acrylonitrile	53		5.004				ND	
33 trans-1,2-Dichloroethene	96		5.011				ND	
36 1,1-Dichloroethane	63		5.607				ND	
49 Chloroform	83		6.750				ND	
50 1,1,1-Trichloroethane	97		6.938				ND	
53 Carbon tetrachloride	117		7.127				ND	
54 Benzene	78		7.364				ND	
55 1,2-Dichloroethane	62		7.388				ND	
61 Trichloroethene	130		8.063				ND	
64 1,2-Dichloropropane	63		8.294				ND	
68 Dichlorobromomethane	83		8.586				ND	
70 2-Chloroethyl vinyl ether	63		8.908				ND	
71 cis-1,3-Dichloropropene	75		9.049				ND	
73 Toluene	91		9.383				ND	
74 trans-1,3-Dichloropropene	75		9.608				ND	
76 1,1,2-Trichloroethane	97		9.784				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
77 Tetrachloroethene	164		9.930				ND	
81 Chlorodibromomethane	129		10.180				ND	
84 Chlorobenzene	112		10.788				ND	
86 Ethylbenzene	106		10.891				ND	
90 Bromoform	173		11.609				ND	
93 1,1,2,2-Tetrachloroethane	83		12.059				ND	
105 1,3-Dichlorobenzene	146		13.026				ND	
107 1,4-Dichlorobenzene	146		13.117				ND	
111 1,2-Dichlorobenzene	146		13.500				ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

VOA8260INT_00013	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260SURR_00017	Amount Added: 10.00	Units: uL	Run Reagent

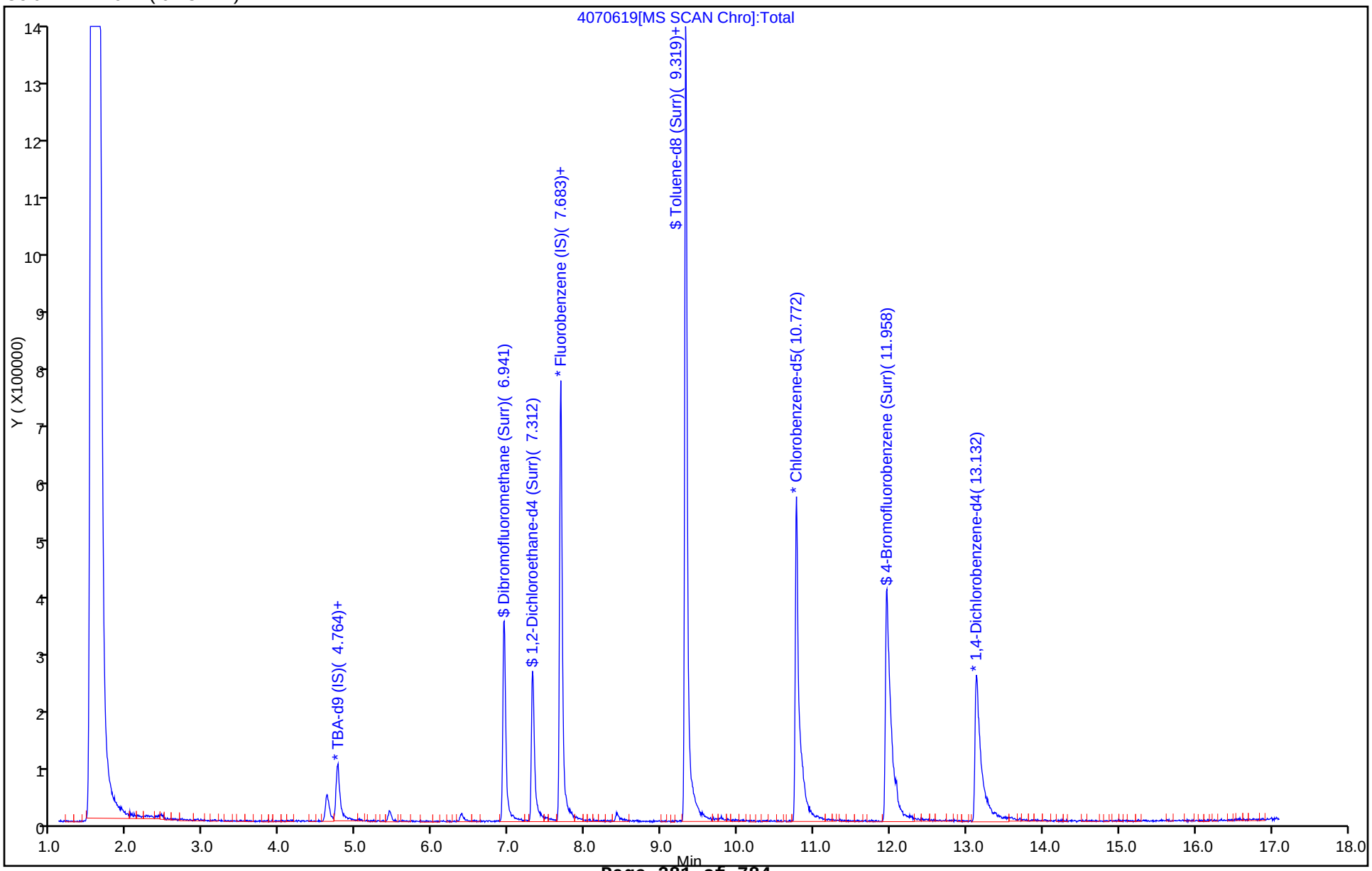
Report Date: 08-Jul-2014 07:26:51 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070619.D

Injection Date:	07-Jul-2014 09:11:30	Instrument ID:	CHHP4	Operator ID:	430936
Lims ID:	180-34362-G-5	Lab Sample ID:	180-34362-5	Worklist Smp#:	19
Client ID:	RW19-PZM020				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
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.: 180-34362-1

SDG No.:

Client Sample ID: 062614-TB Lab Sample ID: 180-34362-6

Matrix: Water Lab File ID: 4070807.D

Analysis Method: 8260C Date Collected: 06/26/2014 08:30

Sample wt/vol: 5(mL) Date Analyzed: 07/08/2014 12:23

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.: 110699 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.: 180-34362-1

SDG No.:

Client Sample ID: 062614-TB Lab Sample ID: 180-34362-6

Matrix: Water Lab File ID: 4070807.D

Analysis Method: 8260C Date Collected: 06/26/2014 08:30

Sample wt/vol: 5(mL) Date Analyzed: 07/08/2014 12:23

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.: 110699 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		62-123
460-00-4	4-Bromofluorobenzene (Surr)	89		75-120
1868-53-7	Dibromofluoromethane (Surr)	87		80-120
2037-26-5	Toluene-d8 (Surr)	104		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140708-2090.b\4070807.D
Lims ID: 180-34362-B-6 Lab Sample ID: 180-34362-6
Client ID: 062614-TB
Sample Type: Client
Inject. Date: 08-Jul-2014 12:23:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 180-34362-B-6
Misc. Info.: 180-0002090-007
Operator ID: 430936 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20140708-2090.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 08-Jul-2014 12:29:32 Calib Date: 03-Jun-2014 14:15:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: zukowskim Date: 08-Jul-2014 12:18:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.754	4.772	-0.018	90	118933	5000.0	
* 2 Fluorobenzene (IS)	96	7.685	7.679	0.006	99	1127577	250.0	
* 3 Chlorobenzene-d5	119	10.769	10.762	0.007	83	243101	250.0	M
* 4 1,4-Dichlorobenzene-d4	152	13.134	13.091	0.043	90	253413	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.943	6.937	0.006	60	299435	216.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.308	7.308	0.000	72	232259	207.6	
$ 7 Toluene-d8 (Surr)	98	9.321	9.315	0.006	92	1433603	259.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.960	11.936	0.024	96	389968	221.7	
11 Chloromethane	50		1.975				ND	
12 Vinyl chloride	62		2.127				ND	
14 Bromomethane	94		2.498				ND	
15 Chloroethane	64		2.619				ND	
20 Acrolein	56		3.678				ND	
21 1,1-Dichloroethene	96		3.787				ND	
30 Methylene Chloride	84		4.602				ND	
32 Acrylonitrile	53		5.015				ND	
33 trans-1,2-Dichloroethene	96		5.021				ND	
36 1,1-Dichloroethane	63		5.611				ND	
49 Chloroform	83		6.749				ND	
50 1,1,1-Trichloroethane	97		6.949				ND	
53 Carbon tetrachloride	117		7.132				ND	
54 Benzene	78		7.363				ND	
55 1,2-Dichloroethane	62		7.387				ND	
61 Trichloroethene	130		8.068				ND	
64 1,2-Dichloropropane	63		8.299				ND	
68 Dichlorobromomethane	83		8.591				ND	
70 2-Chloroethyl vinyl ether	63		8.911				ND	
71 cis-1,3-Dichloropropene	75		9.047				ND	
73 Toluene	91		9.382				ND	
74 trans-1,3-Dichloropropene	75		9.613				ND	
76 1,1,2-Trichloroethane	97		9.789				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
77 Tetrachloroethene	164		9.935				ND	
81 Chlorodibromomethane	129		10.185				ND	
84 Chlorobenzene	112		10.787				ND	
86 Ethylbenzene	106		10.890				ND	
90 Bromoform	173		11.614				ND	
93 1,1,2,2-Tetrachloroethane	83		12.058				ND	
105 1,3-Dichlorobenzene	146		13.025				ND	
107 1,4-Dichlorobenzene	146		13.116				ND	
111 1,2-Dichlorobenzene	146		13.499				ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Review Flags
M - Manually Integrated

Reagents:

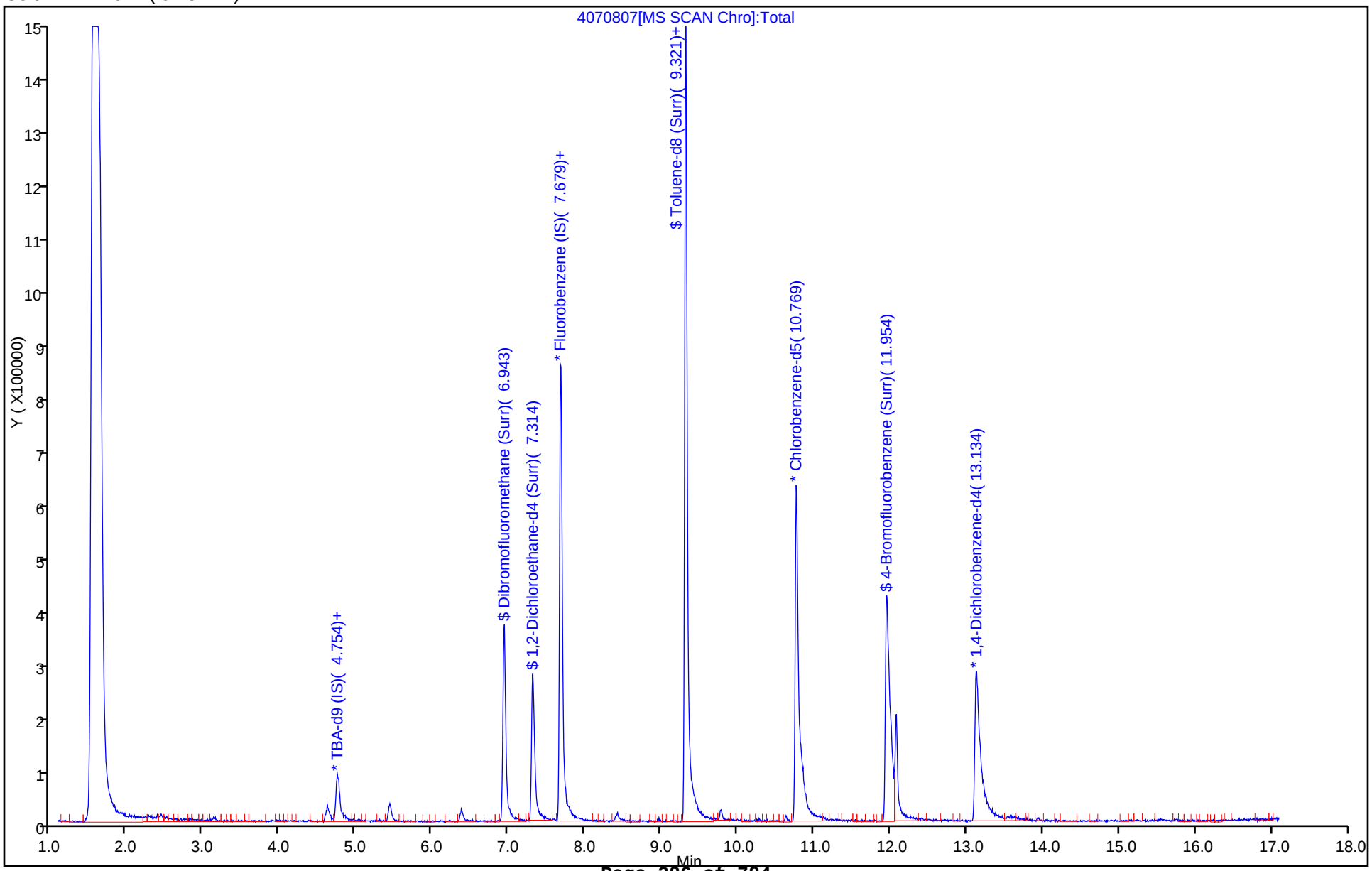
VOA8260INT_00013	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260SURR_00017	Amount Added: 10.00	Units: uL	Run Reagent

Report Date: 08-Jul-2014 12:29:40 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140708-2090.b\4070807.D				
Injection Date:	08-Jul-2014 12:23:30	Instrument ID:	CHHP4	Operator ID:	430936
Lims ID:	180-34362-B-6	Lab Sample ID:	180-34362-6	Worklist Smp#:	7
Client ID:	062614-TB				
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

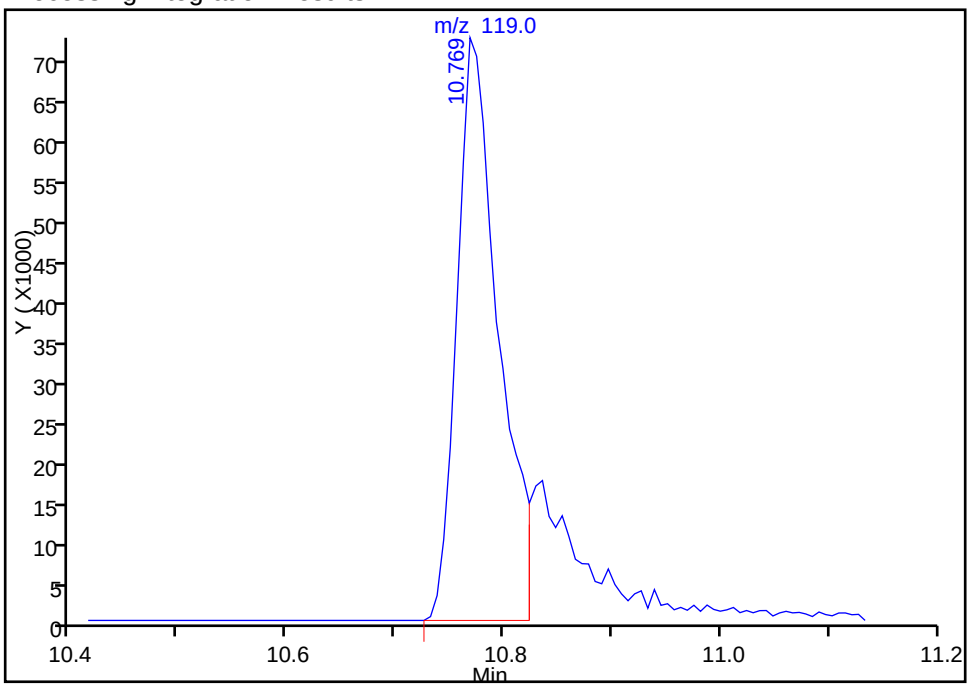
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140708-2090.b\4070807.D				
Injection Date:	08-Jul-2014 12:23:30	Instrument ID:	CHHP4		
Lims ID:	180-34362-B-6	Lab Sample ID:	180-34362-6		
Client ID:	062614-TB				
Operator ID:	430936	ALS Bottle#:	6	Worklist Smp#:	7
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		

* 3 Chlorobenzene-d5, CAS: 3114-55-4

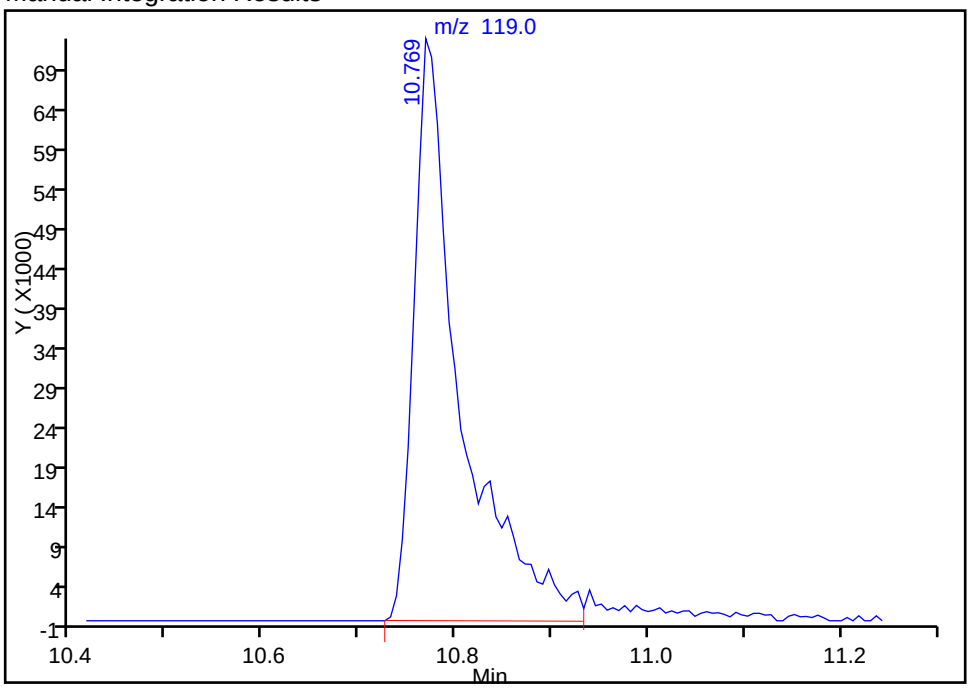
Processing Integration Results

RT: 10.77
Response: 192695
Amount: 250.0000



Manual Integration Results

RT: 10.77
Response: 243101
Amount: 250.0000



Reviewer: zukowskim, 08-Jul-2014 12:18:13
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.: 180-34362-1 Analy Batch No.: 98677

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2013 11:49 Calibration End Date: 06/24/2013 15:43 Calibration ID: 14049

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-98677/2	4062412.D
Level 2	IC 180-98677/3	4062413.D
Level 3	IC 180-98677/4	4062405.D
Level 4	ICIS 180-98677/5	4062406.D
Level 5	IC 180-98677/6	4062407.D
Level 6	IC 180-98677/7	4062408.D
Level 7	IC 180-98677/8	4062409.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								
Ethanol	0.2240 0.1886	0.1792 0.1686	0.2175	0.2115	0.1996	Ave		0.1984				10.0					
Isopropyl alcohol	0.0066 0.0070	0.0070 0.0066	0.0089	0.0077	0.0076	Ave		0.0074				11.0					
Acetonitrile	0.0096 0.0119	0.0130 0.0111	0.0148	0.0128	0.0118	Ave		0.0122				13.0					
Chloroprene	0.5180 0.4791	0.4728 0.4208	0.5176	0.4907	0.4950	Ave		0.4849				6.8					
Isopropyl ether	1.0064 0.8681	0.9360 0.7310	1.0147	0.9506	0.9253	Ave		0.9189				11.0					
Tert-butyl ethyl ether	0.7340 0.6703	0.6947 0.5859	0.7635	0.7172	0.6980	Ave		0.6948				8.1					
Propionitrile	0.0233 0.0233	0.0194 0.0216	0.0253	0.0228	0.0214	Ave		0.0225				8.2					
Ethyl acetate	0.1526 0.1367	0.1412 0.1352	0.1427	0.1238	0.1312	Ave		0.1376				6.7					
Methacrylonitrile	0.1137 0.1005	0.1079 0.0869	0.1256	0.1105	0.1089	Ave		0.1077				11.0					
Isooctane	0.0095 0.0105	0.0073 0.0094	0.0099	0.0102	0.0094	Ave		0.0094				11.0					
Tert-amyl methyl ether	0.5637 0.5354	0.5140 0.4749	0.5785	0.5544	0.5415	Ave		0.5375				6.4					
n-Butanol	0.0010 0.0027	0.0012 0.0027	0.0020	0.0018	0.0023	Ave		0.0020				35.0					
Ethyl acrylate	0.6616 0.7994	0.7920 0.8719	0.8423	0.7448	0.8242	Ave		0.7909				8.8					
Methyl methacrylate	0.1100 0.1129	0.1041 0.1154	0.1217	0.1063	0.1122	Ave		0.1118				5.2					

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.: 180-34362-1 Analy Batch No.: 98677

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2013 11:49 Calibration End Date: 06/24/2013 15:43 Calibration ID: 14049

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-Nitropropane	0.1486 0.1248	0.1401 0.1385	0.1534	0.1236	0.1291	Ave		0.1369				8.5					
2-Chloroethyl vinyl ether	0.0488 0.1158	0.0909 0.1218	0.0814	0.0833	0.0978	Lin1	-4.700	0.1181			0.0100				0.9910		0.9900
n-Butyl acetate	0.0756 0.8402	0.2897 0.9926	0.4638	0.4325	0.5442	Qua	-31.71	0.6807	0.0003						0.9980		
Cyclohexanone	0.0100 0.0215	0.0174 0.0238	0.0276	0.0187	0.0193	Qua	1.2140	0.0190	0						0.9980		
Pentachloroethane	0.6500 0.5677	0.6087 0.5044	0.6306	0.6546	0.6368	Ave		0.6076				8.9					
1,2,3-Trimethylbenzene	4.2891 3.3678	4.0211 2.5533	4.2039	4.0612	4.0284	Ave		3.7892				16.0					
Benzyl chloride	0.6784 0.8996	0.6327 0.9501	0.7265	0.7649	0.7803	Ave		0.7761				15.0					
1,3,5-Trichlorobenzene	1.4009 1.2373	1.1827 1.1242	1.2210	1.2675	1.2704	Ave		1.2434				6.9					
2-Methylnaphthalene	0.1442 0.0834	0.0474 0.1123	0.0513	0.0753	0.0559	Qua	0.6501	0.0505	0						0.9990		

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.: 180-34362-1 Analy Batch No.: 98677

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2013 11:49 Calibration End Date: 06/24/2013 15:43 Calibration ID: 14049

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-98677/2	4062412.D
Level 2	IC 180-98677/3	4062413.D
Level 3	IC 180-98677/4	4062405.D
Level 4	ICIS 180-98677/5	4062406.D
Level 5	IC 180-98677/6	4062407.D
Level 6	IC 180-98677/7	4062408.D
Level 7	IC 180-98677/8	4062409.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
Ethanol	TBA	Ave	11022 146724	18962 306980	37677	55004	64602	1250 31250	2500 62500	6250	10000	12500
Isopropyl alcohol	FB	Ave	7123 129977	16538 290088	31112	45035	57849	250 6250	500 12500	1250	2000	2500
Acetonitrile	FB	Ave	10368 221547	30817 484868	51526	75170	89288	250 6250	500 12500	1250	2000	2500
Chloroprene	FB	Ave	55781 888929	112070 1840987	180224	287185	375318	25.0 625	50.0 1250	125	200	250
Isopropyl ether	FB	Ave	108378 1610664	221856 3197946	353287	556333	701629	25.0 625	50.0 1250	125	200	250
Tert-butyl ethyl ether	FB	Ave	79041 1243776	164660 2563319	265817	419771	529274	25.0 625	50.0 1250	125	200	250
Propionitrile	FB	Ave	25130 431825	46053 946590	87946	133690	162293	250 6250	500 12500	1250	2000	2500
Ethyl acetate	FB	Ave	32868 507174	66942 1183176	99362	144864	199022	50.0 1250	100 2500	250	400	500
Methacrylonitrile	FB	Ave	122454 1865183	255672 3800664	437366	646688	825695	250 6250	500 12500	1250	2000	2500
Isooctane	FB	Ave	1023 19407	1734 41061	3437	5974	7122	25.0 625	50.0 1250	125	200	250
Tert-amyl methyl ether	FB	Ave	60703 993477	121830 2077627	201431	324486	410586	25.0 625	50.0 1250	125	200	250
n-Butanol	FB	Ave	2756 123415	6929 299529	17560	25718	43413	625 15625	1250 31250	3125	5000	6250
Ethyl acrylate	CBZ	Ave	15571 344483	37811 844714	59197	96842	133558	25.0 625	50.0 1250	125	200	250
Methyl methacrylate	FB	Ave	23700 418919	49339 1009907	84770	124429	170152	50.0 1250	100 2500	250	400	500
2-Nitropropane	CBZ	Ave	6994 107569	13377 268339	21559	32130	41832	50.0 1250	100 2500	250	400	500

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1 Analy Batch No.: 98677

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2013 11:49 Calibration End Date: 06/24/2013 15:43 Calibration ID: 14049

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
2-Chloroethyl vinyl ether	FB	Lin1	10516 429844	43100 1065373	56694	97522	148284	50.0 1250	100 2500	250	400	500
n-Butyl acetate	CBZ	Qua	1780 362045	13828 961699	32597	56236	88176	25.0 625	50.0 1250	125	200	250
Cyclohexanone	CBZ	Qua	4687 185391	16567 461750	38724	48570	62680	500 12500	1000 25000	2500	4000	5000
Pentachloroethane	DCB	Ave	18505 337371	37736 729846	64917	110994	137488	25.0 625	50.0 1250	125	200	250
1,2,3-Trimethylbenzene	DCB	Ave	122113 2001496	249271 3694418	432739	688602	869704	25.0 625	50.0 1250	125	200	250
Benzyl chloride	DCB	Ave	19314 534665	39224 1374784	74787	129695	168453	25.0 625	50.0 1250	125	200	250
1,3,5-Trichlorobenzene	DCB	Ave	39884 735346	73314 1626725	125690	214910	274277	25.0 625	50.0 1250	125	200	250
2-Methylnaphthalene	DCB	Qua	4105 49559	2937 162435	5278	12768	12065	25.0 625	50.0 1250	125	200	250

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062412.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 24-Jun-2013 15:03:30 ALS Bottle#: 11 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 4062313d.b,t8260bh2o.m,list2.sub =4062313D.B,T8260BH2O.M,LIST2.SUB
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub3

Method: \\PITCHROM\ChromData\CHHP4\20140304-97.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Mar-2014 12:36:58 Calib Date: 16-Dec-2013 16:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140220-45.b\4121613.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: gordonk Date: 04-Mar-2014 12:15:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.749	4.758	-0.009	95	196812	5000.0	
* 2 Fluorobenzene (IS)	96	7.681	7.678	0.003	98	1076859	250.0	
* 3 Dioxane-d8 (IS)	96	8.405	8.402	0.003	77	26012	5000.0	M
* 4 Chlorobenzene-d5	119	10.771	10.768	0.003	85	235340	250.0	
* 5 1,4-Dichlorobenzene-d4	152	13.107	13.104	0.003	94	284707	250.0	
18 Ethanol	45	3.386	3.395	-0.009	1	11022	1411.2	M
26 Isopropyl alcohol	45	4.299	4.265	0.034	41	7123	224.8	M
27 Acetonitrile	40	4.432	4.405	0.027	91	10368	198.1	
38 2-Chloro-1,3-butadiene	53	5.746	5.731	0.015	86	55781	26.7	
39 Isopropyl ether	45	5.753	5.750	0.003	90	108378	27.4	
40 Tert-butyl ethyl ether	59	6.215	6.212	0.003	94	79041	26.4	
44 Propionitrile	54	6.495	6.480	0.015	95	25130	259.8	
45 Ethyl acetate	43	6.519	6.498	0.021	93	32868	55.4	M
46 Methacrylonitrile	41	6.653	6.650	0.003	92	122454	263.9	
58 Tert-amyl methyl ether	73	7.511	7.514	-0.003	89	60703	26.2	
57 Isooctane	57	7.505	7.514	-0.009	30	1023	25.1	M
60 n-Butanol	56	8.131	8.043	0.088	1	2756	327.9	M
62 Ethyl acrylate	55	8.241	8.207	0.034	23	15571	20.9	M
66 Methyl methacrylate	69	8.454	8.438	0.016	85	23700	49.2	M
69 2-Nitropropane	41	8.843	8.828	0.015	74	6994	54.3	M
70 2-Chloroethyl vinyl ether	63	8.934	8.907	0.027	61	10516	60.5	M
80 n-Butyl acetate	43	10.224	10.184	0.040	1	1780	48.4	M
92 Cyclohexanone	55	11.958	11.906	0.052	1	4687	197.3	M
102 Pentachloroethane	167	12.724	12.715	0.009	80	18505	26.7	
108 1,2,3-Trimethylbenzene	105	13.174	13.165	0.009	94	122113	28.3	
109 Benzyl chloride	91	13.333	13.281	0.052	1	19314	21.9	M
113 1,3,5-Trichlorobenzene	180	14.537	14.504	0.033	73	39884	28.2	M
118 2-Methylnaphthalene	142	16.751	16.718	0.033	1	4105	55.5	M

QC Flag Legend

Review Flags
M - Manually Integrated

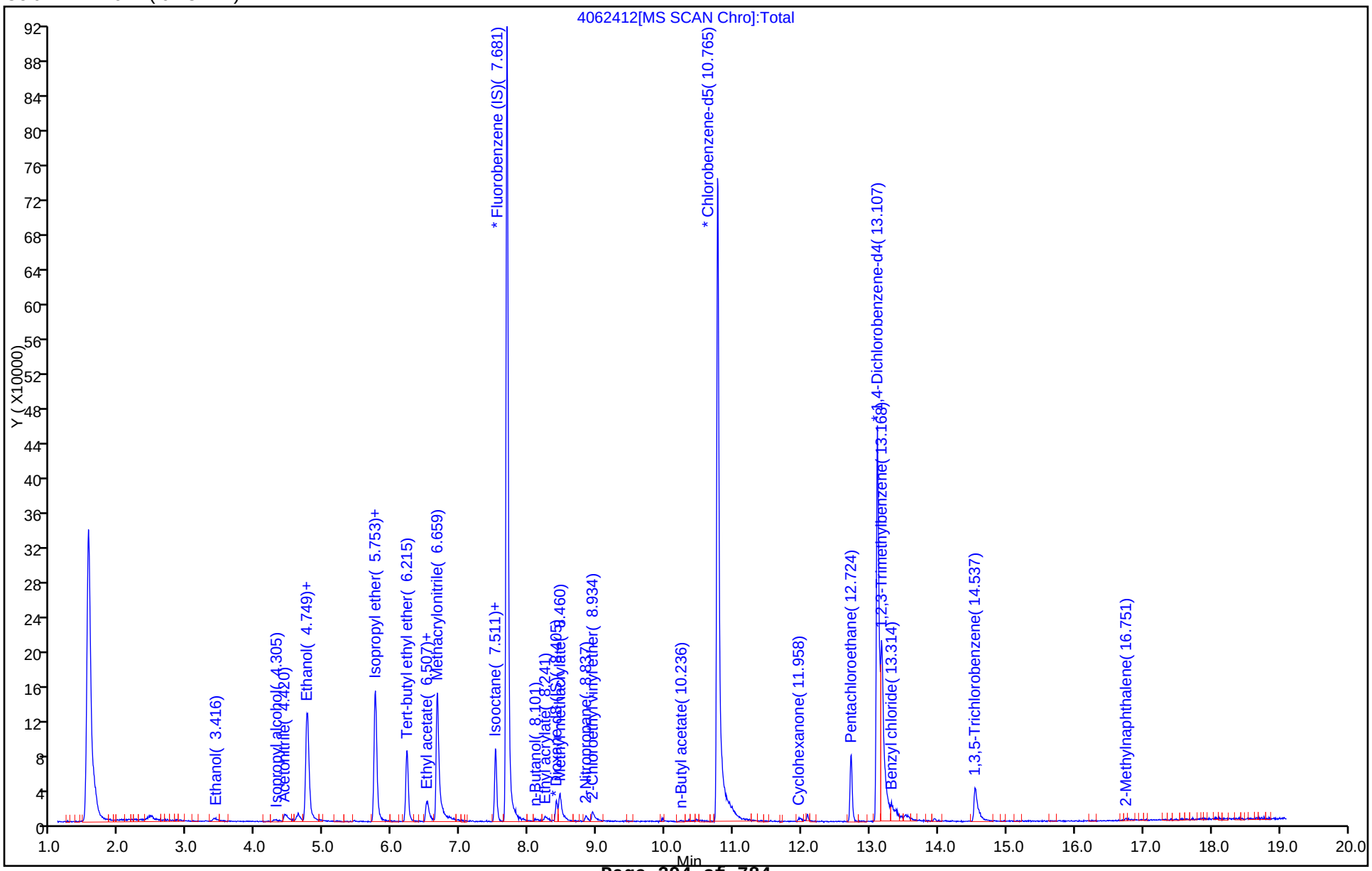
Report Date: 04-Mar-2014 12:36:59 Chrom Revision: 2.2 28-Feb-2014 15:12:04

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062412.D

Injection Date:	24-Jun-2013 15:03:30	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#:	11
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

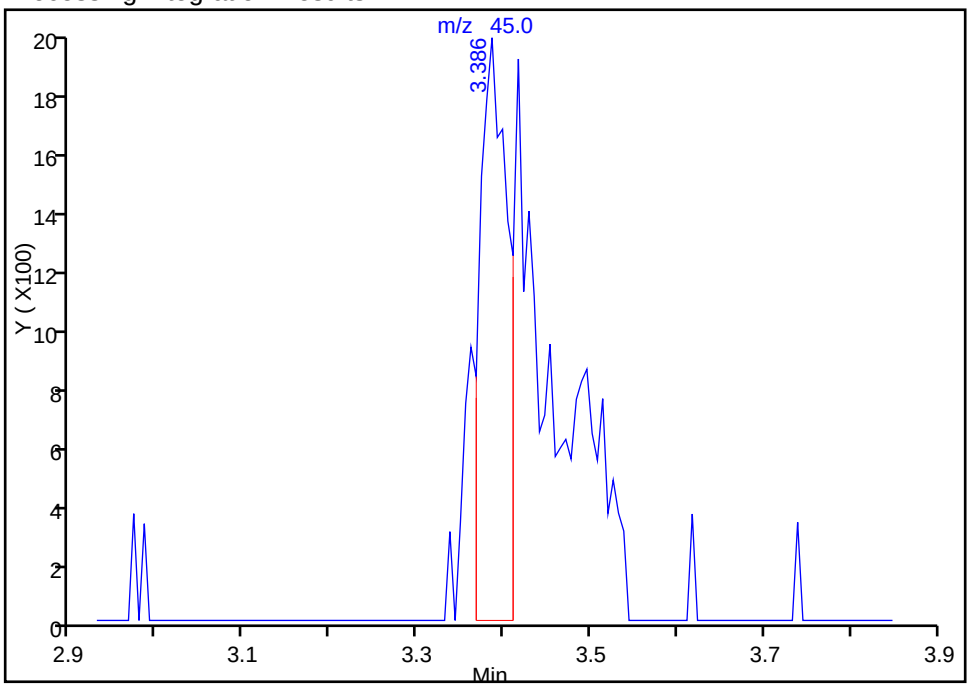
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140304-97.b\4062412.D				
Injection Date:	24-Jun-2013 15:03:30	Instrument ID:	CHHP4		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	11	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		

18 Ethanol, CAS: 64-17-5

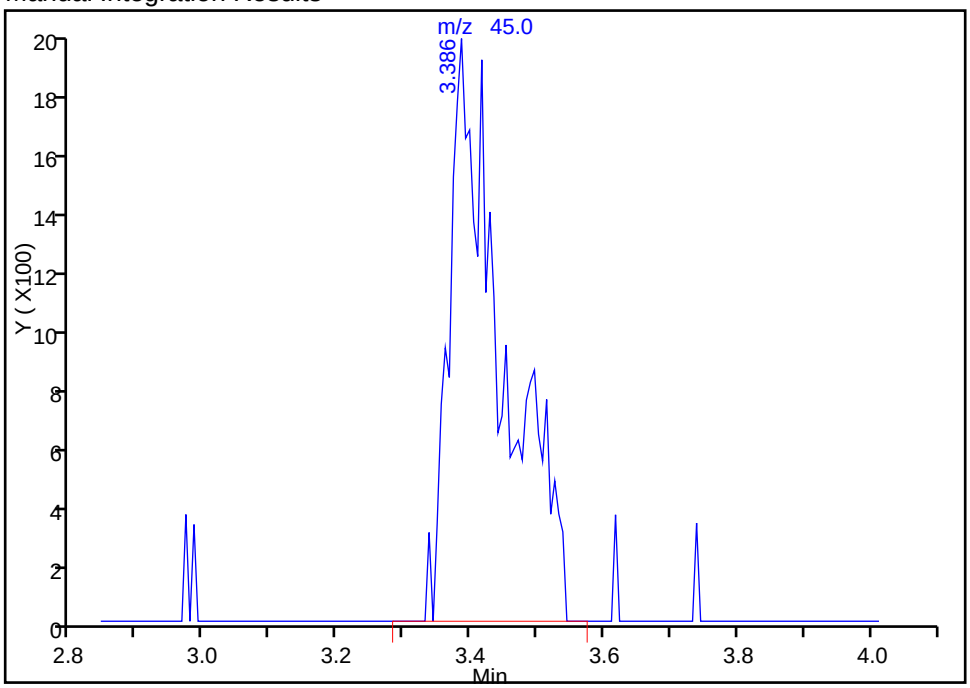
Processing Integration Results

RT: 3.39
Response: 4369
Amount: 795.5646



Manual Integration Results

RT: 3.39
Response: 11022
Amount: 1411.2067



Reviewer: gordonk, 04-Mar-2014 12:15:14
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

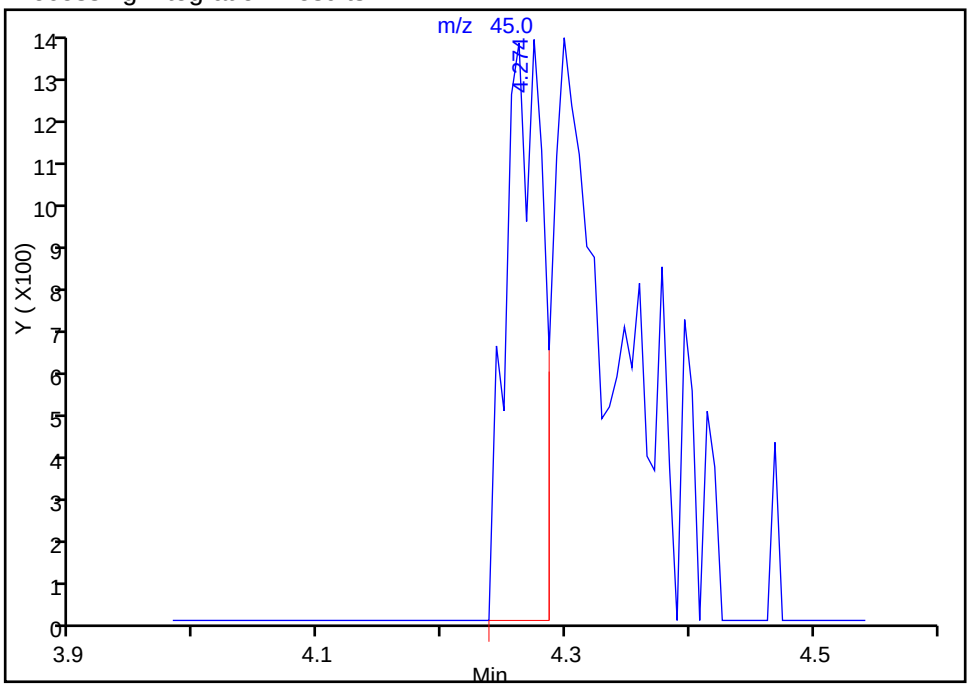
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140304-97.b\4062412.D				
Injection Date:	24-Jun-2013 15:03:30	Instrument ID:	CHHP4		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	11	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		

26 Isopropyl alcohol, CAS: 67-63-0

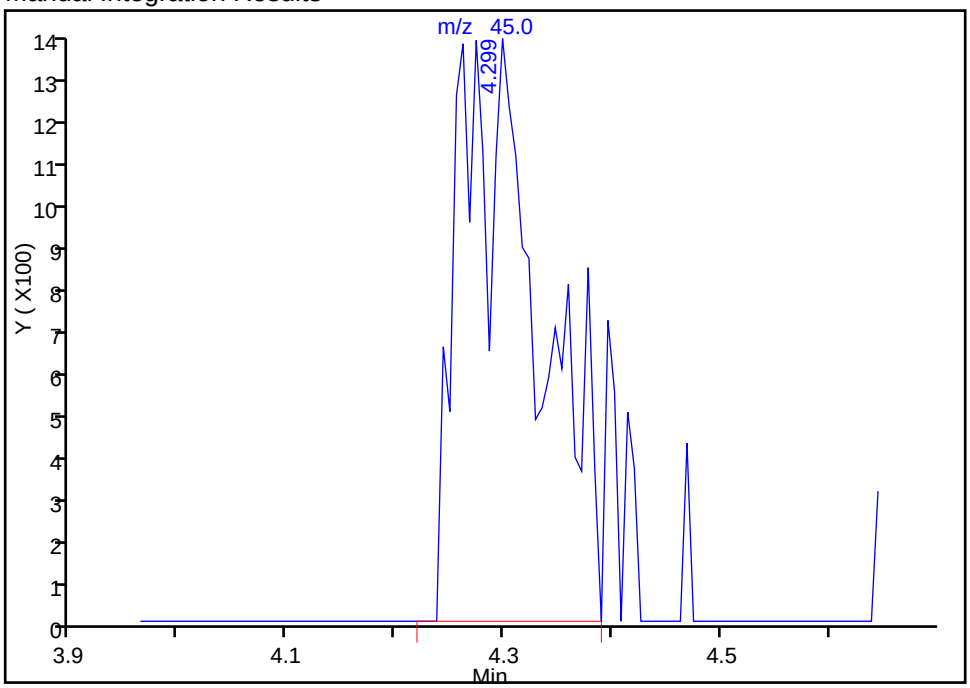
Processing Integration Results

RT: 4.27
Response: 2793
Amount: 120.8539



Manual Integration Results

RT: 4.30
Response: 7123
Amount: 224.8212



Reviewer: gordonk, 04-Mar-2014 12:15:14
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

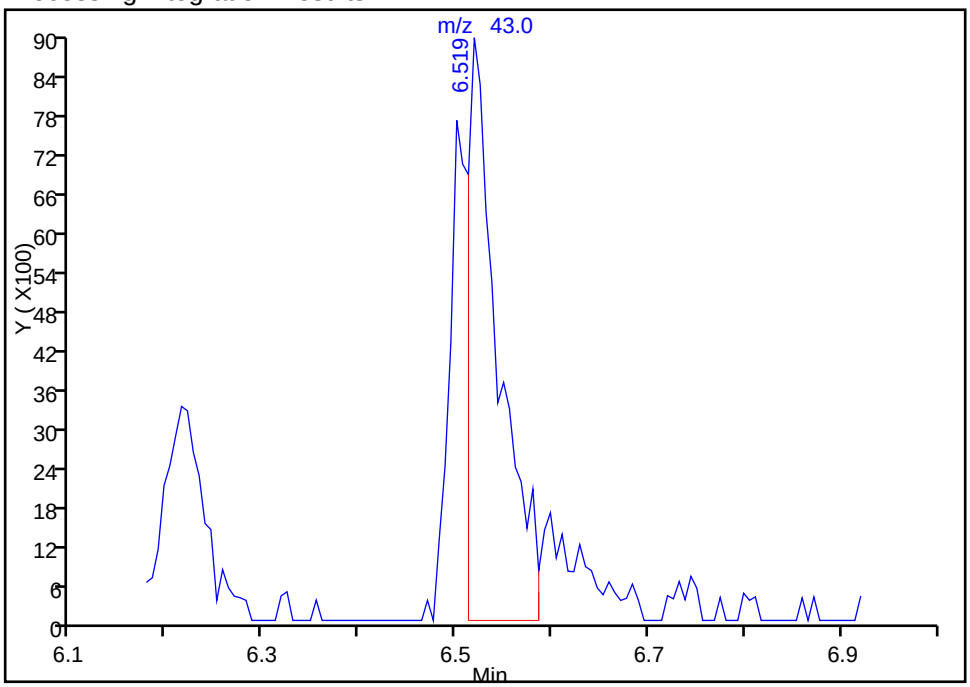
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062412.D
Injection Date: 24-Jun-2013 15:03:30 Instrument ID: CHHP4
Lims ID: ic
Client ID:
Operator ID: 034635 ALS Bottle#: 11 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

45 Ethyl acetate, CAS: 141-78-6

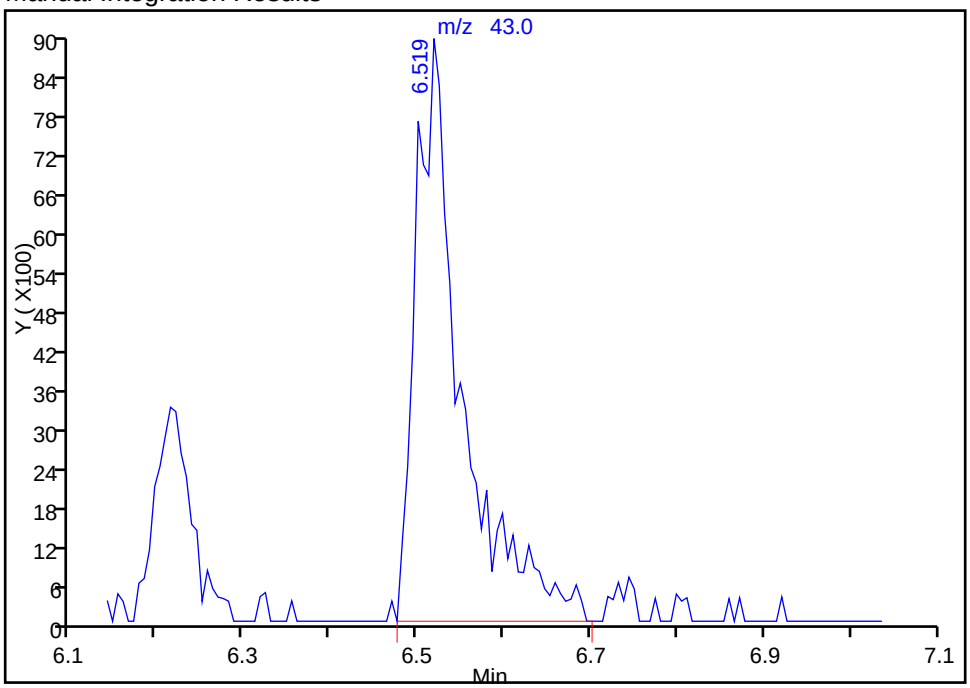
Processing Integration Results

RT: 6.52
Response: 19870
Amount: 46.325493



Manual Integration Results

RT: 6.52
Response: 32868
Amount: 55.442337



Reviewer: gordonk, 04-Mar-2014 12:15:14
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

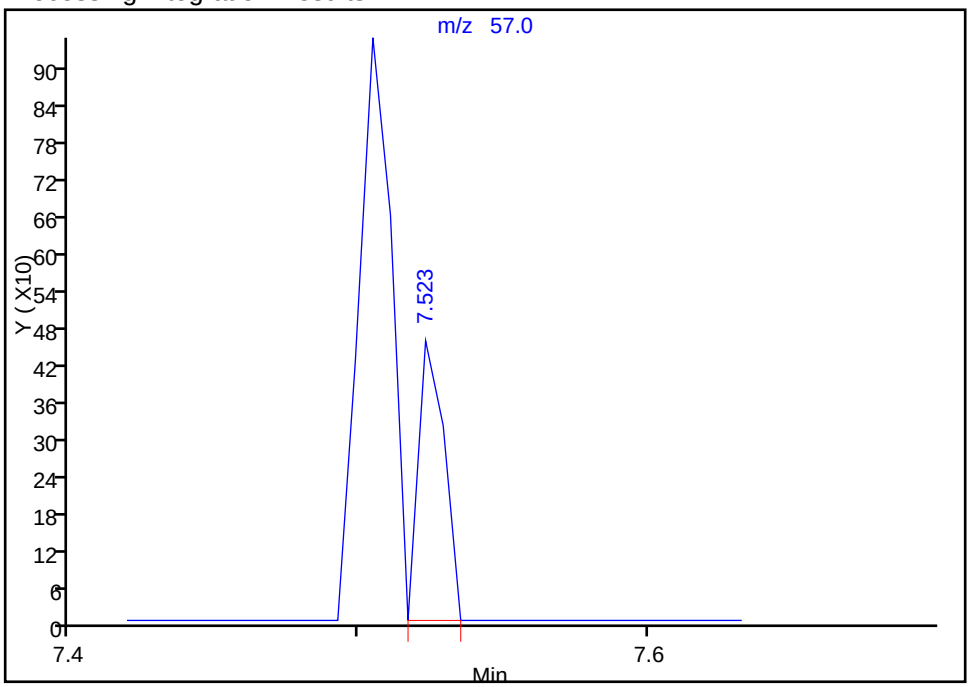
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140304-97.b\4062412.D				
Injection Date:	24-Jun-2013 15:03:30	Instrument ID:	CHHP4		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	11	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		

57 Isooctane, CAS: 540-84-1

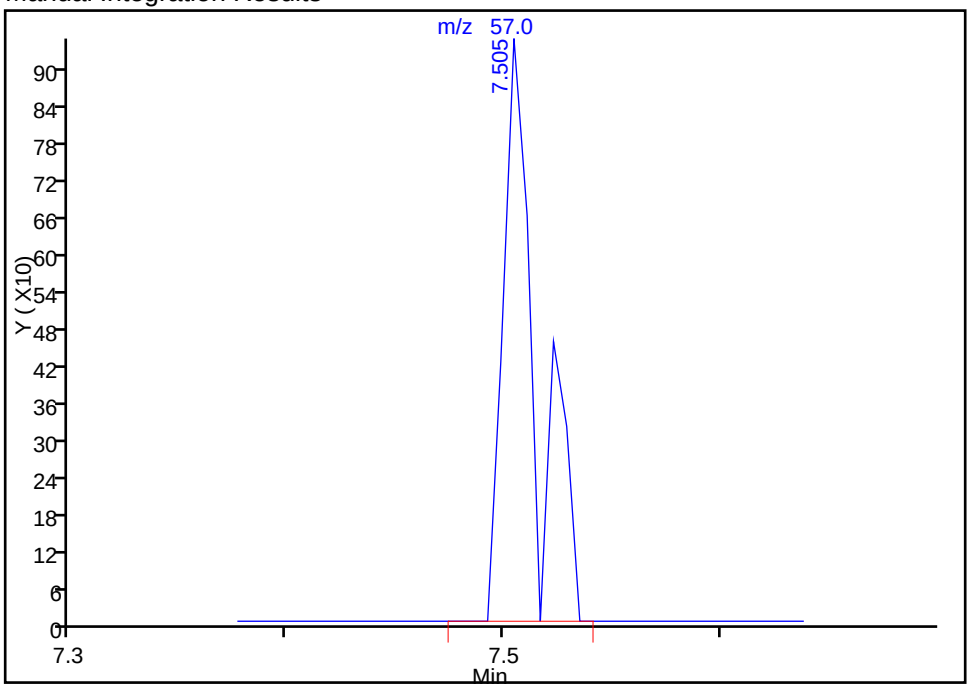
Processing Integration Results

RT: 7.52
Response: 282
Amount: 24.042471



Manual Integration Results

RT: 7.50
Response: 1023
Amount: 25.138545



Reviewer: gordonk, 04-Mar-2014 12:15:14
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

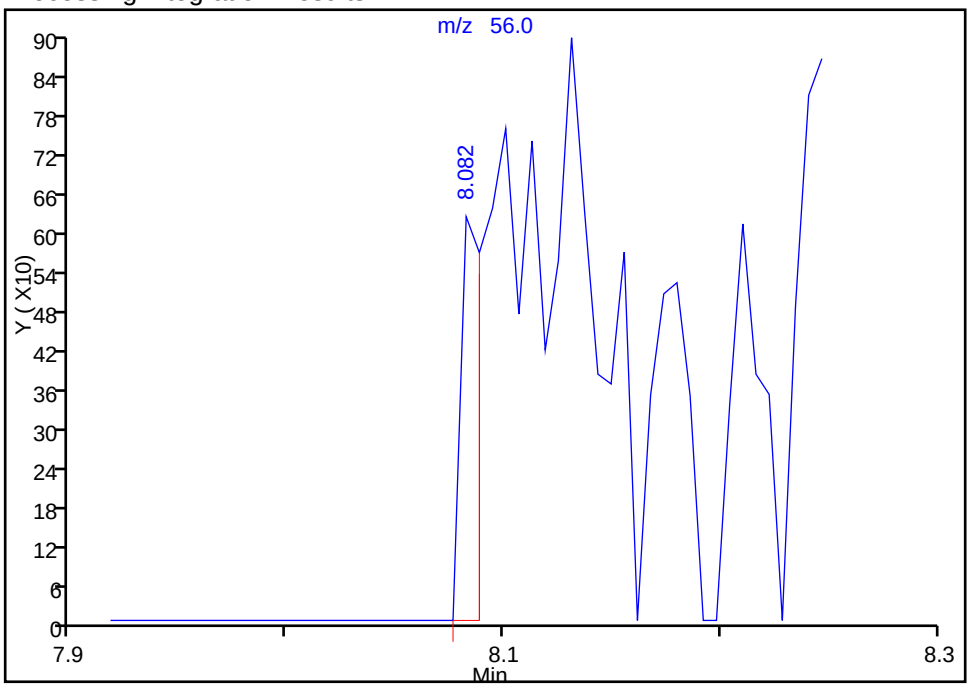
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062412.D
Injection Date: 24-Jun-2013 15:03:30 Instrument ID: CHHP4
Lims ID: ic
Client ID:
Operator ID: 034635 ALS Bottle#: 11 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

60 n-Butanol, CAS: 71-36-3

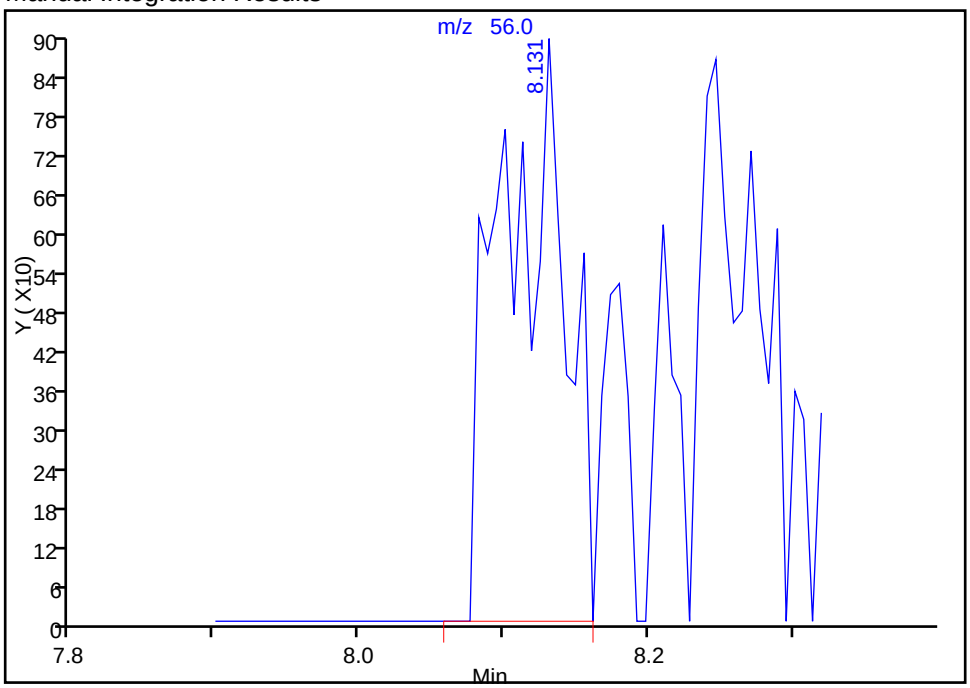
Processing Integration Results

RT: 8.08
Response: 431
Amount: 922.1741



Manual Integration Results

RT: 8.13
Response: 2756
Amount: 327.9314



Reviewer: gordonk, 04-Mar-2014 12:15:14
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

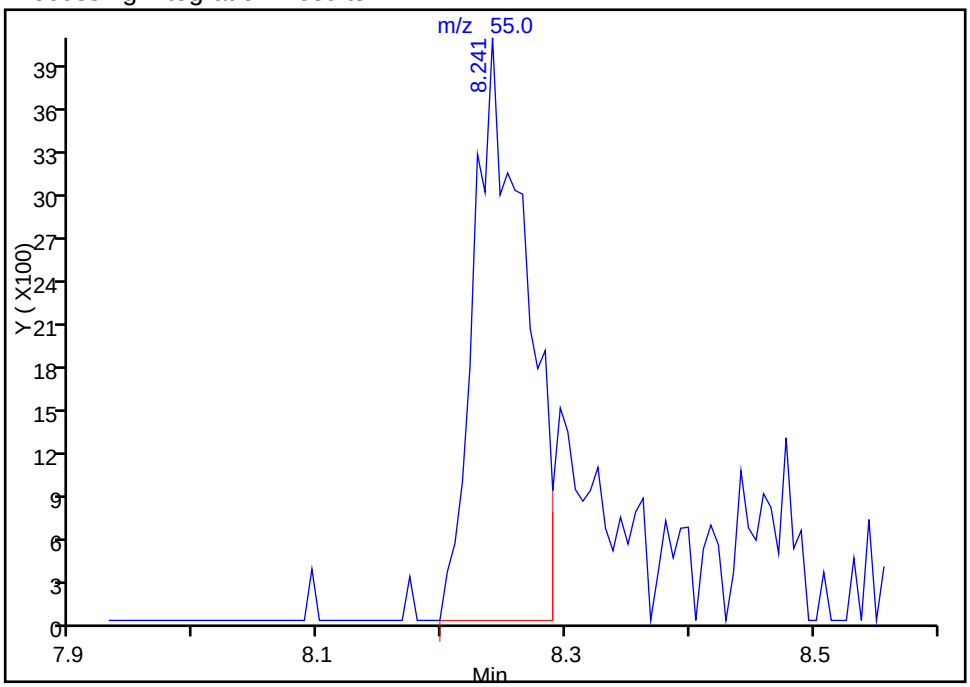
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140304-97.b\4062412.D				
Injection Date:	24-Jun-2013 15:03:30	Instrument ID:	CHHP4		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	11	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		

62 Ethyl acrylate, CAS: 140-88-5

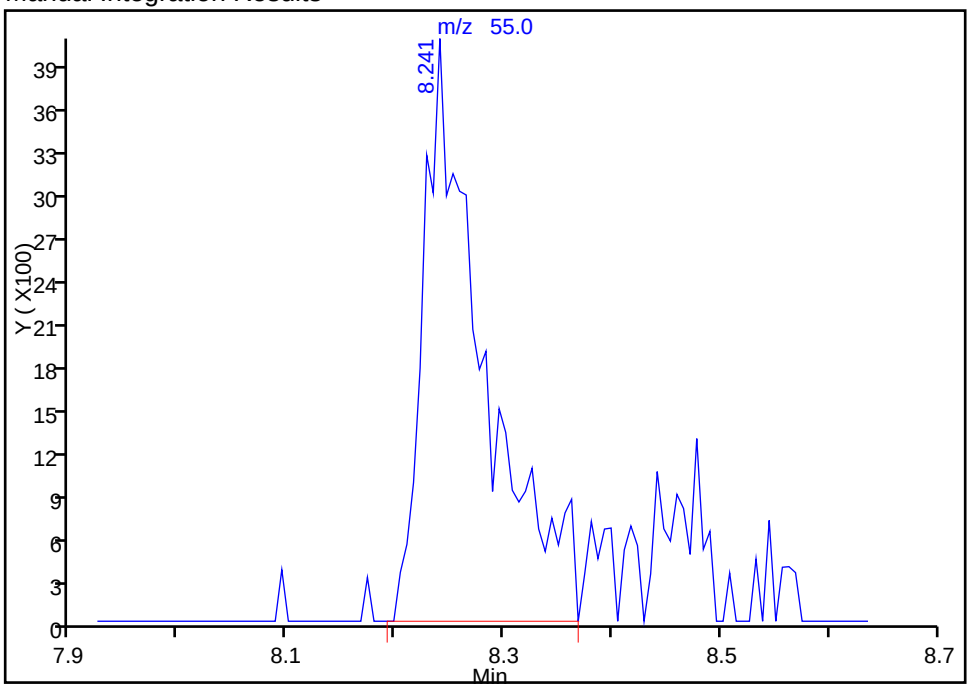
Processing Integration Results

RT: 8.24
Response: 11771
Amount: 25.678452



Manual Integration Results

RT: 8.24
Response: 15571
Amount: 20.914121



Reviewer: gordonk, 04-Mar-2014 12:15:14
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

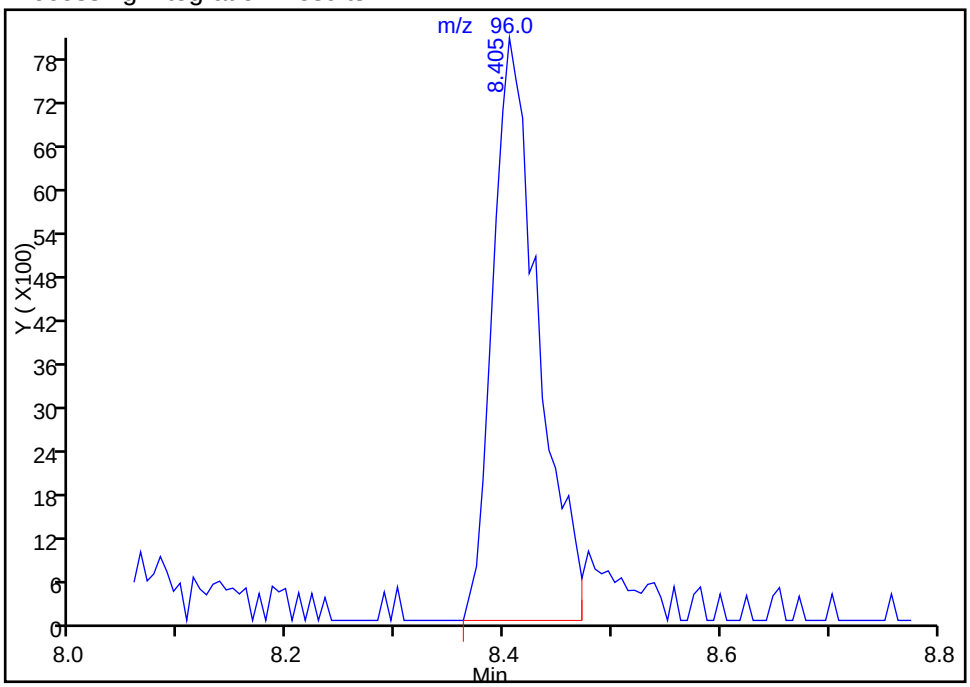
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140304-97.b\4062412.D				
Injection Date:	24-Jun-2013 15:03:30	Instrument ID:	CHHP4		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	11	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		

* 3 Dioxane-d8 (IS), CAS: 17647-74-4

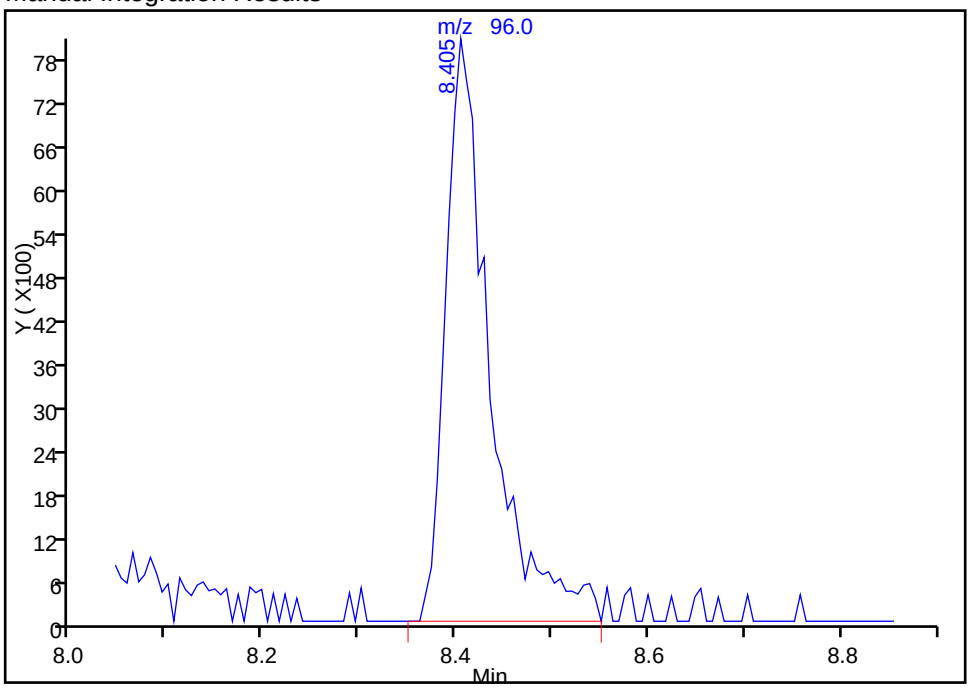
Processing Integration Results

RT: 8.40
Response: 23569
Amount: 5000.0000



Manual Integration Results

RT: 8.40
Response: 26012
Amount: 5000.0000



Reviewer: gordonk, 04-Mar-2014 12:15:14
Audit Action: Manually Integrated
Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

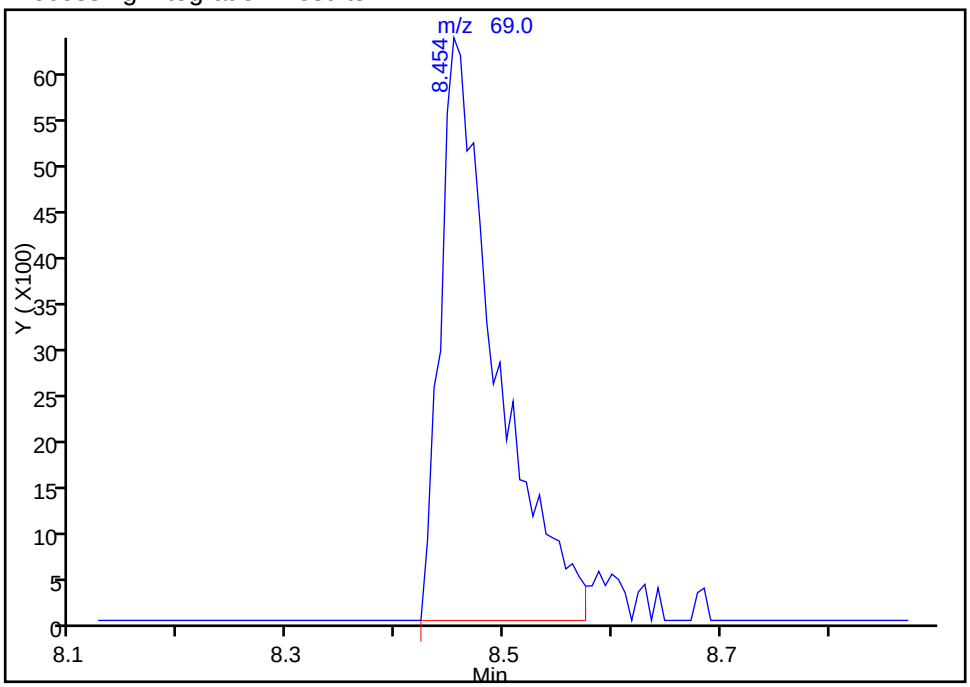
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062412.D
Injection Date: 24-Jun-2013 15:03:30 Instrument ID: CHHP4
Lims ID: ic
Client ID:
Operator ID: 034635 ALS Bottle#: 11 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

66 Methyl methacrylate, CAS: 80-62-6

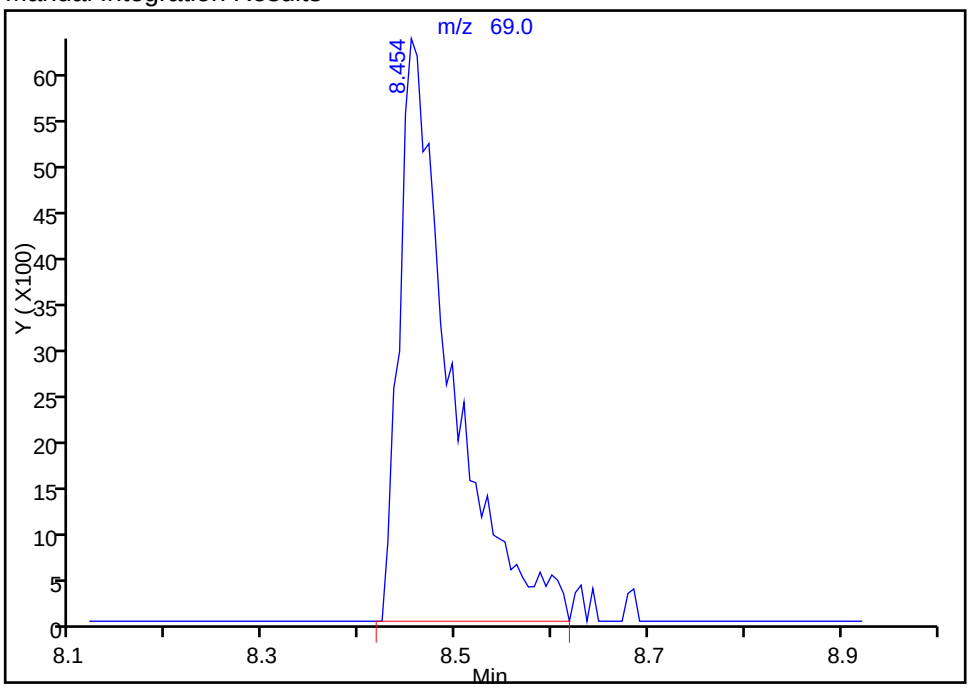
Processing Integration Results

RT: 8.45
Response: 22768
Amount: 47.537022



Manual Integration Results

RT: 8.45
Response: 23700
Amount: 49.209341



Reviewer: gordonk, 04-Mar-2014 12:15:14
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

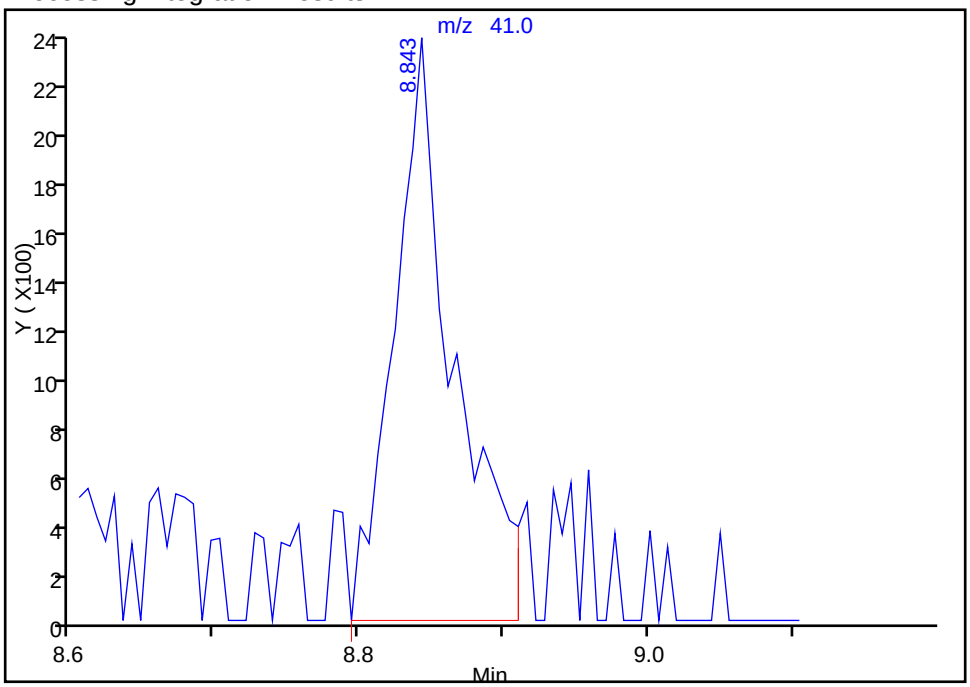
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140304-97.b\4062412.D				
Injection Date:	24-Jun-2013 15:03:30	Instrument ID:	CHHP4		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	11	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		

69 2-Nitropropane, CAS: 79-46-9

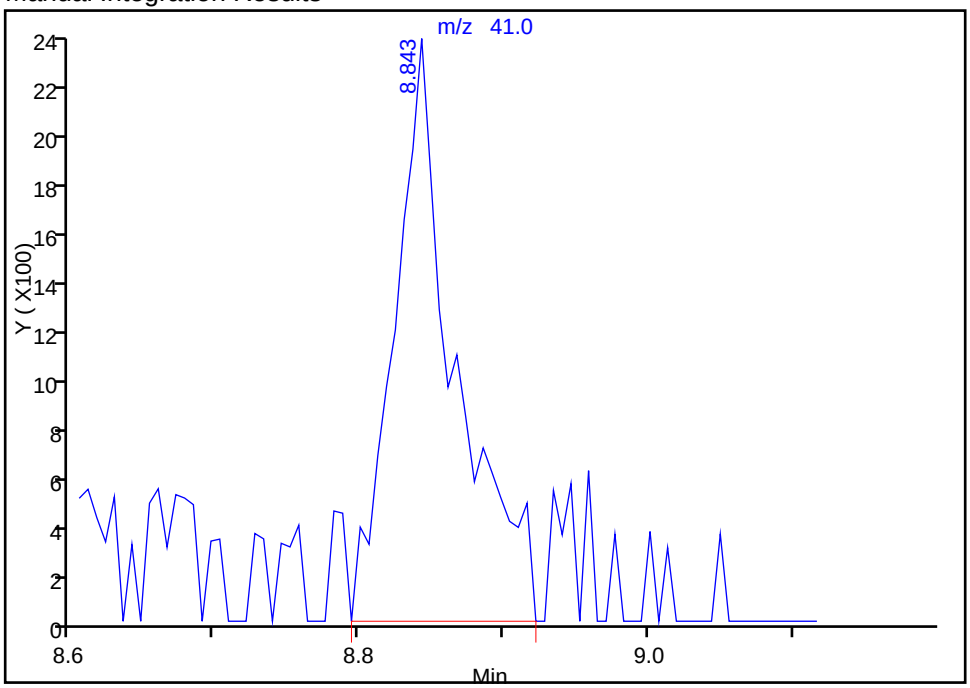
Processing Integration Results

RT: 8.84
Response: 6818
Amount: 53.128568



Manual Integration Results

RT: 8.84
Response: 6994
Amount: 54.287307



Reviewer: gordonk, 04-Mar-2014 12:15:14
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

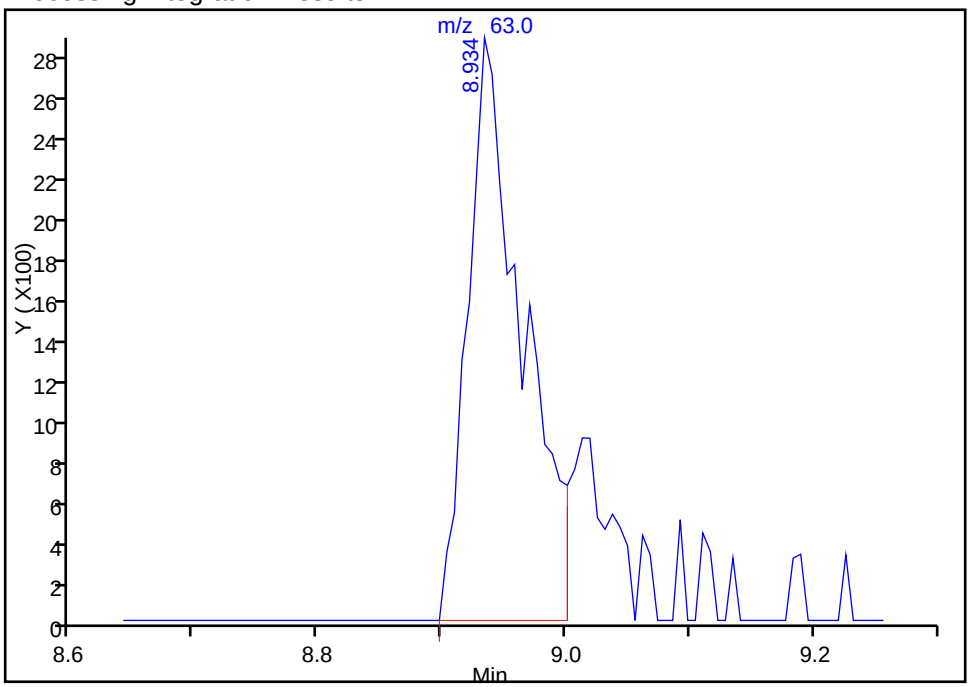
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140304-97.b\4062412.D				
Injection Date:	24-Jun-2013 15:03:30	Instrument ID:	CHHP4		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	11	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		

70 2-Chloroethyl vinyl ether, CAS: 110-75-8

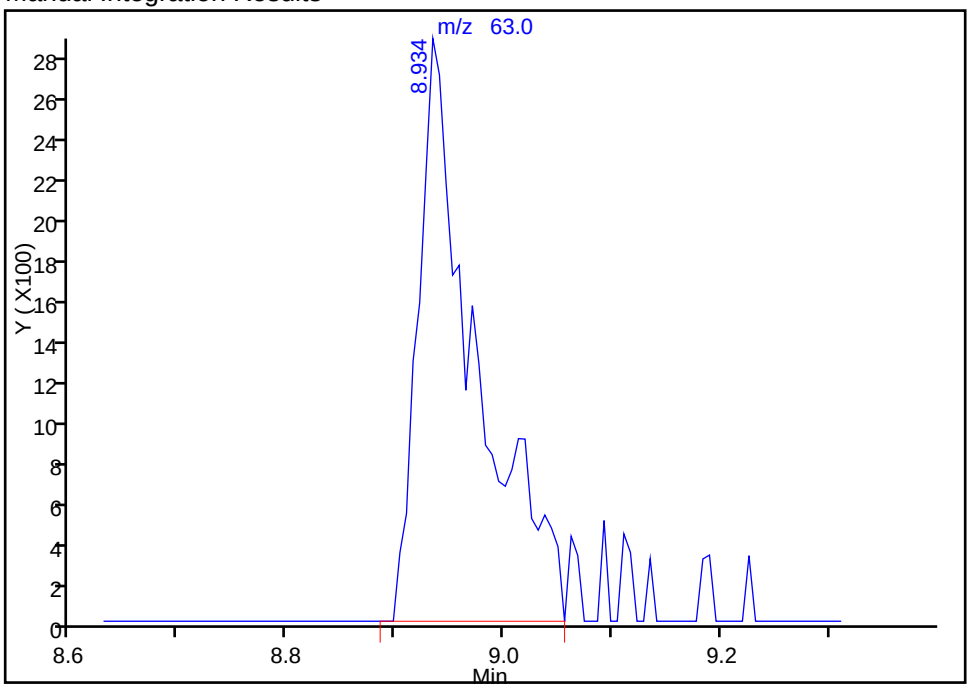
Processing Integration Results

RT: 8.93
Response: 8757
Amount: 73.454415



Manual Integration Results

RT: 8.93
Response: 10516
Amount: 60.485111



Reviewer: gordonk, 04-Mar-2014 12:15:14
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

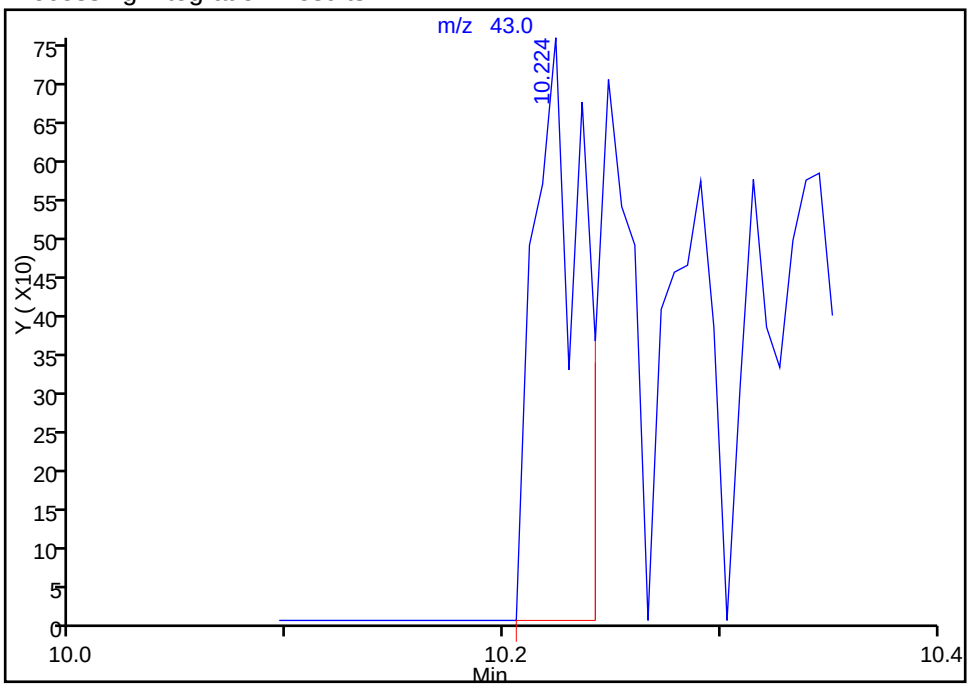
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062412.D
Injection Date: 24-Jun-2013 15:03:30 Instrument ID: CHHP4
Lims ID: ic
Client ID:
Operator ID: 034635 ALS Bottle#: 11 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

80 n-Butyl acetate, CAS: 123-86-4

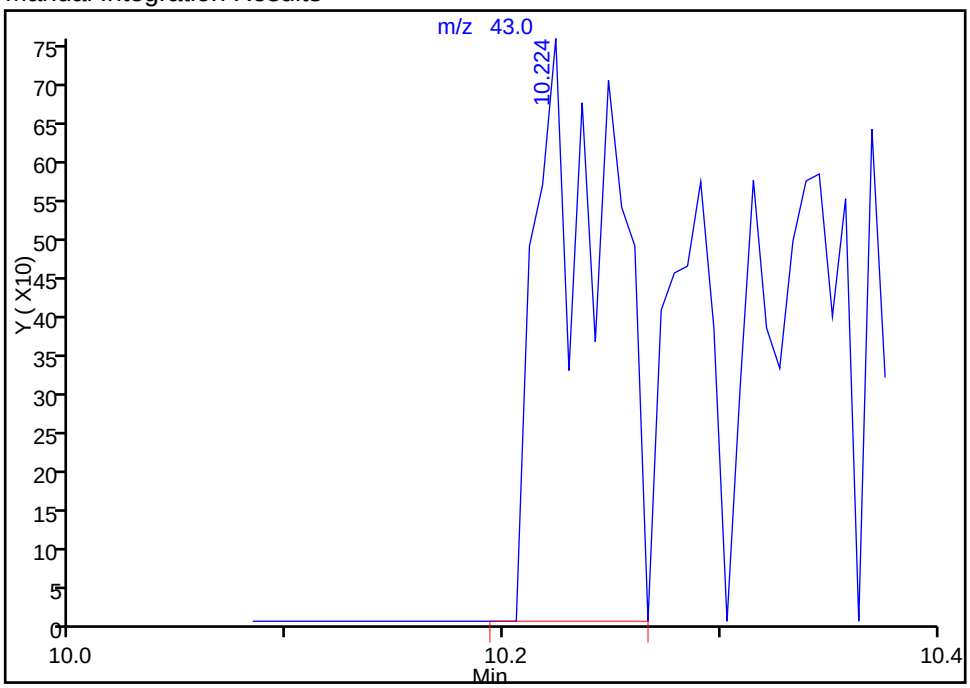
Processing Integration Results

RT: 10.22
Response: 1152
Amount: 47.806466



Manual Integration Results

RT: 10.22
Response: 1780
Amount: 48.421856



Reviewer: gordonk, 04-Mar-2014 12:15:14
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

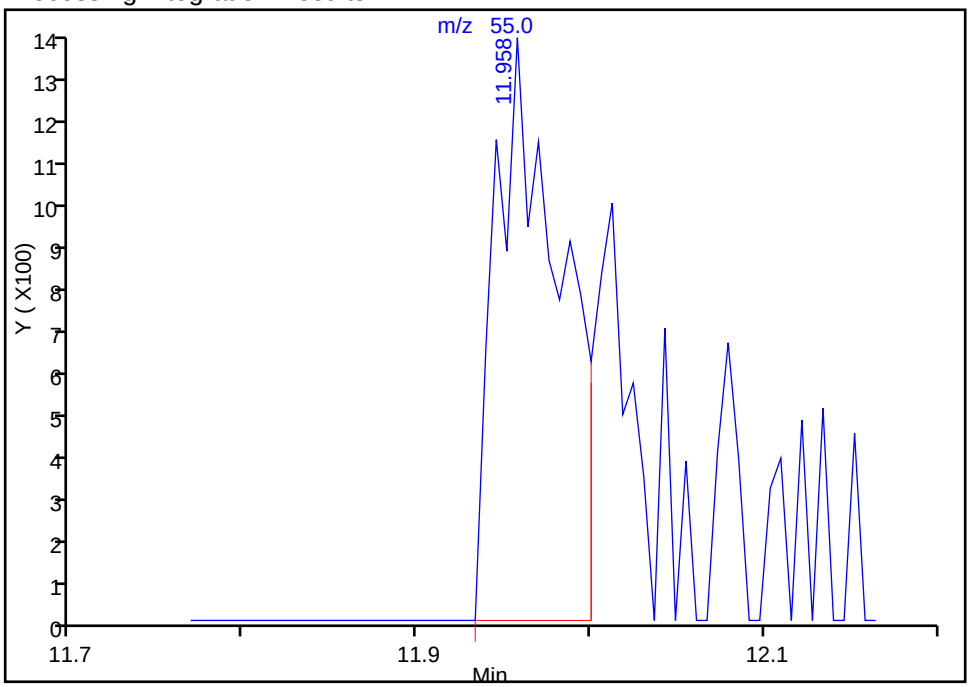
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062412.D
Injection Date: 24-Jun-2013 15:03:30 Instrument ID: CHHP4
Lims ID: ic
Client ID:
Operator ID: 034635 ALS Bottle#: 11 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

92 Cyclohexanone, CAS: 108-94-1

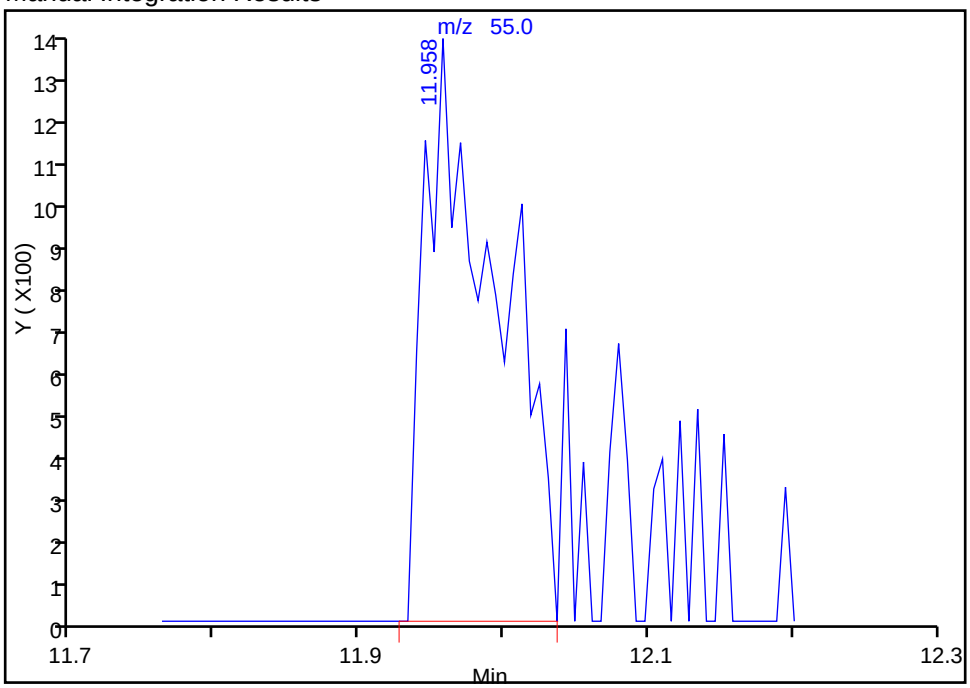
Processing Integration Results

RT: 11.96
Response: 3550
Amount: 333.8387



Manual Integration Results

RT: 11.96
Response: 4687
Amount: 197.3328



Reviewer: gordonk, 04-Mar-2014 12:15:14
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

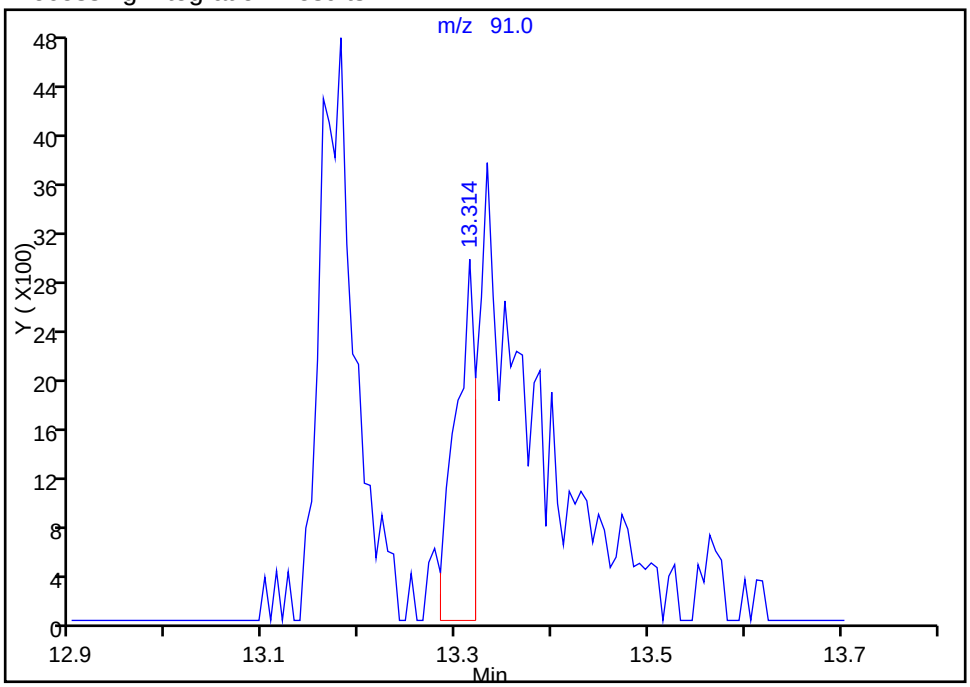
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140304-97.b\4062412.D				
Injection Date:	24-Jun-2013 15:03:30	Instrument ID:	CHHP4		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	11	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		

109 Benzyl chloride, CAS: 100-44-7

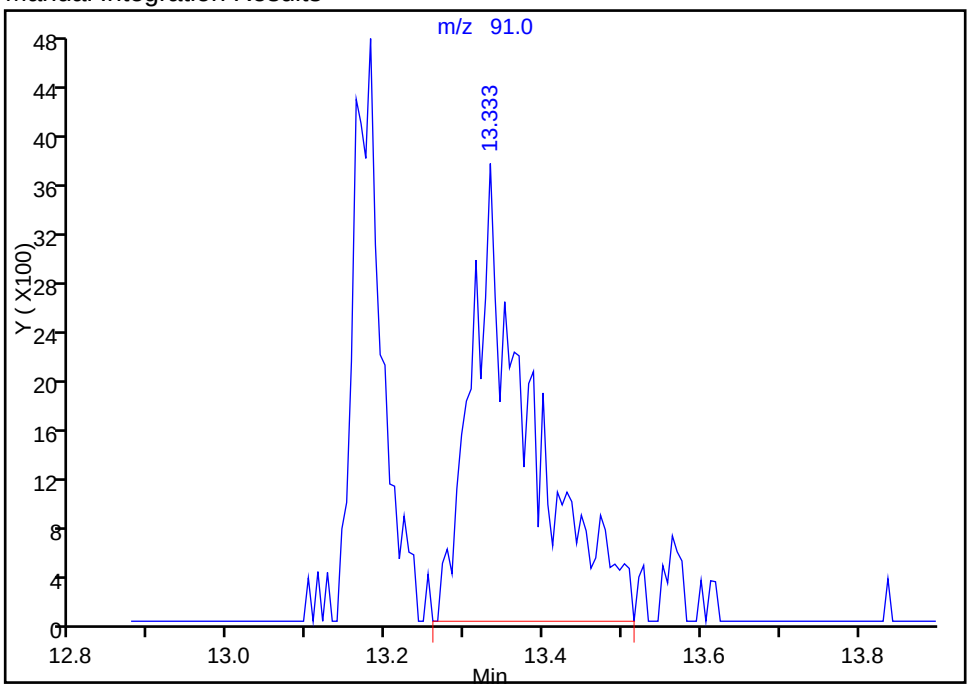
Processing Integration Results

RT: 13.31
Response: 4230
Amount: 24.217645



Manual Integration Results

RT: 13.33
Response: 19314
Amount: 21.852691



Reviewer: gordonk, 04-Mar-2014 12:15:14
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

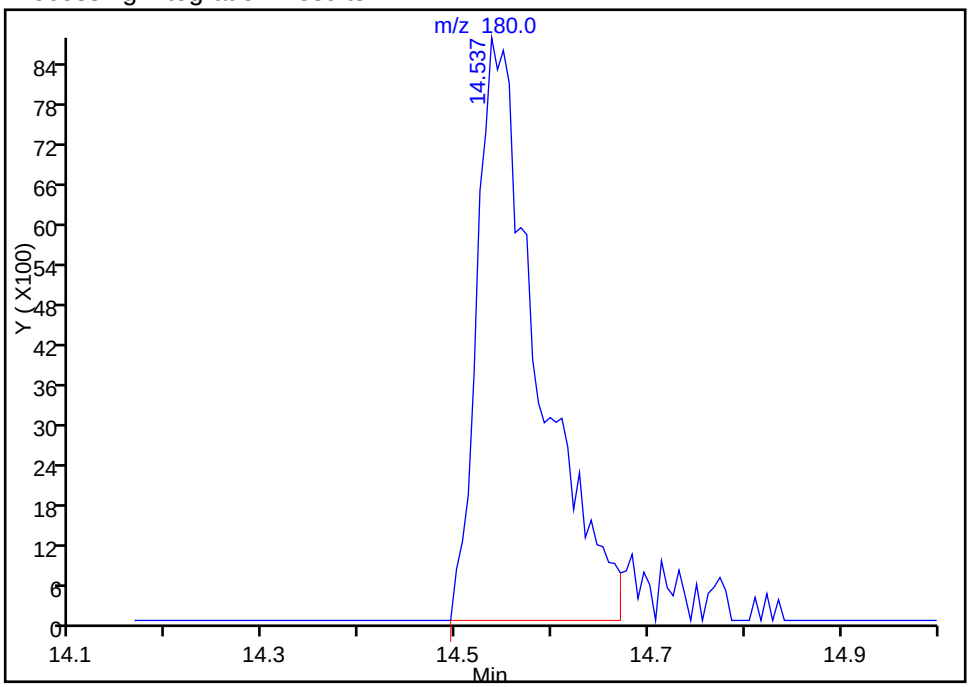
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140304-97.b\4062412.D				
Injection Date:	24-Jun-2013 15:03:30	Instrument ID:	CHHP4		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	11	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		

113 1,3,5-Trichlorobenzene, CAS: 108-70-3

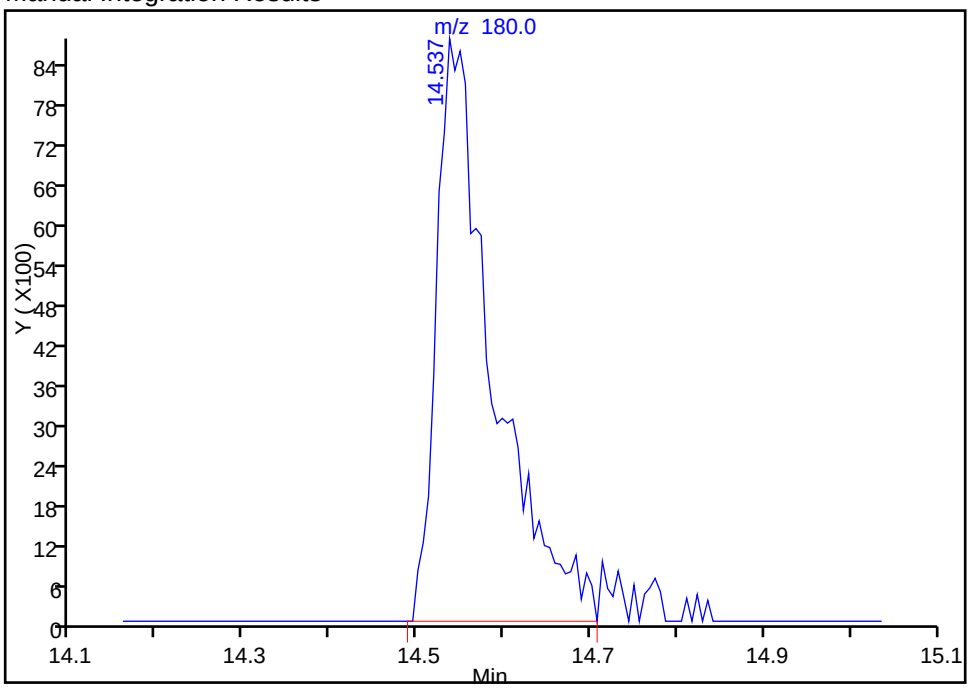
Processing Integration Results

RT: 14.54
Response: 38663
Amount: 27.438412



Manual Integration Results

RT: 14.54
Response: 39884
Amount: 28.165470



Reviewer: gordonk, 04-Mar-2014 12:15:14
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

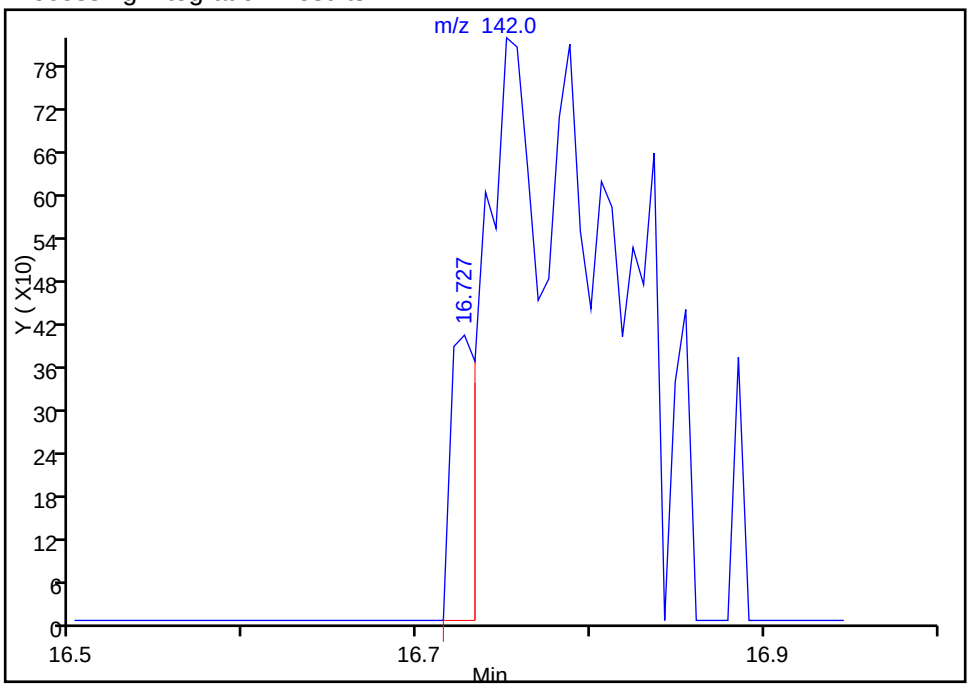
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140304-97.b\4062412.D				
Injection Date:	24-Jun-2013 15:03:30	Instrument ID:	CHHP4		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	11	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		

118 2-Methylnaphthalene, CAS: 91-57-6

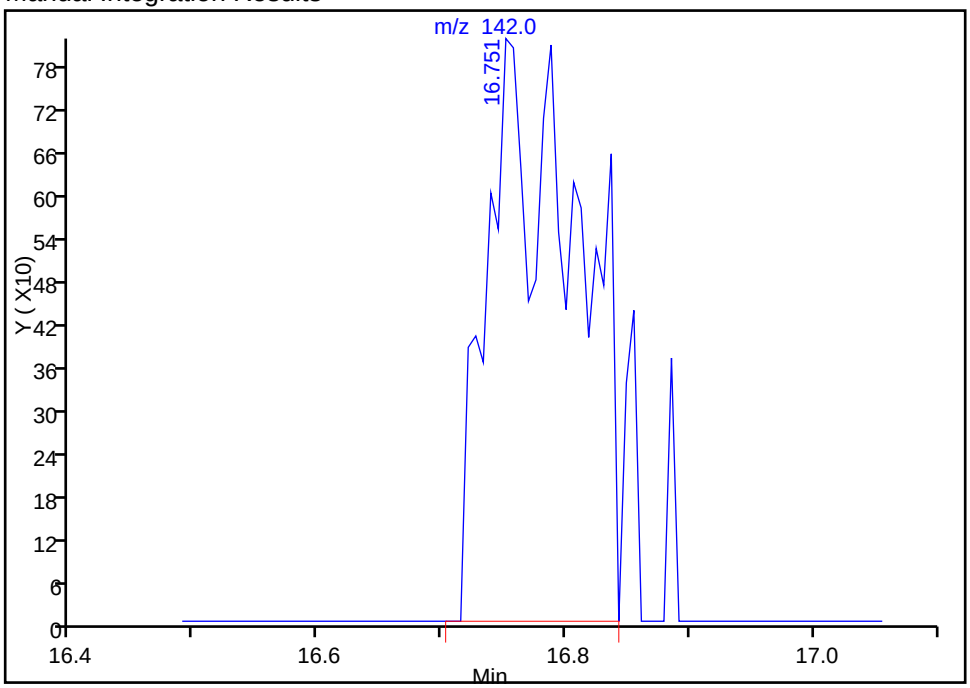
Processing Integration Results

RT: 16.73
Response: 420
Amount: 30.278054



Manual Integration Results

RT: 16.75
Response: 4105
Amount: 55.526030



Reviewer: gordonk, 04-Mar-2014 12:15:14
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062413.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 24-Jun-2013 15:43:30 ALS Bottle#: 12 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 4062313d.b,t8260bh2o.m,list2.sub =4062313D.B,T8260BH2O.M,LIST2.SUB
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub3

Method: \\PITCHROM\ChromData\CHHP4\20140304-97.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Mar-2014 12:37:00 Calib Date: 16-Dec-2013 16:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140220-45.b\4121613.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: gordonk Date: 04-Mar-2014 12:18:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.756	4.758	-0.002	93	211656	5000.0	
* 2 Fluorobenzene (IS)	96	7.677	7.678	-0.001	98	1185153	250.0	
* 3 Dioxane-d8 (IS)	96	8.400	8.402	-0.002	74	30832	5000.0	M
* 4 Chlorobenzene-d5	119	10.767	10.768	-0.001	85	238695	250.0	
* 5 1,4-Dichlorobenzene-d4	152	13.103	13.104	-0.001	95	309950	250.0	
18 Ethanol	45	3.382	3.395	-0.013	73	18962	2257.5	
26 Isopropyl alcohol	45	4.264	4.265	-0.001	75	16538	474.3	M
27 Acetonitrile	40	4.422	4.405	0.017	97	30817	534.9	
38 2-Chloro-1,3-butadiene	53	5.742	5.731	0.011	76	112070	48.8	
39 Isopropyl ether	45	5.754	5.750	0.004	89	221856	50.9	
40 Tert-butyl ethyl ether	59	6.216	6.212	0.004	94	164660	50.0	
44 Propionitrile	54	6.484	6.480	0.004	95	46053	432.6	
45 Ethyl acetate	43	6.509	6.498	0.010	96	66942	102.6	
46 Methacrylonitrile	41	6.655	6.650	0.004	93	255672	500.7	
58 Tert-amyl methyl ether	73	7.512	7.514	-0.002	93	121830	47.8	
57 Isooctane	57	7.512	7.514	-0.002	36	1734	38.7	
60 n-Butanol	56	8.060	8.043	0.017	76	6929	749.1	
62 Ethyl acrylate	55	8.218	8.207	0.011	82	37811	50.1	M
66 Methyl methacrylate	69	8.443	8.438	0.005	87	49339	93.1	
69 2-Nitropropane	41	8.838	8.828	0.010	94	13377	102.4	
70 2-Chloroethyl vinyl ether	63	8.918	8.907	0.011	88	43100	116.8	M
80 n-Butyl acetate	43	10.201	10.184	0.017	83	13828	66.1	
92 Cyclohexanone	55	11.947	11.906	0.041	62	16567	840.5	M
102 Pentachloroethane	167	12.720	12.715	0.005	83	37736	50.1	
108 1,2,3-Trimethylbenzene	105	13.170	13.165	0.005	96	249271	53.1	
109 Benzyl chloride	91	13.310	13.281	0.029	67	39224	40.8	
113 1,3,5-Trichlorobenzene	180	14.520	14.504	0.016	91	73314	47.6	
118 2-Methylnaphthalene	142	16.783	16.718	0.065	1	2937	33.0	M

QC Flag Legend

Review Flags
M - Manually Integrated

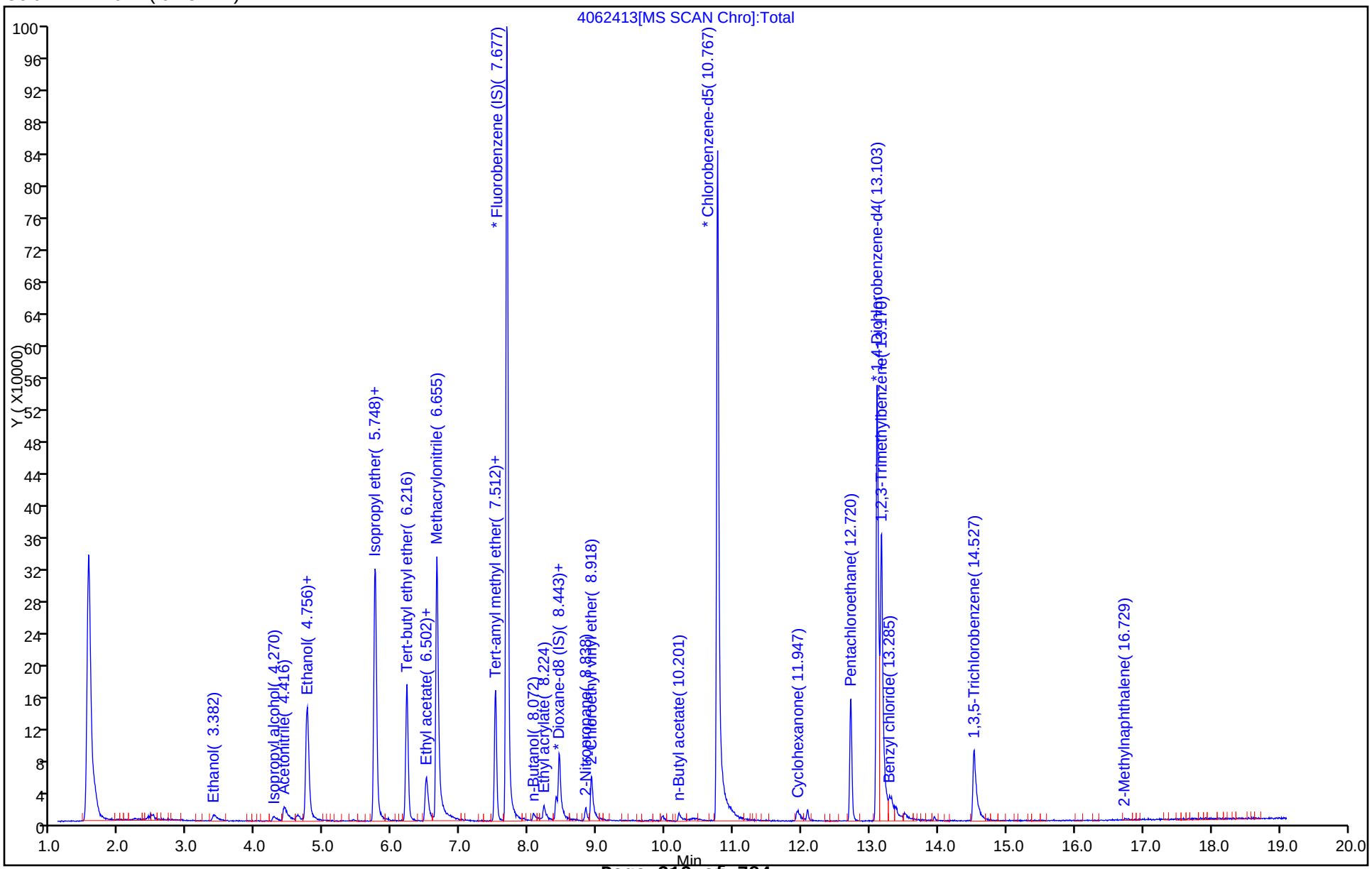
Report Date: 04-Mar-2014 12:37:01 Chrom Revision: 2.2 28-Feb-2014 15:12:04

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062413.D

Injection Date:	24-Jun-2013 15:43:30	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#:	12
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

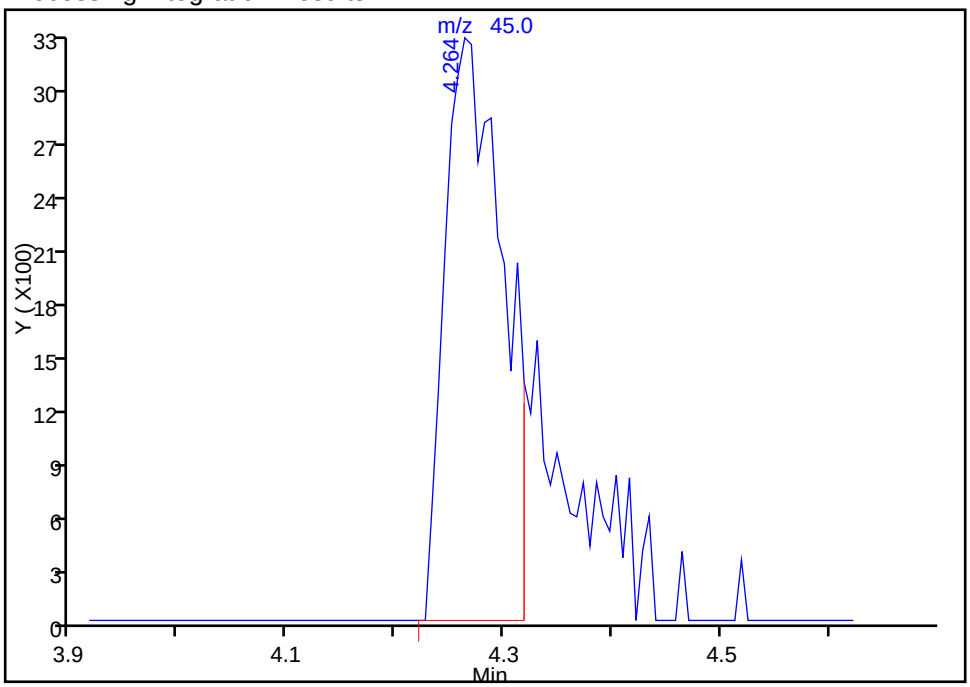
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062413.D
Injection Date: 24-Jun-2013 15:43:30 Instrument ID: CHHP4
Lims ID: ic
Client ID:
Operator ID: 034635 ALS Bottle#: 12 Worklist Smp#: 3
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

26 Isopropyl alcohol, CAS: 67-63-0

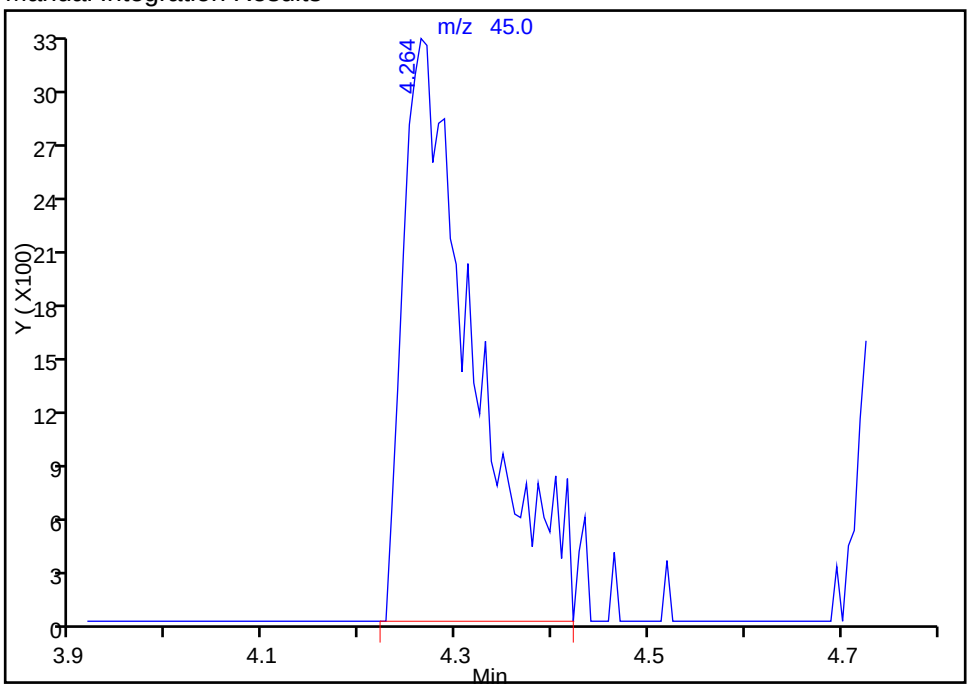
Processing Integration Results

RT: 4.26
Response: 12092
Amount: 317.9627



Manual Integration Results

RT: 4.26
Response: 16538
Amount: 474.2876



Reviewer: gordonk, 04-Mar-2014 12:18:14
Audit Action: Manually Integrated
Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

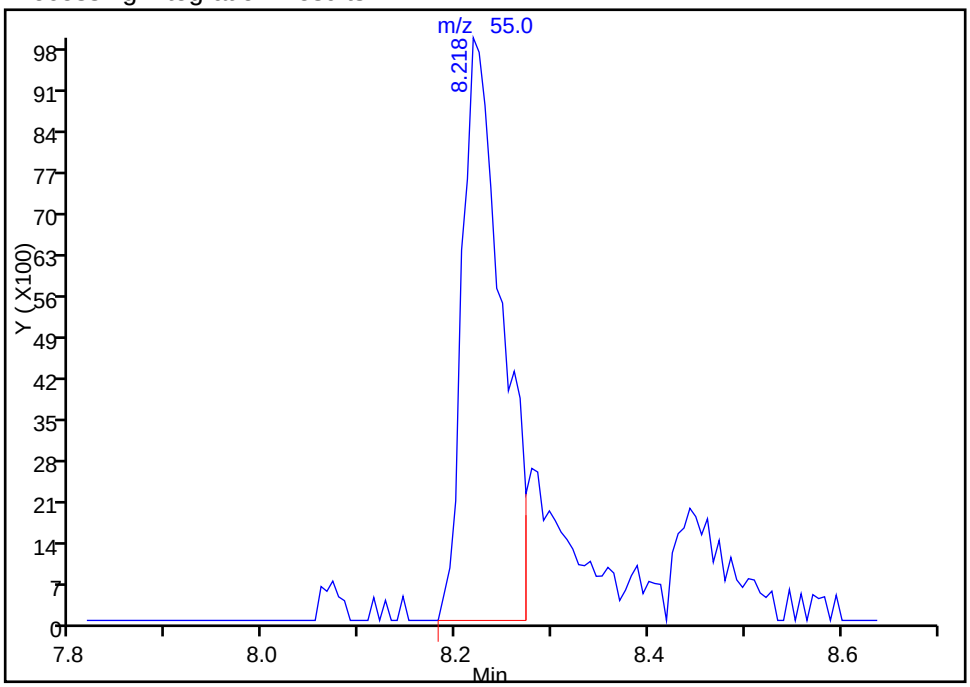
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140304-97.b\4062413.D				
Injection Date:	24-Jun-2013 15:43:30	Instrument ID:	CHHP4		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	12	Worklist Smp#:	3
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		

62 Ethyl acrylate, CAS: 140-88-5

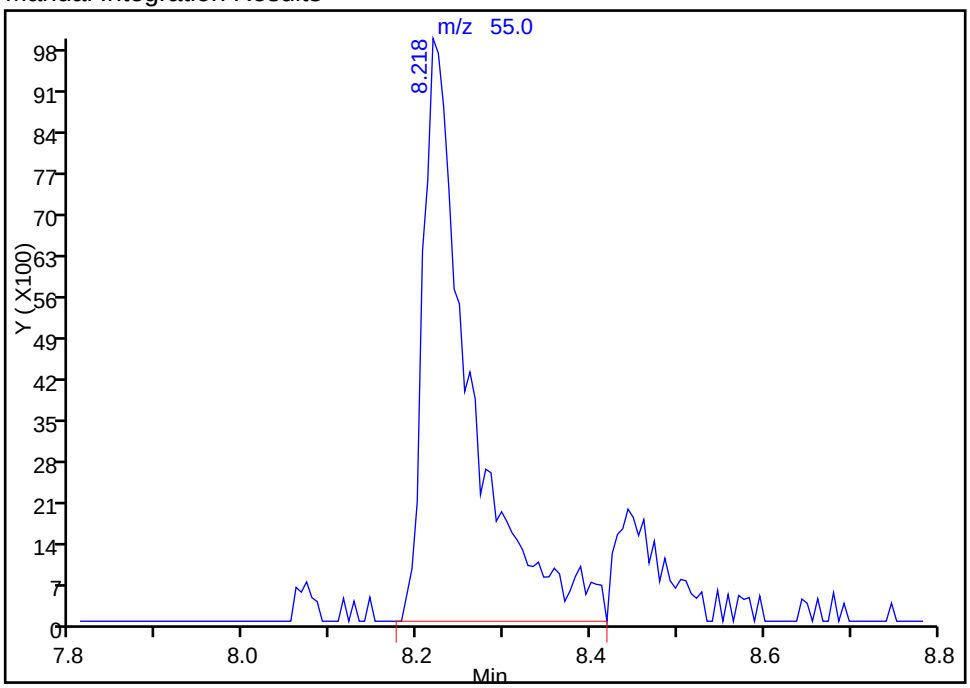
Processing Integration Results

RT: 8.22
Response: 28503
Amount: 39.123427



Manual Integration Results

RT: 8.22
Response: 37811
Amount: 50.071857



Reviewer: gordonk, 04-Mar-2014 12:18:14
Audit Action: Manually Integrated
Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

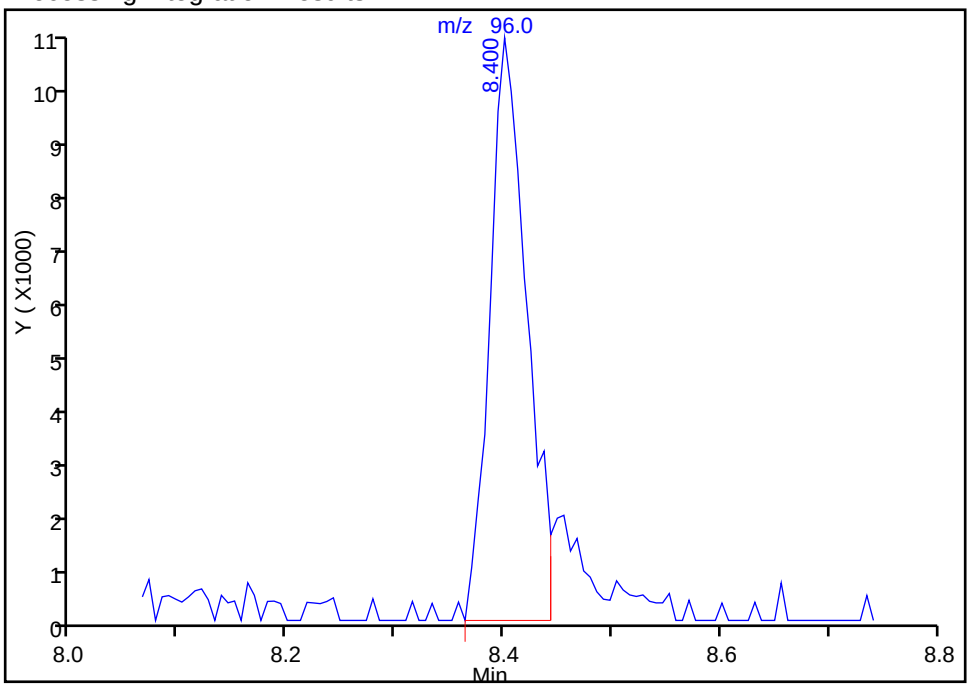
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062413.D
Injection Date: 24-Jun-2013 15:43:30 Instrument ID: CHHP4
Lims ID: ic
Client ID:
Operator ID: 034635 ALS Bottle#: 12 Worklist Smp#: 3
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

* 3 Dioxane-d8 (IS), CAS: 17647-74-4

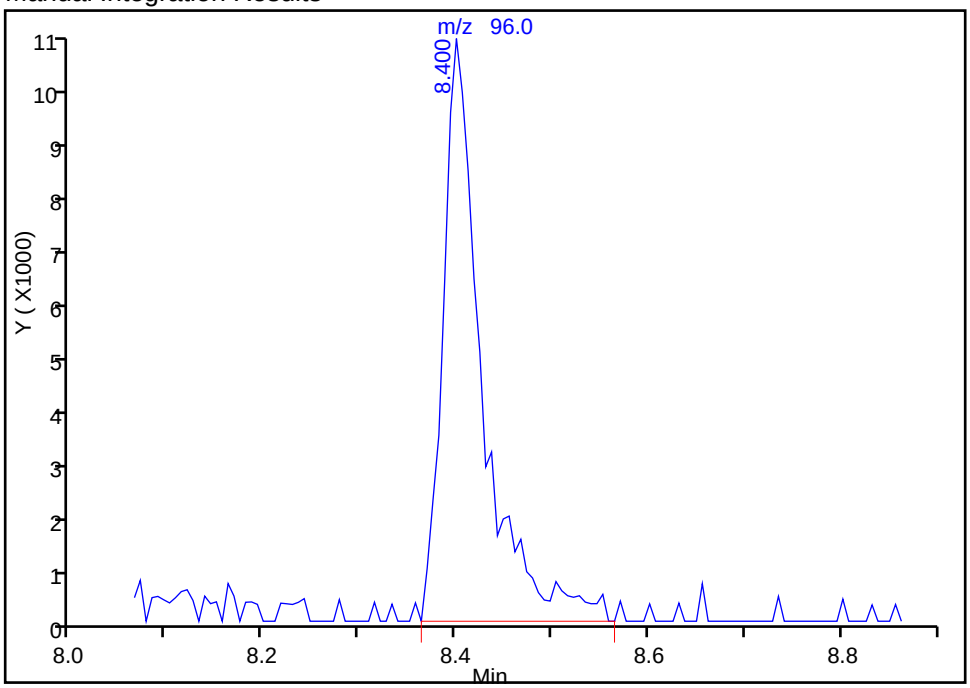
Processing Integration Results

RT: 8.40
Response: 25755
Amount: 5000.0000



Manual Integration Results

RT: 8.40
Response: 30832
Amount: 5000.0000



Reviewer: gordonk, 04-Mar-2014 12:18:14
Audit Action: Manually Integrated
Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

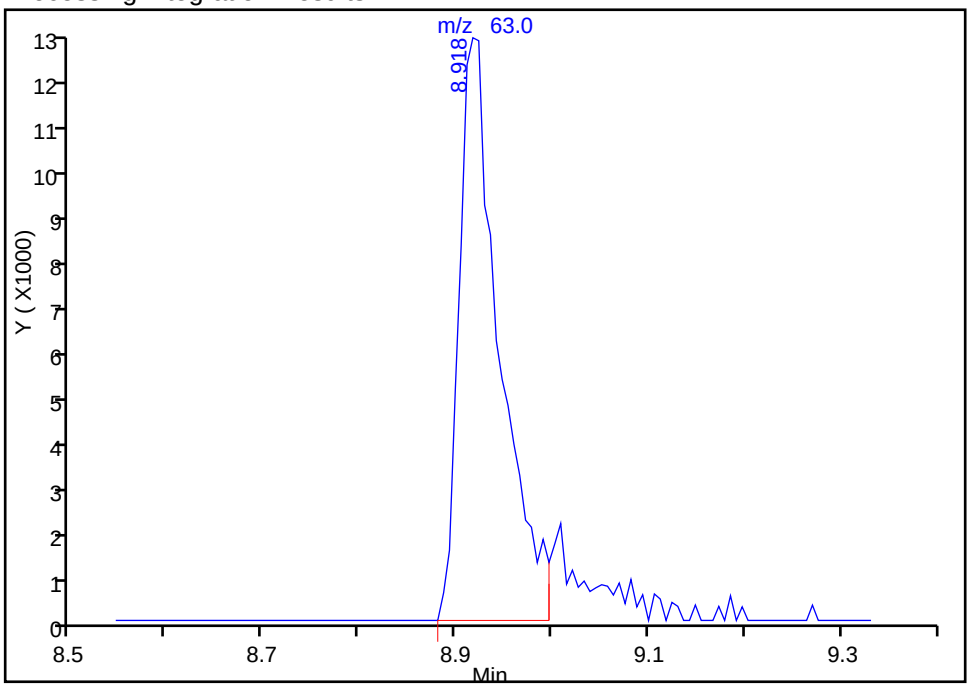
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062413.D
Injection Date: 24-Jun-2013 15:43:30 Instrument ID: CHHP4
Lims ID: ic
Client ID:
Operator ID: 034635 ALS Bottle#: 12 Worklist Smp#: 3
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

70 2-Chloroethyl vinyl ether, CAS: 110-75-8

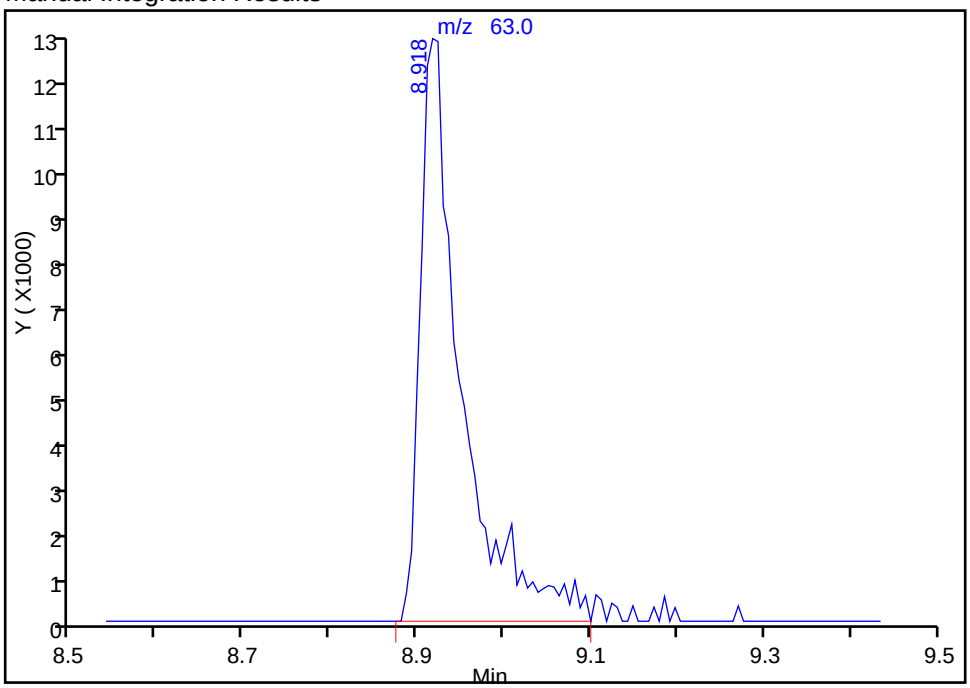
Processing Integration Results

RT: 8.92
Response: 38026
Amount: 125.8985



Manual Integration Results

RT: 8.92
Response: 43100
Amount: 116.8144



Reviewer: gordonk, 04-Mar-2014 12:18:14
Audit Action: Manually Integrated
Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

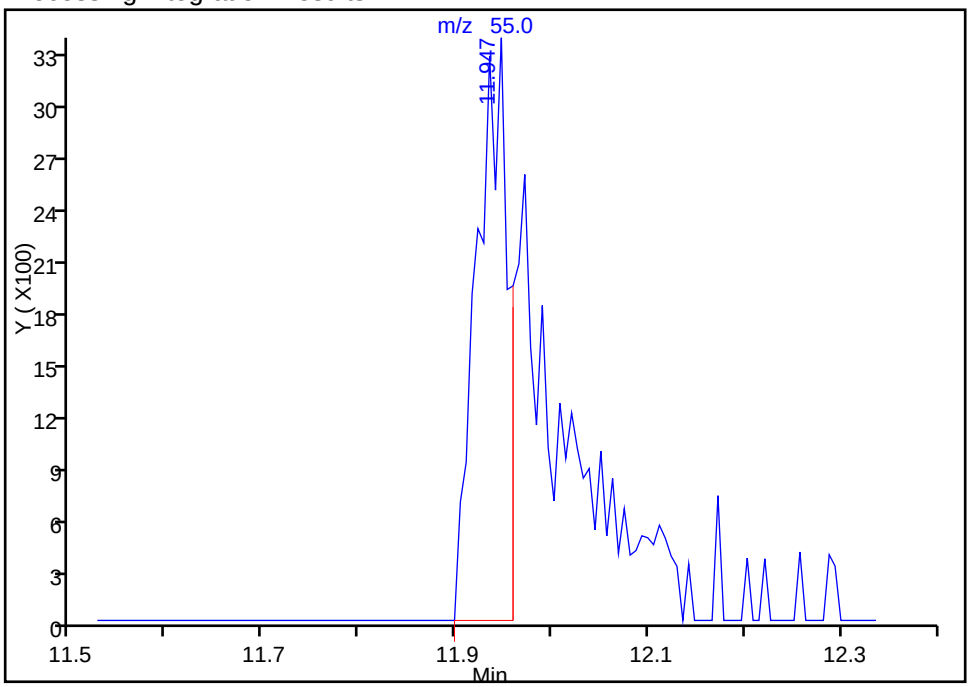
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140304-97.b\4062413.D				
Injection Date:	24-Jun-2013 15:43:30	Instrument ID:	CHHP4		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	12	Worklist Smp#:	3
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		

92 Cyclohexanone, CAS: 108-94-1

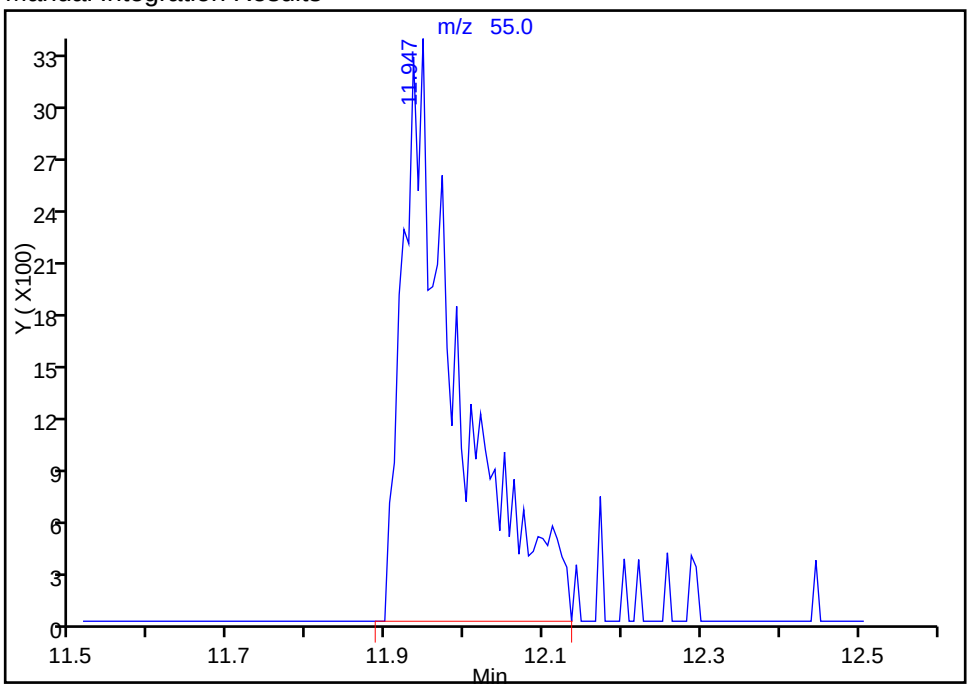
Processing Integration Results

RT: 11.95
Response: 7596
Amount: 520.6181



Manual Integration Results

RT: 11.95
Response: 16567
Amount: 840.4512



Reviewer: gordonk, 04-Mar-2014 12:18:14
Audit Action: Manually Integrated
Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

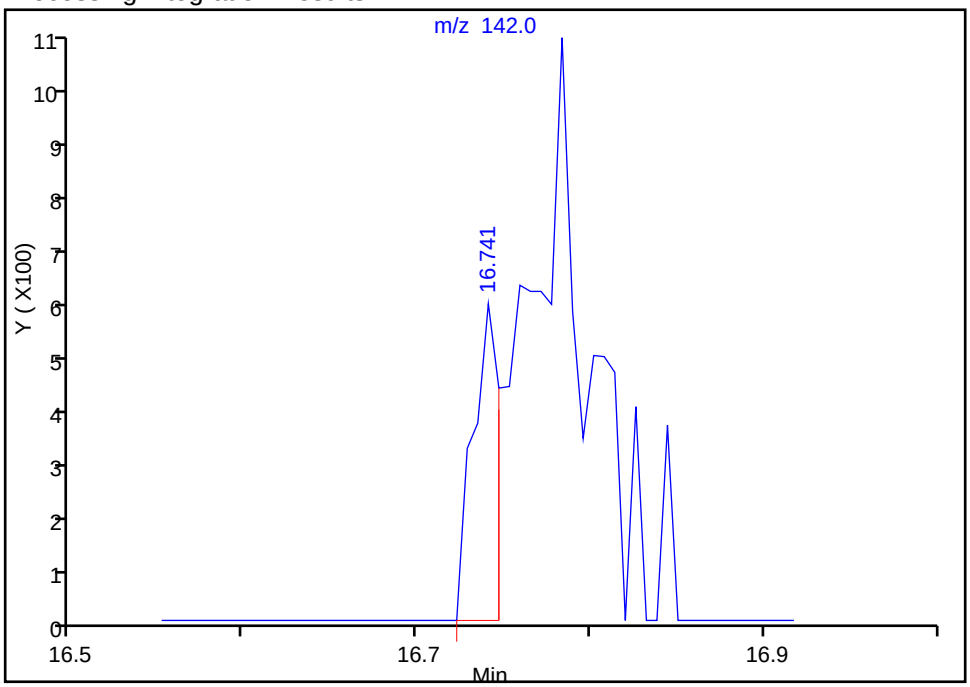
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140304-97.b\4062413.D				
Injection Date:	24-Jun-2013 15:43:30	Instrument ID:	CHHP4		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	12	Worklist Smp#:	3
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		

118 2-Methylnaphthalene, CAS: 91-57-6

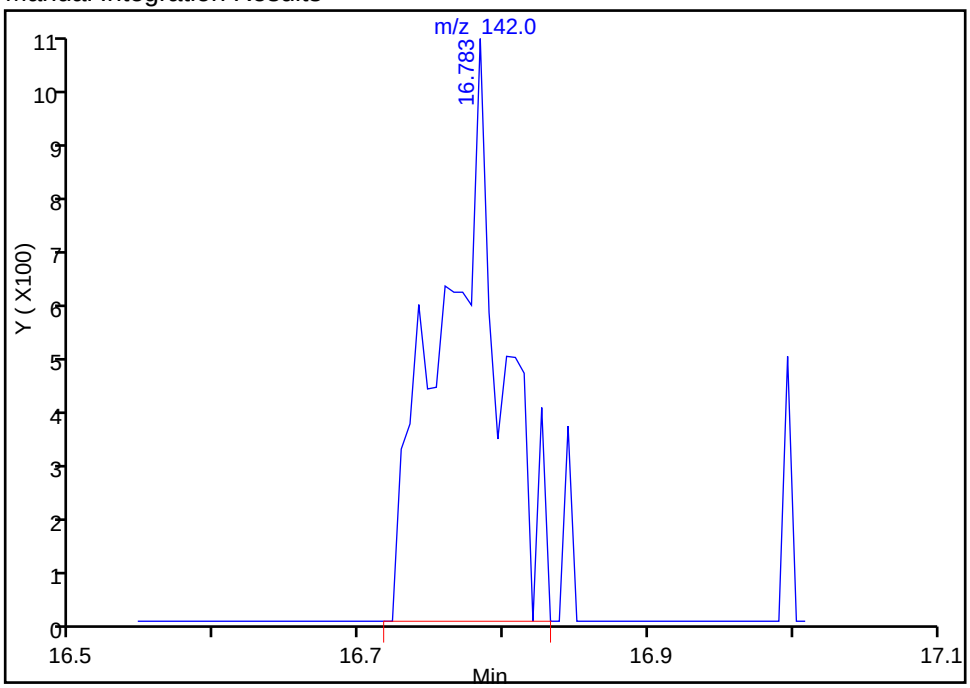
Processing Integration Results

RT: 16.74
Response: 596
Amount: 10.164035



Manual Integration Results

RT: 16.78
Response: 2937
Amount: 32.989569



Reviewer: gordonk, 04-Mar-2014 12:18:14
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062405.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 24-Jun-2013 11:49:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 4062313d.b,t8260bh2o.m,list2.sub =4062313D.B,T8260BH2O.M,LIST2.SUB
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub3

Method: \\PITCHROM\ChromData\CHHP4\20140304-97.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Mar-2014 12:36:53 Calib Date: 16-Dec-2013 16:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140220-45.b\4121613.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: gordonk Date: 04-Mar-2014 11:53:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.762	4.758	0.004	95	138597	5000.0	
* 2 Fluorobenzene (IS)	96	7.682	7.678	0.004	99	696345	250.0	
* 3 Dioxane-d8 (IS)	96	8.406	8.402	0.004	83	19895	5000.0	M
* 4 Chlorobenzene-d5	119	10.773	10.768	0.005	86	140557	250.0	
* 5 1,4-Dichlorobenzene-d4	152	13.103	13.104	-0.001	93	205875	250.0	
18 Ethanol	45	3.393	3.395	-0.002	97	37677	6850.2	
26 Isopropyl alcohol	45	4.257	4.265	-0.008	76	31112	1518.6	
27 Acetonitrile	40	4.422	4.405	0.017	96	51526	1522.1	
38 2-Chloro-1,3-butadiene	53	5.742	5.731	0.011	88	180224	133.4	
39 Isopropyl ether	45	5.754	5.750	0.004	94	353287	138.0	
40 Tert-butyl ethyl ether	59	6.216	6.212	0.004	95	265817	137.4	
44 Propionitrile	54	6.490	6.480	0.010	99	87946	1406.1	
45 Ethyl acetate	43	6.502	6.498	0.004	96	99362	259.2	
46 Methacrylonitrile	41	6.648	6.650	-0.002	92	437366	1457.8	
58 Tert-amyl methyl ether	73	7.512	7.514	-0.002	93	201431	134.5	
57 Isooctane	57	7.506	7.514	-0.008	33	3437	130.6	
60 n-Butanol	56	8.059	8.043	0.016	91	17560	3231.2	
62 Ethyl acrylate	55	8.212	8.207	0.005	95	59197	133.1	
66 Methyl methacrylate	69	8.443	8.438	0.005	91	84770	272.2	
69 2-Nitropropane	41	8.832	8.828	0.004	96	21559	280.2	
70 2-Chloroethyl vinyl ether	63	8.917	8.907	0.010	86	56694	212.2	
80 n-Butyl acetate	43	10.189	10.184	0.005	90	32597	125.5	
92 Cyclohexanone	55	11.916	11.906	0.010	81	38724	3435.9	M
102 Pentachloroethane	167	12.713	12.715	-0.002	86	64917	129.8	
108 1,2,3-Trimethylbenzene	105	13.164	13.165	-0.001	98	432739	138.7	
109 Benzyl chloride	91	13.285	13.281	0.004	79	74787	117.0	
113 1,3,5-Trichlorobenzene	180	14.514	14.504	0.010	94	125690	122.7	
118 2-Methylnaphthalene	142	16.741	16.718	0.023	1	5278	103.6	M

QC Flag Legend

Review Flags
M - Manually Integrated

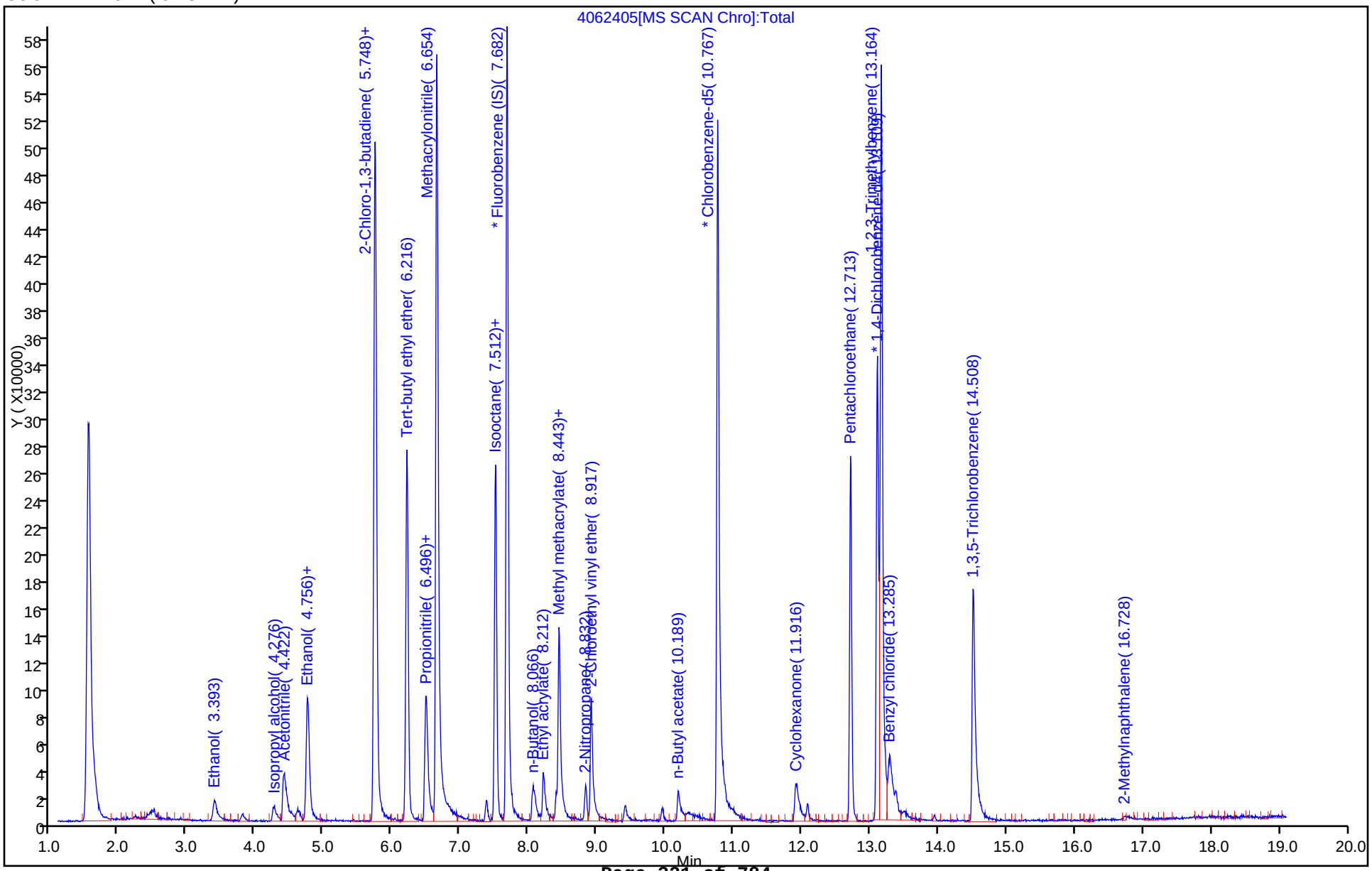
Report Date: 04-Mar-2014 12:36:53 Chrom Revision: 2.2 28-Feb-2014 15:12:04

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062405.D

Injection Date:	24-Jun-2013 11:49:30	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

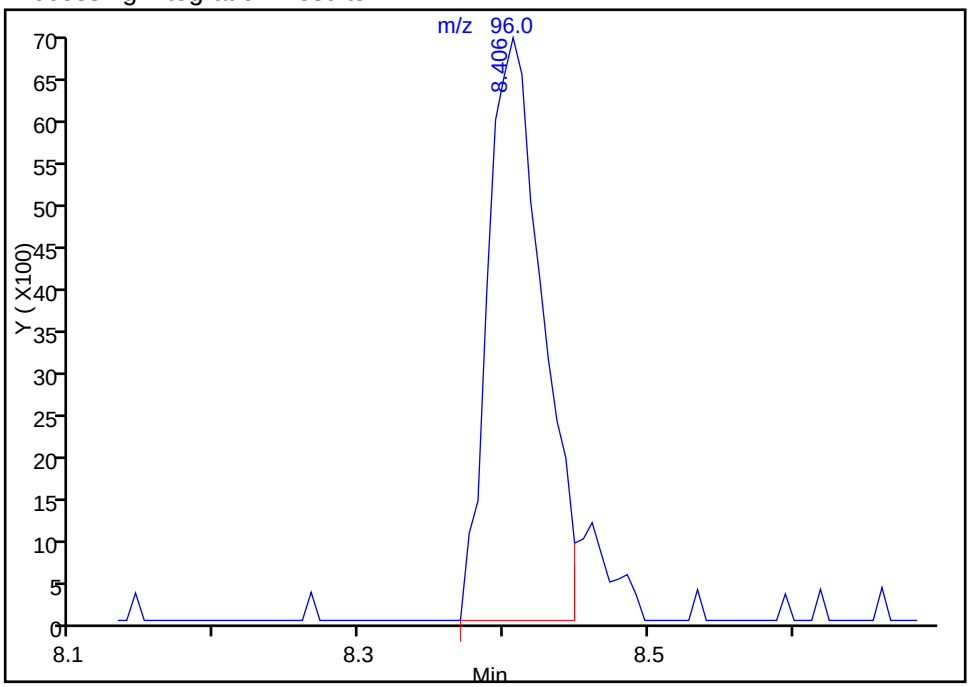
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062405.D
Injection Date: 24-Jun-2013 11:49:30 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

* 3 Dioxane-d8 (IS), CAS: 17647-74-4

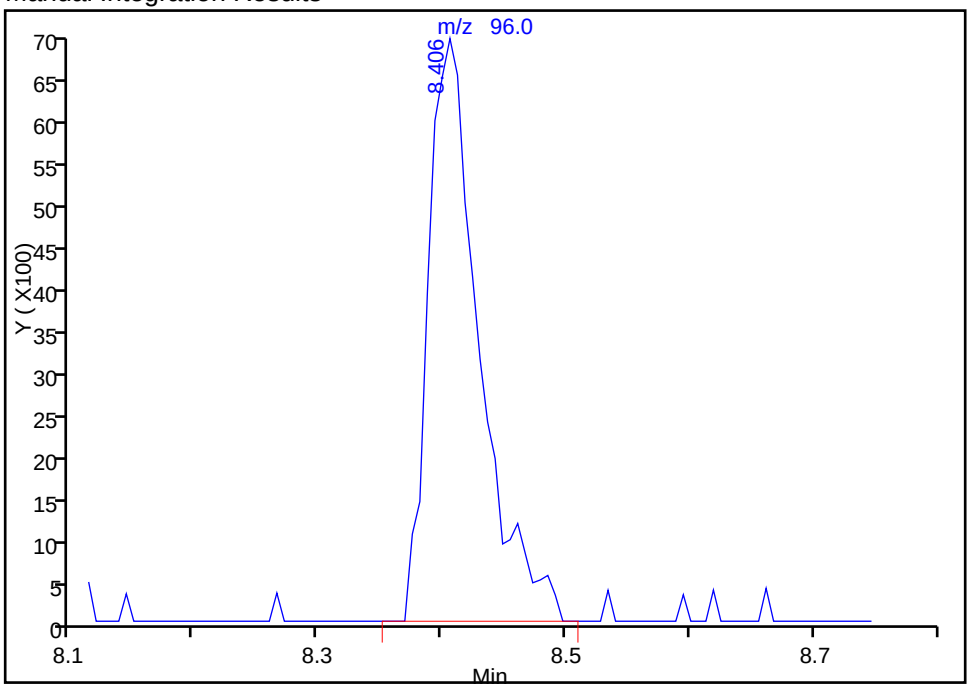
Processing Integration Results

RT: 8.41
Response: 18161
Amount: 5000.0000



Manual Integration Results

RT: 8.41
Response: 19895
Amount: 5000.0000



Reviewer: gordonk, 04-Mar-2014 12:08:08
Audit Action: Manually Integrated
Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

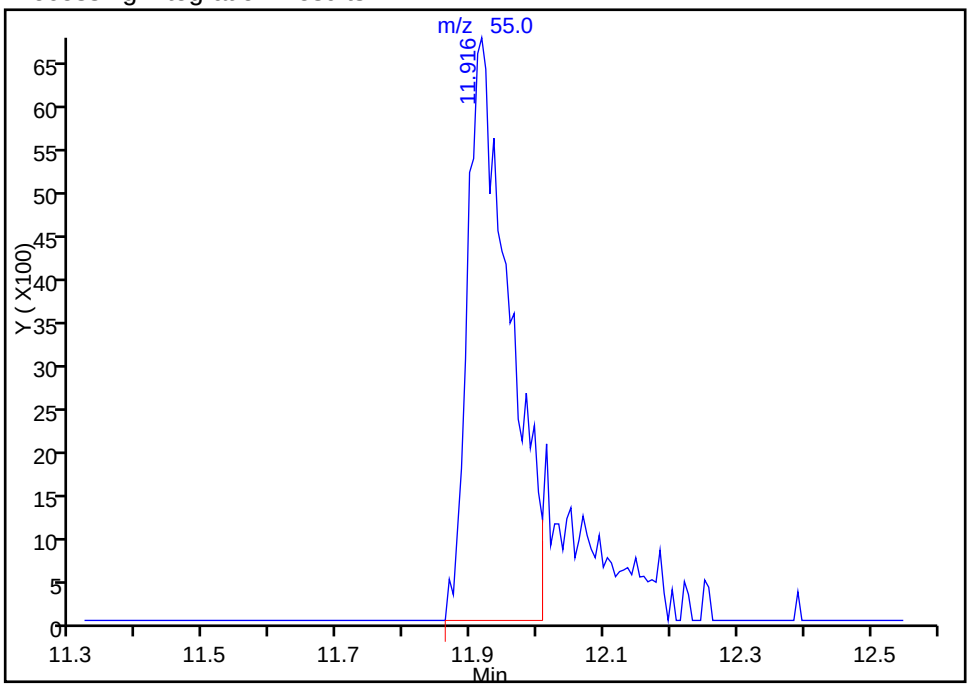
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140304-97.b\4062405.D				
Injection Date:	24-Jun-2013 11:49:30	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		

92 Cyclohexanone, CAS: 108-94-1

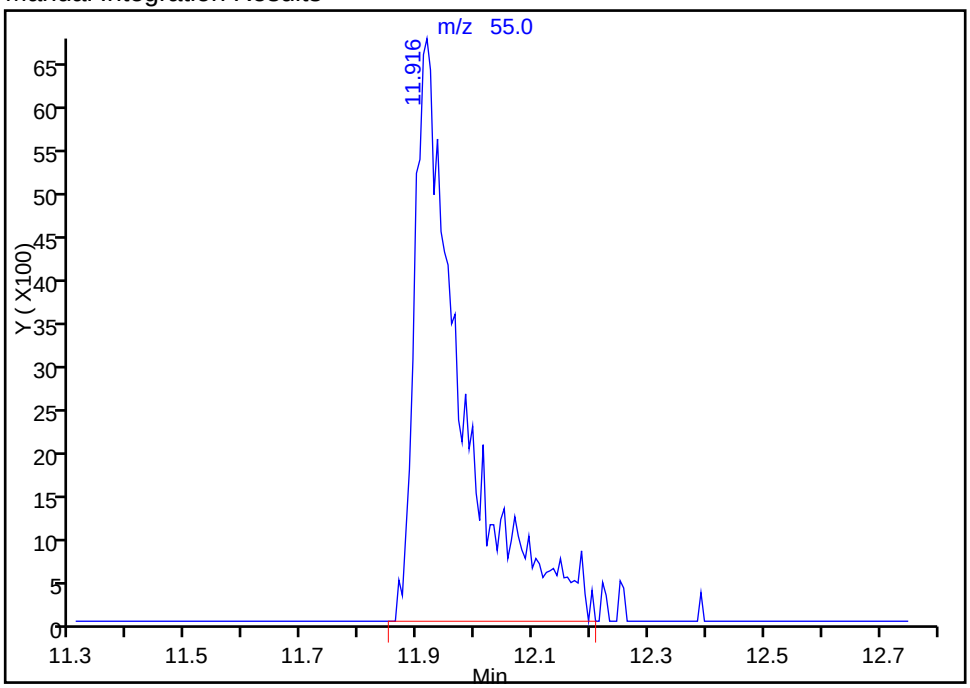
Processing Integration Results

RT: 11.92
Response: 29824
Amount: 2903.7625



Manual Integration Results

RT: 11.92
Response: 38724
Amount: 3435.8889



Reviewer: gordonk, 04-Mar-2014 12:08:08
Audit Action: Manually Integrated
Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

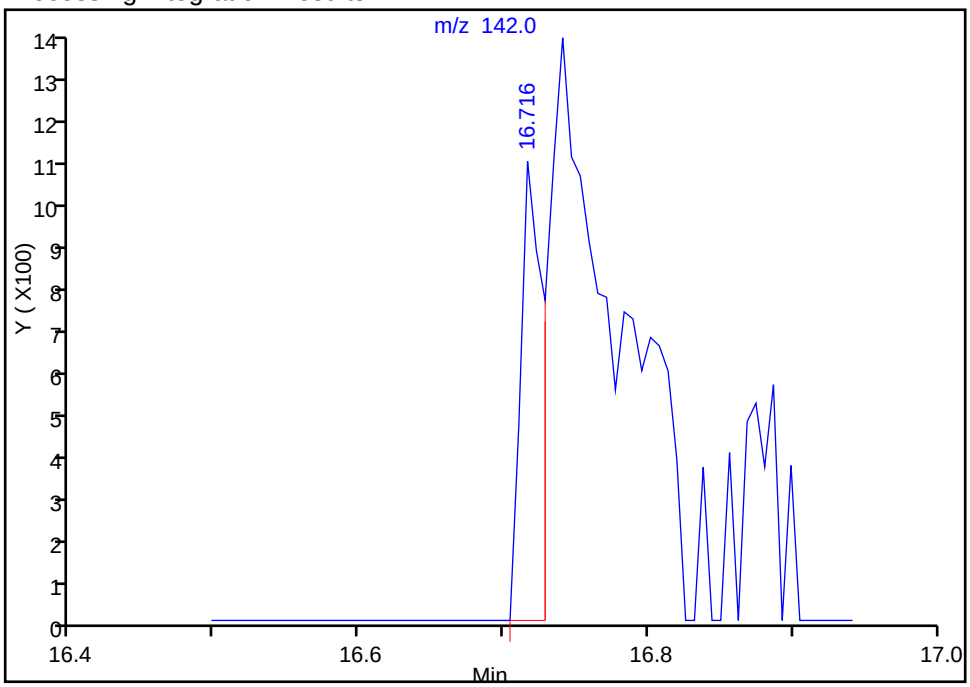
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140304-97.b\4062405.D				
Injection Date:	24-Jun-2013 11:49:30	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		

118 2-Methylnaphthalene, CAS: 91-57-6

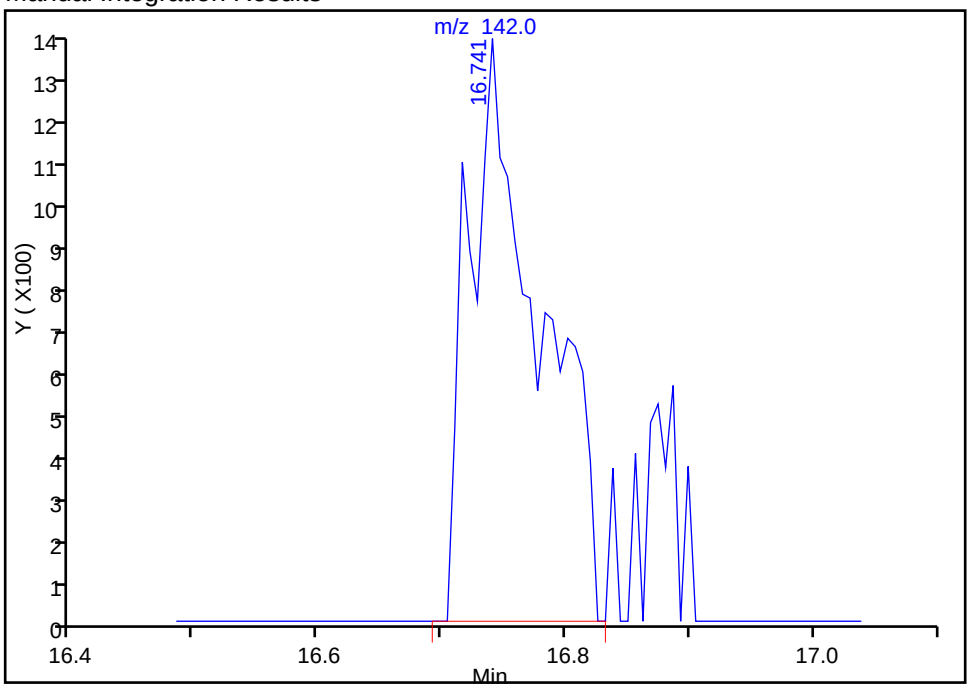
Processing Integration Results

RT: 16.72
Response: 1111
Amount: 45.490915



Manual Integration Results

RT: 16.74
Response: 5278
Amount: 103.6354



Reviewer: gordonk, 04-Mar-2014 12:08:08
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Report Date: 04-Mar-2014 12:36:55 Chrom Revision: 2.2 28-Feb-2014 15:12:04

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062406.D
Lims ID: icis
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 24-Jun-2013 12:17:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS
Misc. Info.: 4062313d.b,t8260bh2o.m,list2.sub =4062313D.B,T8260BH2O.M,LIST2.SUB
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub3

Method: \\PITCHROM\ChromData\CHHP4\20140304-97.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Mar-2014 12:36:54 Calib Date: 16-Dec-2013 16:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140220-45.b\4121613.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: gordonk Date: 04-Mar-2014 11:56:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.758	4.758	0.0	93	130061	5000.0	
* 2 Fluorobenzene (IS)	96	7.678	7.678	0.0	99	731582	250.0	
* 3 Dioxane-d8 (IS)	96	8.402	8.402	0.0	71	18822	5000.0	
* 4 Chlorobenzene-d5	119	10.768	10.768	0.0	86	162532	250.0	
* 5 1,4-Dichlorobenzene-d4	152	13.104	13.104	0.0	94	211946	250.0	
18 Ethanol	45	3.395	3.395	0.0	91	55004	10657	
26 Isopropyl alcohol	45	4.265	4.265	0.0	85	45035	2092.3	M
27 Acetonitrile	40	4.405	4.405	0.0	100	75170	2113.7	
38 2-Chloro-1,3-butadiene	53	5.731	5.731	0.0	92	287185	202.4	
39 Isopropyl ether	45	5.750	5.750	0.0	95	556333	206.9	
40 Tert-butyl ethyl ether	59	6.212	6.212	0.0	96	419771	206.5	
44 Propionitrile	54	6.480	6.480	0.0	99	133690	2034.6	
45 Ethyl acetate	43	6.498	6.498	0.0	98	144864	359.7	
46 Methacrylonitrile	41	6.650	6.650	0.0	92	646688	2051.7	
58 Tert-amyl methyl ether	73	7.514	7.514	0.0	94	324486	206.3	
57 Isooctane	57	7.514	7.514	0.0	34	5974	216.1	
60 n-Butanol	56	8.043	8.043	0.0	91	25718	4504.4	
62 Ethyl acrylate	55	8.207	8.207	0.0	97	96842	188.3	
66 Methyl methacrylate	69	8.438	8.438	0.0	90	124429	380.3	
69 2-Nitropropane	41	8.828	8.828	0.0	98	32130	361.1	
70 2-Chloroethyl vinyl ether	63	8.907	8.907	0.0	89	97522	322.1	
80 n-Butyl acetate	43	10.184	10.184	0.0	95	56236	163.0	
92 Cyclohexanone	55	11.906	11.906	0.0	85	48570	3721.8	
102 Pentachloroethane	167	12.715	12.715	0.0	84	110994	215.5	
108 1,2,3-Trimethylbenzene	105	13.165	13.165	0.0	98	688602	214.4	
109 Benzyl chloride	91	13.281	13.281	0.0	90	129695	197.1	
113 1,3,5-Trichlorobenzene	180	14.504	14.504	0.0	96	214910	203.9	
118 2-Methylnaphthalene	142	16.718	16.718	0.0	1	12768	232.8	M

QC Flag Legend

Review Flags
M - Manually Integrated

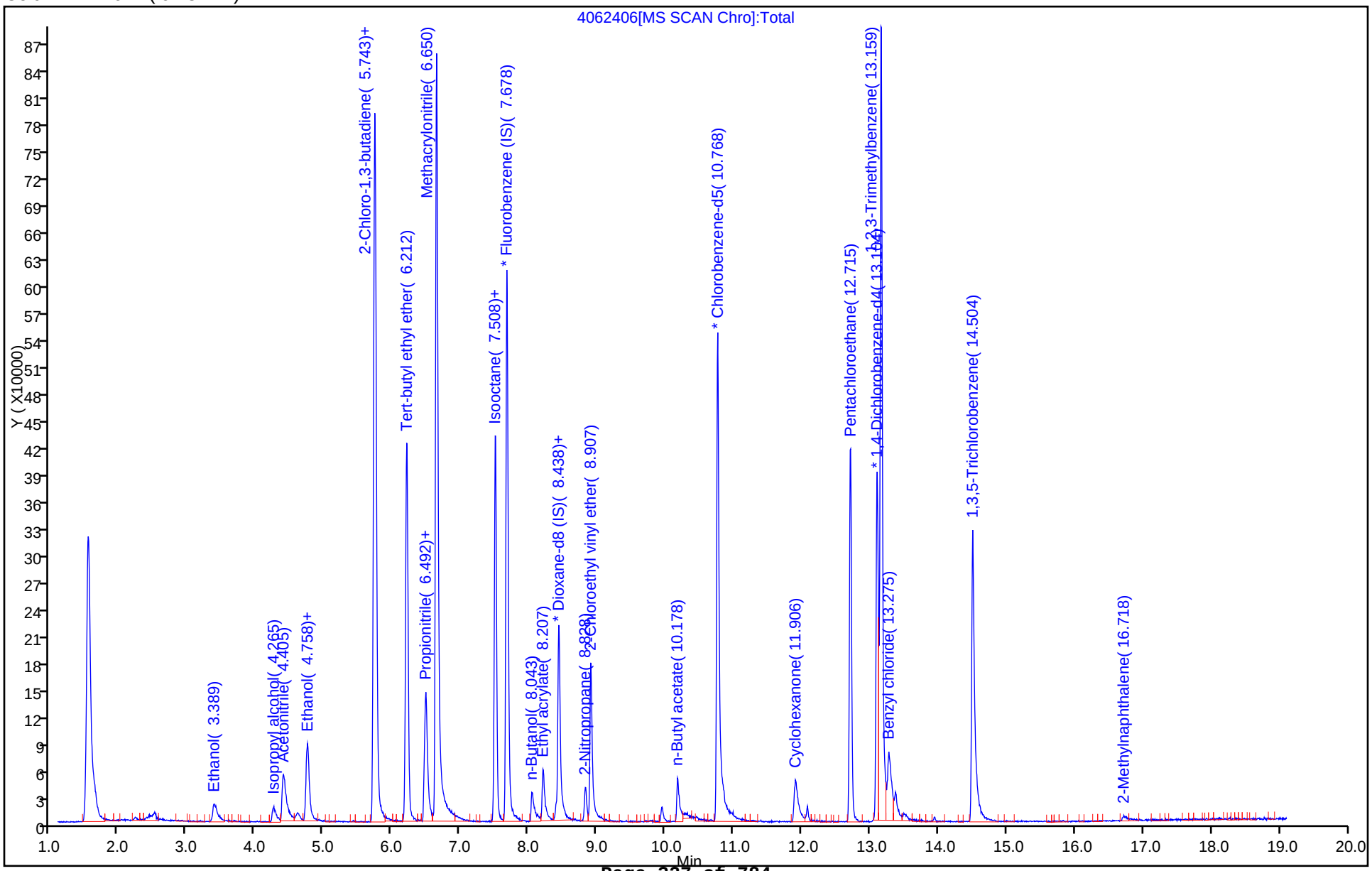
Report Date: 04-Mar-2014 12:36:55 Chrom Revision: 2.2 28-Feb-2014 15:12:04

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062406.D

Injection Date:	24-Jun-2013 12:17:30	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#:	5
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

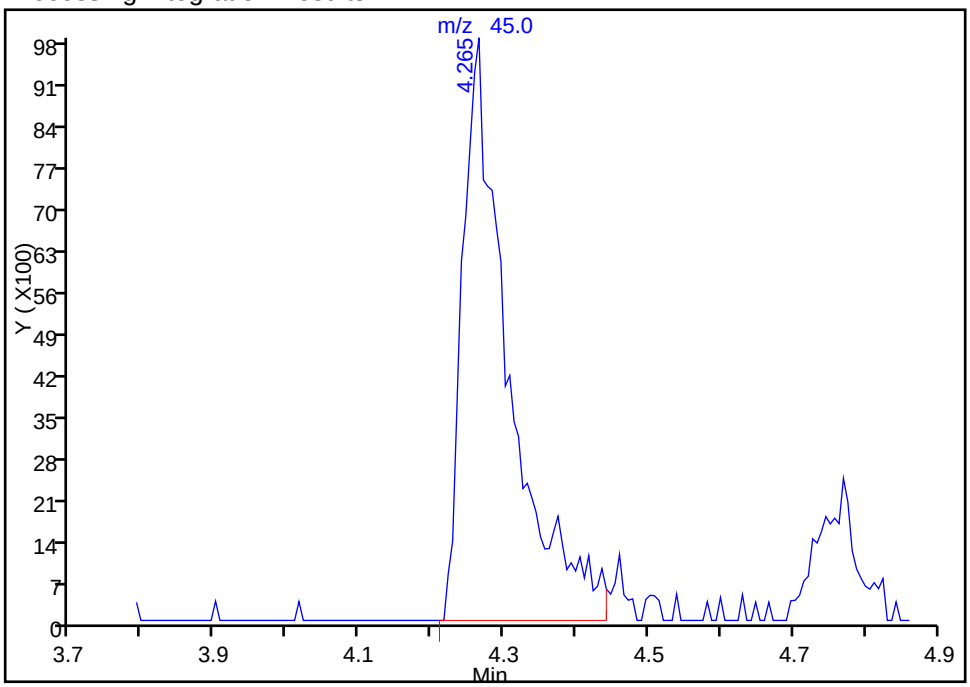
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140304-97.b\4062406.D				
Injection Date:	24-Jun-2013 12:17:30	Instrument ID:	CHHP4		
Lims ID:	icis				
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		

26 Isopropyl alcohol, CAS: 67-63-0

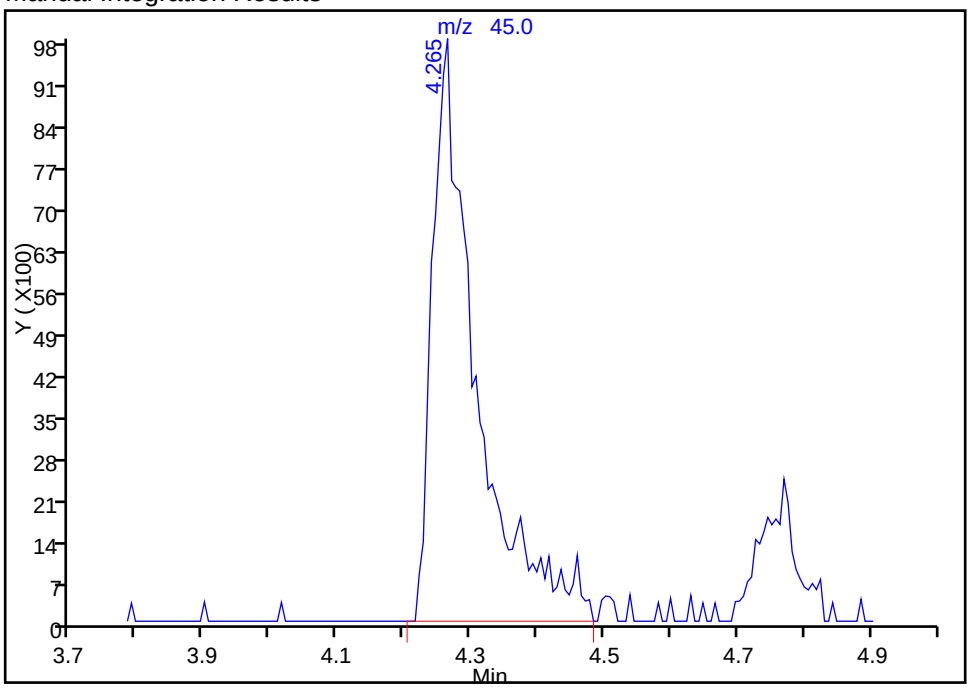
Processing Integration Results

RT: 4.27
Response: 43824
Amount: 2098.1586



Manual Integration Results

RT: 4.27
Response: 45035
Amount: 2092.2827



Reviewer: gordonk, 04-Mar-2014 12:05:57
Audit Action: Manually Integrated
Audit Reason: Peak Tail

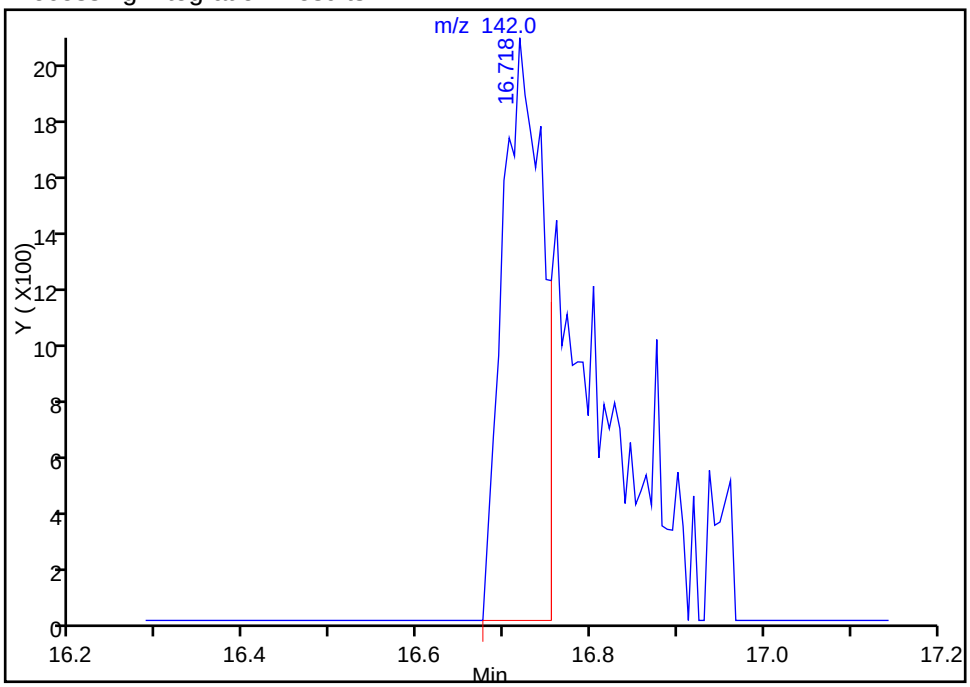
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062406.D
Injection Date: 24-Jun-2013 12:17:30 Instrument ID: CHHP4
Lims ID: icis
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

118 2-Methylnaphthalene, CAS: 91-57-6

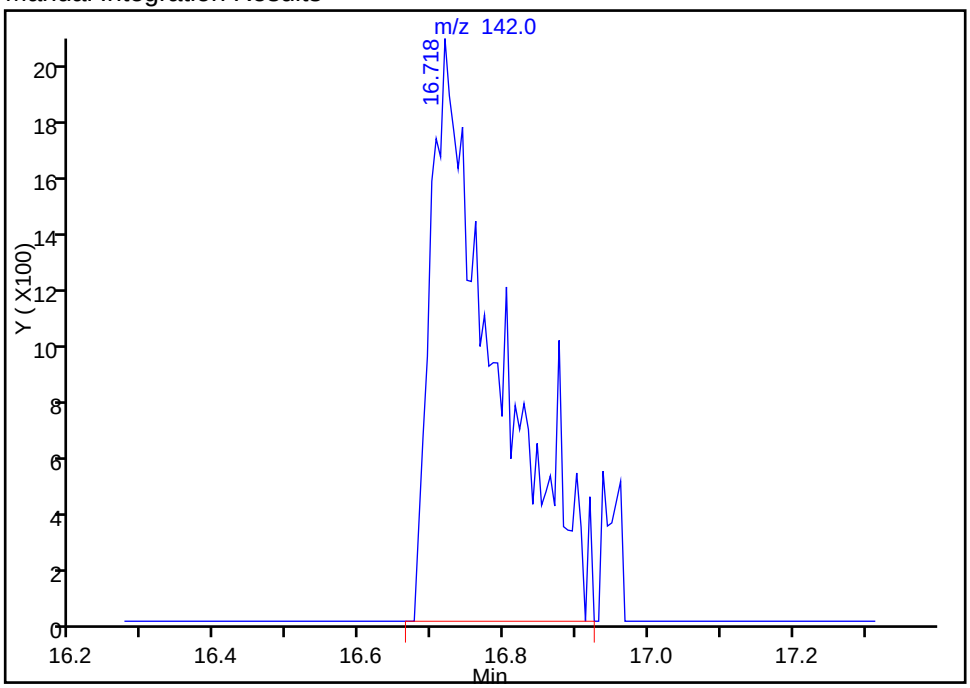
Processing Integration Results

RT: 16.72
Response: 6483
Amount: 192.9351



Manual Integration Results

RT: 16.72
Response: 12768
Amount: 232.7614



Reviewer: gordonk, 04-Mar-2014 12:05:57
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062407.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 24-Jun-2013 12:47:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 4062313d.b,t8260bh2o.m,list2.sub =4062313D.B,T8260BH2O.M,LIST2.SUB
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub3

Method: \\PITCHROM\ChromData\CHHP4\20140304-97.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Mar-2014 12:36:55 Calib Date: 16-Dec-2013 16:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140220-45.b\4121613.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: gordonk Date: 04-Mar-2014 12:09:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.758	4.758	0.0	91	129469	5000.0	
* 2 Fluorobenzene (IS)	96	7.678	7.678	0.0	99	758261	250.0	
* 3 Dioxane-d8 (IS)	96	8.402	8.402	0.0	74	21088	5000.0	M
* 4 Chlorobenzene-d5	119	10.768	10.768	0.0	84	162042	250.0	
* 5 1,4-Dichlorobenzene-d4	152	13.098	13.104	-0.006	88	215894	250.0	
18 Ethanol	45	3.401	3.395	0.006	94	64602	12574	
26 Isopropyl alcohol	45	4.259	4.265	-0.006	93	57849	2593.0	
27 Acetonitrile	40	4.399	4.405	-0.006	99	89288	2422.3	
38 2-Chloro-1,3-butadiene	53	5.737	5.731	0.006	89	375318	255.2	
39 Isopropyl ether	45	5.749	5.750	-0.001	96	701629	251.8	
40 Tert-butyl ethyl ether	59	6.212	6.212	0.0	95	529274	251.2	
44 Propionitrile	54	6.479	6.480	-0.001	98	162293	2383.0	
45 Ethyl acetate	43	6.498	6.498	0.0	98	199022	476.8	
46 Methacrylonitrile	41	6.650	6.650	0.0	92	825695	2527.4	
58 Tert-amyl methyl ether	73	7.507	7.514	-0.007	93	410586	251.9	
57 Isooctane	57	7.501	7.514	-0.013	34	7122	248.5	
60 n-Butanol	56	8.049	8.043	0.006	85	43413	7336.1	
62 Ethyl acrylate	55	8.207	8.207	0.0	96	133558	260.5	
66 Methyl methacrylate	69	8.438	8.438	0.0	89	170152	501.7	
69 2-Nitropropane	41	8.828	8.828	0.0	98	41832	471.6	
70 2-Chloroethyl vinyl ether	63	8.907	8.907	0.0	92	148284	453.9	
80 n-Butyl acetate	43	10.172	10.184	-0.012	97	88176	226.0	
92 Cyclohexanone	55	11.900	11.906	-0.006	90	62680	4786.8	
102 Pentachloroethane	167	12.715	12.715	0.0	88	137488	262.0	
108 1,2,3-Trimethylbenzene	105	13.165	13.165	0.0	98	869704	265.8	
109 Benzyl chloride	91	13.281	13.281	0.0	94	168453	251.3	
113 1,3,5-Trichlorobenzene	180	14.503	14.504	-0.001	97	274277	255.4	
118 2-Methylnaphthalene	142	16.700	16.718	-0.018	7	12065	217.8	

QC Flag Legend

Review Flags
M - Manually Integrated

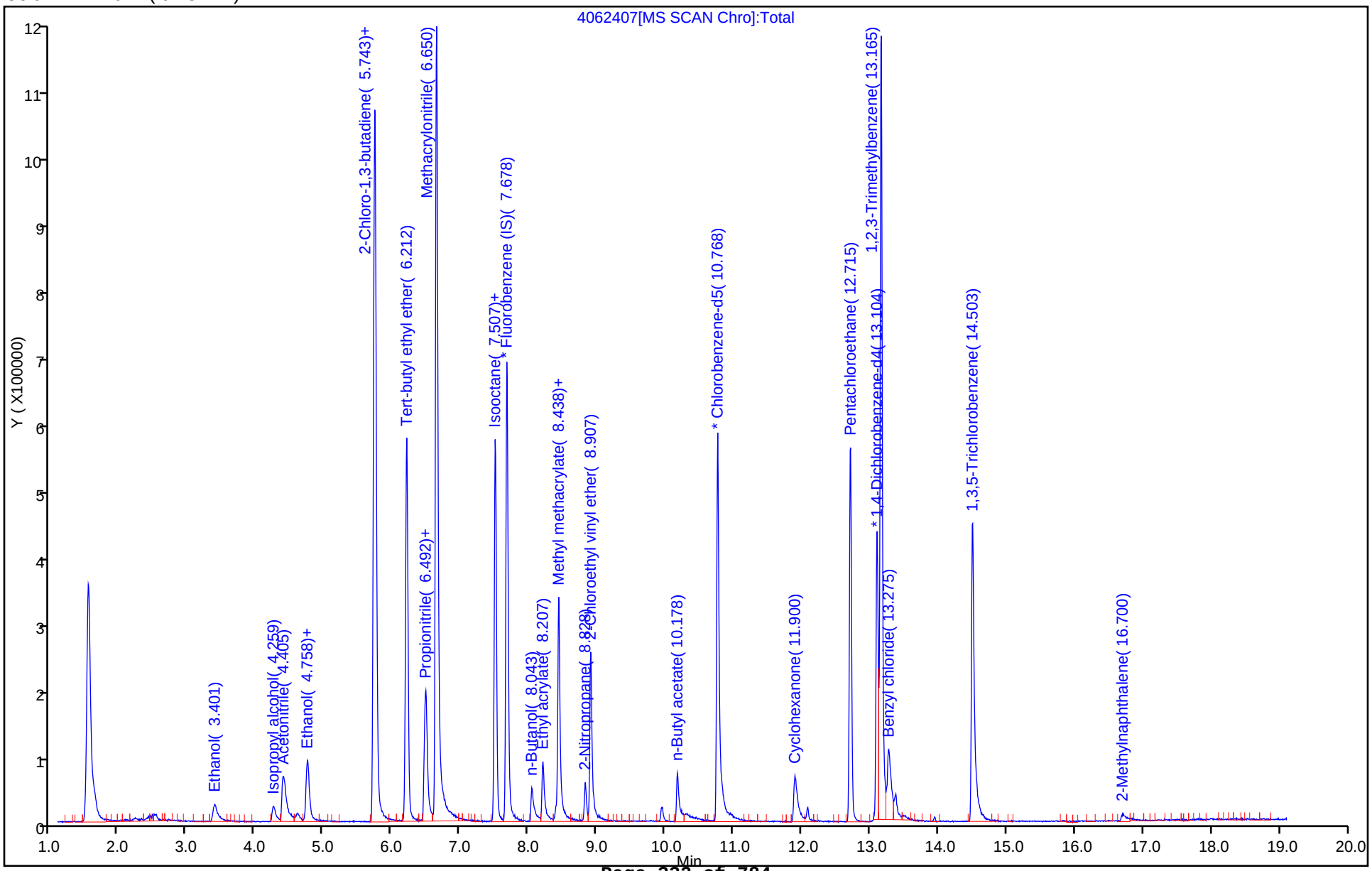
Report Date: 04-Mar-2014 12:36:56 Chrom Revision: 2.2 28-Feb-2014 15:12:04

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062407.D

Injection Date:	24-Jun-2013 12:47:30	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

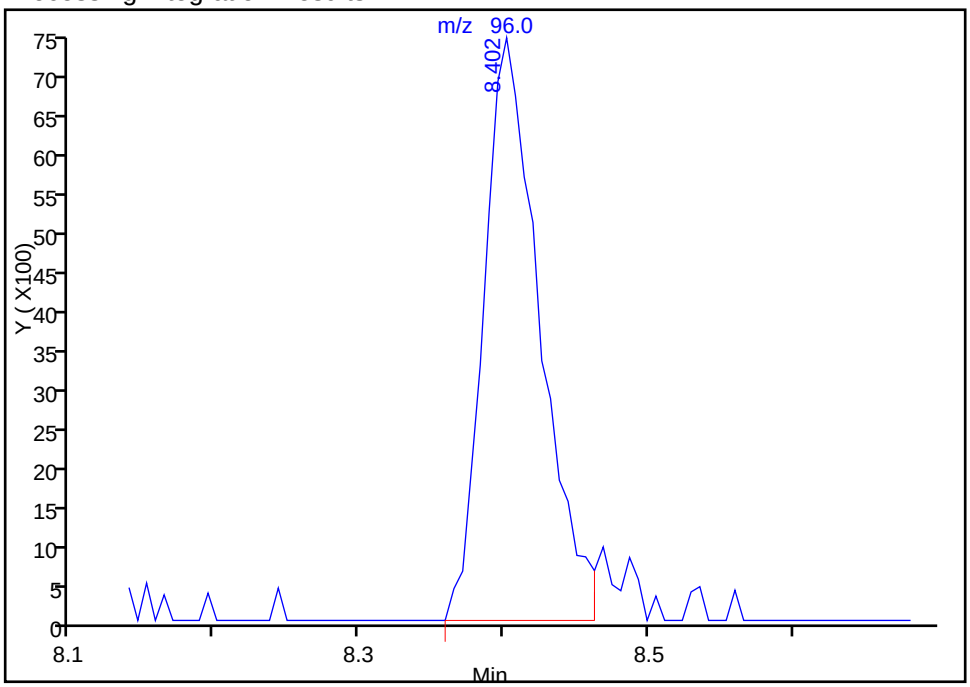
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140304-97.b\4062407.D				
Injection Date:	24-Jun-2013 12:47:30	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		

* 3 Dioxane-d8 (IS), CAS: 17647-74-4

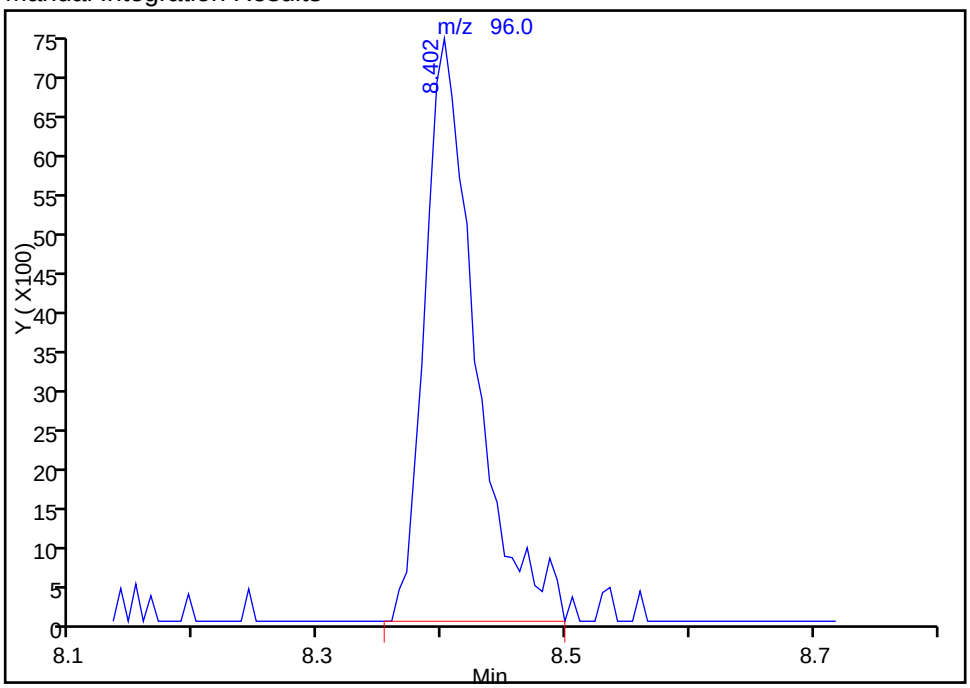
Processing Integration Results

RT: 8.40
Response: 19964
Amount: 5000.0000



Manual Integration Results

RT: 8.40
Response: 21088
Amount: 5000.0000



Reviewer: gordonk, 04-Mar-2014 12:09:11
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062408.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 24-Jun-2013 13:14:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 4062313d.b,t8260bh2o.m,list2.sub =4062313D.B,T8260BH2O.M,LIST2.SUB
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub3

Method: \\PITCHROM\ChromData\CHHP4\20140304-97.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Mar-2014 12:36:56 Calib Date: 16-Dec-2013 16:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140220-45.b\4121613.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: gordonk Date: 04-Mar-2014 12:10:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.786	4.758	0.028	92	124463	5000.0	
* 2 Fluorobenzene (IS)	96	7.675	7.678	-0.003	98	742172	250.0	
* 3 Dioxane-d8 (IS)	96	8.411	8.402	0.009	5	19371	5000.0	M
* 4 Chlorobenzene-d5	119	10.766	10.768	-0.002	85	172371	250.0	
* 5 1,4-Dichlorobenzene-d4	152	13.102	13.104	-0.002	92	237723	250.0	
18 Ethanol	45	3.429	3.395	0.034	96	146724	29706	
26 Isopropyl alcohol	45	4.275	4.265	0.010	95	129977	5952.4	
27 Acetonitrile	40	4.402	4.405	-0.003	99	221547	6140.7	
38 2-Chloro-1,3-butadiene	53	5.735	5.731	0.004	89	888929	617.6	
39 Isopropyl ether	45	5.753	5.750	0.003	96	1610664	590.5	
40 Tert-butyl ethyl ether	59	6.215	6.212	0.003	94	1243776	603.0	
44 Propionitrile	54	6.471	6.480	-0.009	99	431825	6477.9	
45 Ethyl acetate	43	6.489	6.498	-0.009	99	507174	1241.3	
46 Methacrylonitrile	41	6.647	6.650	-0.003	91	1865183	5833.0	
58 Tert-amyl methyl ether	73	7.511	7.514	-0.003	93	993477	622.6	
57 Isooctane	57	7.505	7.514	-0.009	34	19407	692.0	
60 n-Butanol	56	8.034	8.043	-0.009	90	123415	21307	
62 Ethyl acrylate	55	8.198	8.207	-0.009	98	344483	631.7	
66 Methyl methacrylate	69	8.436	8.438	-0.002	91	418919	1262.1	
69 2-Nitropropane	41	8.825	8.828	-0.003	97	107569	1140.0	
70 2-Chloroethyl vinyl ether	63	8.904	8.907	-0.003	92	429844	1266.2	
80 n-Butyl acetate	43	10.163	10.184	-0.021	98	362045	649.1	
92 Cyclohexanone	55	11.885	11.906	-0.021	92	185391	12502	
102 Pentachloroethane	167	12.712	12.715	-0.003	87	337371	584.0	
108 1,2,3-Trimethylbenzene	105	13.157	13.165	-0.008	98	2001496	555.5	
109 Benzyl chloride	91	13.260	13.281	-0.021	98	534665	724.5	
113 1,3,5-Trichlorobenzene	180	14.489	14.504	-0.015	96	735346	621.9	
118 2-Methylnaphthalene	142	16.679	16.718	-0.039	50	49559	631.6	M

QC Flag Legend

Review Flags
M - Manually Integrated

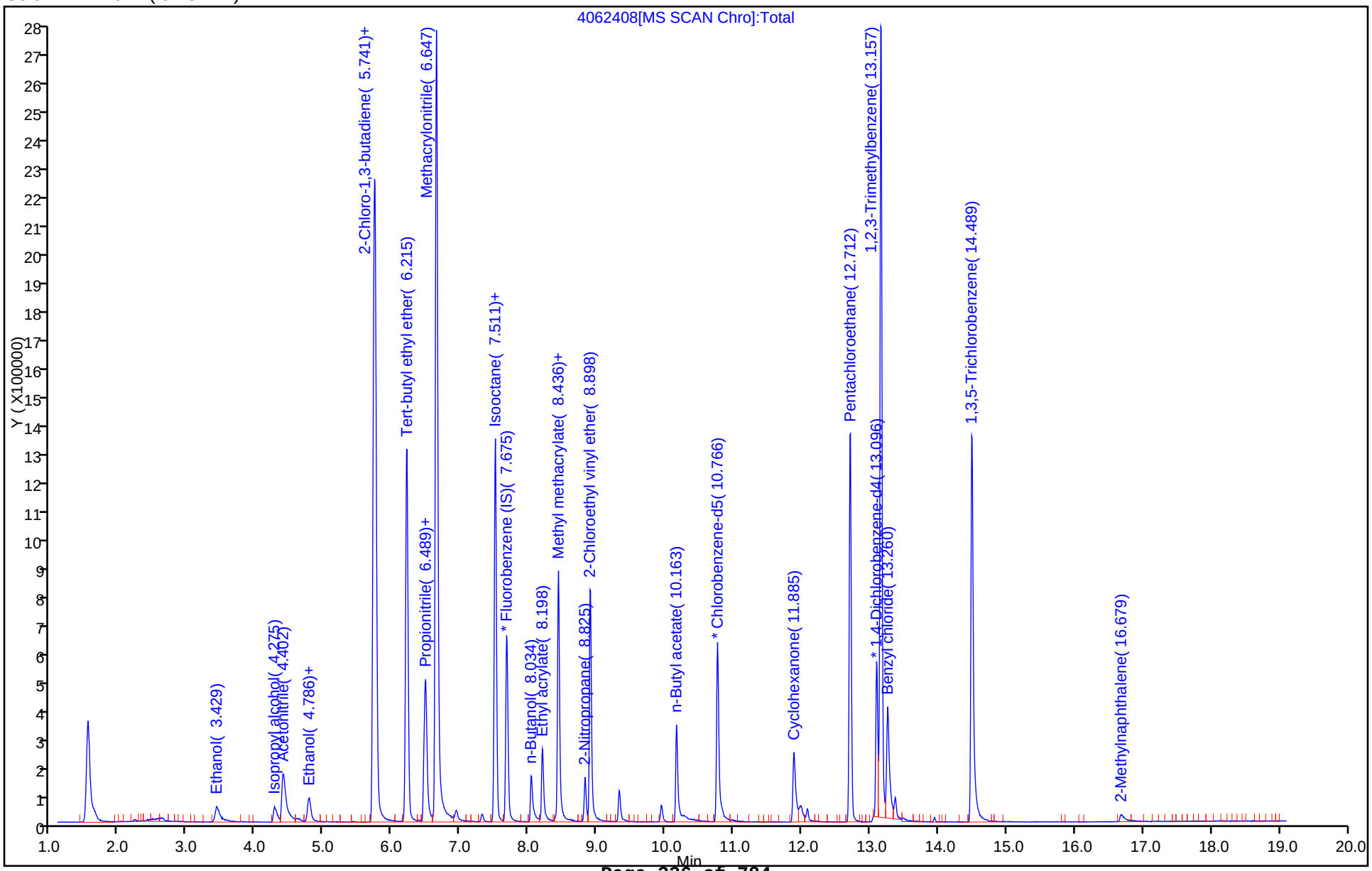
Report Date: 04-Mar-2014 12:36:57 Chrom Revision: 2.2 28-Feb-2014 15:12:04

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062408.D

Injection Date:	24-Jun-2013 13:14:30	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#:	7
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

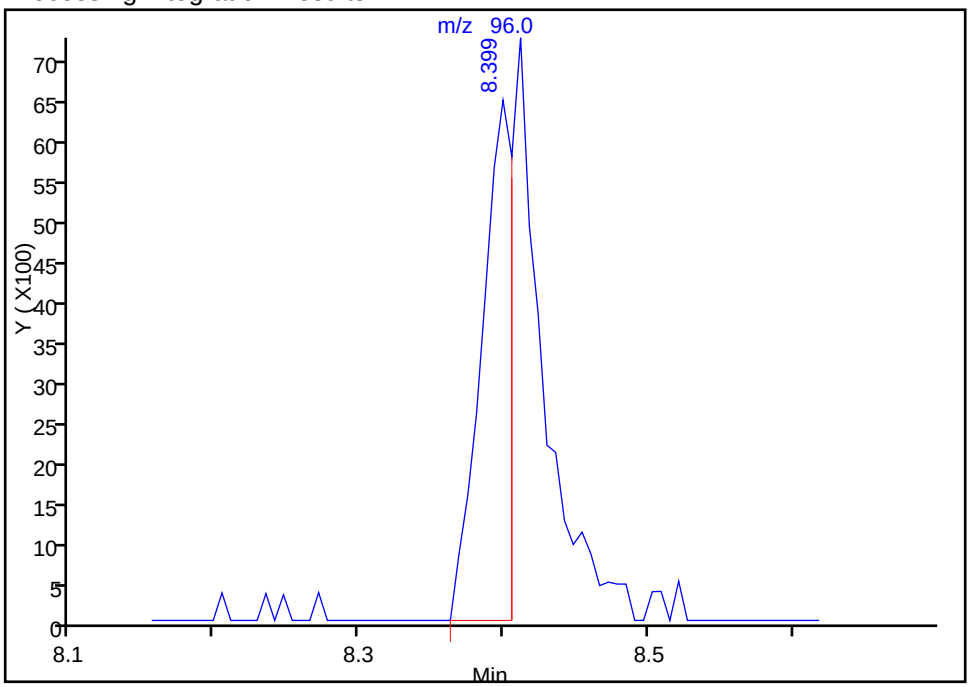
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140304-97.b\4062408.D				
Injection Date:	24-Jun-2013 13:14:30	Instrument ID:	CHHP4		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	7	Worklist Smp#:	7
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		

* 3 Dioxane-d8 (IS), CAS: 17647-74-4

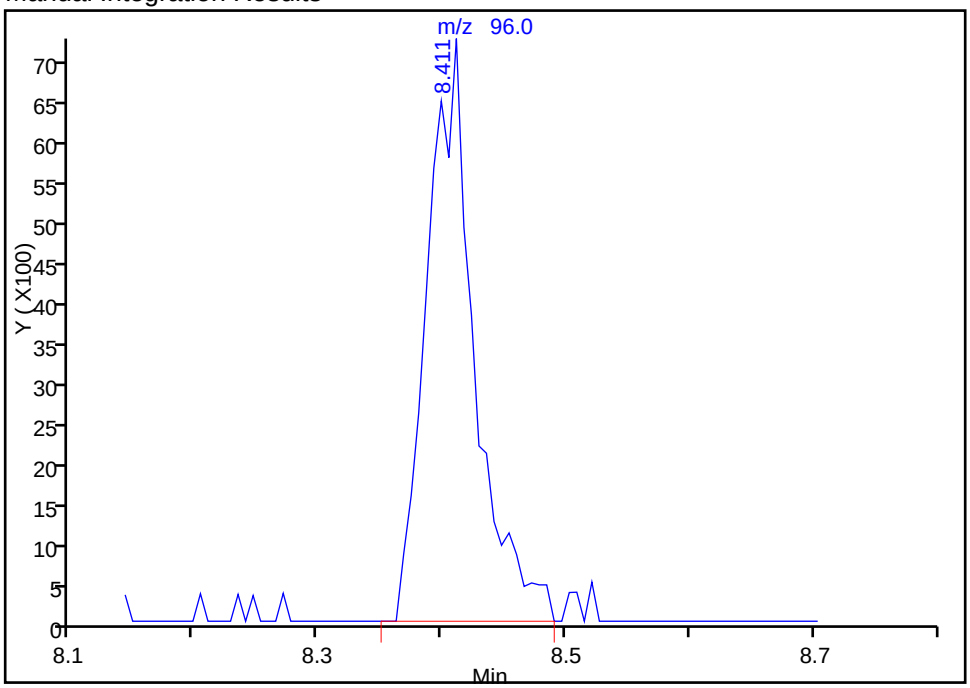
Processing Integration Results

RT: 8.40
Response: 9829
Amount: 5000.0000



Manual Integration Results

RT: 8.41
Response: 19371
Amount: 5000.0000



Reviewer: gordonk, 04-Mar-2014 12:10:24
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

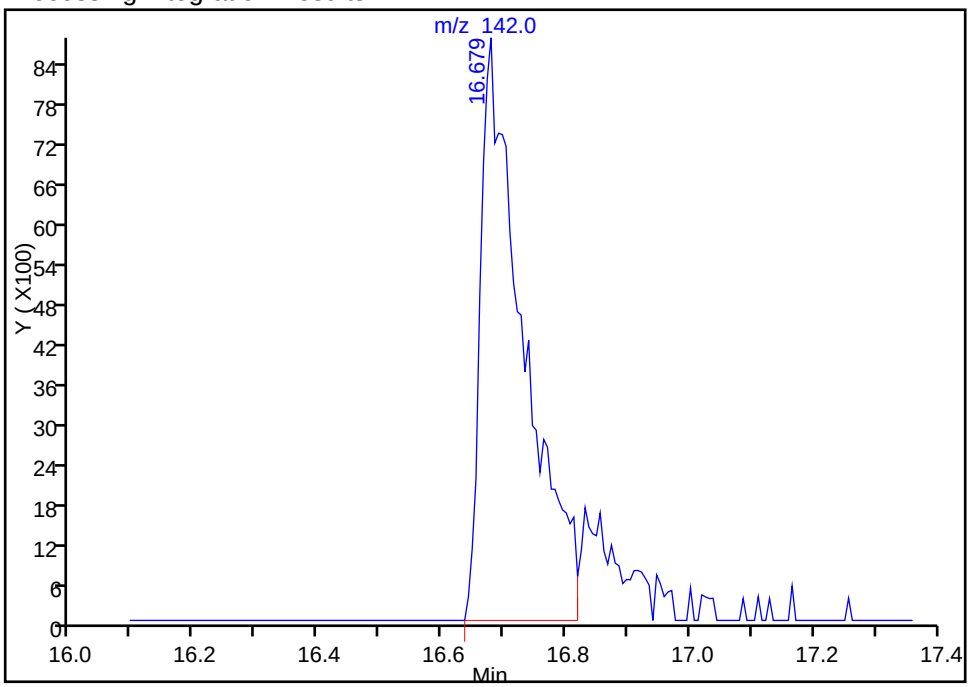
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140304-97.b\4062408.D				
Injection Date:	24-Jun-2013 13:14:30	Instrument ID:	CHHP4		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	7	Worklist Smp#:	7
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		

118 2-Methylnaphthalene, CAS: 91-57-6

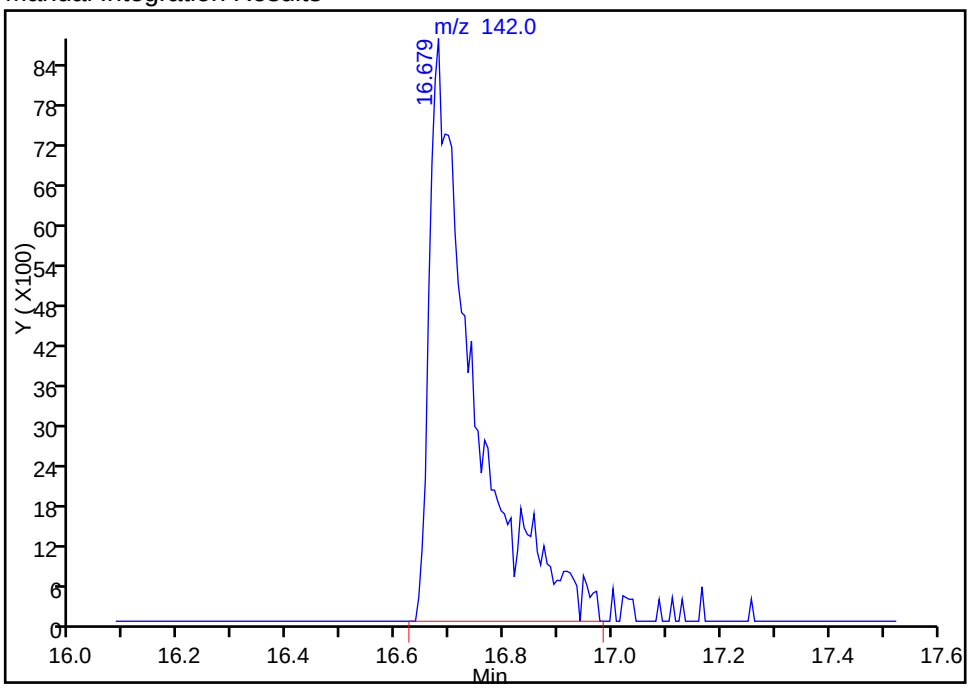
Processing Integration Results

RT: 16.68
Response: 42018
Amount: 601.9641



Manual Integration Results

RT: 16.68
Response: 49559
Amount: 631.5903



Reviewer: gordonk, 04-Mar-2014 12:10:24
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062409.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 24-Jun-2013 13:39:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 4062313d.b,t8260bh2o.m,list2.sub =4062313D.B,T8260BH2O.M,LIST2.SUB
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub3

Method: \\PITCHROM\ChromData\CHHP4\20140304-97.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Mar-2014 12:36:57 Calib Date: 16-Dec-2013 16:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140220-45.b\4121613.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: gordonk Date: 04-Mar-2014 12:10:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.819	4.758	0.061	93	145642	5000.0	
* 2 Fluorobenzene (IS)	96	7.678	7.678	0.0	99	874931	250.0	
* 3 Dioxane-d8 (IS)	96	8.402	8.402	0.0	73	23297	5000.0	
* 4 Chlorobenzene-d5	119	10.769	10.768	0.001	86	193766	250.0	
* 5 1,4-Dichlorobenzene-d4	152	13.099	13.104	-0.005	71	289389	250.0	
18 Ethanol	45	3.517	3.395	0.122	99	306980	53114	
26 Isopropyl alcohol	45	4.320	4.265	0.055	96	290088	11269	
27 Acetonitrile	40	4.430	4.405	0.025	99	484868	11400	
38 2-Chloro-1,3-butadiene	53	5.731	5.731	0.0	89	1840987	1084.9	
39 Isopropyl ether	45	5.762	5.750	0.012	95	3197946	994.5	
40 Tert-butyl ethyl ether	59	6.218	6.212	0.006	93	2563319	1054.2	
44 Propionitrile	54	6.480	6.480	0.0	99	946590	12045	
45 Ethyl acetate	43	6.498	6.498	0.0	99	1183176	2456.4	
46 Methacrylonitrile	41	6.656	6.650	0.006	88	3800664	10082	
58 Tert-amyl methyl ether	73	7.514	7.514	0.0	92	2077627	1104.5	
57 Isooctane	57	7.514	7.514	0.0	34	41061	1241.9	
60 n-Butanol	56	8.037	8.043	-0.006	89	299529	43866	
62 Ethyl acrylate	55	8.195	8.207	-0.012	99	844714	1378.0	
66 Methyl methacrylate	69	8.433	8.438	-0.006	89	1009907	2580.9	
69 2-Nitropropane	41	8.828	8.828	0.0	96	268339	2529.7	
70 2-Chloroethyl vinyl ether	63	8.901	8.907	-0.006	92	1065373	2618.3	
80 n-Butyl acetate	43	10.160	10.184	-0.024	98	961699	1246.5	
92 Cyclohexanone	55	11.882	11.906	-0.024	92	461750	25005	
102 Pentachloroethane	167	12.709	12.715	-0.006	88	729846	1037.8	
108 1,2,3-Trimethylbenzene	105	13.159	13.165	-0.006	95	3694418	842.3	
109 Benzyl chloride	91	13.251	13.281	-0.030	98	1374784	1530.3	
113 1,3,5-Trichlorobenzene	180	14.492	14.504	-0.012	96	1626725	1130.2	
118 2-Methylnaphthalene	142	16.657	16.718	-0.061	88	162435	1249.2	

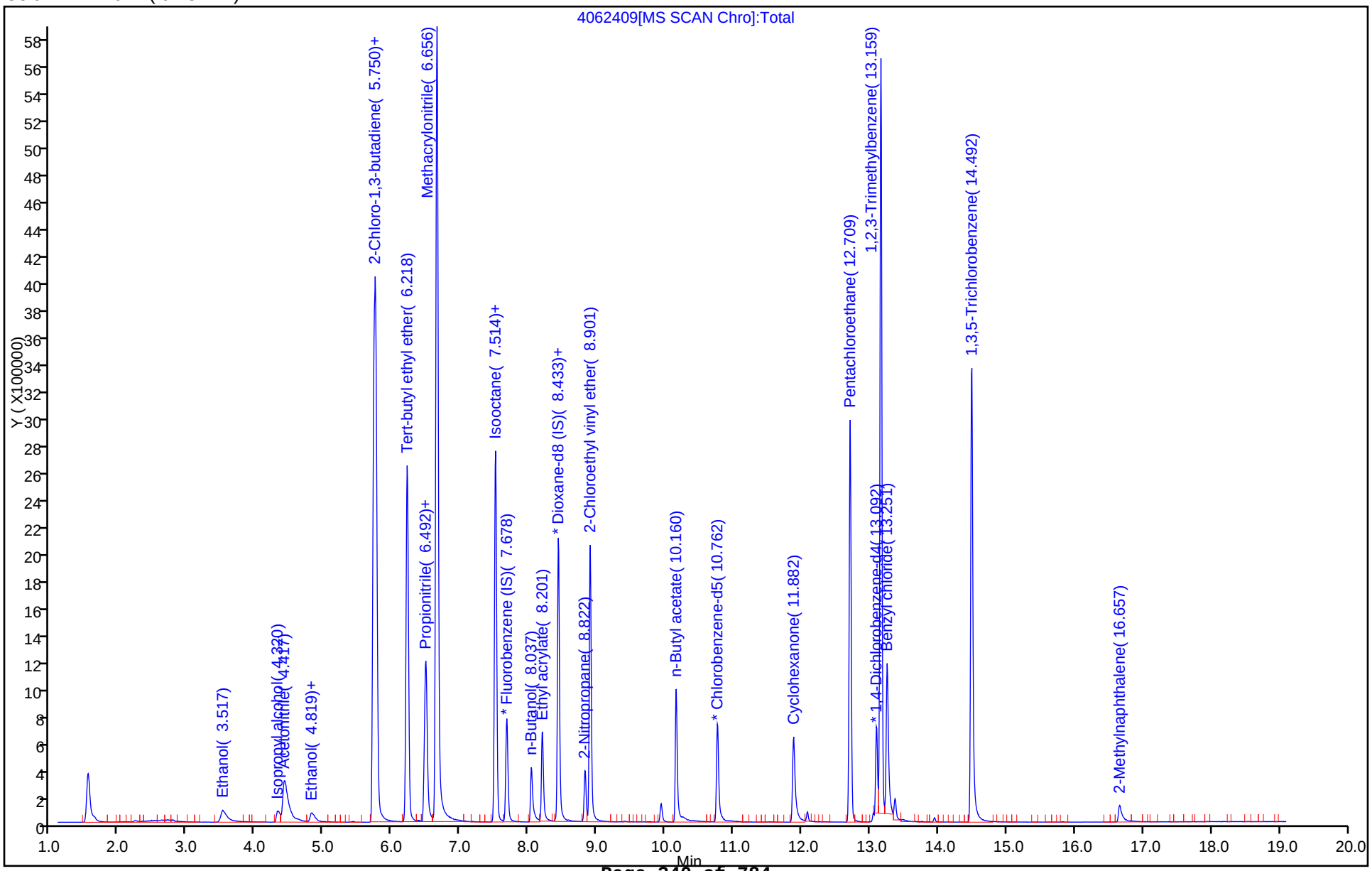
Report Date: 04-Mar-2014 12:36:58 Chrom Revision: 2.2 28-Feb-2014 15:12:04

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062409.D

Injection Date:	24-Jun-2013 13:39:30	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#:	8
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.: 180-34362-1 Analy Batch No.: 107478

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2014 11:03 Calibration End Date: 06/03/2014 14:15 Calibration ID: 16013

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-107478/3	4060303.D
Level 2	IC 180-107478/4	4060304.D
Level 3	IC 180-107478/5	4060305.D
Level 4	ICIS 180-107478/6	4060306.D
Level 5	IC 180-107478/7	4060307.D
Level 6	IC 180-107478/8	4060308.D
Level 7	IC 180-107478/9	4060309.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	0.5586 0.6281	0.6569 0.5260	0.6118	0.6114	0.5501	Ave		0.5918			0.1000	8.0		20.0			
Chloromethane	0.7754 0.7891	0.8862 0.6464	0.7876	0.7988	0.7148	Ave		0.7712			0.1000	9.7		20.0			
Vinyl chloride	0.6382 0.6600	0.7019 0.5435	0.6424	0.6308	0.5726	Ave		0.6271			0.1000	8.5		20.0			
1,3-Butadiene	0.6077 0.6572	0.7315 0.5339	0.6099	0.6557	0.5819	Ave		0.6254			0.0100	10.0		20.0			
Bromomethane	0.1916 0.1843	0.1957 0.1586	0.1927	0.1858	0.1679	Ave		0.1824			0.0500	7.6		20.0			
Chloroethane	0.2844 0.2294	0.2678 0.1504	0.2682	0.2353	0.2420	Ave		0.2397			0.0500	18.0		20.0			
Dichlorofluoromethane	0.6675 0.7120	0.7566 0.5382	0.7256	0.6772	0.6531	Ave		0.6757			0.0100	10.0		20.0			
Trichlorofluoromethane	0.6172 0.6630	0.6921 0.5373	0.6326	0.6329	0.5966	Ave		0.6245			0.1000	7.9		20.0			
Ethyl ether	0.3105 0.3347	0.2923 0.2932	0.3067	0.3214	0.2911	Ave		0.3071			0.0100	5.4		20.0			
Acrolein	0.0196 0.0130	0.0186 0.0159	0.0174	0.0160	0.0139	Ave		0.0163			0.0100	15.0		20.0			
1,1-Dichloroethene	0.4414 0.5421	0.5300 0.4428	0.4924	0.5090	0.4682	Ave		0.4894			0.1000	8.2		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.4671 0.5513	0.5916 0.4665	0.5185	0.5351	0.4806	Ave		0.5158			0.1000	9.2		20.0			
Acetone	0.1321 0.1757	0.1481 0.1670	0.1445	0.1350	0.1748	Ave		0.1539			0.0500	12.0		20.0			
Iodomethane	0.6455 0.7980	0.7651 0.6797	0.7432	0.7684	0.7009	Ave		0.7287			0.0100	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.: 180-34362-1 Analy Batch No.: 107478

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2014 11:03 Calibration End Date: 06/03/2014 14:15 Calibration ID: 16013

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	0.9027 1.5364	1.1305 1.2789	1.1506	1.3176	1.2259	Ave		1.2204			0.1000	16.0		20.0			
Allyl chloride	0.1150 0.3165	0.1597 0.2649	0.2558	0.2757	0.2527	Qua	-12.54	0.3691	0		0.0100				0.9970		0.9900
Methyl acetate	0.1519 0.1786	0.1522 0.1560	0.1706	0.1759	0.1603	Ave		0.1637			0.1000	6.9		20.0			
Methylene Chloride	1.2207 0.4942	0.9011 0.3979	0.6411	0.5243	0.4649	Qua	13.006	0.5150	0		0.1000				0.9960		0.9900
tert-Butyl alcohol	2.0370 1.6775	1.9516 2.1130	1.9286	1.9343	1.8347	Ave		1.9253			0.0100	7.3		20.0			
Acrylonitrile	0.0477 0.0862	0.0518 0.0773	0.0763	0.0766	0.0715	Lin2	-9.155	0.0800			0.0100				0.9920		0.9900
trans-1,2-Dichloroethene	0.4746 0.5271	0.5241 0.4620	0.4909	0.5262	0.4865	Ave		0.4988			0.1000	5.4		20.0			
Methyl tert-butyl ether	0.7028 0.7992	0.7076 0.6704	0.7788	0.7651	0.7072	Ave		0.7330			0.1000	6.5		20.0			
Hexane	1.0750 0.8289	1.0295 0.7358	0.8511	0.8484	0.7980	Ave		0.8809			0.0100	14.0		20.0			
1,1-Dichloroethane	0.7227 0.8192	0.7830 0.6971	0.7647	0.7772	0.7331	Ave		0.7567			0.2000	5.5		20.0			
Vinyl acetate	0.0564 0.2197	0.1040 +++++	0.1712	0.1681	0.2031	Qua	-4.309	0.1970	0		0.0100				0.9980		0.9900
2,2-Dichloropropane	0.3434 0.4826	0.4293 0.4186	0.4167	0.4770	0.4184	Ave		0.4266			0.0100	11.0		20.0			
cis-1,2-Dichloroethene	0.4679 0.5209	0.4369 0.4475	0.4786	0.4951	0.4730	Ave		0.4743			0.1000	5.9		20.0			
2-Butanone (MEK)	0.1539 0.1828	0.1951 0.1948	0.1553	0.1629	0.1844	Qua	-0.464	0.1719	0		0.0500				1.0000		0.9900
Chlorobromomethane	0.1619 0.1969	0.1573 0.1768	0.1676	0.1834	0.1746	Ave		0.1741			0.0100	7.7		20.0			
Tetrahydrofuran	0.0737 0.0678	0.0572 0.0641	0.0645	0.0658	0.0598	Ave		0.0647			0.0100	8.3		20.0			
Chloroform	0.6002 0.6531	0.6429 0.5808	0.6168	0.6331	0.5920	Ave		0.6170			0.2000	4.4		20.0			
1,1,1-Trichloroethane	0.4973 0.6431	0.5578 0.5465	0.5797	0.5927	0.5764	Ave		0.5705			0.1000	7.8		20.0			
Cyclohexane	1.0205 1.1436	1.2222 0.9215	1.1515	1.1393	1.0504	Ave		1.0927			0.1000	9.2		20.0			
Carbon tetrachloride	0.4426 0.5654	0.4748 0.4901	0.4938	0.5204	0.4831	Ave		0.4957			0.1000	7.8		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.: 180-34362-1 Analy Batch No.: 107478

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2014 11:03 Calibration End Date: 06/03/2014 14:15 Calibration ID: 16013

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	0.3776 0.5410	0.5139 0.4807	0.4737	0.5088	0.4949	Ave		0.4844			0.0100	11.0		20.0			
Benzene	1.5275 1.5923	1.6560 1.3267	1.5945	1.6610	1.5441	Ave		1.5575			0.5000	7.3		20.0			
1,2-Dichloroethane	0.3150 0.3410	0.3009 0.3141	0.3286	0.3311	0.3128	Ave		0.3205			0.1000	4.3		20.0			
Isobutyl alcohol	0.0133 0.0170	0.0168 0.0152	0.0173	0.0169	0.0159	Ave		0.0161			0.0100	8.9		20.0			
n-Heptane	0.6518 0.7869	0.8014 0.7006	0.7665	0.7889	0.7888	Ave		0.7550			0.0100	7.5		20.0			
Trichloroethene	0.4547 0.4685	0.4175 0.4352	0.4402	0.4423	0.4260	Ave		0.4406			0.2000	3.9		20.0			
Methylcyclohexane	0.8793 1.0244	1.0109 0.8159	0.9959	0.9858	0.9288	Ave		0.9487			0.1000	8.2		20.0			
1,2-Dichloropropane	0.3485 0.3606	0.3497 0.3362	0.3671	0.3616	0.3369	Ave		0.3515			0.1000	3.5		20.0			
Dibromomethane	0.1270 0.1523	0.1282 0.1442	0.1494	0.1442	0.1387	Ave		0.1406			0.0100	7.0		20.0			
1,4-Dioxane	0.0021 0.0019	0.0023 0.0021	0.0023	0.0021	0.0015	Ave		0.0020		*	0.0100	14.0		20.0			
Dichlorobromomethane	0.2490 0.3780	0.3023 0.3634	0.3095	0.3438	0.3389	Ave		0.3264			0.2000	13.0		20.0			
cis-1,3-Dichloropropene	0.3014 0.4538	0.3547 0.4415	0.3686	0.4181	0.3825	Ave		0.3887			0.2000	14.0		20.0			
4-Methyl-2-pentanone (MIBK)	0.9360 1.4738	1.4197 1.4303	1.3830	1.6087	1.5163	Ave		1.3954			0.1000	15.0		20.0			
Toluene	7.9788 6.7181	8.4502 5.4985	7.7324	7.7853	7.6322	Ave		7.3994			0.4000	13.0		20.0			
trans-1,3-Dichloropropene	0.8766 1.2574	0.7801 1.2907	1.0525	1.2601	1.1693	Ave		1.0981			0.1000	18.0		20.0			
Ethyl methacrylate	0.1631 1.0726	0.2121 1.0722	0.8491	1.0919	1.0423	Lin1	-28.89	1.1139			0.0100				0.9960		0.9900
1,1,2-Trichloroethane	0.9726 0.9773	1.1653 0.9110	1.0612	1.1082	1.0212	Ave		1.0310			0.1000	8.5		20.0			
Tetrachloroethene	1.7878 1.6147	2.0820 1.4641	1.7221	1.8068	1.7144	Ave		1.7417			0.2000	11.0		20.0			
1,3-Dichloropropane	1.2219 1.5526	1.6883 1.4420	1.7200	1.7216	1.6394	Ave		1.5694			0.0100	12.0		20.0			
2-Hexanone	0.1408 1.0705	0.1575 1.0610	0.6819	1.0783	0.9877	Lin1	-31.74	1.0997			0.1000				0.9940		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.: 180-34362-1 Analy Batch No.: 107478

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2014 11:03 Calibration End Date: 06/03/2014 14:15 Calibration ID: 16013

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	0.7914 1.0234	0.8277 0.9957	0.8601	0.9461	0.9756	Ave		0.9171			0.1000	9.8		20.0			
1,2-Dibromoethane	0.1690 0.8835	0.4496 0.8537	0.8887	0.9168	0.8105	Lin2	-19.55	0.9320			0.1000				0.9900		0.9900
Chlorobenzene	4.8035 4.7292	5.5253 4.0456	5.1674	5.2433	5.1080	Ave		4.9460			0.5000	9.7		20.0			
1,1,1,2-Tetrachloroethane	1.1959 1.5214	1.4008 1.3937	1.5347	1.5651	1.5688	Ave		1.4544			0.0100	9.3		20.0			
Ethylbenzene	2.5808 2.6946	3.1480 2.3519	2.8367	3.0783	2.9555	Ave		2.8065			0.1000	10.0		20.0			
m-Xylene & p-Xylene	0.5913 3.4348	3.2095 2.9027	3.7266	3.7782	3.5624	Qua	-56.05	4.1192	-0.001		0.1000				1.0000		0.9900
o-Xylene	3.2454 3.2760	3.9020 2.7377	3.5665	3.7490	3.5580	Ave		3.4335			0.3000	11.0		20.0			
Styrene	3.8033 5.0833	5.1673 4.2856	5.2029	5.6133	5.3118	Ave		4.9239			0.3000	13.0		20.0			
Bromoform	0.2075 0.6196	0.4201 0.6567	0.5033	0.5343	0.5123	Lin2	-10.11	0.6081			0.1000				0.9940		0.9900
Isopropylbenzene	9.1038 8.3910	10.864 6.2709	9.7448	10.166	9.4968	Ave		9.1482			0.1000	16.0		20.0			
1,1,2,2-Tetrachloroethane	1.1062 1.1716	1.1731 1.0419	1.1853	1.2190	1.1207	Ave		1.1454			0.3000	5.2		20.0			
Bromobenzene	1.6804 1.2928	1.3828 1.1367	1.4944	1.3681	1.3124	Ave		1.3811			0.0100	12.0		20.0			
1,2,3-Trichloropropane	0.2698 0.2242	0.2850 0.1945	0.2552	0.2233	0.2175	Ave		0.2385			0.0100	14.0		20.0			
trans-1,4-Dichloro-2-butene	0.0200 0.0247	0.0678 0.1487	0.1036	0.1357	0.1332	Ave		0.0905			0.0100	59.0	*	20.0			
N-Propylbenzene	2.1493 1.8396	2.3566 1.5234	2.1683	2.0781	1.9727	Ave		2.0126			0.0100	13.0		20.0			
2-Chlorotoluene	1.9530 1.4665	1.9851 1.2344	1.7373	1.6815	1.5002	Ave		1.6511			0.0100	16.0		20.0			
1,3,5-Trimethylbenzene	7.2043 4.7037	7.0416 3.4727	6.0184	5.6681	5.3434	Qua	48.658	5.7682	-0.002		0.0100				1.0000		0.9900
4-Chlorotoluene	1.2567 1.4558	1.8350 1.2644	1.6192	1.5419	1.4316	Ave		1.4864			0.0100	14.0		20.0			
tert-Butylbenzene	6.9241 4.5122	7.3065 3.3258	6.6800	5.3648	5.0338	Qua	81.309	5.4274	-0.002		0.0100				0.9980		0.9900
1,2,4-Trimethylbenzene	6.0054 4.6999	6.6893 3.5154	5.9118	5.5482	5.2169	Ave		5.3696			0.0100	19.0		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.: 180-34362-1 Analy Batch No.: 107478

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2014 11:03 Calibration End Date: 06/03/2014 14:15 Calibration ID: 16013

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	10.041 6.2750	10.750 4.3839	8.3828	7.8114	7.2534	Qua	94.549	7.8529	-0.003		0.0100				1.0000		0.9900
1,3-Dichlorobenzene	1.6811 2.4810	2.5306 2.0969	2.5659	2.5102	2.4523	Ave		2.3311			0.6000	14.0		20.0			
4-Isopropyltoluene	7.6164 5.4041	8.3263 3.9251	7.0461	6.5817	6.2631	Qua	55.560	6.7286	-0.002		0.0100				1.0000		0.9900
1,4-Dichlorobenzene	3.7586 2.6835	3.5090 2.2595	3.2268	2.9629	2.8791	Ave		3.0399			0.5000	17.0		20.0			
n-Butylbenzene	5.7391 4.9621	6.4626 3.8509	5.6975	5.5432	5.4679	Ave		5.3890			0.0100	15.0		20.0			
1,2-Dichlorobenzene	3.1322 2.3010	2.9475 1.9252	2.6571	2.5041	2.3493	Ave		2.5452			0.4000	16.0		20.0			
1,2-Dibromo-3-Chloropropane	0.0153 0.0902	0.0101 0.1032	0.0671	0.0793	0.0681	Qua	-2.564	0.0817	0		0.0500				0.9990		0.9900
1,2,4-Trichlorobenzene	0.6162 0.9536	0.6827 1.0099	0.8550	0.8751	0.9754	Ave		0.8526			0.2000	18.0		20.0			
Hexachlorobutadiene	1.6873 1.1253	1.5166 1.0107	1.3800	1.3003	1.2741	Ave		1.3277			0.0100	17.0		20.0			
Naphthalene	0.4876 1.0480	0.3310 1.1259	0.6854	1.0406	1.0148	Lin1	-26.37	1.1181			0.0100				0.9930		0.9900
1,2,3-Trichlorobenzene	0.0470 0.7089	0.2848 0.7208	0.6846	0.7237	0.7078	Qua	-14.57	0.7570	0		0.0100				1.0000		0.9900
Dibromofluoromethane (Surr)	0.3045 0.3305	0.2691 0.3016	0.3057	0.3311	0.3001	Ave		0.3061				6.9		20.0			
1,2-Dichloroethane-d4 (Surr)	0.2595 0.2570	0.2101 0.2546	0.2663	0.2519	0.2365	Ave		0.2480				7.7		20.0			
Toluene-d8 (Surr)	6.1736 5.2673	6.1566 4.4177	5.7873	6.2079	5.7016	Ave		5.6732				11.0		20.0			
4-Bromofluorobenzene (Surr)	1.0462 2.0432	1.6899 1.8724	1.9232	2.0984	1.9897	Ave		1.8090				20.0		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 RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1 Analy Batch No.: 107478

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2014 11:03 Calibration End Date: 06/03/2014 14:15 Calibration ID: 16013

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-107478/3	4060303.D
Level 2	IC 180-107478/4	4060304.D
Level 3	IC 180-107478/5	4060305.D
Level 4	ICIS 180-107478/6	4060306.D
Level 5	IC 180-107478/7	4060307.D
Level 6	IC 180-107478/8	4060308.D
Level 7	IC 180-107478/9	4060309.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	31458 853875	70750 1869499	162959	278707	336725	25.0 625	50.0 1250	125	200	250
Chloromethane	FB	Ave	43672 1072684	95443 2297643	209803	364180	437561	25.0 625	50.0 1250	125	200	250
Vinyl chloride	FB	Ave	35944 897253	75600 1931879	171111	287586	350551	25.0 625	50.0 1250	125	200	250
1,3-Butadiene	FB	Ave	34226 893383	78788 1897569	162470	298926	356216	25.0 625	50.0 1250	125	200	250
Bromomethane	FB	Ave	10791 250512	21072 563541	51325	84704	102793	25.0 625	50.0 1250	125	200	250
Chloroethane	FB	Ave	16018 311875	28838 534610	71447	107278	148170	25.0 625	50.0 1250	125	200	250
Dichlorofluoromethane	FB	Ave	37592 967869	81486 1912847	193275	308719	399776	25.0 625	50.0 1250	125	200	250
Trichlorofluoromethane	FB	Ave	34761 901262	74545 1909728	168507	288511	365195	25.0 625	50.0 1250	125	200	250
Ethyl ether	FB	Ave	17485 454943	31477 1042135	81689	146534	178217	25.0 625	50.0 1250	125	200	250
Acrolein	FB	Ave	22060 31770	24998 56583	27751	31949	34150	500 1125	625 1250	750	875	1000
1,1-Dichloroethene	FB	Ave	24860 736894	57081 1574016	131150	232051	286608	25.0 625	50.0 1250	125	200	250
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	26307 749434	63713 1657918	138123	243923	294178	25.0 625	50.0 1250	125	200	250
Acetone	FB	Ave	7440 238833	15955 593520	38491	61564	106993	25.0 625	50.0 1250	125	200	250
Iodomethane	FB	Ave	36357 1084865	82402 2415711	197972	350283	429090	25.0 625	50.0 1250	125	200	250
Carbon disulfide	FB	Ave	50839 2088584	121759 4545741	306500	600660	750467	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.: 180-34362-1 Analy Batch No.: 107478

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2014 11:03 Calibration End Date: 06/03/2014 14:15 Calibration ID: 16013

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	6478 430194	17201 941697	68139	125698	154664	25.0 625	50.0 1250	125	200	250
Methyl acetate	FB	Ave	42773 1214263	81949 2772831	227261	400963	490611	125 3125	250 6250	625	1000	1250
Methylene Chloride	FB	Qua	68749 671813	97048 1414232	170766	239031	284616	25.0 625	50.0 1250	125	200	250
tert-Butyl alcohol	TBA	Ave	11369 238785	18400 665744	50693	82030	95008	250 6250	500 12500	1250	2000	2500
Acrylonitrile	FB	Lin2	26863 1171700	55798 2747419	203263	349335	437729	250 6250	500 12500	1250	2000	2500
trans-1,2-Dichloroethene	FB	Ave	26731 716611	56452 1642026	130770	239870	297804	25.0 625	50.0 1250	125	200	250
Methyl tert-butyl ether	FB	Ave	39579 1086458	76208 2382696	207457	348786	432901	25.0 625	50.0 1250	125	200	250
Hexane	FB	Ave	60544 1126763	110877 2615355	226702	386773	488483	25.0 625	50.0 1250	125	200	250
1,1-Dichloroethane	FB	Ave	40704 1113593	84332 2477766	203698	354327	448775	25.0 625	50.0 1250	125	200	250
Vinyl acetate	FB	Qua	3177 298647	11206 +++++	45608	76630	124329	25.0 625	50.0 +++++	125	200	250
2,2-Dichloropropane	FB	Ave	19343 656076	46236 1487976	110986	217463	256138	25.0 625	50.0 1250	125	200	250
cis-1,2-Dichloroethene	FB	Ave	26353 708059	47054 1590727	127492	225724	289551	25.0 625	50.0 1250	125	200	250
2-Butanone (MEK)	FB	Qua	8668 248530	21015 692327	41366	74278	112866	25.0 625	50.0 1250	125	200	250
Chlorobromomethane	FB	Ave	9120 267649	16941 628354	44632	83601	106906	25.0 625	50.0 1250	125	200	250
Tetrahydrofuran	FB	Ave	8296 184463	12329 455672	34366	59985	73186	50.0 1250	100 2500	250	400	500
Chloroform	FB	Ave	33804 887828	69246 2064409	164310	288601	362407	25.0 625	50.0 1250	125	200	250
1,1,1-Trichloroethane	FB	Ave	28006 874238	60074 1942330	154416	270199	352859	25.0 625	50.0 1250	125	200	250
Cyclohexane	FB	Ave	57475 1554565	131629 3275225	306727	519372	643016	25.0 625	50.0 1250	125	200	250
Carbon tetrachloride	FB	Ave	24926 768561	51136 1741871	131539	237244	295756	25.0 625	50.0 1250	125	200	250
1,1-Dichloropropene	FB	Ave	21269 735441	55343 1708387	126193	231940	302977	25.0 625	50.0 1250	125	200	250
Benzene	FB	Ave	86031 2164590	178355 4715365	424745	757215	945261	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.: 180-34362-1 Analy Batch No.: 107478

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2014 11:03 Calibration End Date: 06/03/2014 14:15 Calibration ID: 16013

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-Dichloroethane	FB	Ave	17743 463582	32404 1116464	87531	150946	191487	25.0 625	50.0 1250	125	200	250
Isobutyl alcohol	FB	Ave	18671 577610	45358 1354257	115432	192302	244069	625 15625	1250 31250	3125	5000	6250
n-Heptane	FB	Ave	36710 1069765	86313 2490271	204187	359628	482883	25.0 625	50.0 1250	125	200	250
Trichloroethene	FB	Ave	25606 636865	44967 1546774	117260	201647	260770	25.0 625	50.0 1250	125	200	250
Methylcyclohexane	FB	Ave	49523 1392517	108876 2900144	265285	449404	568566	25.0 625	50.0 1250	125	200	250
1,2-Dichloropropane	FB	Ave	19627 490182	37664 1195123	97788	164854	206211	25.0 625	50.0 1250	125	200	250
Dibromomethane	FB	Ave	7150 207079	13808 512387	39794	65723	84905	25.0 625	50.0 1250	125	200	250
1,4-Dioxane	FB	Ave	2414 52785	4990 146373	12006	19340	17839	500 12500	1000 25000	2500	4000	5000
Dichlorobromomethane	FB	Ave	14023 513809	32559 1291669	82433	156750	207432	25.0 625	50.0 1250	125	200	250
cis-1,3-Dichloropropene	FB	Ave	16975 616870	38205 1569225	98185	190621	234138	25.0 625	50.0 1250	125	200	250
4-Methyl-2-pentanone (MIBK)	CBZ	Ave	11262 512527	33629 1275431	87030	167458	210627	25.0 625	50.0 1250	125	200	250
Toluene	CBZ	Ave	96006 2336210	200167 4903061	486576	810387	1060177	25.0 625	50.0 1250	125	200	250
trans-1,3-Dichloropropene	CBZ	Ave	10548 437269	18479 1150943	66230	131169	162430	25.0 625	50.0 1250	125	200	250
Ethyl methacrylate	CBZ	Lin1	1963 373010	5023 956083	53432	113663	144791	25.0 625	50.0 1250	125	200	250
1,1,2-Trichloroethane	CBZ	Ave	11703 339867	27603 812342	66780	115350	141849	25.0 625	50.0 1250	125	200	250
Tetrachloroethene	CBZ	Ave	21512 561525	49319 1305528	108367	188069	238148	25.0 625	50.0 1250	125	200	250
1,3-Dichloropropane	CBZ	Ave	14703 539903	39991 1285839	108236	179206	227726	25.0 625	50.0 1250	125	200	250
2-Hexanone	CBZ	Lin1	1694 372272	3732 946066	42913	112247	137204	25.0 625	50.0 1250	125	200	250
Chlorodibromomethane	CBZ	Ave	9522 355890	19606 887866	54126	98478	135525	25.0 625	50.0 1250	125	200	250
1,2-Dibromoethane	CBZ	Lin2	2033 307228	10649 761274	55921	95431	112585	25.0 625	50.0 1250	125	200	250
Chlorobenzene	CBZ	Ave	57798 1644564	130883 3607456	325166	545788	709554	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.: 180-34362-1 Analy Batch No.: 107478

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2014 11:03 Calibration End Date: 06/03/2014 14:15 Calibration ID: 16013

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	14390 529066	33183 1242745	96577	162919	217927	25.0 625	50.0 1250	125	200	250
Ethylbenzene	CBZ	Ave	31054 937035	74570 2097205	178507	320422	410541	25.0 625	50.0 1250	125	200	250
m-Xylene & p-Xylene	CBZ	Qua	7115 1194443	76026 2588369	234501	393283	494843	25.0 625	50.0 1250	125	200	250
o-Xylene	CBZ	Ave	39051 1139225	92430 2441197	224430	390237	494237	25.0 625	50.0 1250	125	200	250
Styrene	CBZ	Ave	45763 1767720	122402 3821505	327406	584296	737851	25.0 625	50.0 1250	125	200	250
Bromoform	CBZ	Lin2	2497 215453	9952 585557	31669	55620	71163	25.0 625	50.0 1250	125	200	250
Isopropylbenzene	CBZ	Ave	109542 2917967	257339 5591752	613208	1058219	1319197	25.0 625	50.0 1250	125	200	250
1,1,2,2-Tetrachloroethane	CBZ	Ave	13311 407437	27788 929031	74589	126892	155669	25.0 625	50.0 1250	125	200	250
Bromobenzene	DCB	Ave	21835 681279	39563 1597112	122392	206485	273117	25.0 625	50.0 1250	125	200	250
1,2,3-Trichloropropane	DCB	Ave	3506 118147	8154 273255	20899	33708	45252	25.0 625	50.0 1250	125	200	250
trans-1,4-Dichloro-2-butene	DCB	Ave	260 13039	1939 208937	8481	20483	27710	25.0 625	50.0 1250	125	200	250
N-Propylbenzene	DCB	Ave	27927 969443	67423 2140511	177588	313639	410531	25.0 625	50.0 1250	125	200	250
2-Chlorotoluene	DCB	Ave	25377 772863	56794 1734463	142287	253783	312186	25.0 625	50.0 1250	125	200	250
1,3,5-Trimethylbenzene	DCB	Qua	93610 2478853	201464 4879395	492919	855464	1111969	25.0 625	50.0 1250	125	200	250
4-Chlorotoluene	DCB	Ave	16329 767206	52500 1776601	132611	232706	297928	25.0 625	50.0 1250	125	200	250
tert-Butylbenzene	DCB	Qua	89969 2377898	209042 4673004	547098	809679	1047543	25.0 625	50.0 1250	125	200	250
1,2,4-Trimethylbenzene	DCB	Ave	78032 2476853	191384 4939352	484183	837367	1085643	25.0 625	50.0 1250	125	200	250
sec-Butylbenzene	DCB	Qua	130474 3306921	307556 6159727	686560	1178932	1509453	25.0 625	50.0 1250	125	200	250
1,3-Dichlorobenzene	DCB	Ave	21844 1307456	72401 2946226	210148	378858	510341	25.0 625	50.0 1250	125	200	250
4-Isopropyltoluene	DCB	Qua	98964 2847929	238221 5514991	577084	993349	1303380	25.0 625	50.0 1250	125	200	250
1,4-Dichlorobenzene	DCB	Ave	48838 1414211	100396 3174777	264282	447171	599144	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.: 180-34362-1 Analy Batch No.: 107478

SDG No.:

Instrument ID: CHHP4 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2014 11:03 Calibration End Date: 06/03/2014 14:15 Calibration ID: 16013

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
n-Butylbenzene	DCB	Ave	74571 2615011	184898 5410806	466632	836600	1137877	25.0 625	50.0 1250	125	200	250
1,2-Dichlorobenzene	DCB	Ave	40699 1212604	84330 2704973	217623	377929	488892	25.0 625	50.0 1250	125	200	250
1,2-Dibromo-3-Chloropropane	DCB	Qua	199 47555	290 144957	5498	11961	14165	25.0 625	50.0 1250	125	200	250
1,2,4-Trichlorobenzene	DCB	Ave	8007 502567	19532 1418965	70024	132078	202975	25.0 625	50.0 1250	125	200	250
Hexachlorobutadiene	DCB	Ave	21924 593016	43390 1420121	113022	196247	265141	25.0 625	50.0 1250	125	200	250
Naphthalene	DCB	Lin1	6336 552309	9471 1582030	56133	157046	211173	25.0 625	50.0 1250	125	200	250
1,2,3-Trichlorobenzene	DCB	Qua	611 373589	8149 1012752	56072	109220	147300	25.0 625	50.0 1250	125	200	250
Dibromofluoromethane (Surr)	FB	Ave	17152 449327	28981 1071890	81429	150923	183705	25.0 625	50.0 1250	125	200	250
1,2-Dichloroethane-d4 (Surr)	FB	Ave	14615 349327	22633 905001	70946	114838	144768	25.0 625	50.0 1250	125	200	250
Toluene-d8 (Surr)	CBZ	Ave	74285 1831708	145836 3939297	364180	646195	792003	25.0 625	50.0 1250	125	200	250
4-Bromofluorobenzene (Surr)	CBZ	Ave	12589 710520	40029 1669671	121021	218423	276387	25.0 625	50.0 1250	125	200	250

Curve Type Legend:

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

Report Date: 03-Jun-2014 14:07:28 Chrom Revision: 2.2 16-May-2014 10:46:48

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060303.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Jun-2014 11:03:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0001537-003
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub5

Method: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Jun-2014 14:07:27 Calib Date: 03-Jun-2014 14:15:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK040

First Level Reviewer: journetp Date: 03-Jun-2014 13:27:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.761	4.767	-0.006	93	111625	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.680	7.680	0.000	99	563201	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.776	10.763	0.013	77	120326	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	13.135	13.098	0.037	84	129936	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.944	6.932	0.012	24	17152	25.0	24.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.315	7.309	0.006	49	14615	25.0	26.2	
$ 7 Toluene-d8 (Surr)	98	9.340	9.316	0.024	77	74285	25.0	27.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.992	11.943	0.049	71	12589	25.0	14.5	
10 Dichlorodifluoromethane	85	1.757	1.757	0.000	72	31458	25.0	23.6	
11 Chloromethane	50	1.958	1.963	-0.005	83	43672	25.0	25.1	
12 Vinyl chloride	62	2.110	2.115	-0.005	67	35944	25.0	25.4	
13 Butadiene	39	2.146	2.152	-0.006	86	34226	25.0	24.3	
14 Bromomethane	94	2.499	2.492	0.007	74	10791	25.0	26.3	
15 Chloroethane	64	2.614	2.614	0.000	67	16018	25.0	29.7	
16 Dichlorofluoromethane	67	2.943	2.949	-0.006	55	37592	25.0	24.7	
17 Trichlorofluoromethane	101	2.967	2.967	0.000	66	34761	25.0	24.7	
19 Ethyl ether	59	3.466	3.472	-0.006	72	17485	25.0	25.3	
20 Acrolein	56	3.673	3.672	0.001	74	22060	500.0	599.3	M
21 1,1-Dichloroethene	96	3.782	3.782	0.000	79	24860	25.0	22.5	
22 1,1,2-Trichloro-1,2,2-trif	101	3.837	3.849	-0.012	50	26307	25.0	22.6	
23 Acetone	43	3.946	3.958	-0.012	17	7440	25.0	21.5	
24 Iodomethane	142	4.013	4.007	0.006	92	36357	25.0	22.1	
25 Carbon disulfide	76	4.110	4.104	0.006	95	50839	25.0	18.5	
28 3-Chloro-1-propene	76	4.408	4.408	0.000	72	6478	25.0	42.1	
29 Methyl acetate	43	4.518	4.487	0.031	92	42773	125.0	116.0	
30 Methylene Chloride	84	4.609	4.603	0.006	96	68749	25.0	34.2	
31 2-Methyl-2-propanol	59	4.877	4.901	-0.024	75	11369	250.0	264.5	
32 Acrylonitrile	53	5.035	5.004	0.031	93	26863	250.0	263.4	
33 trans-1,2-Dichloroethene	96	5.023	5.016	0.007	87	26731	25.0	23.8	
34 Methyl tert-butyl ether	73	5.053	5.047	0.006	88	39579	25.0	24.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Hexane	57	5.418	5.418	0.000	91	60544	25.0	30.5	
36 1,1-Dichloroethane	63	5.619	5.600	0.019	70	40704	25.0	23.9	
38 Vinyl acetate	43	5.801	5.740	0.061	58	3177	25.0	31.7	
41 2,2-Dichloropropane	77	6.355	6.348	0.006	69	19343	25.0	20.1	
42 cis-1,2-Dichloroethene	96	6.367	6.360	0.007	74	26353	25.0	24.7	
43 2-Butanone (MEK)	43	6.452	6.421	0.031	89	8668	25.0	25.0	
46 Chlorobromomethane	128	6.646	6.646	0.000	73	9120	25.0	23.3	
48 Tetrahydrofuran	42	6.738	6.713	0.025	43	8296	50.0	56.9	
49 Chloroform	83	6.750	6.749	0.001	77	33804	25.0	24.3	
50 1,1,1-Trichloroethane	97	6.944	6.944	0.000	83	28006	25.0	21.8	
51 Cyclohexane	56	7.005	7.005	0.000	88	57475	25.0	23.3	
53 Carbon tetrachloride	117	7.139	7.133	0.006	82	24926	25.0	22.3	
52 1,1-Dichloropropene	75	7.151	7.139	0.012	85	21269	25.0	19.5	
54 Benzene	78	7.370	7.364	0.006	89	86031	25.0	24.5	
55 1,2-Dichloroethane	62	7.394	7.394	0.000	56	17743	25.0	24.6	
58 n-Heptane	43	7.680	7.674	0.006	40	36710	25.0	21.6	
59 Isobutyl alcohol	41	7.674	7.674	0.000	28	18671	625.0	515.7	
61 Trichloroethene	130	8.088	8.069	0.019	74	25606	25.0	25.8	
63 Methylcyclohexane	83	8.258	8.264	-0.006	80	49523	25.0	23.2	
64 1,2-Dichloropropane	63	8.301	8.300	0.001	75	19627	25.0	24.8	
65 Dibromomethane	93	8.440	8.428	0.012	62	7150	25.0	22.6	
67 1,4-Dioxane	88	8.501	8.458	0.043	27	2414	500.0	524.8	
68 Dichlorobromomethane	83	8.592	8.592	0.000	59	14023	25.0	19.1	
71 cis-1,3-Dichloropropene	75	9.073	9.054	0.019	43	16975	25.0	19.4	
72 4-Methyl-2-pentanone (MIBK	43	9.249	9.212	0.037	1	11262	25.0	16.8	
73 Toluene	91	9.401	9.383	0.018	95	96006	25.0	27.0	
74 trans-1,3-Dichloropropene	75	9.657	9.614	0.043	38	10548	25.0	20.0	
75 Ethyl methacrylate	69	9.809	9.705	0.104	1	1963	25.0	29.6	
76 1,1,2-Trichloroethane	97	9.803	9.790	0.013	58	11703	25.0	23.6	
77 Tetrachloroethene	164	9.949	9.930	0.019	76	21512	25.0	25.7	
78 1,3-Dichloropropane	76	9.979	9.954	0.025	43	14703	25.0	19.5	
79 2-Hexanone	43	10.234	10.082	0.152	1	1694	25.0	32.1	
81 Chlorodibromomethane	129	10.198	10.191	0.007	30	9522	25.0	21.6	
82 Ethylene Dibromide	107	10.386	10.313	0.073	1	2033	25.0	25.5	
84 Chlorobenzene	112	10.800	10.793	0.007	82	57798	25.0	24.3	
85 1,1,1,2-Tetrachloroethane	131	10.879	10.866	0.013	55	14390	25.0	20.6	
86 Ethylbenzene	106	10.928	10.897	0.031	87	31054	25.0	23.0	
87 m-Xylene & p-Xylene	106	11.116	11.018	0.098	51	7115	25.0	17.3	
88 o-Xylene	106	11.438	11.408	0.030	61	39051	25.0	23.6	
89 Styrene	104	11.499	11.426	0.073	76	45763	25.0	19.3	
90 Bromoform	173	11.651	11.627	0.024	1	2497	25.0	25.2	
91 Isopropylbenzene	105	11.803	11.773	0.030	83	109542	25.0	24.9	
93 1,1,2,2-Tetrachloroethane	83	12.101	12.064	0.037	26	13311	25.0	24.1	
94 Bromobenzene	156	12.138	12.101	0.037	62	21835	25.0	30.4	
95 1,2,3-Trichloropropane	110	12.144	12.125	0.019	15	3506	25.0	28.3	
96 trans-1,4-Dichloro-2-buten	53	12.241	12.180	0.061	1	260	25.0	5.53	M
97 N-Propylbenzene	120	12.229	12.186	0.043	90	27927	25.0	26.7	
98 2-Chlorotoluene	126	12.308	12.277	0.031	83	25377	25.0	29.6	
99 1,3,5-Trimethylbenzene	105	12.381	12.356	0.025	84	93610	25.0	23.0	
100 4-Chlorotoluene	126	12.454	12.393	0.061	57	16329	25.0	21.1	
101 tert-Butylbenzene	119	12.703	12.685	0.018	81	89969	25.0	17.0	
103 1,2,4-Trimethylbenzene	105	12.764	12.733	0.031	81	78032	25.0	28.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
104 sec-Butylbenzene	105	12.928	12.904	0.024	80	130474	25.0	20.1	
105 1,3-Dichlorobenzene	146	13.080	13.037	0.043	4	21844	25.0	18.0	
106 4-Isopropyltoluene	119	13.087	13.050	0.037	74	98964	25.0	20.2	
107 1,4-Dichlorobenzene	146	13.153	13.123	0.030	43	48838	25.0	30.9	
110 n-Butylbenzene	91	13.567	13.469	0.098	70	74571	25.0	26.6	
111 1,2-Dichlorobenzene	146	13.573	13.506	0.067	50	40699	25.0	30.8	
112 1,2-Dibromo-3-Chloropropan	157	14.370	14.321	0.049	1	199	25.0	35.8	
113 1,2,4-Trichlorobenzene	180	15.233	15.154	0.079	4	8007	25.0	18.1	
115 Hexachlorobutadiene	225	15.312	15.288	0.024	53	21924	25.0	31.8	
116 Naphthalene	128	15.568	15.446	0.122	1	6336	25.0	34.5	
117 1,2,3-Trichlorobenzene	180	15.708	15.689	0.019	1	611	25.0	20.8	
S 130 Xylenes, Total	106				0		50.0	40.9	
S 129 1,2-Dichloroethene, Total	96				0		50.0	48.5	
S 131 1,3-Dichloropropene, Total	1				0		50.0	39.3	

QC Flag Legend

Review Flags
M - Manually Integrated

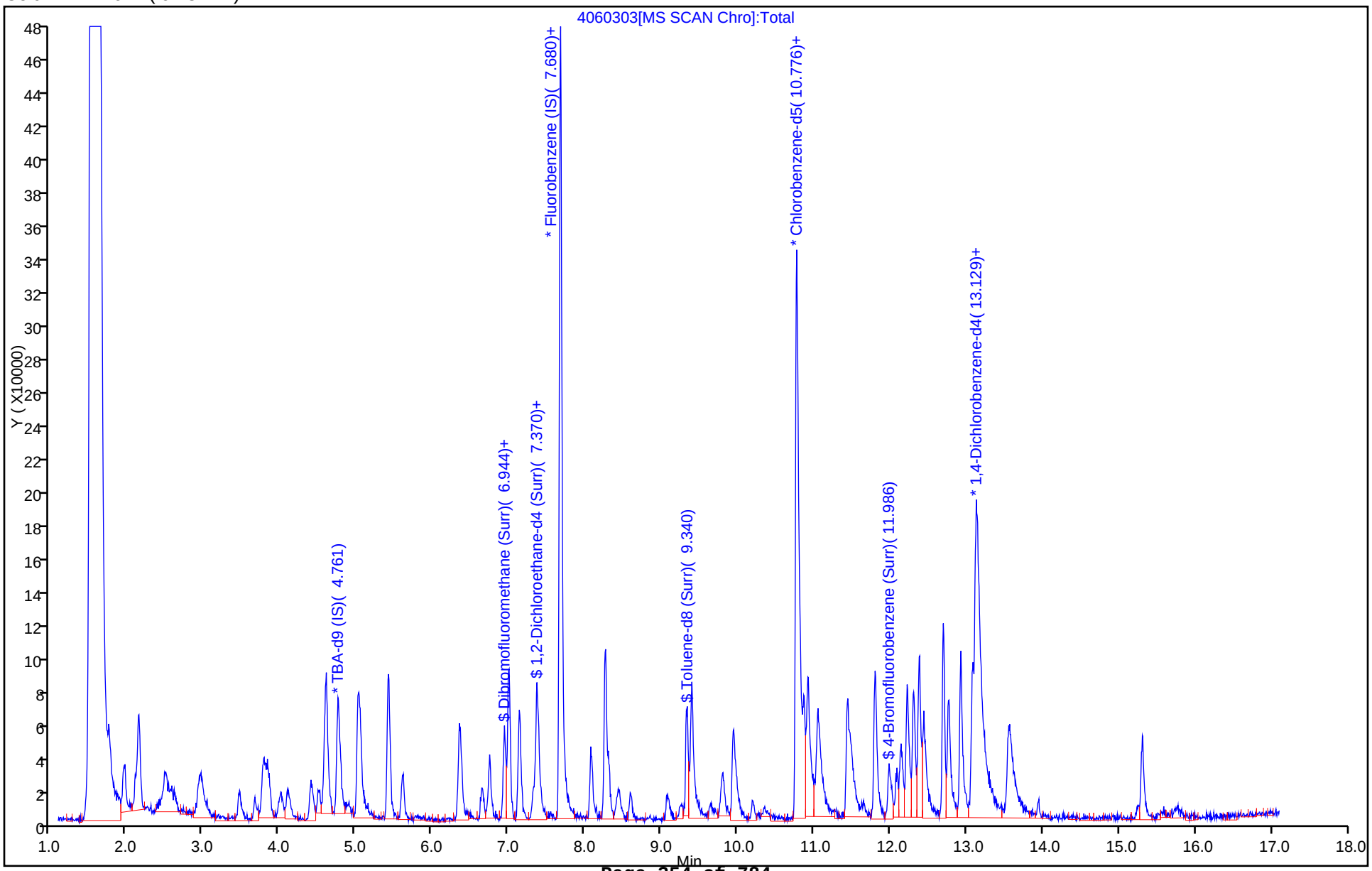
Report Date: 03-Jun-2014 14:07:28 Chrom Revision: 2.2 16-May-2014 10:46:48

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060303.D

Injection Date:	03-Jun-2014 11:03:30	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#:	3
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

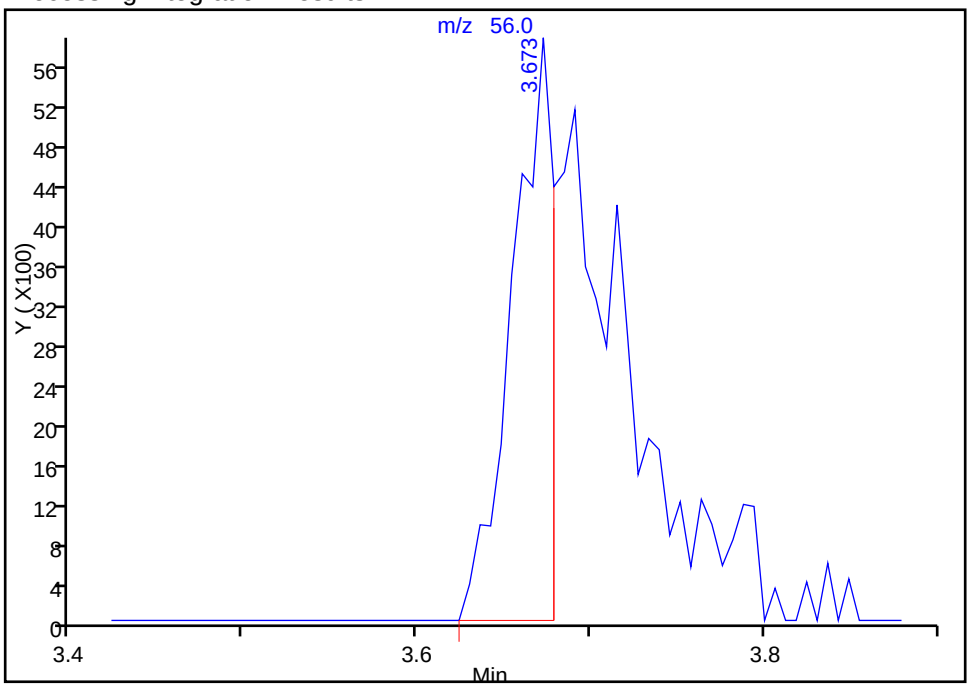
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060303.D				
Injection Date:	03-Jun-2014 11:03:30	Instrument ID:	CHHP4		
Lims ID:	IC				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
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

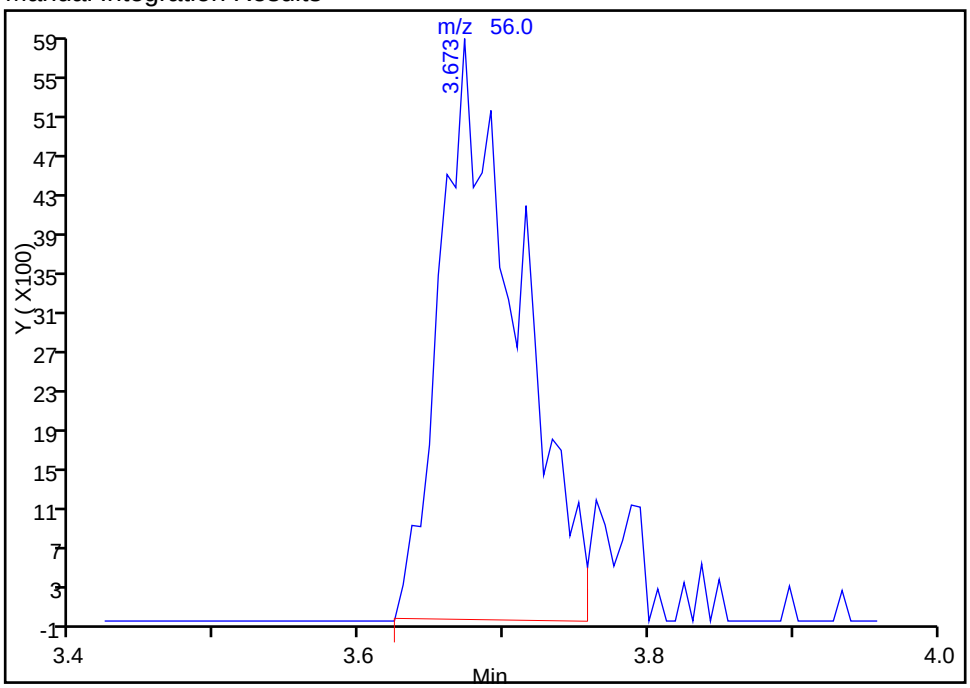
Processing Integration Results

RT: 3.67
Response: 9757
Amount: 284.7544



Manual Integration Results

RT: 3.67
Response: 22060
Amount: 599.2580



Reviewer: journetp, 03-Jun-2014 13:59:16
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

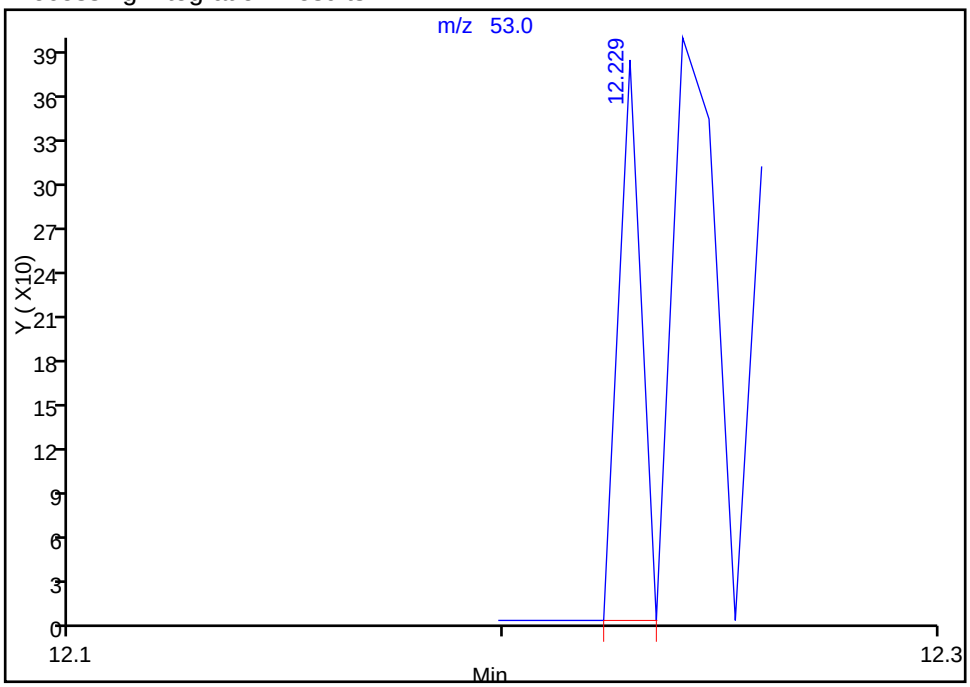
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060303.D				
Injection Date:	03-Jun-2014 11:03:30	Instrument ID:	CHHP4		
Lims ID:	IC				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
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		

96 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

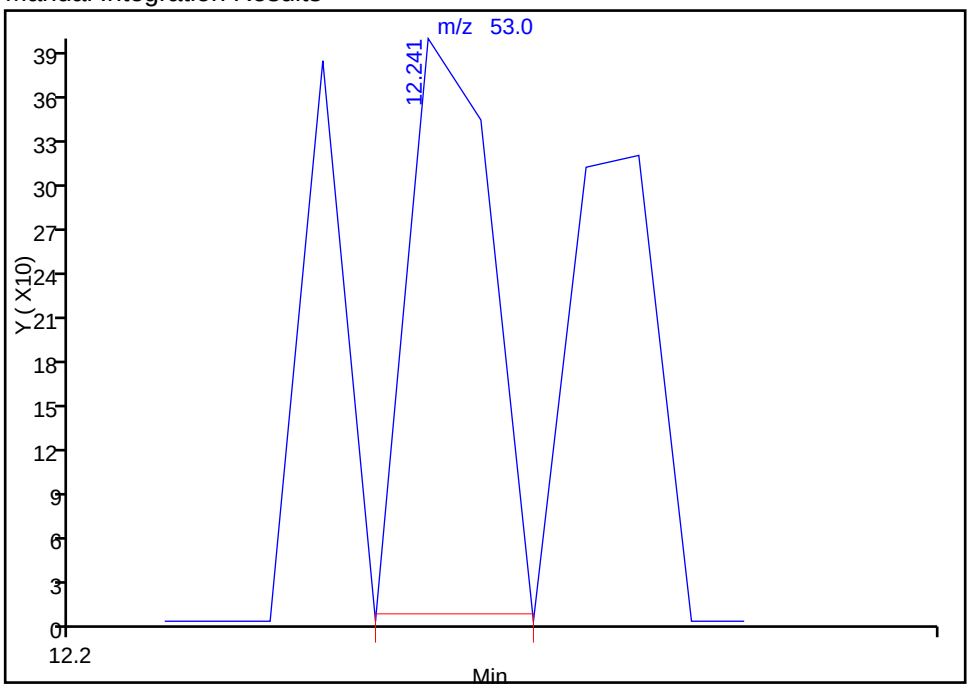
Processing Integration Results

RT: 12.23
Response: 138
Amount: 3.653890



Manual Integration Results

RT: 12.24
Response: 260
Amount: 5.526277



Reviewer: journetp, 03-Jun-2014 13:49:58
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060304.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 03-Jun-2014 11:43:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0001537-004
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub5

Method: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Jun-2014 14:07:30 Calib Date: 03-Jun-2014 14:15:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK040

First Level Reviewer: journetp Date: 03-Jun-2014 13:25:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.773	4.767	0.006	95	94282	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.680	7.680	0.000	98	538510	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.776	10.763	0.013	75	118439	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	13.117	13.098	0.019	92	143053	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.938	6.932	0.006	21	28981	50.0	44.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.321	7.309	0.012	77	22633	50.0	42.4	
$ 7 Toluene-d8 (Surr)	98	9.328	9.316	0.012	83	145836	50.0	54.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.968	11.943	0.025	82	40029	50.0	46.7	
10 Dichlorodifluoromethane	85	1.757	1.757	0.000	94	70750	50.0	55.5	
11 Chloromethane	50	1.958	1.963	-0.005	95	95443	50.0	57.5	
12 Vinyl chloride	62	2.110	2.115	-0.005	96	75600	50.0	56.0	
13 Butadiene	39	2.146	2.152	-0.006	90	78788	50.0	58.5	
14 Bromomethane	94	2.499	2.492	0.007	73	21072	50.0	53.6	
15 Chloroethane	64	2.614	2.614	0.000	59	28838	50.0	55.9	
16 Dichlorofluoromethane	67	2.949	2.949	0.000	75	81486	50.0	56.0	
17 Trichlorofluoromethane	101	2.985	2.967	0.018	88	74545	50.0	55.4	
19 Ethyl ether	59	3.472	3.472	0.000	88	31477	50.0	47.6	
20 Acrolein	56	3.673	3.672	0.001	69	24998	625.0	710.2	M
21 1,1-Dichloroethene	96	3.782	3.782	0.000	80	57081	50.0	54.1	
22 1,1,2-Trichloro-1,2,2-trif	101	3.831	3.849	-0.018	73	63713	50.0	57.3	
23 Acetone	43	3.971	3.958	0.013	70	15955	50.0	48.1	
24 Iodomethane	142	4.007	4.007	0.000	92	82402	50.0	52.5	
25 Carbon disulfide	76	4.110	4.104	0.006	97	121759	50.0	46.3	
28 3-Chloro-1-propene	76	4.414	4.408	0.006	87	17201	50.0	56.2	
29 Methyl acetate	43	4.500	4.487	0.013	96	81949	250.0	232.5	
30 Methylene Chloride	84	4.597	4.603	-0.006	93	97048	50.0	63.0	
31 2-Methyl-2-propanol	59	4.895	4.901	-0.006	75	18400	500.0	506.8	
32 Acrylonitrile	53	5.029	5.004	0.025	89	55798	500.0	438.1	
33 trans-1,2-Dichloroethene	96	5.010	5.016	-0.006	98	56452	50.0	52.5	
34 Methyl tert-butyl ether	73	5.047	5.047	0.000	91	76208	50.0	48.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Hexane	57	5.418	5.418	0.000	94	110877	50.0	58.4	
36 1,1-Dichloroethane	63	5.606	5.600	0.006	81	84332	50.0	51.7	
38 Vinyl acetate	43	5.777	5.740	0.037	38	11206	50.0	49.6	
41 2,2-Dichloropropane	77	6.348	6.348	0.000	76	46236	50.0	50.3	
42 cis-1,2-Dichloroethene	96	6.361	6.360	0.000	64	47054	50.0	46.1	
43 2-Butanone (MEK)	43	6.452	6.421	0.031	52	21015	50.0	59.1	
46 Chlorobromomethane	128	6.646	6.646	0.000	77	16941	50.0	45.2	
48 Tetrahydrofuran	42	6.719	6.713	0.006	91	12329	100.0	88.5	
49 Chloroform	83	6.750	6.749	0.001	91	69246	50.0	52.1	
50 1,1,1-Trichloroethane	97	6.950	6.944	0.006	89	60074	50.0	48.9	
51 Cyclohexane	56	6.999	7.005	-0.006	92	131629	50.0	55.9	
53 Carbon tetrachloride	117	7.127	7.133	-0.006	80	51136	50.0	47.9	
52 1,1-Dichloropropene	75	7.145	7.139	0.006	88	55343	50.0	53.0	
54 Benzene	78	7.370	7.364	0.006	95	178355	50.0	53.2	
55 1,2-Dichloroethane	62	7.400	7.394	0.006	76	32404	50.0	46.9	
58 n-Heptane	43	7.674	7.674	0.000	47	86313	50.0	53.1	
59 Isobutyl alcohol	41	7.674	7.674	0.000	34	45358	1250.0	1310.3	
61 Trichloroethene	130	8.082	8.069	0.013	81	44967	50.0	47.4	
63 Methylcyclohexane	83	8.264	8.264	0.000	84	108876	50.0	53.3	
64 1,2-Dichloropropane	63	8.300	8.300	0.000	82	37664	50.0	49.7	
65 Dibromomethane	93	8.440	8.428	0.012	71	13808	50.0	45.6	
67 1,4-Dioxane	88	8.465	8.458	0.007	18	4990	1000.0	1134.6	
68 Dichlorobromomethane	83	8.598	8.592	0.006	78	32559	50.0	46.3	
71 cis-1,3-Dichloropropene	75	9.067	9.054	0.013	69	38205	50.0	45.6	
72 4-Methyl-2-pentanone (MIBK	43	9.237	9.212	0.025	82	33629	50.0	50.9	
73 Toluene	91	9.395	9.383	0.012	98	200167	50.0	57.1	
74 trans-1,3-Dichloropropene	75	9.638	9.614	0.024	67	18479	50.0	35.5	
75 Ethyl methacrylate	69	9.790	9.705	0.085	7	5023	50.0	35.5	
76 1,1,2-Trichloroethane	97	9.790	9.790	0.000	74	27603	50.0	56.5	
77 Tetrachloroethene	164	9.942	9.930	0.012	94	49319	50.0	59.8	
78 1,3-Dichloropropane	76	9.973	9.954	0.019	81	39991	50.0	53.8	
79 2-Hexanone	43	10.240	10.082	0.158	1	3732	50.0	36.0	
81 Chlorodibromomethane	129	10.198	10.191	0.007	65	19606	50.0	45.1	
82 Ethylene Dibromide	107	10.332	10.313	0.019	57	10649	50.0	45.1	
84 Chlorobenzene	112	10.806	10.793	0.013	92	130883	50.0	55.9	
85 1,1,1,2-Tetrachloroethane	131	10.873	10.866	0.007	75	33183	50.0	48.2	
86 Ethylbenzene	106	10.915	10.897	0.018	97	74570	50.0	56.1	
87 m-Xylene & p-Xylene	106	11.037	11.018	0.019	97	76026	50.0	53.2	
88 o-Xylene	106	11.420	11.408	0.012	92	92430	50.0	56.8	
89 Styrene	104	11.469	11.426	0.043	90	122402	50.0	52.5	
90 Bromoform	173	11.639	11.627	0.012	59	9952	50.0	51.2	
91 Isopropylbenzene	105	11.785	11.773	0.012	92	257339	50.0	59.4	
93 1,1,2,2-Tetrachloroethane	83	12.083	12.064	0.019	53	27788	50.0	51.2	
94 Bromobenzene	156	12.120	12.101	0.019	92	39563	50.0	50.1	
95 1,2,3-Trichloropropane	110	12.144	12.125	0.019	14	8154	50.0	59.7	
96 trans-1,4-Dichloro-2-buten	53	12.223	12.180	0.043	1	1939	50.0	37.4	M
97 N-Propylbenzene	120	12.205	12.186	0.019	93	67423	50.0	58.5	
98 2-Chlorotoluene	126	12.296	12.277	0.019	95	56794	50.0	60.1	
99 1,3,5-Trimethylbenzene	105	12.369	12.356	0.013	95	201464	50.0	53.5	
100 4-Chlorotoluene	126	12.411	12.393	0.018	92	52500	50.0	61.7	
101 tert-Butylbenzene	119	12.691	12.685	0.006	88	209042	50.0	53.2	
103 1,2,4-Trimethylbenzene	105	12.752	12.733	0.019	93	191384	50.0	62.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
104 sec-Butylbenzene	105	12.922	12.904	0.018	89	307556	50.0	57.6	
105 1,3-Dichlorobenzene	146	13.056	13.037	0.019	43	72401	50.0	54.3	
106 4-Isopropyltoluene	119	13.062	13.050	0.012	92	238221	50.0	54.6	
107 1,4-Dichlorobenzene	146	13.141	13.123	0.018	69	100396	50.0	57.7	
110 n-Butylbenzene	91	13.524	13.469	0.055	89	184898	50.0	60.0	
111 1,2-Dichlorobenzene	146	13.549	13.506	0.043	83	84330	50.0	57.9	
112 1,2-Dibromo-3-Chloropropan	157	14.351	14.321	0.030	1	290	50.0	37.3	
113 1,2,4-Trichlorobenzene	180	15.215	15.154	0.061	24	19532	50.0	40.0	
115 Hexachlorobutadiene	225	15.294	15.288	0.006	83	43390	50.0	57.1	
116 Naphthalene	128	15.525	15.446	0.079	1	9471	50.0	38.4	
117 1,2,3-Trichlorobenzene	180	15.726	15.689	0.037	1	8149	50.0	38.1	
S 130 Xylenes, Total	106				0		100.0	110.0	
S 129 1,2-Dichloroethene, Total	96				0		100.0	98.6	
S 131 1,3-Dichloropropene, Total	1				0		100.0	81.2	

QC Flag Legend

Review Flags
M - Manually Integrated

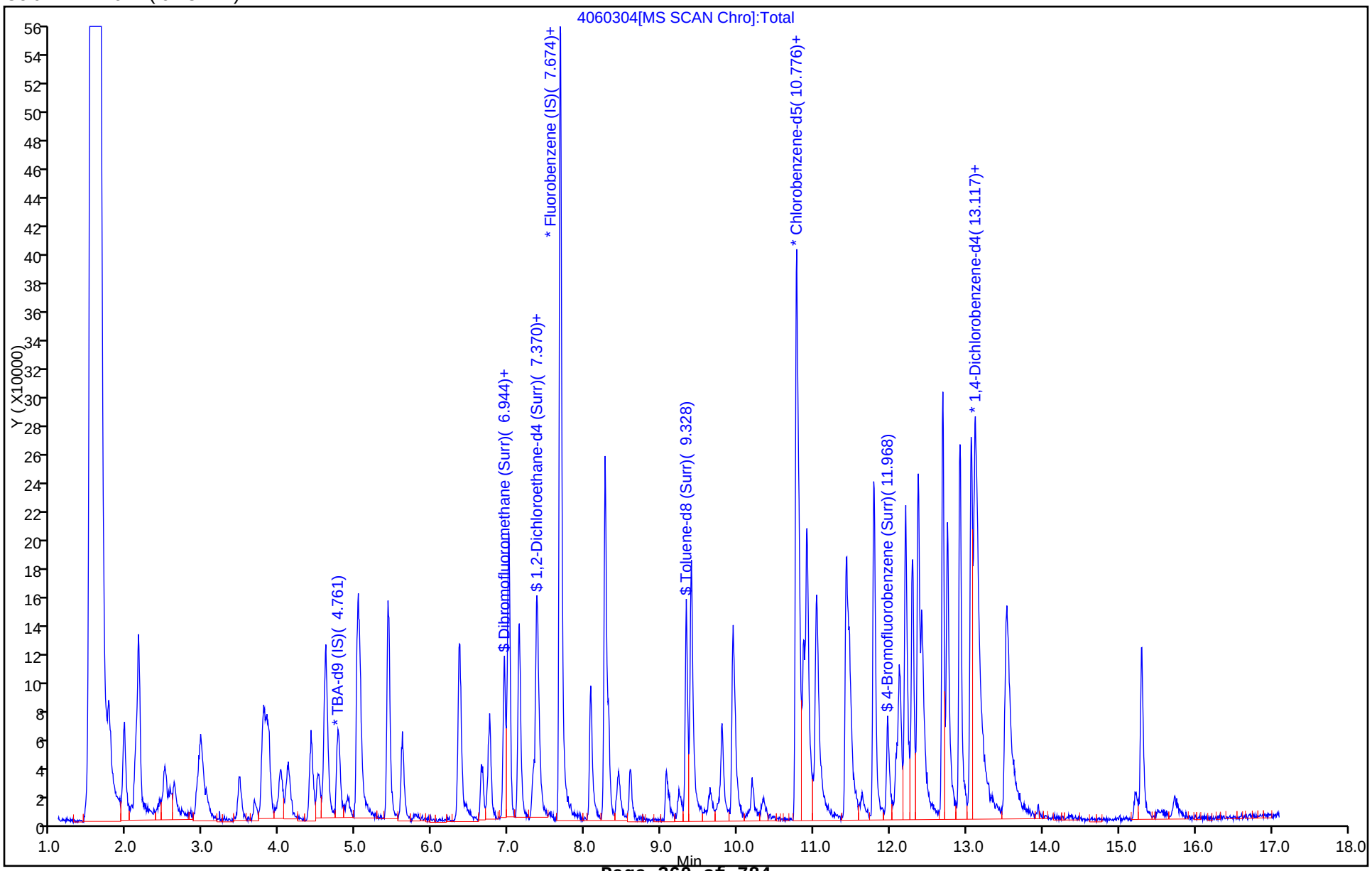
Report Date: 03-Jun-2014 14:07:31 Chrom Revision: 2.2 16-May-2014 10:46:48

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060304.D

Injection Date:	03-Jun-2014 11:43:30	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

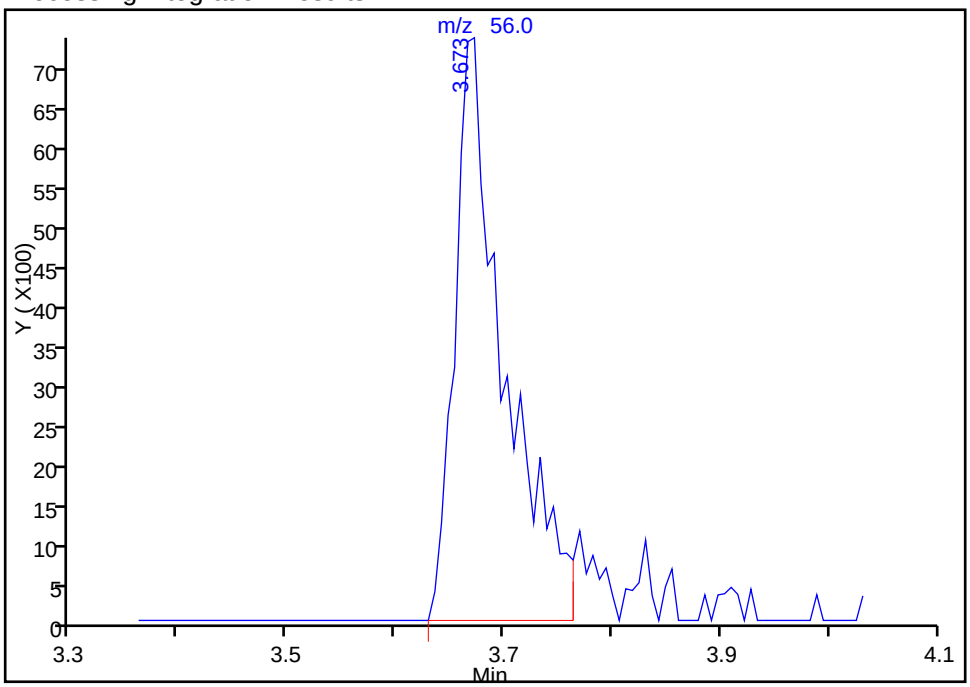
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060304.D
Injection Date: 03-Jun-2014 11:43:30 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

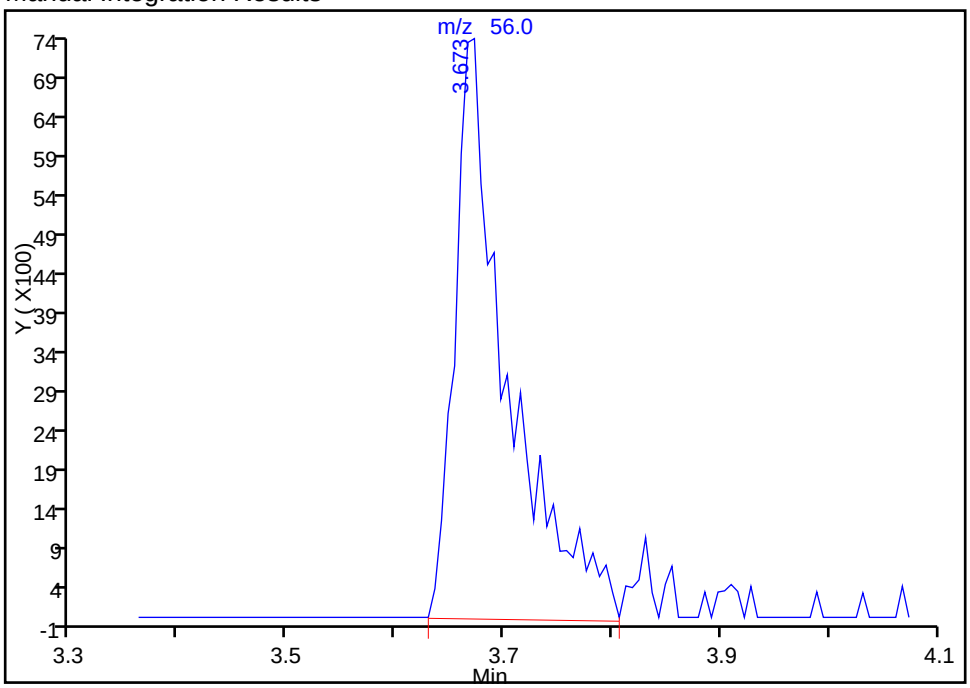
Processing Integration Results

RT: 3.67
Response: 23198
Amount: 717.0719



Manual Integration Results

RT: 3.67
Response: 24998
Amount: 710.2042



Reviewer: journetp, 03-Jun-2014 13:54:51
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

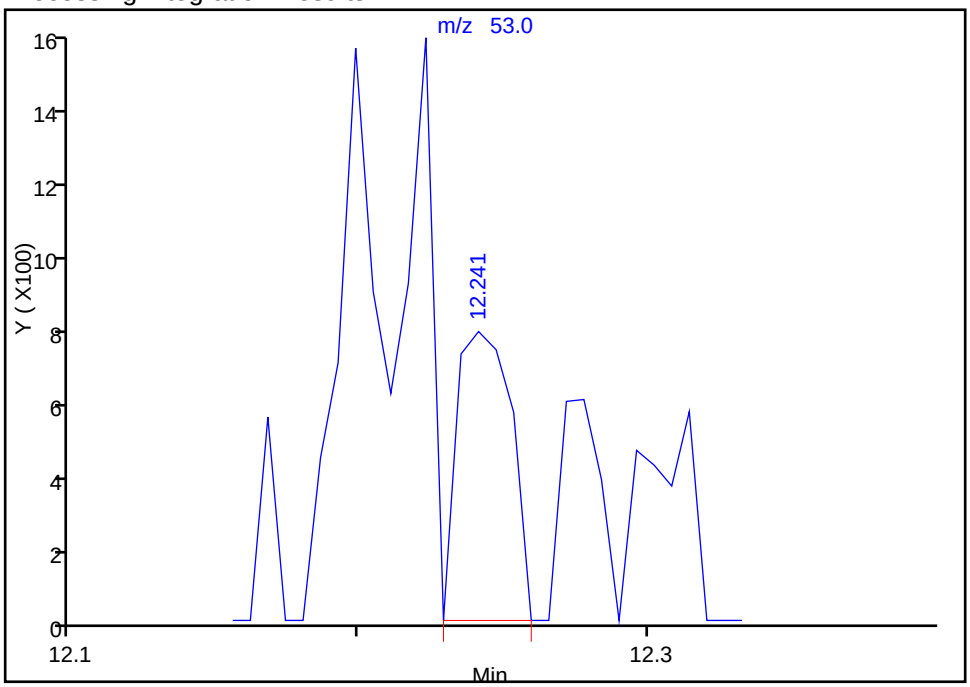
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060304.D				
Injection Date:	03-Jun-2014 11:43:30	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		

96 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

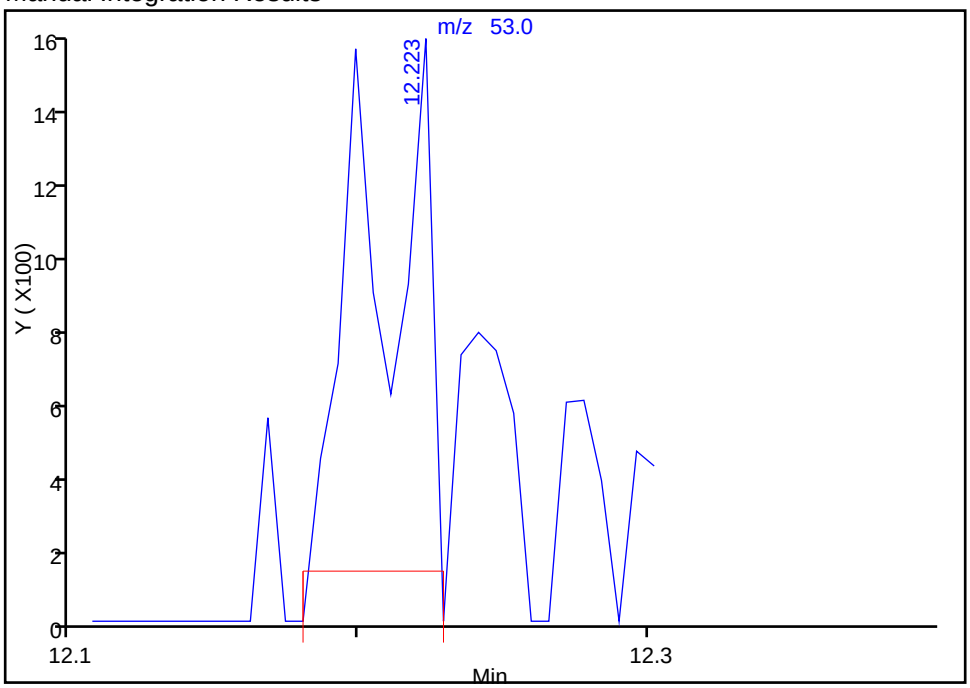
Processing Integration Results

RT: 12.24
Response: 994
Amount: 23.303158



Manual Integration Results

RT: 12.22
Response: 1939
Amount: 37.434292



Reviewer: journetp, 03-Jun-2014 13:50:17
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Report Date: 03-Jun-2014 14:07:33 Chrom Revision: 2.2 16-May-2014 10:46:48

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060305.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Jun-2014 12:13:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0001537-005
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub5

Method: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Jun-2014 14:07:32 Calib Date: 03-Jun-2014 14:15:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK040

First Level Reviewer: journetp Date: 03-Jun-2014 13:27:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.773	4.767	0.006	96	105137	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.679	7.680	-0.001	95	532750	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.775	10.763	0.012	80	125854	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	13.104	13.098	0.006	92	163803	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.938	6.932	0.006	31	81429	125.0	124.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.315	7.309	0.006	92	70946	125.0	134.2	
$ 7 Toluene-d8 (Surr)	98	9.321	9.316	0.005	91	364180	125.0	127.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.943	11.943	-0.001	93	121021	125.0	132.9	
10 Dichlorodifluoromethane	85	1.768	1.757	0.011	86	162959	125.0	129.2	
11 Chloromethane	50	1.963	1.963	0.000	99	209803	125.0	127.7	
12 Vinyl chloride	62	2.121	2.115	0.006	98	171111	125.0	128.0	
13 Butadiene	39	2.158	2.152	0.006	90	162470	125.0	121.9	
14 Bromomethane	94	2.498	2.492	0.006	88	51325	125.0	132.1	
15 Chloroethane	64	2.626	2.614	0.012	96	71447	125.0	139.9	
16 Dichlorofluoromethane	67	2.936	2.949	-0.013	77	193275	125.0	134.2	
17 Trichlorofluoromethane	101	2.979	2.967	0.012	84	168507	125.0	126.6	
19 Ethyl ether	59	3.471	3.472	-0.001	92	81689	125.0	124.8	
20 Acrolein	56	3.690	3.672	0.018	78	27751	750.0	796.9	M
21 1,1-Dichloroethene	96	3.787	3.782	0.005	92	131150	125.0	125.8	
22 1,1,2-Trichloro-1,2,2-trif	101	3.848	3.849	-0.001	76	138123	125.0	125.7	
23 Acetone	43	3.958	3.958	0.000	89	38491	125.0	117.4	
24 Iodomethane	142	4.012	4.007	0.005	94	197972	125.0	127.5	
25 Carbon disulfide	76	4.110	4.104	0.006	98	306500	125.0	117.9	
28 3-Chloro-1-propene	76	4.408	4.408	0.000	90	68139	125.0	123.7	
29 Methyl acetate	43	4.499	4.487	0.012	98	227261	625.0	651.7	
30 Methylene Chloride	84	4.602	4.603	-0.001	95	170766	125.0	133.8	
31 2-Methyl-2-propanol	59	4.888	4.901	-0.013	84	50693	1250.0	1252.2	
32 Acrylonitrile	53	5.010	5.004	0.006	99	203263	1250.0	1306.4	
33 trans-1,2-Dichloroethene	96	5.010	5.016	-0.006	99	130770	125.0	123.0	
34 Methyl tert-butyl ether	73	5.046	5.047	-0.001	88	207457	125.0	132.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Hexane	57	5.423	5.418	0.005	94	226702	125.0	120.8	
36 1,1-Dichloroethane	63	5.612	5.600	0.012	82	203698	125.0	126.3	
38 Vinyl acetate	43	5.752	5.740	0.012	92	45608	125.0	125.5	
41 2,2-Dichloropropane	77	6.348	6.348	0.000	78	110986	125.0	122.1	
42 cis-1,2-Dichloroethene	96	6.366	6.360	0.006	68	127492	125.0	126.1	
43 2-Butanone (MEK)	43	6.433	6.421	0.012	90	41366	125.0	114.2	
46 Chlorobromomethane	128	6.640	6.646	-0.006	88	44632	125.0	120.3	
48 Tetrahydrofuran	42	6.713	6.713	0.000	90	34366	250.0	249.2	
49 Chloroform	83	6.749	6.749	0.000	81	164310	125.0	125.0	
50 1,1,1-Trichloroethane	97	6.950	6.944	0.006	90	154416	125.0	127.0	
51 Cyclohexane	56	7.004	7.005	-0.001	91	306727	125.0	131.7	
53 Carbon tetrachloride	117	7.132	7.133	-0.001	90	131539	125.0	124.5	
52 1,1-Dichloropropene	75	7.138	7.139	-0.001	88	126193	125.0	122.3	
54 Benzene	78	7.369	7.364	0.005	97	424745	125.0	128.0	
55 1,2-Dichloroethane	62	7.394	7.394	0.000	79	87531	125.0	128.2	
58 n-Heptane	43	7.673	7.674	-0.001	65	204187	125.0	126.9	
59 Isobutyl alcohol	41	7.673	7.674	-0.001	54	115432	3125.0	3370.5	
61 Trichloroethene	130	8.069	8.069	0.000	89	117260	125.0	124.9	
63 Methylcyclohexane	83	8.263	8.264	-0.001	89	265285	125.0	131.2	
64 1,2-Dichloropropane	63	8.300	8.300	0.000	92	97788	125.0	130.5	
65 Dibromomethane	93	8.434	8.428	0.006	85	39794	125.0	132.9	
67 1,4-Dioxane	88	8.452	8.458	-0.006	59	12006	2500.0	2759.4	
68 Dichlorobromomethane	83	8.592	8.592	0.000	97	82433	125.0	118.5	
71 cis-1,3-Dichloropropene	75	9.060	9.054	0.006	84	98185	125.0	118.5	
72 4-Methyl-2-pentanone (MIBK	43	9.212	9.212	0.000	88	87030	125.0	123.9	
73 Toluene	91	9.388	9.383	0.005	98	486576	125.0	130.6	
74 trans-1,3-Dichloropropene	75	9.619	9.614	0.005	83	66230	125.0	119.8	
75 Ethyl methacrylate	69	9.723	9.705	0.018	81	53432	125.0	121.2	
76 1,1,2-Trichloroethane	97	9.790	9.790	0.000	80	66780	125.0	128.7	
77 Tetrachloroethene	164	9.942	9.930	0.012	90	108367	125.0	123.6	
78 1,3-Dichloropropane	76	9.960	9.954	0.006	91	108236	125.0	137.0	
79 2-Hexanone	43	10.112	10.082	0.030	90	42913	125.0	106.4	
81 Chlorodibromomethane	129	10.185	10.191	-0.006	86	54126	125.0	117.2	
82 Ethylene Dibromide	107	10.319	10.313	0.006	90	55921	125.0	140.2	
84 Chlorobenzene	112	10.793	10.793	0.000	95	325166	125.0	130.6	
85 1,1,1,2-Tetrachloroethane	131	10.866	10.866	0.000	89	96577	125.0	131.9	
86 Ethylbenzene	106	10.903	10.897	0.006	97	178507	125.0	126.3	
87 m-Xylene & p-Xylene	106	11.024	11.018	0.006	99	234501	125.0	130.6	
88 o-Xylene	106	11.420	11.408	0.012	96	224430	125.0	129.8	
89 Styrene	104	11.444	11.426	0.018	95	327406	125.0	132.1	
90 Bromoform	173	11.626	11.627	-0.001	90	31669	125.0	120.1	
91 Isopropylbenzene	105	11.778	11.773	0.005	95	613208	125.0	133.2	
93 1,1,2,2-Tetrachloroethane	83	12.070	12.064	0.006	71	74589	125.0	129.4	
94 Bromobenzene	156	12.107	12.101	0.006	82	122392	125.0	135.3	
95 1,2,3-Trichloropropane	110	12.125	12.125	0.000	62	20899	125.0	133.7	
96 trans-1,4-Dichloro-2-buten	53	12.186	12.180	0.006	1	8481	125.0	143.0	M
97 N-Propylbenzene	120	12.192	12.186	0.006	95	177588	125.0	134.7	
98 2-Chlorotoluene	126	12.277	12.277	0.000	97	142287	125.0	131.5	
99 1,3,5-Trimethylbenzene	105	12.362	12.356	0.006	96	492919	125.0	127.2	
100 4-Chlorotoluene	126	12.399	12.393	0.006	96	132611	125.0	136.2	
101 tert-Butylbenzene	119	12.691	12.685	0.005	87	547098	125.0	145.6	
103 1,2,4-Trimethylbenzene	105	12.739	12.733	0.006	96	484183	125.0	137.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
104 sec-Butylbenzene	105	12.909	12.904	0.005	91	686560	125.0	127.2	
105 1,3-Dichlorobenzene	146	13.043	13.037	0.006	92	210148	125.0	137.6	
106 4-Isopropyltoluene	119	13.055	13.050	0.005	95	577084	125.0	128.2	
107 1,4-Dichlorobenzene	146	13.134	13.123	0.011	92	264282	125.0	132.7	
110 n-Butylbenzene	91	13.487	13.469	0.018	93	466632	125.0	132.2	
111 1,2-Dichlorobenzene	146	13.518	13.506	0.012	96	217623	125.0	130.5	
112 1,2-Dibromo-3-Chloropropan	157	14.357	14.321	0.036	18	5498	125.0	130.1	
113 1,2,4-Trichlorobenzene	180	15.178	15.154	0.024	71	70024	125.0	125.4	
115 Hexachlorobutadiene	225	15.293	15.288	0.005	86	113022	125.0	129.9	
116 Naphthalene	128	15.482	15.446	0.036	11	56133	125.0	100.2	
117 1,2,3-Trichlorobenzene	180	15.689	15.689	0.000	71	56072	125.0	132.8	
S 130 Xylenes, Total	106				0		250.0	260.4	
S 129 1,2-Dichloroethene, Total	96				0		250.0	249.2	
S 131 1,3-Dichloropropene, Total	1				0		250.0	238.4	

QC Flag Legend

Review Flags
M - Manually Integrated

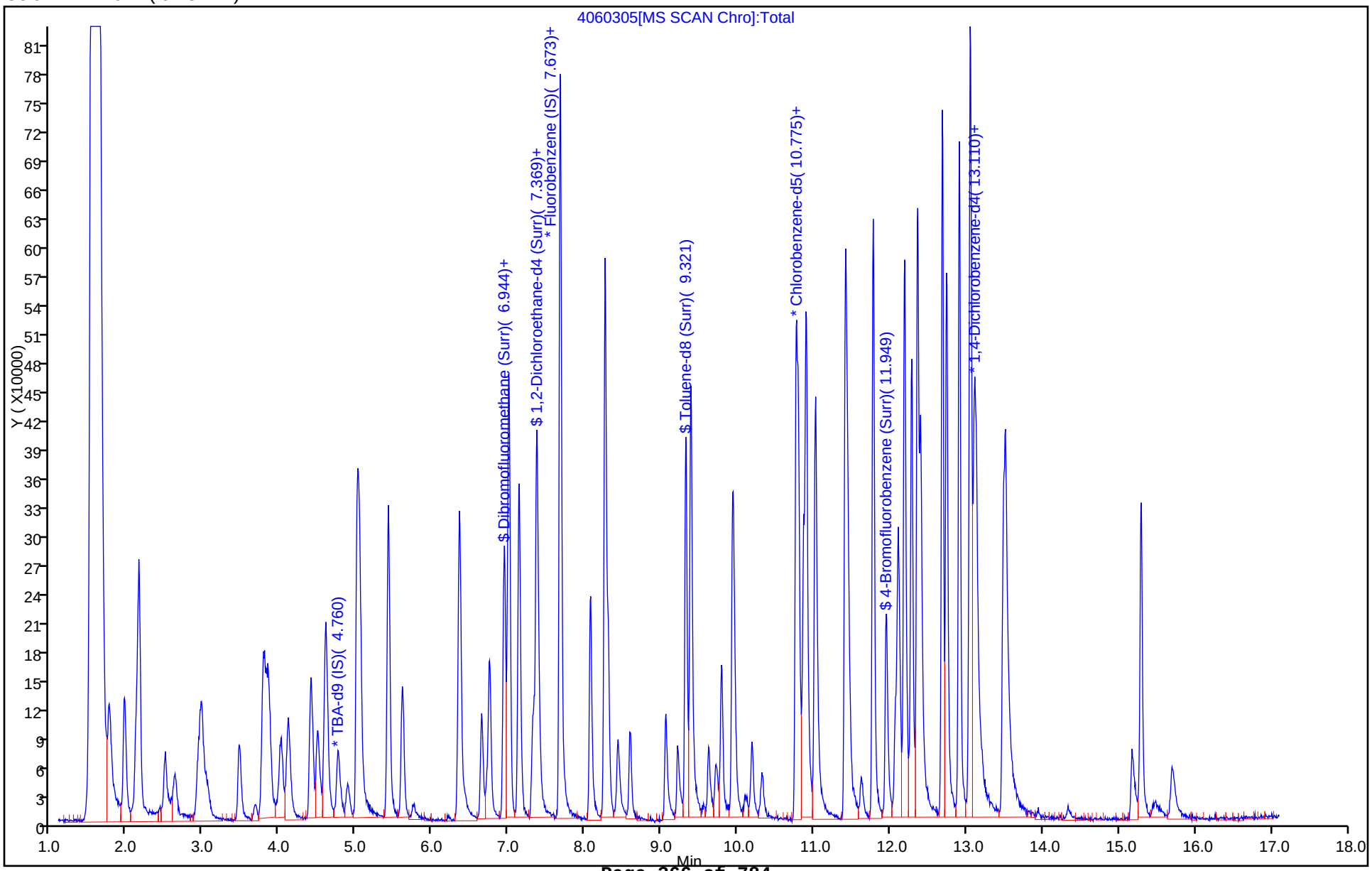
Report Date: 03-Jun-2014 14:07:33 Chrom Revision: 2.2 16-May-2014 10:46:48

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060305.D

Injection Date:	03-Jun-2014 12:13:30	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

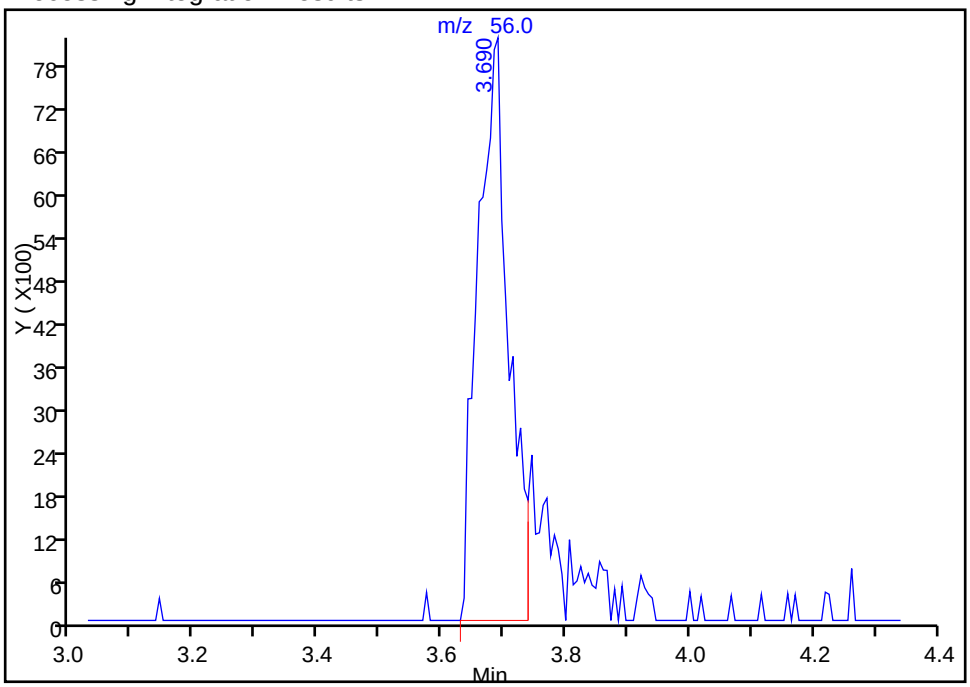
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060305.D				
Injection Date:	03-Jun-2014 12:13:30	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

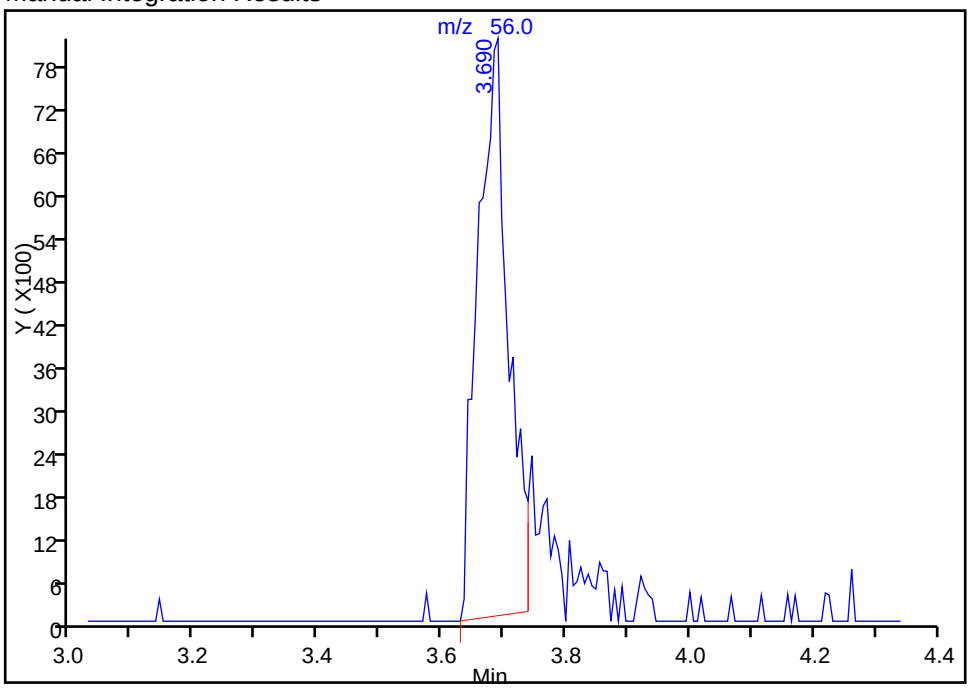
Processing Integration Results

RT: 3.69
Response: 28240
Amount: 902.7796



Manual Integration Results

RT: 3.69
Response: 27751
Amount: 796.9424



Reviewer: journetp, 03-Jun-2014 14:07:08
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

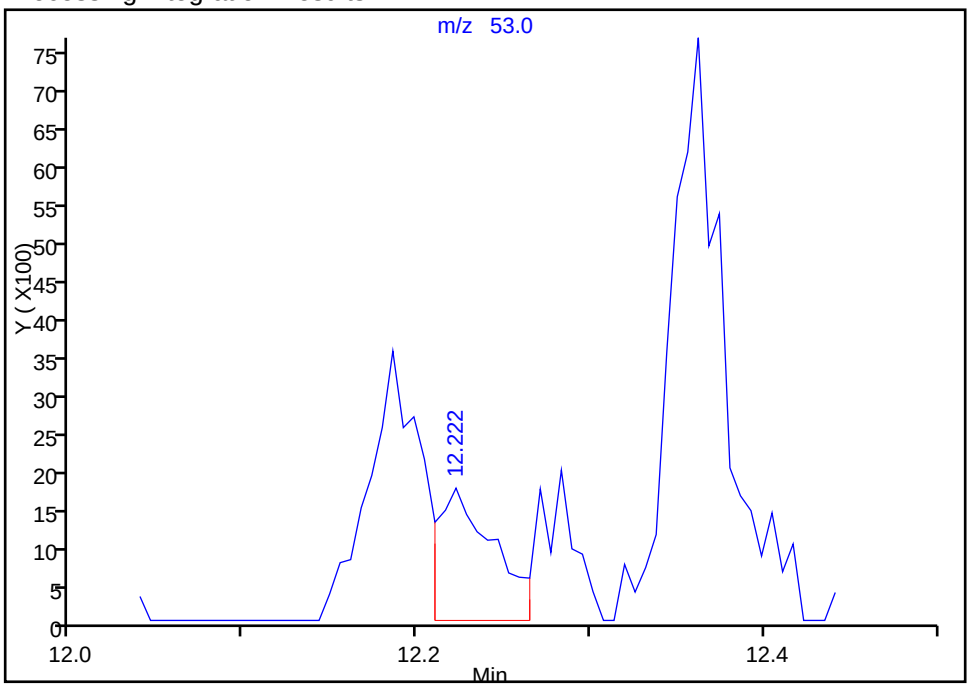
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060305.D
Injection Date: 03-Jun-2014 12:13:30 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

96 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

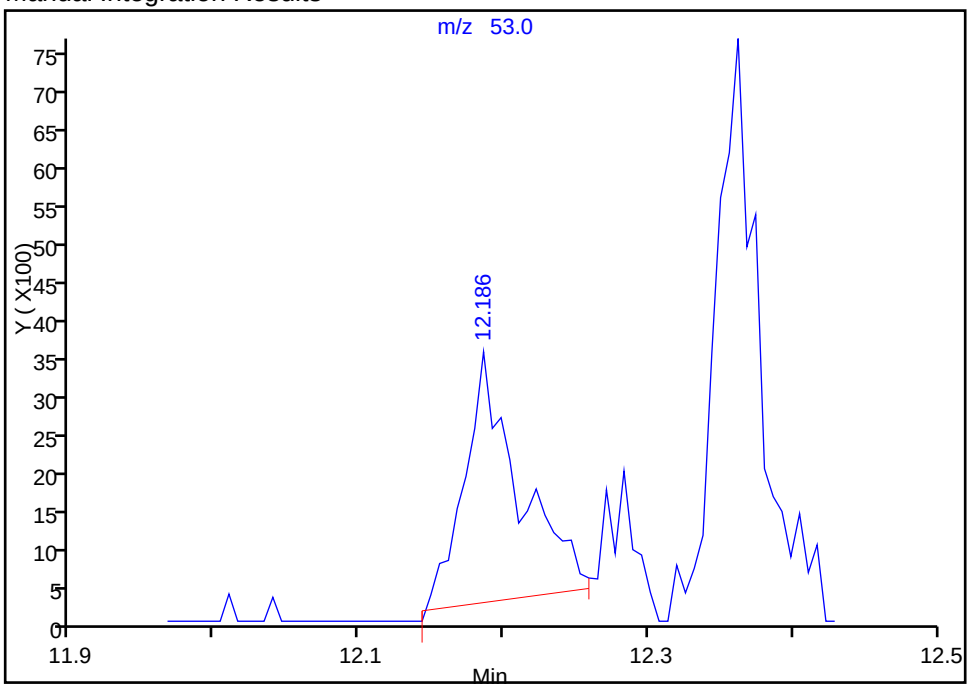
Processing Integration Results

RT: 12.22
Response: 3958
Amount: 106.1036



Manual Integration Results

RT: 12.19
Response: 8481
Amount: 142.9927



Reviewer: journetp, 03-Jun-2014 13:50:32
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060306.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 03-Jun-2014 12:43:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS
Misc. Info.: 180-0001537-006
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub5

Method: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Jun-2014 14:07:35 Calib Date: 03-Jun-2014 14:15:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK040

First Level Reviewer: journetp Date: 03-Jun-2014 13:27:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.767	4.767	0.000	97	106021	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.680	7.680	0.000	93	569856	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.763	10.763	0.000	77	130115	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	13.098	13.098	0.000	92	188656	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.932	6.932	0.000	76	150923	200.0	216.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.309	7.309	0.000	90	114838	200.0	203.2	
$ 7 Toluene-d8 (Surr)	98	9.316	9.316	0.000	91	646195	200.0	218.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.943	11.943	0.000	94	218423	200.0	232.0	
10 Dichlorodifluoromethane	85	1.757	1.757	0.000	87	278707	200.0	206.6	
11 Chloromethane	50	1.963	1.963	0.000	89	364180	200.0	207.2	
12 Vinyl chloride	62	2.115	2.115	0.000	83	287586	200.0	201.2	
13 Butadiene	39	2.152	2.152	0.000	90	298926	200.0	209.7	
14 Bromomethane	94	2.492	2.492	0.000	88	84704	200.0	203.8	
15 Chloroethane	64	2.614	2.614	0.000	93	107278	200.0	196.4	
16 Dichlorofluoromethane	67	2.949	2.949	0.000	95	308719	200.0	200.4	
17 Trichlorofluoromethane	101	2.967	2.967	0.000	84	288511	200.0	202.7	
19 Ethyl ether	59	3.472	3.472	0.000	90	146534	200.0	209.3	
20 Acrolein	56	3.672	3.672	0.000	69	31949	875.0	857.8	M
21 1,1-Dichloroethene	96	3.782	3.782	0.000	84	232051	200.0	208.0	
22 1,1,2-Trichloro-1,2,2-trif	101	3.849	3.849	0.000	87	243923	200.0	207.5	
23 Acetone	43	3.958	3.958	0.000	84	61564	200.0	175.5	
24 Iodomethane	142	4.007	4.007	0.000	96	350283	200.0	210.9	
25 Carbon disulfide	76	4.104	4.104	0.000	99	600660	200.0	215.9	
28 3-Chloro-1-propene	76	4.408	4.408	0.000	93	125698	200.0	190.7	
29 Methyl acetate	43	4.487	4.487	0.000	98	400963	1000.0	1074.9	
30 Methylene Chloride	84	4.603	4.603	0.000	90	239031	200.0	185.0	
31 2-Methyl-2-propanol	59	4.901	4.901	0.000	88	82030	2000.0	2009.4	
32 Acrylonitrile	53	5.004	5.004	0.000	99	349335	2000.0	2029.7	
33 trans-1,2-Dichloroethene	96	5.016	5.016	0.000	95	239870	200.0	211.0	
34 Methyl tert-butyl ether	73	5.047	5.047	0.000	91	348786	200.0	208.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Hexane	57	5.418	5.418	0.000	91	386773	200.0	192.6	
36 1,1-Dichloroethane	63	5.600	5.600	0.000	96	354327	200.0	205.4	
38 Vinyl acetate	43	5.740	5.740	0.000	94	76630	200.0	181.7	
41 2,2-Dichloropropane	77	6.348	6.348	0.000	80	217463	200.0	223.6	
42 cis-1,2-Dichloroethene	96	6.360	6.360	0.000	70	225724	200.0	208.8	
43 2-Butanone (MEK)	43	6.421	6.421	0.000	96	74278	200.0	188.4	
46 Chlorobromomethane	128	6.646	6.646	0.000	92	83601	200.0	210.7	
48 Tetrahydrofuran	42	6.713	6.713	0.000	93	59985	400.0	406.7	
49 Chloroform	83	6.749	6.749	0.000	80	288601	200.0	205.2	
50 1,1,1-Trichloroethane	97	6.944	6.944	0.000	90	270199	200.0	207.8	
51 Cyclohexane	56	7.005	7.005	0.000	91	519372	200.0	208.5	
53 Carbon tetrachloride	117	7.133	7.133	0.000	85	237244	200.0	210.0	
52 1,1-Dichloropropene	75	7.139	7.139	0.000	92	231940	200.0	210.1	
54 Benzene	78	7.364	7.364	0.000	96	757215	200.0	213.3	
55 1,2-Dichloroethane	62	7.394	7.394	0.000	87	150946	200.0	206.6	
58 n-Heptane	43	7.674	7.674	0.000	93	359628	200.0	209.0	
59 Isobutyl alcohol	41	7.674	7.674	0.000	80	192302	5000.0	5249.4	
61 Trichloroethene	130	8.069	8.069	0.000	93	201647	200.0	200.8	
63 Methylcyclohexane	83	8.264	8.264	0.000	90	449404	200.0	207.8	
64 1,2-Dichloropropane	63	8.300	8.300	0.000	92	164854	200.0	205.7	
65 Dibromomethane	93	8.428	8.428	0.000	84	65723	200.0	205.1	
67 1,4-Dioxane	88	8.458	8.458	0.000	75	19340	4000.0	4155.6	
68 Dichlorobromomethane	83	8.592	8.592	0.000	93	156750	200.0	210.7	
71 cis-1,3-Dichloropropene	75	9.054	9.054	0.000	85	190621	200.0	215.2	
72 4-Methyl-2-pentanone (MIBK	43	9.212	9.212	0.000	95	167458	200.0	230.6	
73 Toluene	91	9.383	9.383	0.000	98	810387	200.0	210.4	
74 trans-1,3-Dichloropropene	75	9.614	9.614	0.000	87	131169	200.0	229.5	
75 Ethyl methacrylate	69	9.705	9.705	0.000	92	113663	200.0	222.0	
76 1,1,2-Trichloroethane	97	9.790	9.790	0.000	88	115350	200.0	215.0	
77 Tetrachloroethene	164	9.930	9.930	0.000	91	188069	200.0	207.5	
78 1,3-Dichloropropane	76	9.954	9.954	0.000	92	179206	200.0	219.4	
79 2-Hexanone	43	10.082	10.082	0.000	93	112247	200.0	225.0	
81 Chlorodibromomethane	129	10.191	10.191	0.000	88	98478	200.0	206.3	
82 Ethylene Dibromide	107	10.313	10.313	0.000	92	95431	200.0	217.7	
84 Chlorobenzene	112	10.793	10.793	0.000	95	545788	200.0	212.0	
85 1,1,1,2-Tetrachloroethane	131	10.866	10.866	0.000	90	162919	200.0	215.2	
86 Ethylbenzene	106	10.897	10.897	0.000	97	320422	200.0	219.4	
87 m-Xylene & p-Xylene	106	11.018	11.018	0.000	99	393283	200.0	206.8	
88 o-Xylene	106	11.408	11.408	0.000	96	390237	200.0	218.4	
89 Styrene	104	11.426	11.426	0.000	93	584296	200.0	228.0	
90 Bromoform	173	11.627	11.627	0.000	95	55620	200.0	192.4	
91 Isopropylbenzene	105	11.773	11.773	0.000	94	1058219	200.0	222.3	
93 1,1,2,2-Tetrachloroethane	83	12.064	12.064	0.000	80	126892	200.0	212.9	
94 Bromobenzene	156	12.101	12.101	0.000	75	206485	200.0	198.1	
95 1,2,3-Trichloropropane	110	12.125	12.125	0.000	70	33708	200.0	187.3	
96 trans-1,4-Dichloro-2-buten	53	12.180	12.180	0.000	29	20483	200.0	299.9	M
97 N-Propylbenzene	120	12.186	12.186	0.000	96	313639	200.0	206.5	
98 2-Chlorotoluene	126	12.277	12.277	0.000	98	253783	200.0	203.7	
99 1,3,5-Trimethylbenzene	105	12.356	12.356	0.000	95	855464	200.0	201.2	
100 4-Chlorotoluene	126	12.393	12.393	0.000	96	232706	200.0	207.5	
101 tert-Butylbenzene	119	12.685	12.685	0.000	88	809679	200.0	194.8	
103 1,2,4-Trimethylbenzene	105	12.733	12.733	0.000	95	837367	200.0	206.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
104 sec-Butylbenzene	105	12.904	12.904	0.000	93	1178932	200.0	201.6	
105 1,3-Dichlorobenzene	146	13.037	13.037	0.000	97	378858	200.0	215.4	
106 4-Isopropyltoluene	119	13.050	13.050	0.000	96	993349	200.0	201.1	
107 1,4-Dichlorobenzene	146	13.123	13.123	0.000	94	447171	200.0	194.9	
110 n-Butylbenzene	91	13.469	13.469	0.000	94	836600	200.0	205.7	
111 1,2-Dichlorobenzene	146	13.506	13.506	0.000	97	377929	200.0	196.8	
112 1,2-Dibromo-3-Chloropropan	157	14.321	14.321	0.000	41	11961	200.0	214.7	
113 1,2,4-Trichlorobenzene	180	15.154	15.154	0.000	89	132078	200.0	205.3	
115 Hexachlorobutadiene	225	15.288	15.288	0.000	90	196247	200.0	195.9	
116 Naphthalene	128	15.446	15.446	0.000	80	157046	200.0	209.7	
117 1,2,3-Trichlorobenzene	180	15.689	15.689	0.000	86	109220	200.0	211.7	
S 130 Xylenes, Total	106				0		400.0	425.2	
S 129 1,2-Dichloroethene, Total	96				0		400.0	419.8	
S 131 1,3-Dichloropropene, Total	1				0		400.0	444.7	

QC Flag Legend

Review Flags
M - Manually Integrated

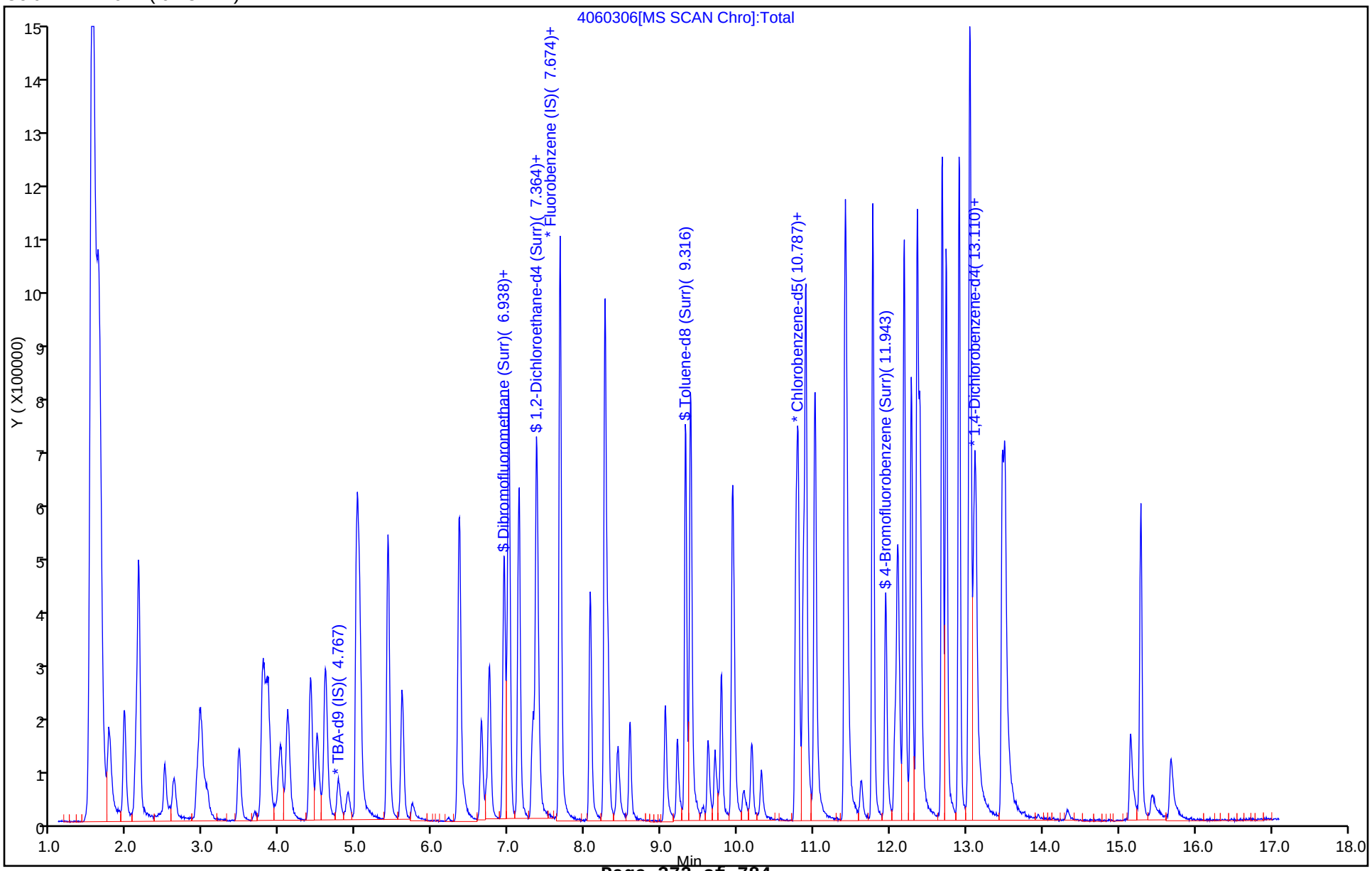
Report Date: 03-Jun-2014 14:07:36 Chrom Revision: 2.2 16-May-2014 10:46:48

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060306.D

Injection Date:	03-Jun-2014 12:43:30	Instrument ID:	CHHP4	Operator ID:	034635
Lims ID:	ICIS			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

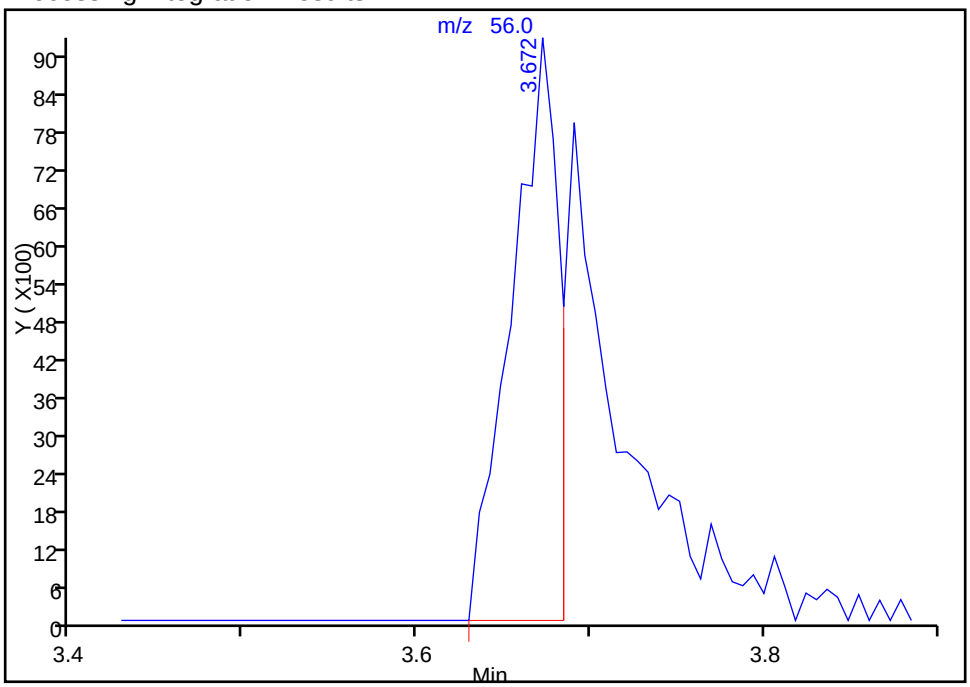
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060306.D				
Injection Date:	03-Jun-2014 12:43:30	Instrument ID:	CHHP4		
Lims ID:	ICIS				
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		

20 Acrolein, CAS: 107-02-8

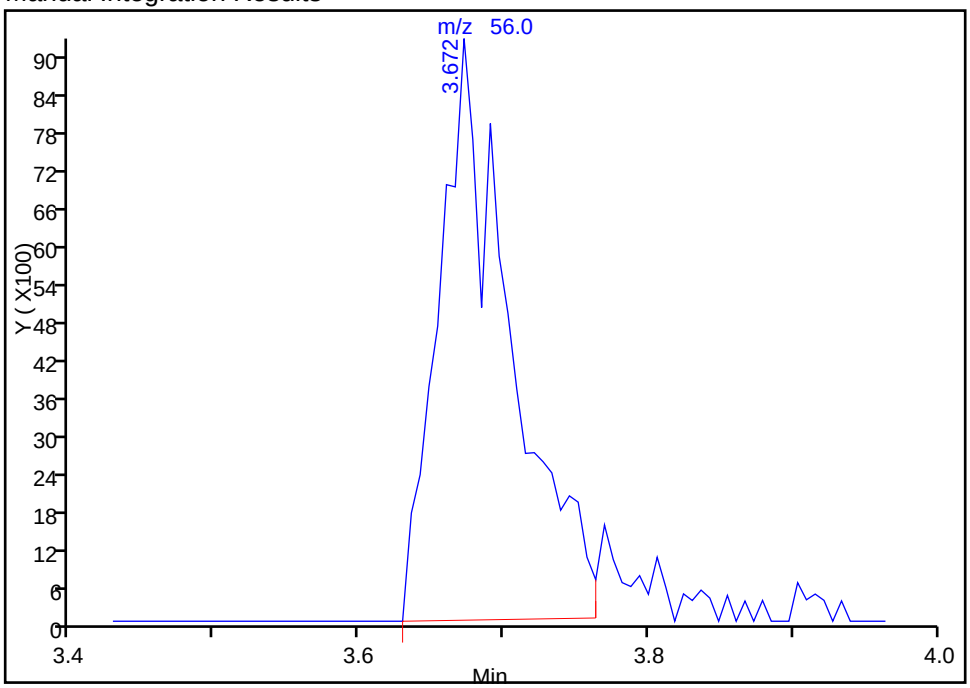
Processing Integration Results

RT: 3.67
Response: 17606
Amount: 576.3315



Manual Integration Results

RT: 3.67
Response: 31949
Amount: 857.7562



Reviewer: journetp, 03-Jun-2014 14:00:41
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

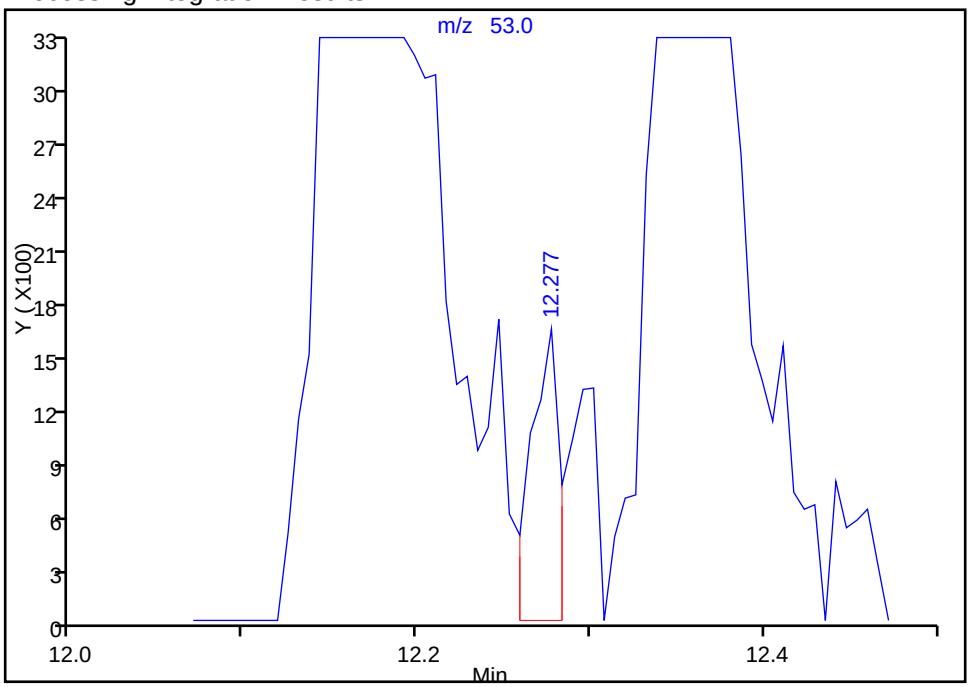
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060306.D
Injection Date: 03-Jun-2014 12:43:30 Instrument ID: CHHP4
Lims ID: ICIS
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

96 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

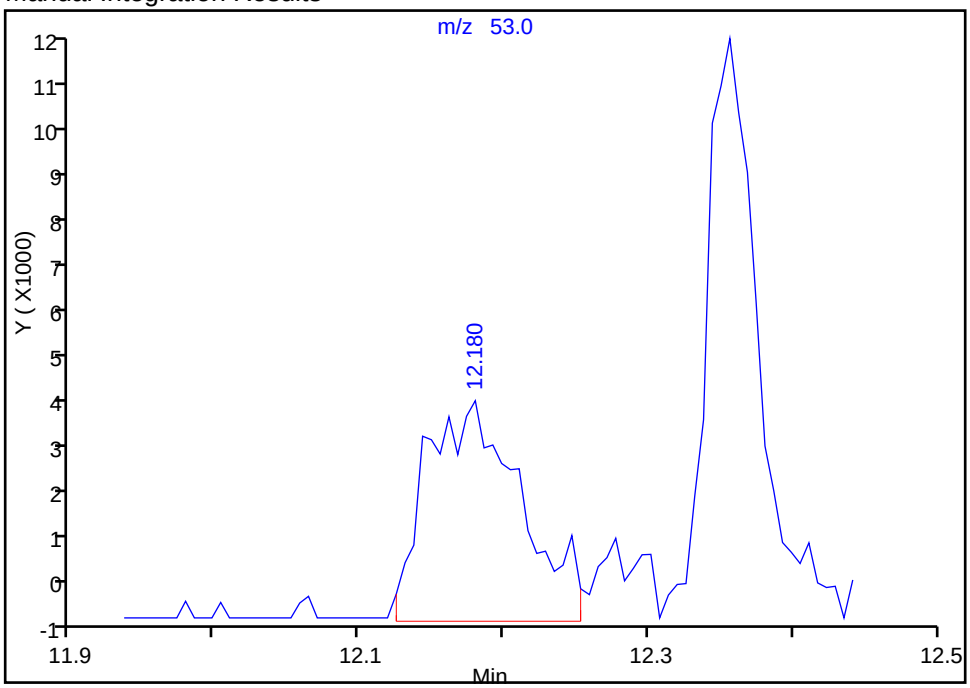
Processing Integration Results

RT: 12.28
Response: 1870
Amount: 93.175600



Manual Integration Results

RT: 12.18
Response: 20483
Amount: 299.8553



Reviewer: journetp, 03-Jun-2014 13:51:15
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060307.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 03-Jun-2014 13:14:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0001537-007
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub5

Method: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Jun-2014 14:07:37 Calib Date: 03-Jun-2014 14:15:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK040

First Level Reviewer: journetp Date: 03-Jun-2014 13:27:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.773	4.767	0.006	97	103566	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.673	7.680	-0.007	91	612159	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.763	10.763	0.000	79	138909	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	13.098	13.098	0.000	91	208103	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.931	6.932	-0.001	80	183705	250.0	245.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.308	7.309	-0.001	91	144768	250.0	238.4	
$ 7 Toluene-d8 (Surr)	98	9.315	9.316	-0.001	91	792003	250.0	251.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.936	11.943	-0.007	94	276387	250.0	275.0	
10 Dichlorodifluoromethane	85	1.768	1.757	0.011	87	336725	250.0	232.4	
11 Chloromethane	50	1.969	1.963	0.006	99	437561	250.0	231.7	
12 Vinyl chloride	62	2.121	2.115	0.006	97	350551	250.0	228.3	
13 Butadiene	39	2.158	2.152	0.006	91	356216	250.0	232.6	
14 Bromomethane	94	2.498	2.492	0.006	87	102793	250.0	230.2	
15 Chloroethane	64	2.620	2.614	0.006	93	148170	250.0	252.5	
16 Dichlorofluoromethane	67	2.942	2.949	-0.007	81	399776	250.0	241.6	
17 Trichlorofluoromethane	101	2.979	2.967	0.012	85	365195	250.0	238.8	
19 Ethyl ether	59	3.465	3.472	-0.007	91	178217	250.0	237.0	
20 Acrolein	56	3.672	3.672	0.000	85	34150	1000.0	853.5	M
21 1,1-Dichloroethene	96	3.787	3.782	0.005	86	286608	250.0	239.2	
22 1,1,2-Trichloro-1,2,2-trif	101	3.848	3.849	-0.001	77	294178	250.0	232.9	
23 Acetone	43	3.958	3.958	0.000	93	106993	250.0	283.9	
24 Iodomethane	142	4.012	4.007	0.005	96	429090	250.0	240.5	
25 Carbon disulfide	76	4.110	4.104	0.006	99	750467	250.0	251.1	
28 3-Chloro-1-propene	76	4.402	4.408	-0.006	93	154664	250.0	214.4	
29 Methyl acetate	43	4.493	4.487	0.006	99	490611	1250.0	1224.3	
30 Methylene Chloride	84	4.608	4.603	0.005	93	284616	250.0	208.9	
31 2-Methyl-2-propanol	59	4.894	4.901	-0.007	91	95008	2500.0	2382.5	
32 Acrylonitrile	53	5.004	5.004	0.000	99	437729	2500.0	2348.5	
33 trans-1,2-Dichloroethene	96	5.016	5.016	0.000	96	297804	250.0	243.8	
34 Methyl tert-butyl ether	73	5.052	5.047	0.005	90	432901	250.0	241.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Hexane	57	5.417	5.418	-0.001	93	488483	250.0	226.5	
36 1,1-Dichloroethane	63	5.606	5.600	0.006	85	448775	250.0	242.2	
38 Vinyl acetate	43	5.739	5.740	-0.001	95	124329	250.0	259.1	
41 2,2-Dichloropropane	77	6.348	6.348	0.000	78	256138	250.0	245.2	
42 cis-1,2-Dichloroethene	96	6.360	6.360	0.000	69	289551	250.0	249.3	
43 2-Butanone (MEK)	43	6.408	6.421	-0.013	94	112866	250.0	263.3	
46 Chlorobromomethane	128	6.646	6.646	0.000	93	106906	250.0	250.8	
48 Tetrahydrofuran	42	6.719	6.713	0.006	94	73186	500.0	461.9	
49 Chloroform	83	6.743	6.749	-0.006	81	362407	250.0	239.9	
50 1,1,1-Trichloroethane	97	6.944	6.944	0.000	91	352859	250.0	252.6	
51 Cyclohexane	56	6.998	7.005	-0.007	91	643016	250.0	240.3	
53 Carbon tetrachloride	117	7.132	7.133	-0.001	84	295756	250.0	243.6	
52 1,1-Dichloropropene	75	7.138	7.139	-0.001	91	302977	250.0	255.5	
54 Benzene	78	7.369	7.364	0.005	97	945261	250.0	247.9	
55 1,2-Dichloroethane	62	7.394	7.394	0.000	85	191487	250.0	244.0	
58 n-Heptane	43	7.673	7.674	-0.001	94	482883	250.0	261.2	
59 Isobutyl alcohol	41	7.673	7.674	-0.001	75	244069	6250.0	6202.2	
61 Trichloroethene	130	8.069	8.069	0.000	90	260770	250.0	241.7	
63 Methylcyclohexane	83	8.263	8.264	-0.001	91	568566	250.0	244.7	
64 1,2-Dichloropropane	63	8.306	8.300	0.006	93	206211	250.0	239.6	
65 Dibromomethane	93	8.427	8.428	-0.001	88	84905	250.0	246.7	
67 1,4-Dioxane	88	8.470	8.458	0.012	89	17839	5000.0	3568.2	
68 Dichlorobromomethane	83	8.592	8.592	0.000	92	207432	250.0	259.5	
71 cis-1,3-Dichloropropene	75	9.048	9.054	-0.006	84	234138	250.0	246.0	
72 4-Methyl-2-pentanone (MIBK	43	9.212	9.212	0.000	94	210627	250.0	271.7	
73 Toluene	91	9.388	9.383	0.005	99	1060177	250.0	257.9	
74 trans-1,3-Dichloropropene	75	9.613	9.614	-0.001	87	162430	250.0	266.2	
75 Ethyl methacrylate	69	9.711	9.705	0.006	90	144791	250.0	259.9	
76 1,1,2-Trichloroethane	97	9.784	9.790	-0.006	80	141849	250.0	247.6	
77 Tetrachloroethene	164	9.936	9.930	0.006	91	238148	250.0	246.1	
78 1,3-Dichloropropane	76	9.954	9.954	0.000	90	227726	250.0	261.1	
79 2-Hexanone	43	10.069	10.082	-0.013	93	137204	250.0	253.4	
81 Chlorodibromomethane	129	10.185	10.191	-0.006	91	135525	250.0	265.9	
82 Ethylene Dibromide	107	10.313	10.313	0.000	96	112585	250.0	238.4	
84 Chlorobenzene	112	10.793	10.793	0.000	96	709554	250.0	258.2	
85 1,1,1,2-Tetrachloroethane	131	10.866	10.866	0.000	91	217927	250.0	269.7	
86 Ethylbenzene	106	10.896	10.897	-0.001	97	410541	250.0	263.3	
87 m-Xylene & p-Xylene	106	11.012	11.018	-0.006	98	494843	250.0	243.3	
88 o-Xylene	106	11.407	11.408	-0.001	95	494237	250.0	259.1	
89 Styrene	104	11.432	11.426	0.006	94	737851	250.0	269.7	
90 Bromoform	173	11.620	11.627	-0.007	97	71163	250.0	227.2	
91 Isopropylbenzene	105	11.772	11.773	-0.001	95	1319197	250.0	259.5	
93 1,1,2,2-Tetrachloroethane	83	12.064	12.064	0.000	75	155669	250.0	244.6	
94 Bromobenzene	156	12.094	12.101	-0.007	86	273117	250.0	237.6	
95 1,2,3-Trichloropropane	110	12.119	12.125	-0.006	60	45252	250.0	227.9	
96 trans-1,4-Dichloro-2-buten	53	12.180	12.180	0.000	36	27710	250.0	367.7	M
97 N-Propylbenzene	120	12.186	12.186	0.000	97	410531	250.0	245.1	
98 2-Chlorotoluene	126	12.277	12.277	0.000	97	312186	250.0	227.1	
99 1,3,5-Trimethylbenzene	105	12.356	12.356	0.000	94	1111969	250.0	242.1	
100 4-Chlorotoluene	126	12.392	12.393	-0.001	96	297928	250.0	240.8	
101 tert-Butylbenzene	119	12.684	12.685	-0.001	89	1047543	250.0	234.4	
103 1,2,4-Trimethylbenzene	105	12.733	12.733	0.000	96	1085643	250.0	242.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
104 sec-Butylbenzene	105	12.903	12.904	-0.001	92	1509453	250.0	239.6	
105 1,3-Dichlorobenzene	146	13.031	13.037	-0.006	97	510341	250.0	263.0	
106 4-Isopropyltoluene	119	13.049	13.050	-0.001	96	1303380	250.0	244.7	
107 1,4-Dichlorobenzene	146	13.122	13.123	-0.001	94	599144	250.0	236.8	
110 n-Butylbenzene	91	13.469	13.469	0.000	95	1137877	250.0	253.7	
111 1,2-Dichlorobenzene	146	13.499	13.506	-0.007	99	488892	250.0	230.8	
112 1,2-Dibromo-3-Chloropropan	157	14.320	14.321	-0.001	60	14165	250.0	227.7	
113 1,2,4-Trichlorobenzene	180	15.141	15.154	-0.013	91	202975	250.0	286.0	
115 Hexachlorobutadiene	225	15.287	15.288	-0.001	90	265141	250.0	239.9	
116 Naphthalene	128	15.433	15.446	-0.013	86	211173	250.0	250.5	
117 1,2,3-Trichlorobenzene	180	15.682	15.689	-0.007	90	147300	250.0	254.8	
S 130 Xylenes, Total	106				0		500.0	502.4	
S 129 1,2-Dichloroethene, Total	96				0		500.0	493.2	
S 131 1,3-Dichloropropene, Total	1				0		500.0	512.2	

QC Flag Legend

Review Flags
M - Manually Integrated

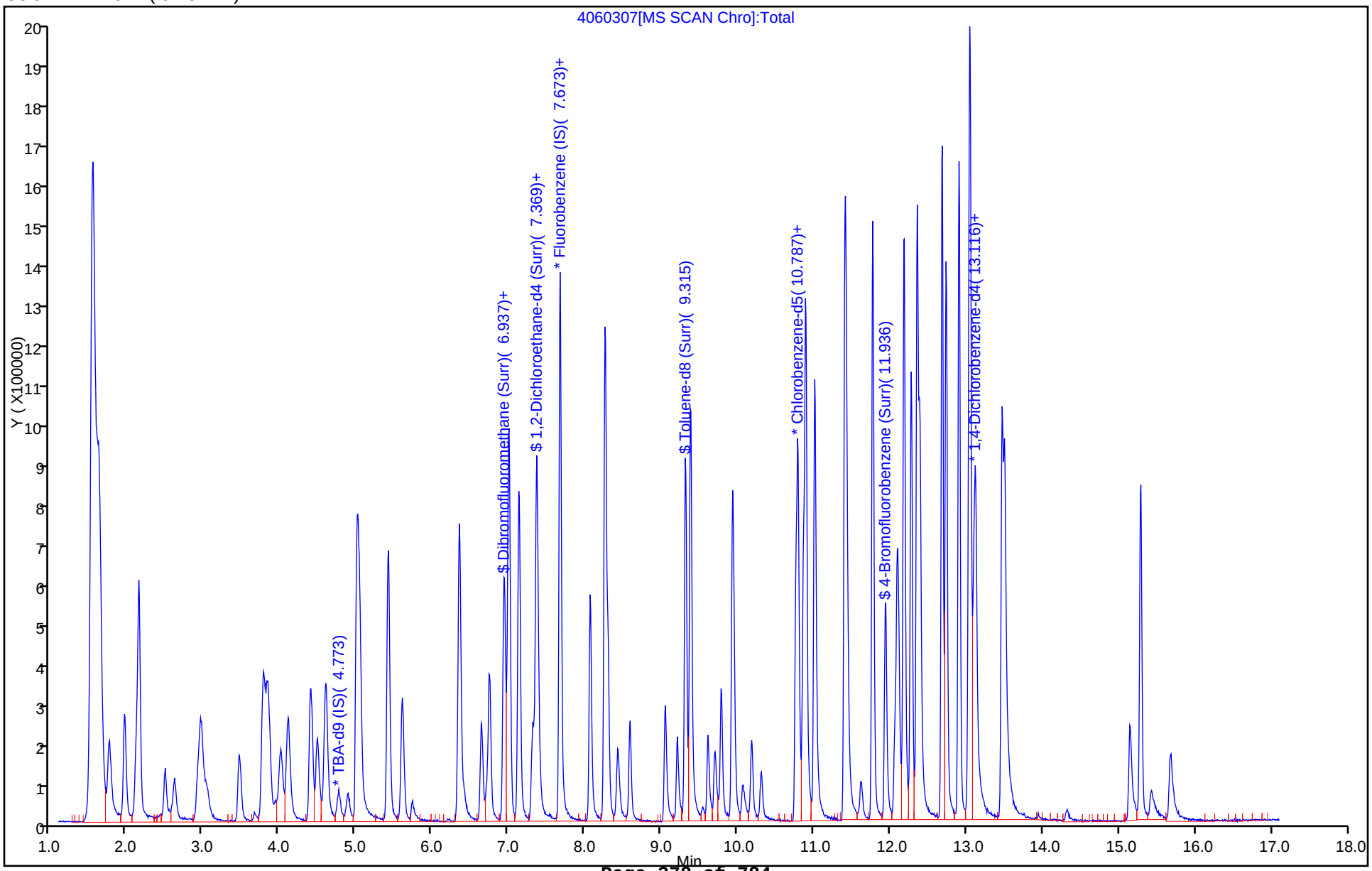
Report Date: 03-Jun-2014 14:07:38 Chrom Revision: 2.2 16-May-2014 10:46:48

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060307.D

Injection Date:	03-Jun-2014 13:14:30	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#:	7
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

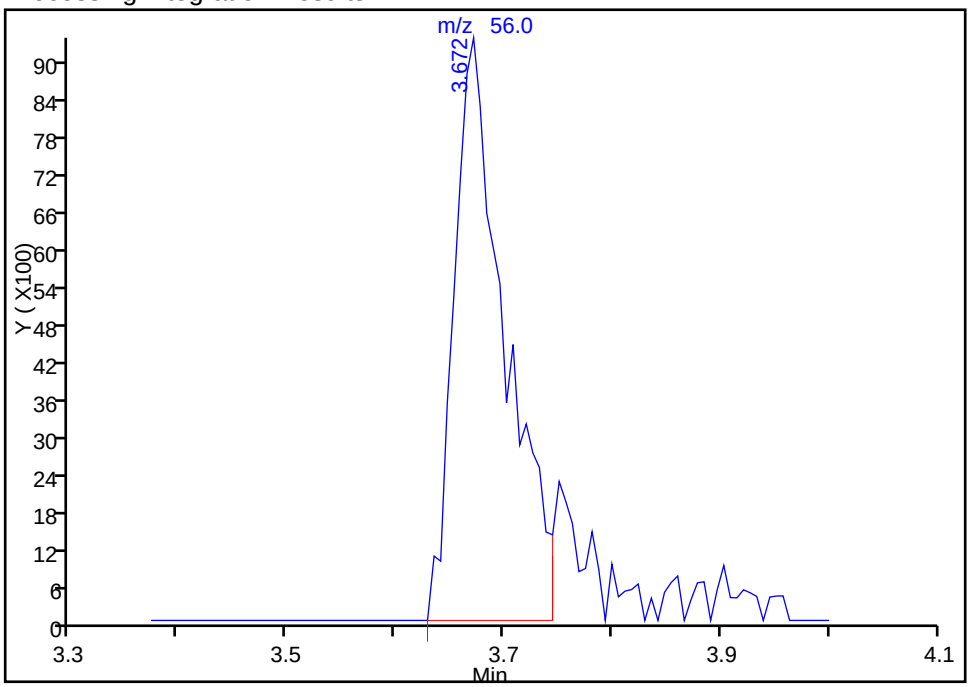
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060307.D
Injection Date: 03-Jun-2014 13:14:30 Instrument ID: CHHP4
Lims ID: IC
Client ID:
Operator ID: 034635 ALS Bottle#: 7 Worklist Smp#: 7
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

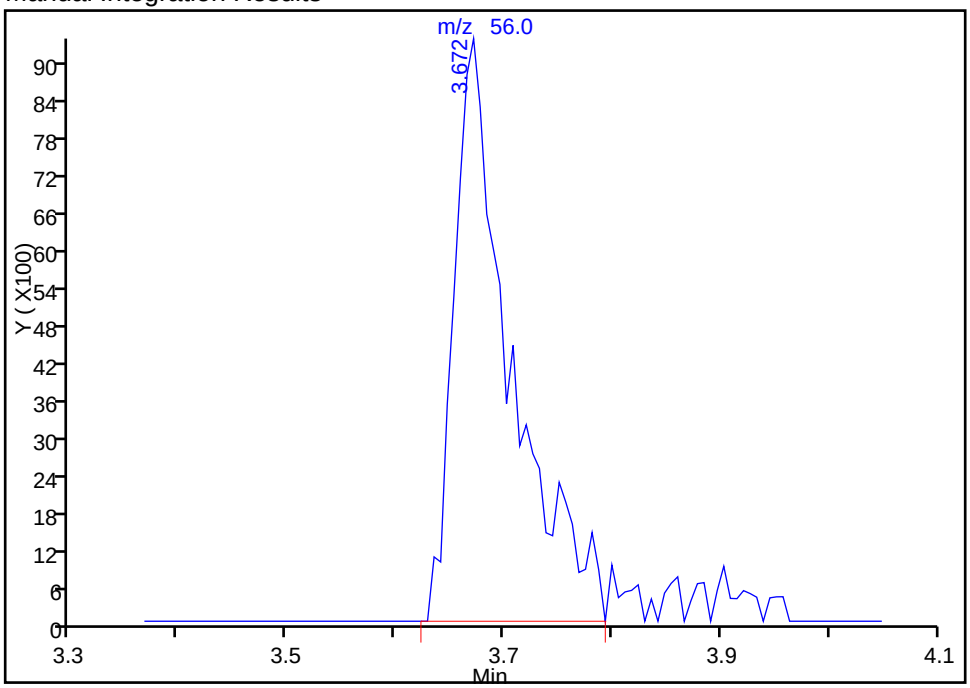
Processing Integration Results

RT: 3.67
Response: 30656
Amount: 733.0451



Manual Integration Results

RT: 3.67
Response: 34150
Amount: 853.4896



Reviewer: journetp, 03-Jun-2014 13:57:37
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

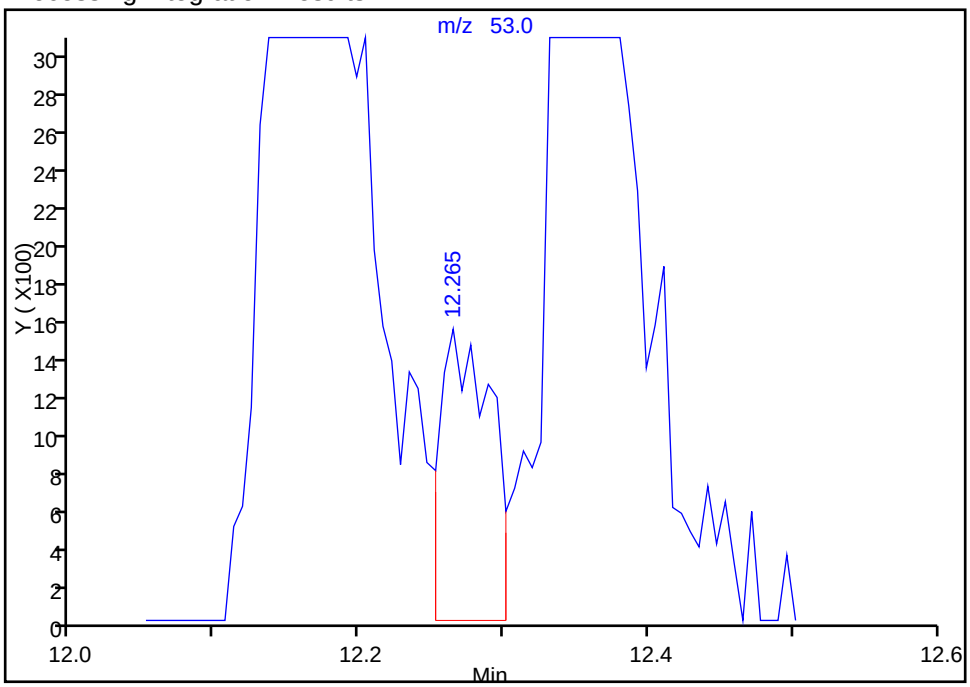
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060307.D
Injection Date: 03-Jun-2014 13:14:30 Instrument ID: CHHP4
Lims ID: IC
Client ID:
Operator ID: 034635 ALS Bottle#: 7 Worklist Smp#: 7
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

96 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

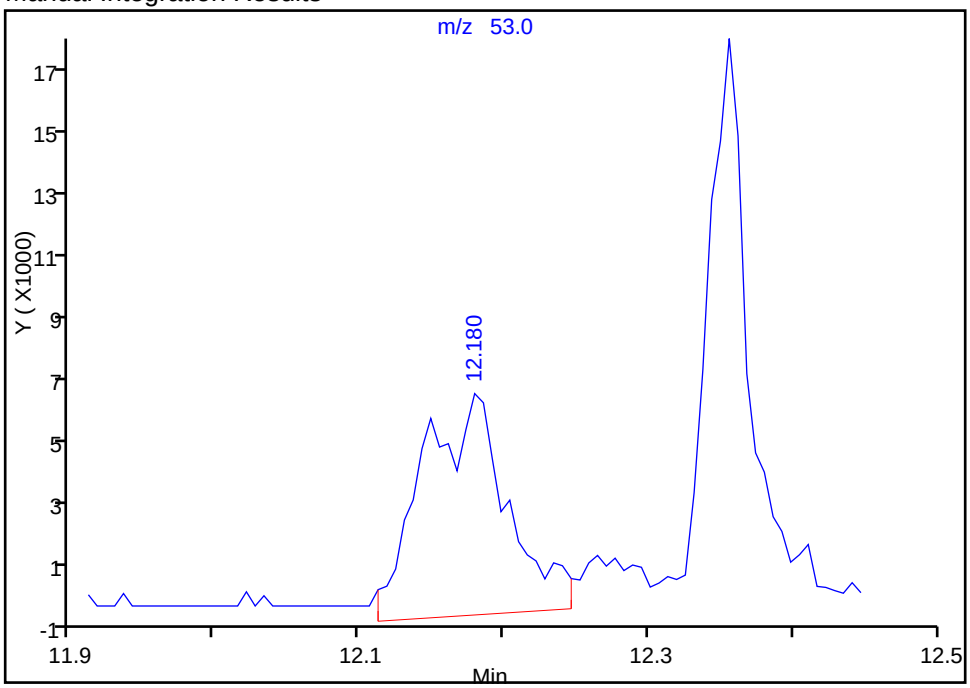
Processing Integration Results

RT: 12.26
Response: 3766
Amount: 146.5829



Manual Integration Results

RT: 12.18
Response: 27710
Amount: 367.7452



Reviewer: journetp, 03-Jun-2014 13:52:22
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060308.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Jun-2014 13:44:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0001537-008
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub5

Method: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Jun-2014 14:07:39 Calib Date: 03-Jun-2014 14:15:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK040

First Level Reviewer: journetp Date: 03-Jun-2014 13:28:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.775	4.767	0.008	97	113876	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.676	7.680	-0.004	62	543766	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.759	10.763	-0.004	55	139100	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	13.094	13.098	-0.004	87	210799	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.934	6.932	0.002	85	449327	625.0	674.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.305	7.309	-0.004	91	349327	625.0	647.6	
$ 7 Toluene-d8 (Surr)	98	9.318	9.316	0.002	92	1831708	625.0	580.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.933	11.943	-0.010	96	710520	625.0	705.9	
10 Dichlorodifluoromethane	85	1.765	1.757	0.008	87	853875	625.0	663.3	
11 Chloromethane	50	1.972	1.963	0.009	89	1072684	625.0	639.5	
12 Vinyl chloride	62	2.130	2.115	0.015	83	897253	625.0	657.8	
13 Butadiene	39	2.154	2.152	0.002	89	893383	625.0	656.8	
14 Bromomethane	94	2.495	2.492	0.003	90	250512	625.0	631.6	
15 Chloroethane	64	2.628	2.614	0.014	97	311875	625.0	598.3	
16 Dichlorofluoromethane	67	2.951	2.949	0.002	80	967869	625.0	658.5	
17 Trichlorofluoromethane	101	2.969	2.967	0.002	86	901262	625.0	663.5	
19 Ethyl ether	59	3.468	3.472	-0.004	92	454943	625.0	681.1	
20 Acrolein	56	3.680	3.672	0.008	73	31770	1125.0	893.9	
21 1,1-Dichloroethene	96	3.778	3.782	-0.004	96	736894	625.0	692.2	
22 1,1,2-Trichloro-1,2,2-trif	101	3.845	3.849	-0.004	81	749434	625.0	668.0	
23 Acetone	43	3.942	3.958	-0.016	98	238833	625.0	713.5	
24 Iodomethane	142	4.009	4.007	0.002	95	1084865	625.0	684.5	
25 Carbon disulfide	76	4.100	4.104	-0.004	99	2088584	625.0	786.8	
28 3-Chloro-1-propene	76	4.404	4.408	-0.004	92	430194	625.0	656.6	
29 Methyl acetate	43	4.483	4.487	-0.004	98	1214263	3125.0	3411.3	
30 Methylene Chloride	84	4.599	4.603	-0.004	92	671813	625.0	659.3	
31 2-Methyl-2-propanol	59	4.897	4.901	-0.004	92	238785	6250.0	5445.7	
32 Acrylonitrile	53	5.000	5.004	-0.004	98	1171700	6250.0	6846.6	
33 trans-1,2-Dichloroethene	96	5.012	5.016	-0.004	95	716611	625.0	660.5	
34 Methyl tert-butyl ether	73	5.049	5.047	0.002	91	1086458	625.0	681.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Hexane	57	5.420	5.418	0.002	92	1126763	625.0	588.0	
36 1,1-Dichloroethane	63	5.602	5.600	0.002	85	1113593	625.0	676.6	
38 Vinyl acetate	43	5.724	5.740	-0.016	97	298647	625.0	628.0	
41 2,2-Dichloropropane	77	6.344	6.348	-0.004	84	656076	625.0	707.1	
42 cis-1,2-Dichloroethene	96	6.356	6.360	-0.004	68	708059	625.0	686.4	
43 2-Butanone (MEK)	43	6.411	6.421	-0.010	99	248530	625.0	625.1	
46 Chlorobromomethane	128	6.642	6.646	-0.004	94	267649	625.0	706.9	
48 Tetrahydrofuran	42	6.709	6.713	-0.004	94	184463	1250.0	1310.8	
49 Chloroform	83	6.745	6.749	-0.004	82	887828	625.0	661.6	
50 1,1,1-Trichloroethane	97	6.940	6.944	-0.004	96	874238	625.0	704.5	
51 Cyclohexane	56	7.007	7.005	0.002	91	1554565	625.0	654.1	
53 Carbon tetrachloride	117	7.129	7.133	-0.004	86	768561	625.0	712.8	
52 1,1-Dichloropropene	75	7.135	7.139	-0.004	90	735441	625.0	698.1	
54 Benzene	78	7.366	7.364	0.002	98	2164590	625.0	639.0	
55 1,2-Dichloroethane	62	7.384	7.394	-0.010	84	463582	625.0	665.0	
58 n-Heptane	43	7.670	7.674	-0.004	92	1069765	625.0	651.4	
59 Isobutyl alcohol	41	7.670	7.674	-0.004	85	577610	15625	16524	
61 Trichloroethene	130	8.071	8.069	0.002	91	636865	625.0	664.5	
63 Methylcyclohexane	83	8.266	8.264	0.002	92	1392517	625.0	674.8	
64 1,2-Dichloropropane	63	8.296	8.300	-0.004	93	490182	625.0	641.1	
65 Dibromomethane	93	8.424	8.428	-0.004	89	207079	625.0	677.3	
67 1,4-Dioxane	88	8.454	8.458	-0.004	96	52785	12500	11886	
68 Dichlorobromomethane	83	8.588	8.592	-0.004	98	513809	625.0	723.7	
71 cis-1,3-Dichloropropene	75	9.050	9.054	-0.004	91	616870	625.0	729.7	
72 4-Methyl-2-pentanone (MIBK	43	9.202	9.212	-0.010	95	512527	625.0	660.1	
73 Toluene	91	9.385	9.383	0.002	99	2336210	625.0	567.5	
74 trans-1,3-Dichloropropene	75	9.604	9.614	-0.010	90	437269	625.0	715.7	
75 Ethyl methacrylate	69	9.695	9.705	-0.010	91	373010	625.0	627.8	
76 1,1,2-Trichloroethane	97	9.786	9.790	-0.004	82	339867	625.0	592.5	
77 Tetrachloroethene	164	9.932	9.930	0.002	91	561525	625.0	579.4	
78 1,3-Dichloropropane	76	9.956	9.954	0.002	91	539903	625.0	618.3	
79 2-Hexanone	43	10.048	10.082	-0.034	97	372272	625.0	637.3	
81 Chlorodibromomethane	129	10.181	10.191	-0.010	89	355890	625.0	697.4	
82 Ethylene Dibromide	107	10.303	10.313	-0.010	96	307228	625.0	613.4	
84 Chlorobenzene	112	10.790	10.793	-0.003	96	1644564	625.0	597.6	
85 1,1,1,2-Tetrachloroethane	131	10.863	10.866	-0.003	92	529066	625.0	653.8	
86 Ethylbenzene	106	10.893	10.897	-0.004	97	937035	625.0	600.1	
87 m-Xylene & p-Xylene	106	11.008	11.018	-0.010	98	1194443	625.0	623.2	
88 o-Xylene	106	11.404	11.408	-0.004	93	1139225	625.0	596.3	
89 Styrene	104	11.422	11.426	-0.004	93	1767720	625.0	645.2	
90 Bromoform	173	11.617	11.627	-0.010	99	215453	625.0	653.4	
91 Isopropylbenzene	105	11.769	11.773	-0.004	95	2917967	625.0	573.3	
93 1,1,2,2-Tetrachloroethane	83	12.061	12.064	-0.003	77	407437	625.0	639.3	
94 Bromobenzene	156	12.091	12.101	-0.010	88	681279	625.0	585.0	
95 1,2,3-Trichloropropane	110	12.109	12.125	-0.016	75	118147	625.0	587.5	
96 trans-1,4-Dichloro-2-buten	53	12.213	12.180	0.033	24	13039	625.0	170.8	M
97 N-Propylbenzene	120	12.182	12.186	-0.004	96	969443	625.0	571.3	
98 2-Chlorotoluene	126	12.279	12.277	0.002	98	772863	625.0	555.1	
99 1,3,5-Trimethylbenzene	105	12.352	12.356	-0.004	95	2478853	625.0	629.4	
100 4-Chlorotoluene	126	12.383	12.393	-0.010	96	767206	625.0	612.1	
101 tert-Butylbenzene	119	12.681	12.685	-0.004	90	2377898	625.0	632.0	
103 1,2,4-Trimethylbenzene	105	12.730	12.733	-0.003	96	2476853	625.0	547.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
104 sec-Butylbenzene	105	12.900	12.904	-0.004	93	3306921	625.0	631.0	
105 1,3-Dichlorobenzene	146	13.027	13.037	-0.010	96	1307456	625.0	665.2	
106 4-Isopropyltoluene	119	13.046	13.050	-0.004	95	2847929	625.0	626.6	
107 1,4-Dichlorobenzene	146	13.113	13.123	-0.010	95	1414211	625.0	551.7	
110 n-Butylbenzene	91	13.459	13.469	-0.010	93	2615011	625.0	575.5	
111 1,2-Dichlorobenzene	146	13.496	13.506	-0.010	98	1212604	625.0	565.0	
112 1,2-Dibromo-3-Chloropropan	157	14.292	14.321	-0.029	73	47555	625.0	630.0	
113 1,2,4-Trichlorobenzene	180	15.126	15.154	-0.028	92	502567	625.0	699.1	
115 Hexachlorobutadiene	225	15.284	15.288	-0.004	90	593016	625.0	529.7	
116 Naphthalene	128	15.405	15.446	-0.041	95	552309	625.0	609.4	
117 1,2,3-Trichlorobenzene	180	15.661	15.689	-0.028	94	373589	625.0	614.8	
S 130 Xylenes, Total	106				0		1250.0	1219.6	
S 129 1,2-Dichloroethene, Total	96				0		1250.0	1346.9	
S 131 1,3-Dichloropropene, Total	1				0		1250.0	1445.4	

QC Flag Legend

Review Flags
M - Manually Integrated

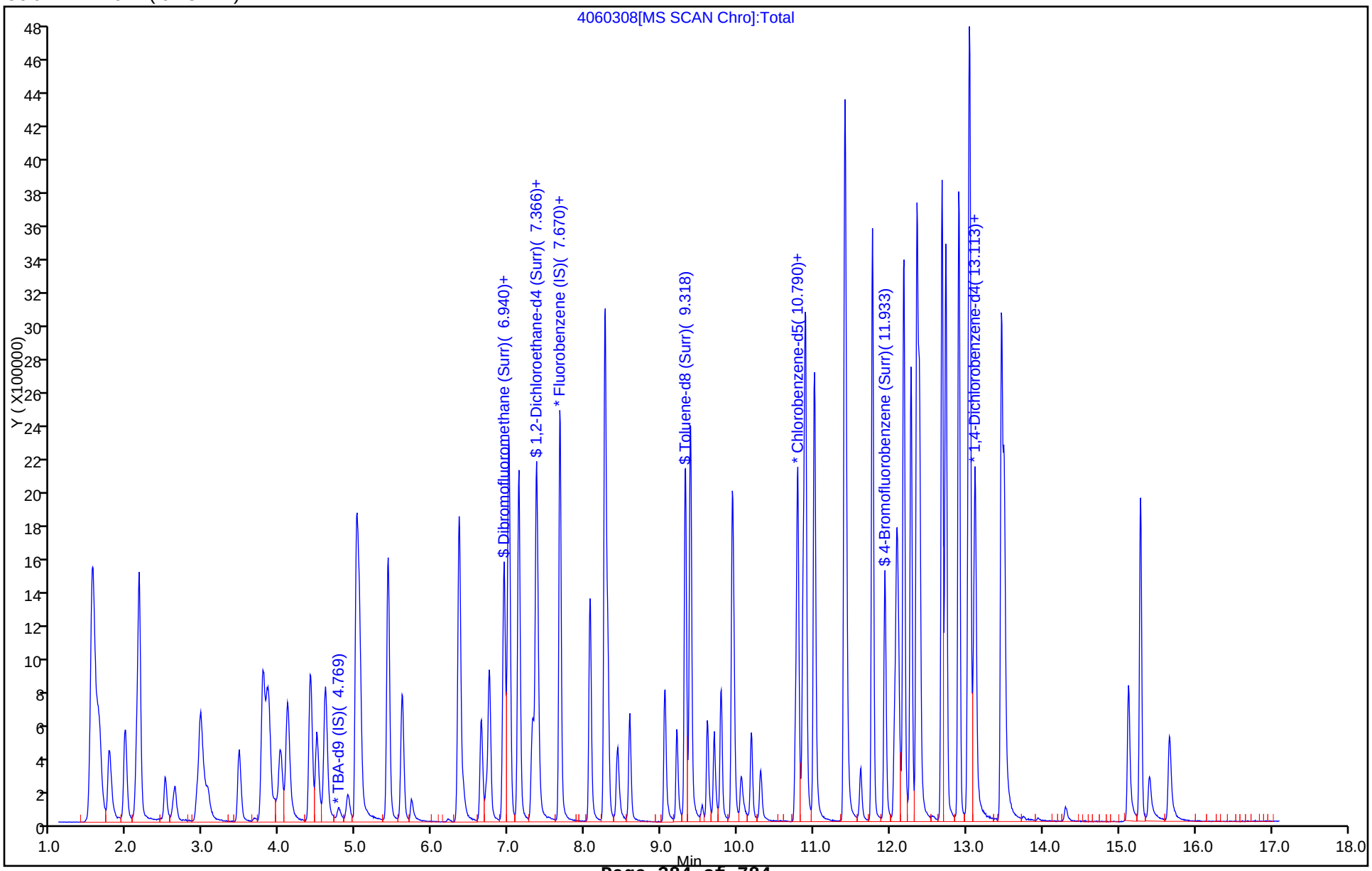
Report Date: 03-Jun-2014 14:07:40 Chrom Revision: 2.2 16-May-2014 10:46:48

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060308.D

Injection Date:	03-Jun-2014 13:44:30	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#:	8
Method:	MSVOA_CHHP4	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

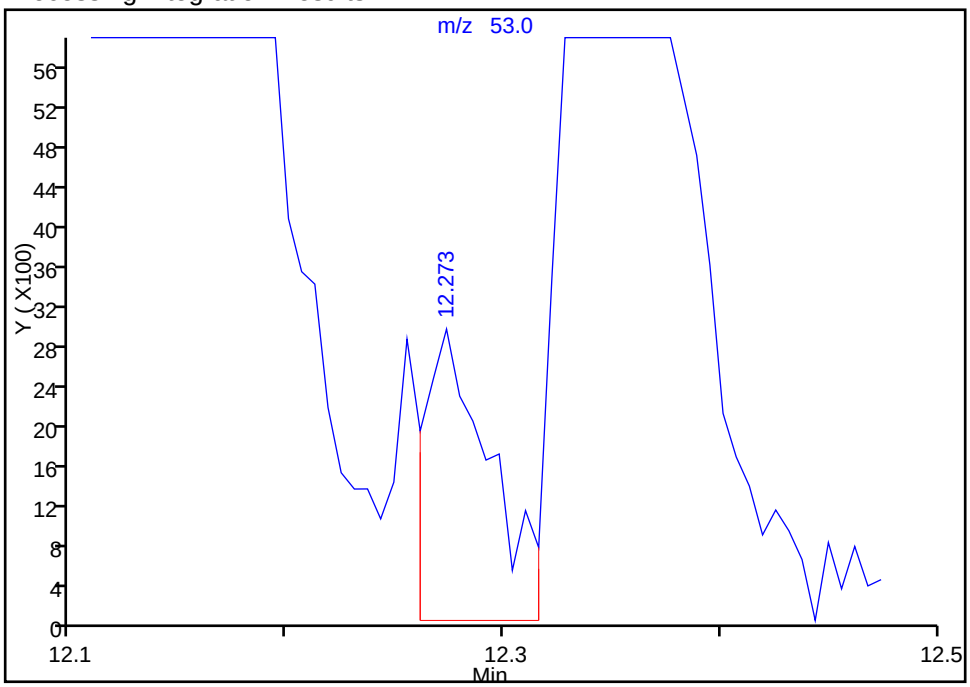
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060308.D				
Injection Date:	03-Jun-2014 13:44:30	Instrument ID:	CHHP4		
Lims ID:	IC				
Client ID:					
Operator ID:	034635	ALS Bottle#:	8	Worklist Smp#:	8
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		

96 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

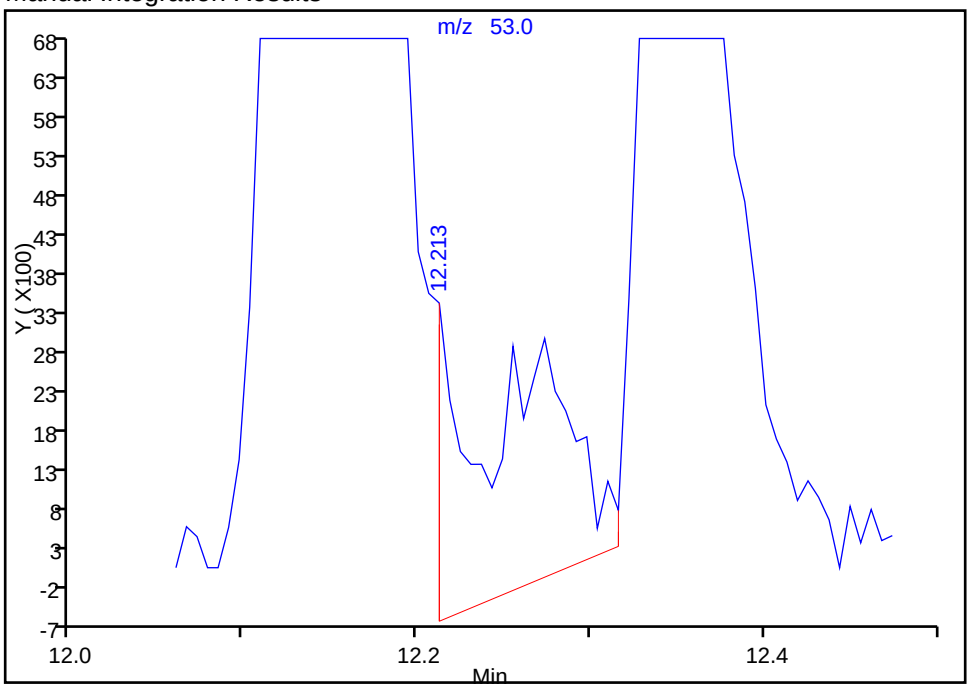
Processing Integration Results

RT: 12.27
Response: 6257
Amount: 230.5732



Manual Integration Results

RT: 12.21
Response: 13039
Amount: 170.8302



Reviewer: journetp, 03-Jun-2014 13:34:50
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 03-Jun-2014 14:15:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0001537-009
Operator ID: 034635 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub5

Method: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Jun-2014 14:07:41 Calib Date: 03-Jun-2014 14:15:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK040

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.806	4.767	0.039	92	126028	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.670	7.680	-0.010	48	710864	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.760	10.763	-0.003	82	178341	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	13.089	13.098	-0.009	84	281013	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.928	6.932	-0.004	88	1071890	1250.0	1231.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.305	7.309	-0.004	92	905001	1250.0	1283.4	
$ 7 Toluene-d8 (Surr)	98	9.312	9.316	-0.004	92	3939297	1250.0	973.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.927	11.943	-0.016	96	1669671	1250.0	1293.8	
10 Dichlorodifluoromethane	85	1.759	1.757	0.002	88	1869499	1250.0	1110.9	
11 Chloromethane	50	1.972	1.963	0.009	88	2297643	1250.0	1047.8	
12 Vinyl chloride	62	2.124	2.115	0.009	84	1931879	1250.0	1083.5	
13 Butadiene	39	2.155	2.152	0.003	89	1897569	1250.0	1067.1	
14 Bromomethane	94	2.495	2.492	0.003	90	563541	1250.0	1086.8	
15 Chloroethane	64	2.617	2.614	0.003	93	534610	1250.0	784.5	
16 Dichlorofluoromethane	67	2.927	2.949	-0.022	81	1912847	1250.0	995.6	
17 Trichlorofluoromethane	101	2.945	2.967	-0.022	86	1909728	1250.0	1075.4	
19 Ethyl ether	59	3.468	3.472	-0.004	93	1042135	1250.0	1193.4	
20 Acrolein	56	3.675	3.672	0.003	68	56583	1250.0	1217.8	
21 1,1-Dichloroethene	96	3.760	3.782	-0.022	87	1574016	1250.0	1131.1	
22 1,1,2-Trichloro-1,2,2-trif	101	3.827	3.849	-0.022	79	1657918	1250.0	1130.4	
23 Acetone	43	3.949	3.958	-0.009	98	593520	1250.0	1356.4	
24 Iodomethane	142	3.997	4.007	-0.010	96	2415711	1250.0	1165.9	
25 Carbon disulfide	76	4.088	4.104	-0.016	99	4545741	1250.0	1310.0	
28 3-Chloro-1-propene	76	4.393	4.408	-0.016	92	941697	1250.0	1241.3	
29 Methyl acetate	43	4.490	4.487	0.003	98	2772831	6250.0	5958.7	
30 Methylene Chloride	84	4.593	4.603	-0.010	91	1414232	1250.0	1240.9	
31 2-Methyl-2-propanol	59	4.928	4.901	0.027	94	665744	12500	13719	
32 Acrylonitrile	53	5.001	5.004	-0.003	100	2747419	12500	12190	
33 trans-1,2-Dichloroethene	96	5.001	5.016	-0.015	94	1642026	1250.0	1157.8	
34 Methyl tert-butyl ether	73	5.049	5.047	0.002	91	2382696	1250.0	1143.2	
35 Hexane	57	5.408	5.418	-0.010	93	2615355	1250.0	1044.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 1,1-Dichloroethane	63	5.603	5.600	0.003	84	2477766	1250.0	1151.5	
38 Vinyl acetate	43	5.718	5.740	-0.022	97	856708	1250.0	1201.9	
41 2,2-Dichloropropane	77	6.345	6.348	-0.003	85	1487976	1250.0	1226.7	
42 cis-1,2-Dichloroethene	96	6.351	6.360	-0.009	67	1590727	1250.0	1179.5	
43 2-Butanone (MEK)	43	6.405	6.421	-0.016	98	692327	1250.0	1249.9	
46 Chlorobromomethane	128	6.637	6.646	-0.009	95	628354	1250.0	1269.5	
48 Tetrahydrofuran	42	6.703	6.713	-0.010	92	455672	2500.0	2476.8	
49 Chloroform	83	6.746	6.749	-0.003	82	2064409	1250.0	1176.7	
50 1,1,1-Trichloroethane	97	6.941	6.944	-0.003	93	1942330	1250.0	1197.4	
51 Cyclohexane	56	7.001	7.005	-0.004	91	3275225	1250.0	1054.1	
53 Carbon tetrachloride	117	7.129	7.133	-0.004	86	1741871	1250.0	1235.7	
52 1,1-Dichloropropene	75	7.129	7.139	-0.010	88	1708387	1250.0	1240.4	
54 Benzene	78	7.360	7.364	-0.004	99	4715365	1250.0	1064.8	
55 1,2-Dichloroethane	62	7.385	7.394	-0.010	87	1116464	1250.0	1225.1	
58 n-Heptane	43	7.670	7.674	-0.004	92	2490271	1250.0	1160.0	
59 Isobutyl alcohol	41	7.670	7.674	-0.004	86	1354257	31250	29635	
61 Trichloroethene	130	8.060	8.069	-0.009	92	1546774	1250.0	1234.6	
63 Methylcyclohexane	83	8.260	8.264	-0.004	92	2900144	1250.0	1075.1	
64 1,2-Dichloropropane	63	8.297	8.300	-0.003	94	1195123	1250.0	1195.7	
65 Dibromomethane	93	8.424	8.428	-0.004	87	512387	1250.0	1282.0	
67 1,4-Dioxane	88	8.455	8.458	-0.003	96	146373	25000	25213	
68 Dichlorobromomethane	83	8.583	8.592	-0.009	93	1291669	1250.0	1391.7	
71 cis-1,3-Dichloropropene	75	9.039	9.054	-0.015	90	1569225	1250.0	1419.9	
72 4-Methyl-2-pentanone (MIBK	43	9.203	9.212	-0.009	96	1275431	1250.0	1281.3	
73 Toluene	91	9.379	9.383	-0.004	96	4903061	1250.0	928.9	
74 trans-1,3-Dichloropropene	75	9.598	9.614	-0.016	89	1150943	1250.0	1469.2	
75 Ethyl methacrylate	69	9.689	9.705	-0.016	92	956083	1250.0	1229.1	
76 1,1,2-Trichloroethane	97	9.781	9.790	-0.009	83	812342	1250.0	1104.5	
77 Tetrachloroethene	164	9.933	9.930	0.003	92	1305528	1250.0	1050.8	
78 1,3-Dichloropropane	76	9.951	9.954	-0.003	92	1285839	1250.0	1148.5	
79 2-Hexanone	43	10.036	10.082	-0.046	95	946066	1250.0	1234.9	
81 Chlorodibromomethane	129	10.182	10.191	-0.009	90	887866	1250.0	1357.1	
82 Ethylene Dibromide	107	10.297	10.313	-0.016	98	761274	1250.0	1166.0	
84 Chlorobenzene	112	10.784	10.793	-0.009	93	3607456	1250.0	1022.4	
85 1,1,1,2-Tetrachloroethane	131	10.863	10.866	-0.003	91	1242745	1250.0	1197.8	
86 Ethylbenzene	106	10.887	10.897	-0.010	96	2097205	1250.0	1047.5	
87 m-Xylene & p-Xylene	106	11.003	11.018	-0.015	95	2588369	1250.0	1250.8	
88 o-Xylene	106	11.404	11.408	-0.004	92	2441197	1250.0	996.7	
89 Styrene	104	11.416	11.426	-0.010	93	3821505	1250.0	1088.0	
90 Bromoform	173	11.611	11.627	-0.016	99	585557	1250.0	1366.5	
91 Isopropylbenzene	105	11.769	11.773	-0.004	96	5591752	1250.0	856.8	
93 1,1,2,2-Tetrachloroethane	83	12.055	12.064	-0.009	95	929031	1250.0	1137.0	
94 Bromobenzene	156	12.085	12.101	-0.016	88	1597112	1250.0	1028.8	
95 1,2,3-Trichloropropane	110	12.110	12.125	-0.015	75	273255	1250.0	1019.3	
96 trans-1,4-Dichloro-2-buten	53	12.122	12.180	-0.058	50	208937	1250.0	2053.4	
97 N-Propylbenzene	120	12.177	12.186	-0.009	93	2140511	1250.0	946.2	
98 2-Chlorotoluene	126	12.274	12.277	-0.003	96	1734463	1250.0	934.5	
99 1,3,5-Trimethylbenzene	105	12.353	12.356	-0.003	95	4879395	1250.0	1247.7	
100 4-Chlorotoluene	126	12.383	12.393	-0.010	95	1776601	1250.0	1063.4	
101 tert-Butylbenzene	119	12.681	12.685	-0.004	82	4673004	1250.0	1247.0	
103 1,2,4-Trimethylbenzene	105	12.730	12.733	-0.003	95	4939352	1250.0	818.4	
104 sec-Butylbenzene	105	12.900	12.904	-0.004	94	6159727	1250.0	1244.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 1,3-Dichlorobenzene	146	13.022	13.037	-0.015	96	2946226	1250.0	1124.4	
106 4-Isopropyltoluene	119	13.046	13.050	-0.004	91	5514991	1250.0	1249.2	
107 1,4-Dichlorobenzene	146	13.113	13.123	-0.010	93	3174777	1250.0	929.1	
110 n-Butylbenzene	91	13.454	13.469	-0.015	92	5410806	1250.0	893.2	
111 1,2-Dichlorobenzene	146	13.490	13.506	-0.016	96	2704973	1250.0	945.5	
112 1,2-Dibromo-3-Chloropropan	157	14.287	14.321	-0.034	89	144957	1250.0	1249.3	
113 1,2,4-Trichlorobenzene	180	15.114	15.154	-0.040	91	1418965	1250.0	1480.7	
115 Hexachlorobutadiene	225	15.284	15.288	-0.004	91	1420121	1250.0	951.5	
116 Naphthalene	128	15.388	15.446	-0.058	97	1582030	1250.0	1282.3	
117 1,2,3-Trichlorobenzene	180	15.649	15.689	-0.040	94	1012752	1250.0	1252.1	
S 130 Xylenes, Total	106				0		2500.0	2247.5	
S 129 1,2-Dichloroethene, Total	96				0		2500.0	2337.3	
S 131 1,3-Dichloropropene, Total	1				0		2500.0	2889.2	

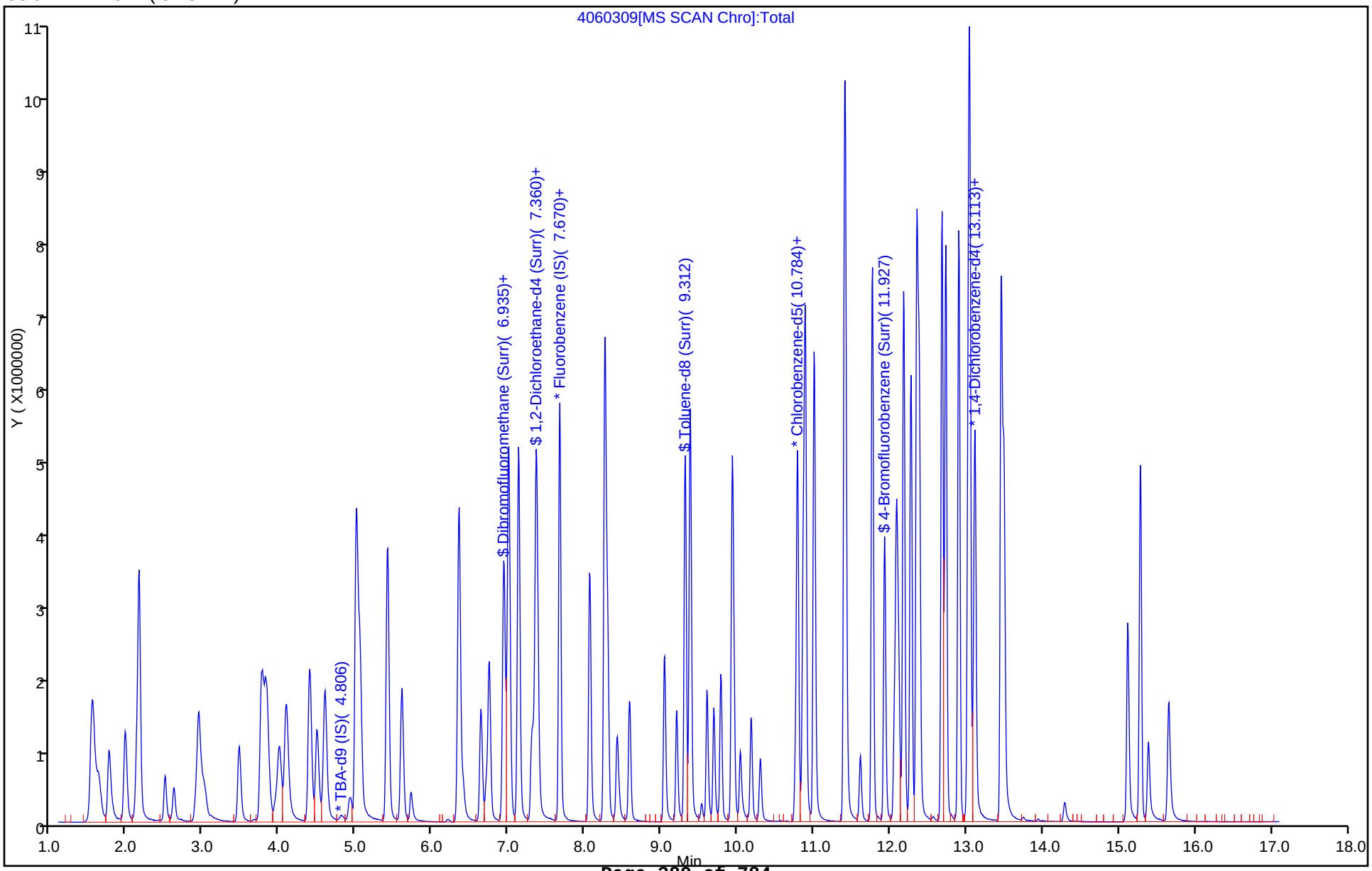
Report Date: 03-Jun-2014 14:07:42 Chrom Revision: 2.2 16-May-2014 10:46:48

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D

Injection Date:	03-Jun-2014 14:15:30	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)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Lab Sample ID: CCVIS 180-110534/2 Calibration Date: 07/07/2014 00:53

Instrument ID: CHHP4 Calib Start Date: 06/03/2014 11:03

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/03/2014 14:15

Lab File ID: 4070602.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	0.5918	0.4829		32.6	40.0	-18.4	
Chloromethane	Ave	0.7712	0.6778		35.2	40.0	-12.1	
Vinyl chloride	Ave	0.6271	0.5379		34.3	40.0	-14.2	
1,3-Butadiene	Ave	0.6254	0.5175		33.1	40.0	-17.3	
Bromomethane	Ave	0.1824	0.1521		33.4	40.0	-16.6	
Chloroethane	Ave	0.2397	0.1558		26.0	40.0	-35.0	
Dichlorofluoromethane	Ave	0.6757	0.5879		34.8	40.0	-13.0	
Trichlorofluoromethane	Ave	0.6245	0.5193		33.3	40.0	-16.8	
Ethyl ether	Ave	0.3071	0.2566		33.4	40.0	-16.5	
Acrolein	Ave	0.0163	0.0198		212	175	21.1	
1,1-Dichloroethene	Ave	0.4894	0.4431		36.2	40.0	-9.5	
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.5158	0.4848		37.6	40.0	-6.0	
Acetone	Ave	0.1539	0.1827		47.5	40.0	18.7	
Iodomethane	Ave	0.7287	0.6172		33.9	40.0	-15.3	
Carbon disulfide	Ave	1.220	1.013		33.2	40.0	-17.0	
Allyl chloride	Qua		0.2338		33.2	40.0	-16.9	
Methyl acetate	Ave	0.1637	0.1558		190	200	-4.8	
Methylene Chloride	Qua		0.4434		30.3	40.0	-24.3	
tert-Butyl alcohol	Ave	1.925	1.603		333	400	-16.7	
Acrylonitrile	Lin2		0.0842		444	400	10.9	
trans-1,2-Dichloroethene	Ave	0.4988	0.4587		36.8	40.0	-8.0	
Methyl tert-butyl ether	Ave	0.7330	0.6104		33.3	40.0	-16.7	
Hexane	Ave	0.8809	0.7069		32.1	40.0	-19.8	
1,1-Dichloroethane	Ave	0.7567	0.6908		36.5	40.0	-8.7	
Vinyl acetate	Qua		0.1193		27.4	40.0	-31.6	
2,2-Dichloropropane	Ave	0.4266	0.3721		34.9	40.0	-12.8	
cis-1,2-Dichloroethene	Ave	0.4743	0.4402		37.1	40.0	-7.2	
2-Butanone (MEK)	Qua		0.1944		44.7	40.0	11.7	
Chlorobromomethane	Ave	0.1741	0.1636		37.6	40.0	-6.0	
Tetrahydrofuran	Ave	0.0647	0.0559		69.1	80.0	-13.7	
Chloroform	Ave	0.6170	0.5500		35.7	40.0	-10.9	
1,1,1-Trichloroethane	Ave	0.5705	0.4907		34.4	40.0	-14.0	
Cyclohexane	Ave	1.093	1.004		36.8	40.0	-8.1	
Carbon tetrachloride	Ave	0.4957	0.4341		35.0	40.0	-12.4	
1,1-Dichloropropene	Ave	0.4844	0.4535		37.5	40.0	-6.4	
Benzene	Ave	1.557	1.448		37.2	40.0	-7.1	
1,2-Dichloroethane	Ave	0.3205	0.3057		38.2	40.0	-4.6	
Isobutyl alcohol	Ave	0.0161	0.0147		915	1000	-8.5	
n-Heptane	Ave	0.7550	0.6828		36.2	40.0	-9.6	
Trichloroethene	Ave	0.4406	0.3990		36.2	40.0	-9.5	

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Lab Sample ID: CCVIS 180-110534/2 Calibration Date: 07/07/2014 00:53

Instrument ID: CHHP4 Calib Start Date: 06/03/2014 11:03

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/03/2014 14:15

Lab File ID: 4070602.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
Methylcyclohexane	Ave	0.9487	0.8691		36.6	40.0	-8.4	
1,2-Dichloropropane	Ave	0.3515	0.3117		35.5	40.0	-11.3	
Dibromomethane	Ave	0.1406	0.1309		37.3	40.0	-6.9	
1,4-Dioxane	Ave	0.0020	0.0021		817	800	2.1	
Dichlorobromomethane	Ave	0.3264	0.2903		35.6	40.0	-11.1	
cis-1,3-Dichloropropene	Ave	0.3887	0.3346		34.4	40.0	-13.9	
4-Methyl-2-pentanone (MIBK)	Ave	1.395	1.254		36.0	40.0	-10.1	
Toluene	Ave	7.399	6.619		35.8	40.0	-10.6	
trans-1,3-Dichloropropene	Ave	1.098	1.009		36.8	40.0	-8.1	
Ethyl methacrylate	Lin1		0.8721		36.5	40.0	-8.7	
1,1,2-Trichloroethane	Ave	1.031	0.9170		35.6	40.0	-11.1	
Tetrachloroethene	Ave	1.742	1.515		34.8	40.0	-13.0	
1,3-Dichloropropane	Ave	1.569	1.520		38.7	40.0	-3.1	
2-Hexanone	Lin1		0.9621		40.8	40.0	1.9	
Chlorodibromomethane	Ave	0.9171	0.7952		34.7	40.0	-13.3	
1,2-Dibromoethane	Lin2		0.8204		39.4	40.0	-1.5	
Chlorobenzene	Ave	4.946	4.496		36.4	40.0	-9.1	
1,1,1,2-Tetrachloroethane	Ave	1.454	1.330		36.6	40.0	-8.6	
Ethylbenzene	Ave	2.807	2.638		37.6	40.0	-6.0	
m-Xylene & p-Xylene	Qua		3.137		34.5	40.0	-13.6	
o-Xylene	Ave	3.434	3.229		37.6	40.0	-6.0	
Styrene	Ave	4.924	4.804		39.0	40.0	-2.4	
Bromoform	Lin2		0.4584		33.5	40.0	-16.3	
Isopropylbenzene	Ave	9.148	8.648		37.8	40.0	-5.5	
1,1,2,2-Tetrachloroethane	Ave	1.145	1.017		35.5	40.0	-11.2	
Bromobenzene	Ave	1.381	1.198		34.7	40.0	-13.3	
1,2,3-Trichloropropane	Ave	0.2385	0.1974		33.1	40.0	-17.2	
trans-1,4-Dichloro-2-butene	Ave	0.0905	0.0748		33.1	40.0	-17.3	
N-Propylbenzene	Ave	2.013	1.739		34.6	40.0	-13.6	
2-Chlorotoluene	Ave	1.651	1.340		32.5	40.0	-18.8	
1,3,5-Trimethylbenzene	Qua		4.554		31.5	40.0	-21.3	
4-Chlorotoluene	Ave	1.486	1.343		36.2	40.0	-9.6	
tert-Butylbenzene	Qua		4.295		30.1	40.0	-24.7	
1,2,4-Trimethylbenzene	Ave	5.370	4.541		33.8	40.0	-15.4	
sec-Butylbenzene	Qua		6.375		31.9	40.0	-20.3	
1,3-Dichlorobenzene	Ave	2.331	2.336		40.1	40.0	0.2	
4-Isopropyltoluene	Qua		5.520		33.0	40.0	-17.5	
1,4-Dichlorobenzene	Ave	3.040	2.488		32.7	40.0	-18.1	
n-Butylbenzene	Ave	5.389	5.027		37.3	40.0	-6.7	
1,2-Dichlorobenzene	Ave	2.545	2.170		34.1	40.0	-14.7	
1,2-Dibromo-3-Chloropropane	Qua		0.0664		37.2	40.0	-7.0	

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Lab Sample ID: CCVIS 180-110534/2 Calibration Date: 07/07/2014 00:53

Instrument ID: CHHP4 Calib Start Date: 06/03/2014 11:03

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/03/2014 14:15

Lab File ID: 4070602.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
1,2,4-Trichlorobenzene	Ave	0.8526	0.9058		42.5	40.0	6.2	
Hexachlorobutadiene	Ave	1.328	1.101		33.2	40.0	-17.1	
Naphthalene	Lin1		0.9181		37.6	40.0	-6.1	
1,2,3-Trichlorobenzene	Qua		0.6362		37.7	40.0	-5.9	
Dibromofluoromethane (Surr)	Ave	0.3061	0.2704		35.3	40.0	-11.7	
1,2-Dichloroethane-d4 (Surr)	Ave	0.2480	0.2207		35.6	40.0	-11.0	
Toluene-d8 (Surr)	Ave	5.673	5.173		36.5	40.0	-8.8	
4-Bromofluorobenzene (Surr)	Ave	1.809	1.954		43.2	40.0	8.0	

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070602.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 07-Jul-2014 00:53:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0002060-002
Operator ID: 430936 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub7

Method: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 07-Jul-2014 02:58:21 Calib Date: 03-Jun-2014 14:15:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: zukowskim Date: 07-Jul-2014 00:23:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.792	4.792	0.000	92	137054	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.674	7.674	0.000	96	959132	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.763	10.763	0.000	84	225637	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	13.093	13.093	0.000	93	362209	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.932	6.932	0.000	81	207471	200.0	176.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.303	7.303	0.000	65	169355	200.0	178.0	
$ 7 Toluene-d8 (Surr)	98	9.316	9.316	0.000	93	933745	200.0	182.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.931	11.931	0.000	96	352711	200.0	216.0	
10 Dichlorodifluoromethane	85	1.769	1.769	0.000	87	370524	200.0	163.2	
11 Chloromethane	50	1.976	1.976	0.000	93	520044	200.0	175.8	
12 Vinyl chloride	62	2.128	2.128	0.000	83	412768	200.0	171.6	
13 Butadiene	39	2.158	2.158	0.000	89	397039	200.0	165.5	
14 Bromomethane	94	2.493	2.493	0.000	88	116698	200.0	166.8	
15 Chloroethane	64	2.614	2.614	0.000	92	119546	200.0	130.0	
16 Dichlorofluoromethane	67	2.937	2.937	0.000	81	451113	200.0	174.0	
17 Trichlorofluoromethane	101	2.967	2.967	0.000	80	398496	200.0	166.3	
19 Ethyl ether	59	3.472	3.472	0.000	92	196864	200.0	167.1	
20 Acrolein	56	3.673	3.673	0.000	88	66439	875.0	1059.8	
21 1,1-Dichloroethene	96	3.782	3.782	0.000	86	339960	200.0	181.1	
22 1,1,2-Trichloro-1,2,2-trif	101	3.843	3.843	0.000	81	371990	200.0	188.0	
23 Acetone	43	3.940	3.940	0.000	96	140150	200.0	237.4	
24 Iodomethane	142	4.001	4.001	0.000	95	473564	200.0	169.4	
25 Carbon disulfide	76	4.104	4.104	0.000	99	776969	200.0	165.9	
28 3-Chloro-1-propene	76	4.408	4.408	0.000	93	179401	200.0	166.2	
29 Methyl acetate	43	4.488	4.488	0.000	99	597588	1000.0	951.8	
30 Methylene Chloride	84	4.603	4.603	0.000	94	340192	200.0	151.4	
31 2-Methyl-2-propanol	59	4.901	4.901	0.000	89	87878	2000.0	1665.2	
32 Acrylonitrile	53	5.004	5.004	0.000	100	645833	2000.0	2218.2	
33 trans-1,2-Dichloroethene	96	5.011	5.011	0.000	96	351929	200.0	183.9	
34 Methyl tert-butyl ether	73	5.053	5.053	0.000	90	468341	200.0	166.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Hexane	57	5.418	5.418	0.000	92	542441	200.0	160.5	
36 1,1-Dichloroethane	63	5.607	5.607	0.000	85	530082	200.0	182.6	
38 Vinyl acetate	43	5.734	5.734	0.000	95	91522	200.0	136.8	
41 2,2-Dichloropropane	77	6.342	6.342	0.000	75	285511	200.0	174.5	
42 cis-1,2-Dichloroethene	96	6.355	6.355	0.000	70	337790	200.0	185.6	
43 2-Butanone (MEK)	43	6.415	6.415	0.000	98	149153	200.0	223.4	
46 Chlorobromomethane	128	6.640	6.640	0.000	93	125550	200.0	188.0	
48 Tetrahydrofuran	42	6.713	6.713	0.000	89	85730	400.0	345.4	
49 Chloroform	83	6.750	6.750	0.000	81	422005	200.0	178.3	
50 1,1,1-Trichloroethane	97	6.938	6.938	0.000	90	376519	200.0	172.0	
51 Cyclohexane	56	6.999	6.999	0.000	90	770659	200.0	183.8	
53 Carbon tetrachloride	117	7.127	7.127	0.000	91	333081	200.0	175.1	
52 1,1-Dichloropropene	75	7.139	7.139	0.000	92	347970	200.0	187.3	
54 Benzene	78	7.364	7.364	0.000	97	1110739	200.0	185.9	
55 1,2-Dichloroethane	62	7.388	7.388	0.000	84	234557	200.0	190.8	
58 n-Heptane	43	7.668	7.668	0.000	92	523885	200.0	180.9	
59 Isobutyl alcohol	41	7.668	7.668	0.000	75	282134	5000.0	4575.9	
61 Trichloroethene	130	8.063	8.063	0.000	91	306124	200.0	181.1	
63 Methylcyclohexane	83	8.264	8.264	0.000	90	666837	200.0	183.2	
64 1,2-Dichloropropane	63	8.294	8.294	0.000	95	239177	200.0	177.4	
65 Dibromomethane	93	8.422	8.422	0.000	86	100444	200.0	186.3	
67 1,4-Dioxane	88	8.465	8.465	0.000	79	31987	4000.0	4083.6	
68 Dichlorobromomethane	83	8.586	8.586	0.000	92	222737	200.0	177.9	
71 cis-1,3-Dichloropropene	75	9.049	9.049	0.000	87	256769	200.0	172.2	
72 4-Methyl-2-pentanone (MIBK	43	9.201	9.201	0.000	95	226408	200.0	179.8	
73 Toluene	91	9.383	9.383	0.000	99	1194703	200.0	178.9	
74 trans-1,3-Dichloropropene	75	9.608	9.608	0.000	92	182196	200.0	183.8	
75 Ethyl methacrylate	69	9.693	9.693	0.000	90	157425	200.0	182.5	
76 1,1,2-Trichloroethane	97	9.784	9.784	0.000	84	165521	200.0	177.9	
77 Tetrachloroethene	164	9.930	9.930	0.000	90	273524	200.0	174.0	
78 1,3-Dichloropropane	76	9.955	9.955	0.000	88	274412	200.0	193.7	
79 2-Hexanone	43	10.052	10.052	0.000	97	173665	200.0	203.8	
81 Chlorodibromomethane	129	10.180	10.180	0.000	89	143532	200.0	173.4	
82 Ethylene Dibromide	107	10.301	10.301	0.000	97	148093	200.0	197.0	
84 Chlorobenzene	112	10.788	10.788	0.000	95	811653	200.0	181.8	
85 1,1,1,2-Tetrachloroethane	131	10.861	10.861	0.000	90	240044	200.0	182.9	
86 Ethylbenzene	106	10.891	10.891	0.000	97	476172	200.0	188.0	
87 m-Xylene & p-Xylene	106	11.007	11.007	0.000	98	566255	200.0	172.7	
88 o-Xylene	106	11.402	11.402	0.000	94	582868	200.0	188.1	
89 Styrene	104	11.426	11.426	0.000	95	867256	200.0	195.1	
90 Bromoform	173	11.609	11.609	0.000	98	82741	200.0	167.4	
91 Isopropylbenzene	105	11.773	11.773	0.000	95	1561109	200.0	189.1	
93 1,1,2,2-Tetrachloroethane	83	12.059	12.059	0.000	89	183659	200.0	177.7	
94 Bromobenzene	156	12.089	12.089	0.000	89	347070	200.0	173.5	
95 1,2,3-Trichloropropane	110	12.114	12.114	0.000	70	57187	200.0	165.5	
96 trans-1,4-Dichloro-2-buten	53	12.138	12.138	0.000	4	21684	200.0	165.3	
97 N-Propylbenzene	120	12.180	12.180	0.000	97	503926	200.0	172.8	
98 2-Chlorotoluene	126	12.272	12.272	0.000	96	388300	200.0	162.3	
99 1,3,5-Trimethylbenzene	105	12.351	12.351	0.000	97	1319595	200.0	157.5	
100 4-Chlorotoluene	126	12.387	12.387	0.000	97	389278	200.0	180.8	
101 tert-Butylbenzene	119	12.679	12.679	0.000	89	1244638	200.0	150.5	
103 1,2,4-Trimethylbenzene	105	12.734	12.734	0.000	96	1315943	200.0	169.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
104 sec-Butylbenzene	105	12.904	12.904	0.000	93	1847268	200.0	159.5	
105 1,3-Dichlorobenzene	146	13.026	13.026	0.000	88	676969	200.0	200.4	
106 4-Isopropyltoluene	119	13.044	13.044	0.000	96	1599510	200.0	165.0	
107 1,4-Dichlorobenzene	146	13.117	13.117	0.000	94	721034	200.0	163.7	
110 n-Butylbenzene	91	13.464	13.464	0.000	95	1456552	200.0	186.6	
111 1,2-Dichlorobenzene	146	13.500	13.500	0.000	97	628857	200.0	170.5	
112 1,2-Dibromo-3-Chloropropan	157	14.297	14.297	0.000	57	19249	200.0	186.0	
113 1,2,4-Trichlorobenzene	180	15.130	15.130	0.000	90	262475	200.0	212.5	
115 Hexachlorobutadiene	225	15.282	15.282	0.000	91	318903	200.0	165.8	
116 Naphthalene	128	15.397	15.397	0.000	94	266037	200.0	187.8	
117 1,2,3-Trichlorobenzene	180	15.659	15.659	0.000	94	184344	200.0	188.3	
S 130 Xylenes, Total	106				0		400.0	360.8	
S 129 1,2-Dichloroethene, Total	96				0		400.0	369.6	
S 131 1,3-Dichloropropene, Total	1				0		400.0	356.0	

Reagents:

VOA8260INT_00013	Amount Added:	10.00	Units: uL
VOA8260SURR_00017	Amount Added:	8.00	Units: uL
VOAACROLEINPR_00003	Amount Added:	35.00	Units: uL
voaW VA pri R_00003	Amount Added:	8.00	Units: uL
VOA8260VOAPRI_00071	Amount Added:	8.00	Units: uL

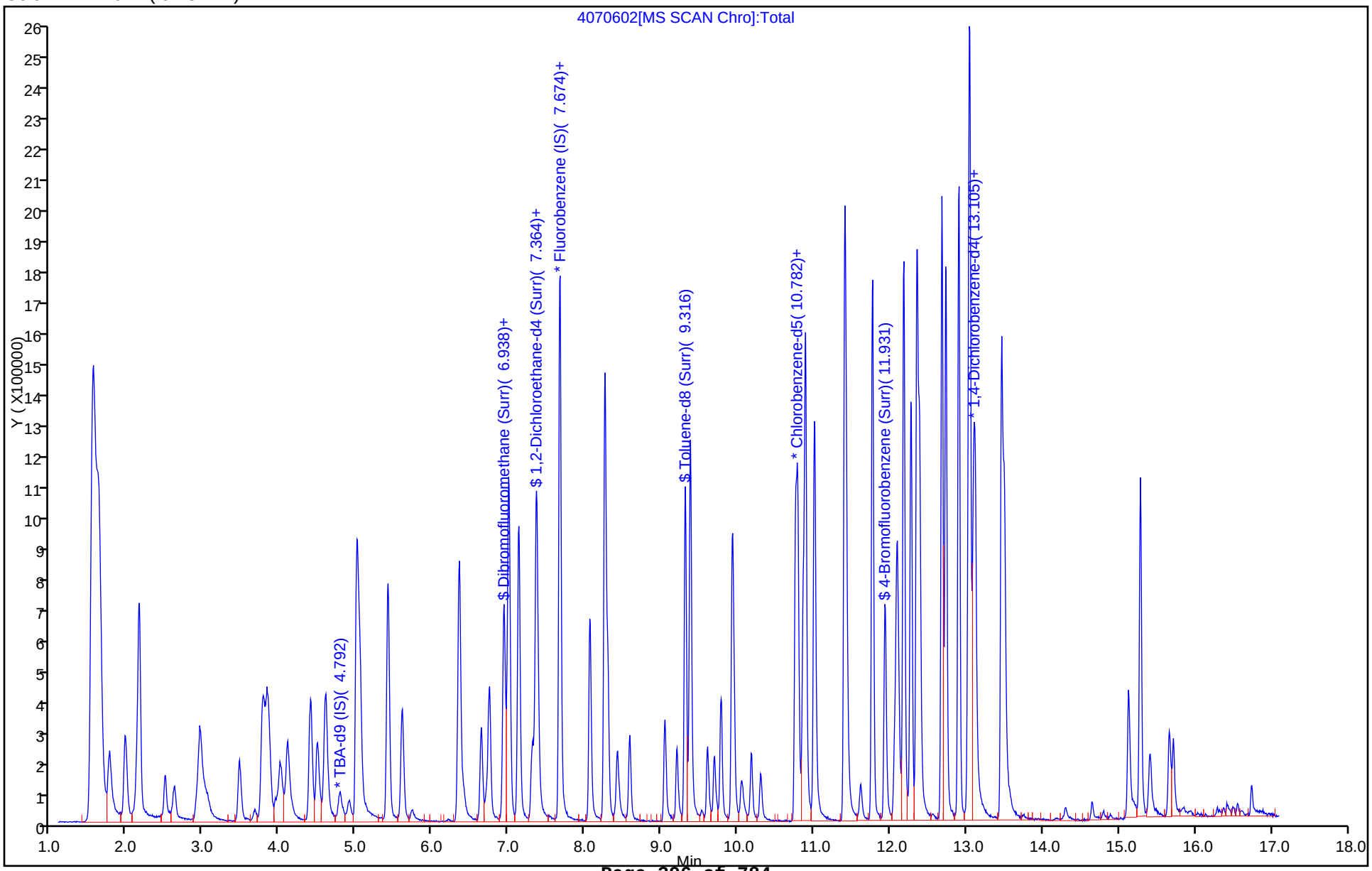
Report Date: 07-Jul-2014 02:58:22 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070602.D

Injection Date:	07-Jul-2014 00:53:30	Instrument ID:	CHHP4	Operator ID:	430936
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
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.: 180-34362-1

SDG No.:

Lab Sample ID: CCV 180-110534/3 Calibration Date: 07/07/2014 01:20

Instrument ID: CHHP4 Calib Start Date: 06/24/2013 11:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/24/2013 15:43

Lab File ID: 4070603.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	0.0122	0.0139		458	400	14.4	
Chloroprene	Ave	0.4849	0.8077		66.6	40.0	66.6	
Propionitrile	Ave	0.0225	0.0219		390	400	-2.4	
Methacrylonitrile	Ave	0.1077	0.1169		434	400	8.5	
Isooctane	Ave	0.0094	2.520		10700	40.0	26573.4	
n-Butanol	Ave	0.0020	0.0003		274	1000	-84.8	
Ethyl acrylate	Ave	0.7909	0.8628		43.6	40.0	9.1	
Methyl methacrylate	Ave	0.1118	0.1205		86.2	80.0	7.8	
2-Nitropropane	Ave	0.1369	0.0542		31.7	80.0	-60.4	
2-Chloroethyl vinyl ether	Lin1		0.1021		77.1	80.0	-3.6	
Cyclohexanone	Qua		0.0180		720	800	-10.1	
1,2,3-Trimethylbenzene	Ave	3.789	5.676		56.8	40.0	49.8	
Benzyl chloride	Ave	0.7761	0.4475		23.1	40.0	-42.3	
1,3,5-Trichlorobenzene	Ave	1.243	0.1011		3.25	40.0	-91.9	
2-Methylnaphthalene	Qua		0.0012			40.0		

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070603.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 07-Jul-2014 01:20:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV, List2
Misc. Info.: 180-0002060-003
Operator ID: 430936 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub3

Method: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 07-Jul-2014 02:58:20 Calib Date: 03-Jun-2014 14:15:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: zukowskim Date: 07-Jul-2014 00:44:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.755	4.755	0.000	94	150115	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.680	7.680	0.000	99	1132691	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.763	10.763	0.000	82	244631	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	13.104	13.104	0.000	93	342603	250.0	250.0	
18 Ethanol	45	3.532	3.532	0.000	46	3008	10000	504.9	
26 Isopropyl alcohol	45	3.940	3.940	0.000	54	1850	2000.0	55.5	
27 Acetonitrile	40	4.414	4.414	0.000	99	125999	2000.0	2288.3	
37 2-Chloro-1,3-butadiene	53	5.740	5.740	0.000	88	731861	200.0	333.2	
39 Isopropyl ether	45	5.752	5.752	0.000	95	1204226	200.0	289.3	
40 Tert-butyl ethyl ether	59	6.214	6.214	0.000	96	852081	200.0	270.7	
44 Propionitrile	54	6.476	6.476	0.000	99	198621	2000.0	1952.3	
45 Ethyl acetate	43	6.500	6.500	0.000	98	242803	400.0	389.4	
47 Methacrylonitrile	41	6.652	6.652	0.000	93	1059029	2000.0	2170.0	
57 Isooctane	57	7.467	7.467	0.000	95	2283475	200.0	53347	E
56 Tert-amyl methyl ether	73	7.509	7.509	0.000	90	574957	200.0	236.1	
60 n-Butanol	56	8.130	8.130	0.000	55	6701	5000.0	1369.9	
62 Ethyl acrylate	55	8.209	8.209	0.000	97	168855	200.0	218.2	
66 Methyl methacrylate	69	8.440	8.440	0.000	95	218349	400.0	431.0	
69 2-Nitropropane	41	8.829	8.829	0.000	86	21205	400.0	158.3	
70 2-Chloroethyl vinyl ether	63	8.908	8.908	0.000	91	185011	400.0	385.7	
80 n-Butyl acetate	43	10.173	10.173	0.000	98	140827	200.0	235.7	
92 Cyclohexanone	55	11.906	11.906	0.000	86	70626	4000.0	3597.9	
102 Pentachloroethane	167	12.715	12.715	0.000	85	166220	200.0	199.6	
108 1,2,3-Trimethylbenzene	105	13.159	13.159	0.000	97	1555672	200.0	284.1	
109 Benzyl chloride	91	13.274	13.274	0.000	90	122653	200.0	115.3	
114 1,3,5-Trichlorobenzene	180	15.154	15.154	0.000	74	27704	200.0	16.3	
118 2-Methylnaphthalene	142	16.765	16.765	0.000	1	317	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
E - Exceeded Maximum Amount

Reagents:

VOA8260INT_00013	Amount Added:	10.00	Units: uL
Voa Appix PRI_00001	Amount Added:	8.00	Units: uL
voaW2-clevRes_00008	Amount Added:	8.00	Units: uL

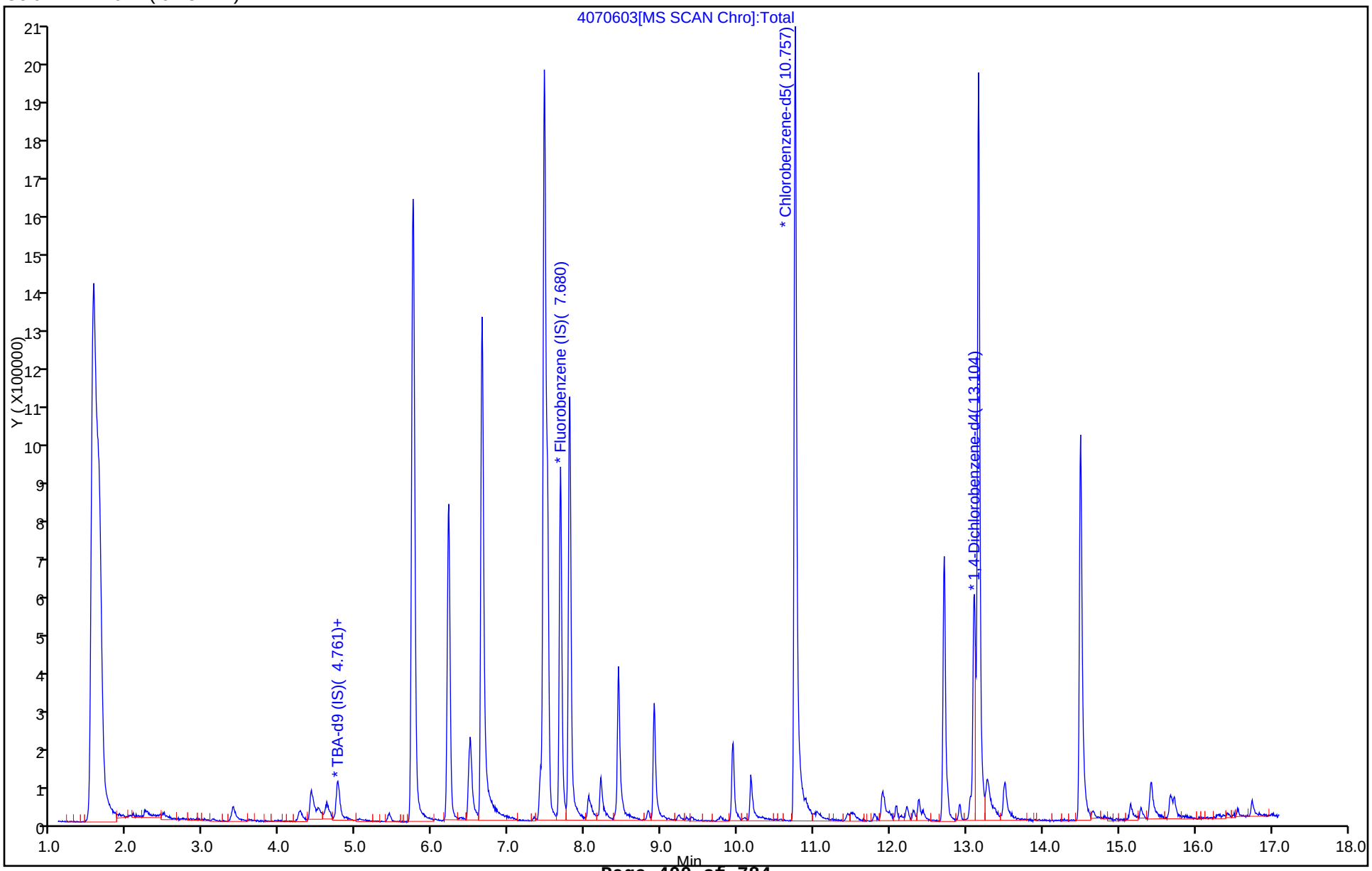
Report Date: 07-Jul-2014 02:58:21 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070603.D

Injection Date:	07-Jul-2014 01:20:30	Instrument ID:	CHHP4	Operator ID:	430936
Lims ID:	CCV			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
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.: 180-34362-1

SDG No.:

Lab Sample ID: CCV 180-110699/3 Calibration Date: 07/08/2014 10:10

Instrument ID: CHHP4 Calib Start Date: 06/24/2013 11:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/24/2013 15:43

Lab File ID: 4070803.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	0.0122	0.0108		355	400	-11.3	
Chloroprene	Ave	0.4849	0.7819		64.5	40.0	61.3	
Propionitrile	Ave	0.0225	0.0209		373	400	-6.8	
Methacrylonitrile	Ave	0.1077	0.1164		432	400	8.0	
Isooctane	Ave	0.0094	2.561		10800	40.0	27003.3	
n-Butanol	Ave	0.0020	0.0019		869	1000	-3.7	
Ethyl acrylate	Ave	0.7909	0.7834		39.6	40.0	-0.9	
Methyl methacrylate	Ave	0.1118	0.1132		81.0	80.0	1.2	
2-Nitropropane	Ave	0.1369	0.0503		29.4	80.0	-63.2	
2-Chloroethyl vinyl ether	Lin1		0.0993		75.2	80.0	-6.0	
Cyclohexanone	Qua		0.0169		672	800	-15.9	
1,2,3-Trimethylbenzene	Ave	3.789	5.575		55.8	40.0	47.1	
Benzyl chloride	Ave	0.7761	0.3884		20.0	40.0	-49.9	
1,3,5-Trichlorobenzene	Ave	1.243	0.0557		1.79	40.0	-95.5	

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140708-2090.b\4070803.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 08-Jul-2014 10:10:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV, List2
Misc. Info.: 180-0002090-003
Operator ID: 430936 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub3

Method: \\PITCHROM\ChromData\CHHP4\20140708-2090.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 08-Jul-2014 12:29:29 Calib Date: 03-Jun-2014 14:15:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: zukowskim Date: 08-Jul-2014 09:58:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.758	4.758	0.000	92	125684	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.683	7.683	0.000	99	947888	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.766	10.766	0.000	82	220213	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	13.101	13.101	0.000	89	281043	250.0	250.0	
18 Ethanol	45	3.541	3.541	0.000	1	1534	10000	307.6	
26 Isopropyl alcohol	45	4.058	4.058	0.000	41	1583	2000.0	56.8	
27 Acetonitrile	40	4.417	4.417	0.000	98	81730	2000.0	1773.7	
37 2-Chloro-1,3-butadiene	53	5.737	5.737	0.000	87	592931	200.0	322.5	
39 Isopropyl ether	45	5.749	5.749	0.000	95	970476	200.0	278.6	
40 Tert-butyl ethyl ether	59	6.211	6.211	0.000	95	691367	200.0	262.4	
44 Propionitrile	54	6.479	6.479	0.000	98	158686	2000.0	1863.9	
45 Ethyl acetate	43	6.497	6.497	0.000	97	175633	400.0	336.6	
47 Methacrylonitrile	41	6.649	6.649	0.000	93	882454	2000.0	2160.8	
57 Isooctane	57	7.470	7.470	0.000	96	1941717	200.0	54207	E
56 Tert-amyl methyl ether	73	7.513	7.513	0.000	89	467386	200.0	229.3	
60 n-Butanol	56	8.054	8.054	0.000	85	35606	5000.0	4344.4	
62 Ethyl acrylate	55	8.218	8.218	0.000	97	138013	200.0	198.1	
66 Methyl methacrylate	69	8.443	8.443	0.000	92	171631	400.0	404.9	
69 2-Nitropropane	41	8.826	8.826	0.000	73	17724	400.0	147.0	
70 2-Chloroethyl vinyl ether	63	8.911	8.911	0.000	92	150567	400.0	376.2	
80 n-Butyl acetate	43	10.182	10.182	0.000	94	88768	200.0	181.4	
92 Cyclohexanone	55	11.909	11.909	0.000	88	59354	4000.0	3362.4	
102 Pentachloroethane	167	12.712	12.712	0.000	85	150952	200.0	221.0	
108 1,2,3-Trimethylbenzene	105	13.162	13.162	0.000	97	1253479	200.0	279.1	
109 Benzyl chloride	91	13.284	13.284	0.000	76	87333	200.0	100.1	
114 1,3,5-Trichlorobenzene	180	15.181	15.181	0.000	52	12531	200.0	8.96	
118 2-Methylnaphthalene	142		16.765					ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND
E - Exceeded Maximum Amount

Reagents:

VOA8260INT_00013	Amount Added:	10.00	Units: uL
Voa Appix PRI_00001	Amount Added:	8.00	Units: uL
voaW2-clevRes_00008	Amount Added:	8.00	Units: uL

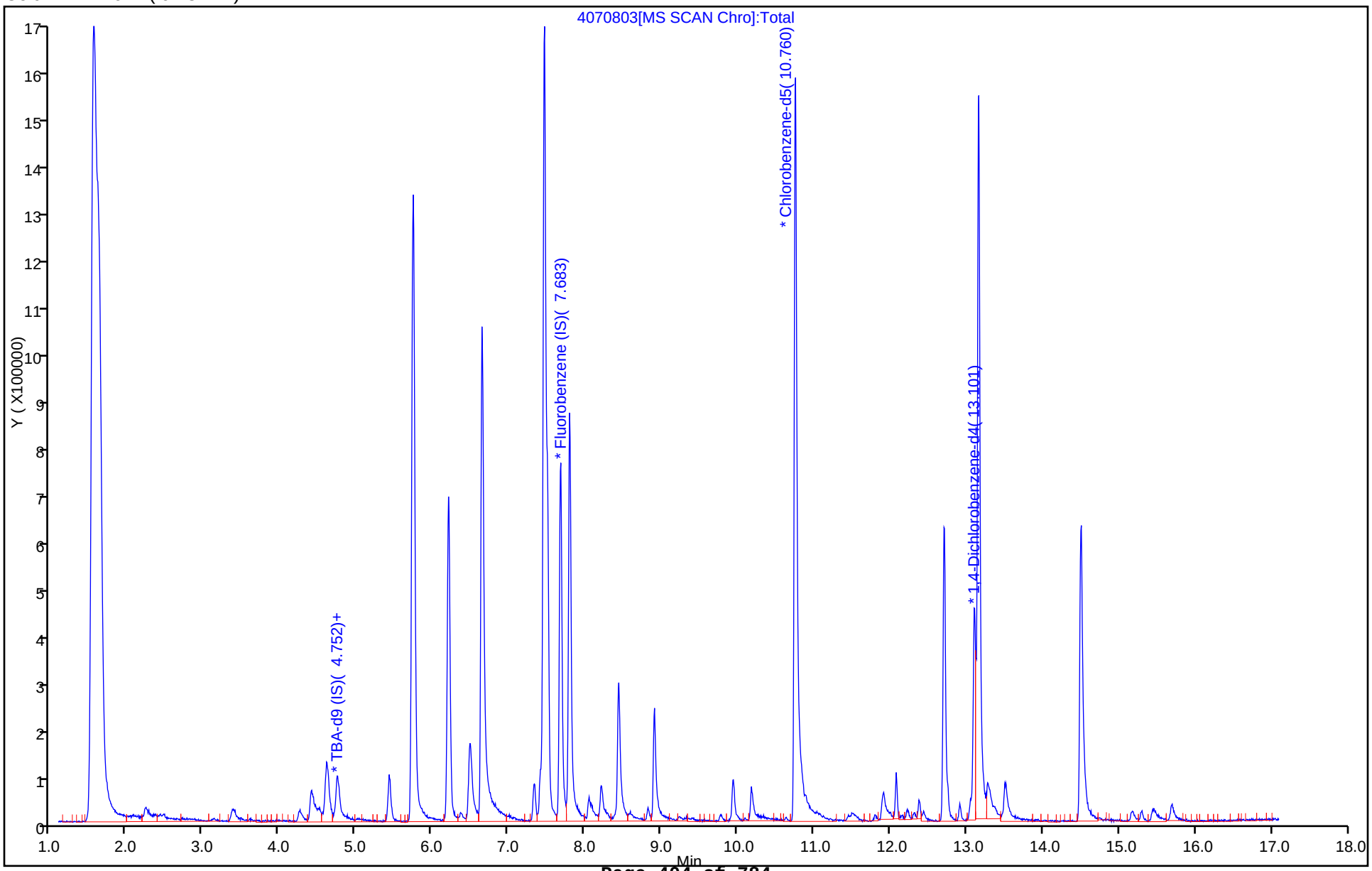
Report Date: 08-Jul-2014 12:29:30 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140708-2090.b\4070803.D

Injection Date:	08-Jul-2014 10:10:30	Instrument ID:	CHHP4	Operator ID:	430936
Lims ID:	CCV			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
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.: 180-34362-1

SDG No.:

Lab Sample ID: CCVIS 180-110699/4 Calibration Date: 07/08/2014 10:37

Instrument ID: CHHP4 Calib Start Date: 06/03/2014 11:03

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/03/2014 14:15

Lab File ID: 4070804.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	0.5918	0.4712		31.8	40.0	-20.4	
Chloromethane	Ave	0.7712	0.6813		35.3	40.0	-11.7	
Vinyl chloride	Ave	0.6271	0.5296		33.8	40.0	-15.5	
1,3-Butadiene	Ave	0.6254	0.5008		32.0	40.0	-19.9	
Bromomethane	Ave	0.1824	0.1490		32.7	40.0	-18.3	
Chloroethane	Ave	0.2397	0.1993		33.3	40.0	-16.8	
Dichlorofluoromethane	Ave	0.6757	0.5970		35.3	40.0	-11.7	
Trichlorofluoromethane	Ave	0.6245	0.5275		33.8	40.0	-15.5	
Ethyl ether	Ave	0.3071	0.2467		32.1	40.0	-19.7	
Acrolein	Ave	0.0163	0.0173		185	175	5.8	
1,1-Dichloroethene	Ave	0.4894	0.4339		35.5	40.0	-11.3	
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.5158	0.4753		36.9	40.0	-7.8	
Acetone	Ave	0.1539	0.1580		41.1	40.0	2.6	
Iodomethane	Ave	0.7287	0.5940		32.6	40.0	-18.5	
Carbon disulfide	Ave	1.220	1.033		33.8	40.0	-15.4	
Allyl chloride	Qua		0.2390		33.8	40.0	-15.4	
Methyl acetate	Ave	0.1637	0.1285		157	200	-21.5	
Methylene Chloride	Qua		0.5296		37.4	40.0	-6.4	
tert-Butyl alcohol	Ave	1.925	1.641		341	400	-14.8	
Acrylonitrile	Lin2		0.0678		362	400	-9.6	
trans-1,2-Dichloroethene	Ave	0.4988	0.4404		35.3	40.0	-11.7	
Methyl tert-butyl ether	Ave	0.7330	0.5525		30.2	40.0	-24.6	
Hexane	Ave	0.8809	0.8136		36.9	40.0	-7.6	
1,1-Dichloroethane	Ave	0.7567	0.7066		37.4	40.0	-6.6	
Vinyl acetate	Qua		0.2694		54.6	40.0	36.5	
2,2-Dichloropropane	Ave	0.4266	0.3635		34.1	40.0	-14.8	
cis-1,2-Dichloroethene	Ave	0.4743	0.4407		37.2	40.0	-7.1	
2-Butanone (MEK)	Qua		0.1884		43.3	40.0	8.4	
Chlorobromomethane	Ave	0.1741	0.1609		37.0	40.0	-7.5	
Tetrahydrofuran	Ave	0.0647	0.0521		64.4	80.0	-19.5	
Chloroform	Ave	0.6170	0.5696		36.9	40.0	-7.7	
1,1,1-Trichloroethane	Ave	0.5705	0.5052		35.4	40.0	-11.4	
Cyclohexane	Ave	1.093	0.9677		35.4	40.0	-11.4	
Carbon tetrachloride	Ave	0.4957	0.4299		34.7	40.0	-13.3	
1,1-Dichloropropene	Ave	0.4844	0.4883		40.3	40.0	0.8	
Benzene	Ave	1.557	1.554		39.9	40.0	-0.2	
1,2-Dichloroethane	Ave	0.3205	0.3103		38.7	40.0	-3.2	
Isobutyl alcohol	Ave	0.0161	0.0155		965	1000	-3.5	
n-Heptane	Ave	0.7550	0.7642		40.5	40.0	1.2	
Trichloroethene	Ave	0.4406	0.4176		37.9	40.0	-5.2	

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Lab Sample ID: CCVIS 180-110699/4 Calibration Date: 07/08/2014 10:37

Instrument ID: CHHP4 Calib Start Date: 06/03/2014 11:03

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/03/2014 14:15

Lab File ID: 4070804.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
Methylcyclohexane	Ave	0.9487	0.8605		36.3	40.0	-9.3	
1,2-Dichloropropane	Ave	0.3515	0.3353		38.2	40.0	-4.6	
Dibromomethane	Ave	0.1406	0.1215		34.6	40.0	-13.5	
1,4-Dioxane	Ave	0.0020	0.0016		638	800	-20.3	
Dichlorobromomethane	Ave	0.3264	0.3087		37.8	40.0	-5.4	
cis-1,3-Dichloropropene	Ave	0.3887	0.3571		36.7	40.0	-8.1	
4-Methyl-2-pentanone (MIBK)	Ave	1.395	1.160		33.3	40.0	-16.9	
Toluene	Ave	7.399	7.326		39.6	40.0	-1.0	
trans-1,3-Dichloropropene	Ave	1.098	1.002		36.5	40.0	-8.8	
Ethyl methacrylate	Lin1		0.7858		33.4	40.0	-16.5	
1,1,2-Trichloroethane	Ave	1.031	0.9784		38.0	40.0	-5.1	
Tetrachloroethene	Ave	1.742	1.638		37.6	40.0	-6.0	
1,3-Dichloropropane	Ave	1.569	1.527		38.9	40.0	-2.7	
2-Hexanone	Lin1		0.7609		33.4	40.0	-16.4	
Chlorodibromomethane	Ave	0.9171	0.8154		35.6	40.0	-11.1	
1,2-Dibromoethane	Lin2		0.7533		36.5	40.0	-8.7	
Chlorobenzene	Ave	4.946	4.666		37.7	40.0	-5.7	
1,1,1,2-Tetrachloroethane	Ave	1.454	1.398		38.4	40.0	-3.9	
Ethylbenzene	Ave	2.807	2.777		39.6	40.0	-1.1	
m-Xylene & p-Xylene	Qua		3.353		36.8	40.0	-7.9	
o-Xylene	Ave	3.434	3.335		38.9	40.0	-2.9	
Styrene	Ave	4.924	4.841		39.3	40.0	-1.7	
Bromoform	Lin2		0.4366		32.0	40.0	-19.9	
Isopropylbenzene	Ave	9.148	8.844		38.7	40.0	-3.3	
1,1,2,2-Tetrachloroethane	Ave	1.145	0.9767		34.1	40.0	-14.7	
Bromobenzene	Ave	1.381	1.206		34.9	40.0	-12.6	
1,2,3-Trichloropropane	Ave	0.2385	0.1879		31.5	40.0	-21.2	
trans-1,4-Dichloro-2-butene	Ave	0.0905	0.1096		48.4	40.0	21.1	
N-Propylbenzene	Ave	2.013	1.823		36.2	40.0	-9.4	
2-Chlorotoluene	Ave	1.651	1.407		34.1	40.0	-14.8	
1,3,5-Trimethylbenzene	Qua		4.768		33.2	40.0	-17.1	
4-Chlorotoluene	Ave	1.486	1.389		37.4	40.0	-6.6	
tert-Butylbenzene	Qua		4.554		32.2	40.0	-19.4	
1,2,4-Trimethylbenzene	Ave	5.370	4.670		34.8	40.0	-13.0	
sec-Butylbenzene	Qua		6.703		33.8	40.0	-15.5	
1,3-Dichlorobenzene	Ave	2.331	2.349		40.3	40.0	0.8	
4-Isopropyltoluene	Qua		5.647		33.9	40.0	-15.3	
1,4-Dichlorobenzene	Ave	3.040	2.397		31.5	40.0	-21.2	
n-Butylbenzene	Ave	5.389	5.023		37.3	40.0	-6.8	
1,2-Dichlorobenzene	Ave	2.545	2.060		32.4	40.0	-19.1	
1,2-Dibromo-3-Chloropropane	Qua		0.0518		30.6	40.0	-23.6	

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Lab Sample ID: CCVIS 180-110699/4 Calibration Date: 07/08/2014 10:37

Instrument ID: CHHP4 Calib Start Date: 06/03/2014 11:03

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/03/2014 14:15

Lab File ID: 4070804.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
1,2,4-Trichlorobenzene	Ave	0.8526	0.6714		31.5	40.0	-21.2	
Hexachlorobutadiene	Ave	1.328	1.011		30.5	40.0	-23.8	
Naphthalene	Lin1		0.3017		15.5	40.0	-61.2	
1,2,3-Trichlorobenzene	Qua		0.4218		26.2	40.0	-34.4	
Dibromofluoromethane (Surr)	Ave	0.3061	0.2843		37.1	40.0	-7.1	
1,2-Dichloroethane-d4 (Surr)	Ave	0.2480	0.2323		37.5	40.0	-6.3	
Toluene-d8 (Surr)	Ave	5.673	5.569		39.3	40.0	-1.8	
4-Bromofluorobenzene (Surr)	Ave	1.809	1.884		41.7	40.0	4.1	

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140708-2090.b\4070804.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 08-Jul-2014 10:37:30 ALS Bottle#: 1 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0002090-002
Operator ID: 430936 Instrument ID: CHHP4
Sublist: chrom-MSVOA_CHHP4*sub7

Method: \\PITCHROM\ChromData\CHHP4\20140708-2090.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 08-Jul-2014 12:29:32 Calib Date: 03-Jun-2014 14:15:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: zukowskim Date: 08-Jul-2014 10:01:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.772	4.772	0.000	92	135265	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.679	7.679	0.000	93	1040359	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.762	10.762	0.000	82	235507	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	13.091	13.091	0.000	93	360514	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.937	6.937	0.000	81	236590	200.0	185.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.308	7.308	0.000	93	193315	200.0	187.3	
$ 7 Toluene-d8 (Surr)	98	9.315	9.315	0.000	93	1049147	200.0	196.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.936	11.936	0.000	97	354955	200.0	208.3	
10 Dichlorodifluoromethane	85	1.768	1.768	0.000	87	392183	200.0	159.2	
11 Chloromethane	50	1.975	1.975	0.000	89	566999	200.0	176.7	
12 Vinyl chloride	62	2.127	2.127	0.000	83	440778	200.0	168.9	
13 Butadiene	39	2.157	2.157	0.000	90	416808	200.0	160.2	
14 Bromomethane	94	2.498	2.498	0.000	86	124039	200.0	163.5	
15 Chloroethane	64	2.619	2.619	0.000	97	165903	200.0	166.4	
16 Dichlorofluoromethane	67	2.954	2.954	0.000	81	496850	200.0	176.7	
17 Trichlorofluoromethane	101	2.984	2.984	0.000	86	439017	200.0	168.9	
19 Ethyl ether	59	3.471	3.471	0.000	92	205293	200.0	160.6	
20 Acrolein	56	3.678	3.678	0.000	72	62972	875.0	926.1	
21 1,1-Dichloroethene	96	3.787	3.787	0.000	87	361119	200.0	177.3	
22 1,1,2-Trichloro-1,2,2-trif	101	3.848	3.848	0.000	82	395600	200.0	184.3	
23 Acetone	43	3.957	3.957	0.000	94	131457	200.0	205.3	
24 Iodomethane	142	4.018	4.018	0.000	93	494384	200.0	163.0	
25 Carbon disulfide	76	4.115	4.115	0.000	99	859348	200.0	169.2	
28 3-Chloro-1-propene	76	4.407	4.407	0.000	93	198875	200.0	169.2	
29 Methyl acetate	43	4.492	4.492	0.000	99	534664	1000.0	785.1	
30 Methylene Chloride	84	4.602	4.602	0.000	92	440745	200.0	187.2	
31 2-Methyl-2-propanol	59	4.894	4.894	0.000	90	88789	2000.0	1704.7	
32 Acrylonitrile	53	5.015	5.015	0.000	98	563918	2000.0	1807.9	
33 trans-1,2-Dichloroethene	96	5.021	5.021	0.000	96	366539	200.0	176.6	
34 Methyl tert-butyl ether	73	5.058	5.058	0.000	91	459862	200.0	150.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Hexane	57	5.429	5.429	0.000	93	677112	200.0	184.7	
36 1,1-Dichloroethane	63	5.611	5.611	0.000	85	588118	200.0	186.8	
38 Vinyl acetate	43	5.733	5.733	0.000	97	224222	200.0	273.0	
41 2,2-Dichloropropane	77	6.347	6.347	0.000	77	302512	200.0	170.4	
42 cis-1,2-Dichloroethene	96	6.359	6.359	0.000	80	366824	200.0	185.9	
43 2-Butanone (MEK)	43	6.414	6.414	0.000	98	156765	200.0	216.7	
46 Chlorobromomethane	128	6.645	6.645	0.000	93	133944	200.0	184.9	
48 Tetrahydrofuran	42	6.712	6.712	0.000	95	86691	400.0	322.0	
49 Chloroform	83	6.749	6.749	0.000	94	474054	200.0	184.6	
50 1,1,1-Trichloroethane	97	6.949	6.949	0.000	91	420457	200.0	177.1	
51 Cyclohexane	56	7.004	7.004	0.000	91	805388	200.0	177.1	
53 Carbon tetrachloride	117	7.132	7.132	0.000	93	357783	200.0	173.4	
52 1,1-Dichloropropene	75	7.138	7.138	0.000	93	406412	200.0	201.6	
54 Benzene	78	7.363	7.363	0.000	97	1293420	200.0	199.6	
55 1,2-Dichloroethane	62	7.387	7.387	0.000	85	258221	200.0	193.6	
59 Isobutyl alcohol	41	7.673	7.673	0.000	66	322822	5000.0	4827.0	
58 n-Heptane	43	7.673	7.673	0.000	83	636004	200.0	202.4	
61 Trichloroethene	130	8.068	8.068	0.000	92	347526	200.0	189.5	
63 Methylcyclohexane	83	8.263	8.263	0.000	90	716186	200.0	181.4	
64 1,2-Dichloropropane	63	8.299	8.299	0.000	92	279065	200.0	190.8	
65 Dibromomethane	93	8.427	8.427	0.000	83	101152	200.0	172.9	
67 1,4-Dioxane	88	8.451	8.451	0.000	84	27096	4000.0	3189.1	
68 Dichlorobromomethane	83	8.591	8.591	0.000	93	256921	200.0	189.1	
71 cis-1,3-Dichloropropene	75	9.047	9.047	0.000	90	297173	200.0	183.7	
72 4-Methyl-2-pentanone (MIBK	43	9.205	9.205	0.000	97	218568	200.0	166.3	
73 Toluene	91	9.382	9.382	0.000	99	1380277	200.0	198.0	
74 trans-1,3-Dichloropropene	75	9.613	9.613	0.000	93	188702	200.0	182.4	
75 Ethyl methacrylate	69	9.698	9.698	0.000	85	148041	200.0	167.0	
76 1,1,2-Trichloroethane	97	9.789	9.789	0.000	81	184339	200.0	189.8	
77 Tetrachloroethene	164	9.935	9.935	0.000	91	308575	200.0	188.1	
78 1,3-Dichloropropane	76	9.953	9.953	0.000	91	287664	200.0	194.6	
79 2-Hexanone	43	10.057	10.057	0.000	92	143356	200.0	167.2	
81 Chlorodibromomethane	129	10.185	10.185	0.000	90	153624	200.0	177.8	
82 Ethylene Dibromide	107	10.300	10.300	0.000	97	141918	200.0	182.6	
84 Chlorobenzene	112	10.787	10.787	0.000	95	879054	200.0	188.7	
85 1,1,1,2-Tetrachloroethane	131	10.860	10.860	0.000	93	263343	200.0	192.2	
86 Ethylbenzene	106	10.890	10.890	0.000	97	523155	200.0	197.9	
87 m-Xylene & p-Xylene	106	11.012	11.012	0.000	99	631688	200.0	184.1	
88 o-Xylene	106	11.407	11.407	0.000	93	628389	200.0	194.3	
89 Styrene	104	11.425	11.425	0.000	95	911978	200.0	196.6	
90 Bromoform	173	11.614	11.614	0.000	98	82258	200.0	160.2	
91 Isopropylbenzene	105	11.772	11.772	0.000	94	1666195	200.0	193.3	
93 1,1,2,2-Tetrachloroethane	83	12.058	12.058	0.000	82	184019	200.0	170.5	
94 Bromobenzene	156	12.094	12.094	0.000	88	347957	200.0	174.7	
95 1,2,3-Trichloropropane	110	12.112	12.112	0.000	64	54185	200.0	157.6	
96 trans-1,4-Dichloro-2-buten	53	12.149	12.149	0.000	37	31618	200.0	242.2	
97 N-Propylbenzene	120	12.179	12.179	0.000	96	525849	200.0	181.2	
98 2-Chlorotoluene	126	12.277	12.277	0.000	98	405699	200.0	170.4	
99 1,3,5-Trimethylbenzene	105	12.349	12.349	0.000	95	1375255	200.0	165.8	
100 4-Chlorotoluene	126	12.386	12.386	0.000	96	400554	200.0	186.9	
101 tert-Butylbenzene	119	12.678	12.678	0.000	90	1313414	200.0	161.1	
103 1,2,4-Trimethylbenzene	105	12.733	12.733	0.000	95	1346957	200.0	174.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
104 sec-Butylbenzene	105	12.903	12.903	0.000	93	1933247	200.0	169.0	
105 1,3-Dichlorobenzene	146	13.025	13.025	0.000	97	677581	200.0	201.6	
106 4-Isopropyltoluene	119	13.043	13.043	0.000	96	1628720	200.0	169.3	
107 1,4-Dichlorobenzene	146	13.116	13.116	0.000	96	691209	200.0	157.7	
110 n-Butylbenzene	91	13.462	13.462	0.000	95	1448575	200.0	186.4	
111 1,2-Dichlorobenzene	146	13.499	13.499	0.000	98	594151	200.0	161.9	
112 1,2-Dibromo-3-Chloropropan	157	14.308	14.308	0.000	59	14941	200.0	152.8	
113 1,2,4-Trichlorobenzene	180	15.135	15.135	0.000	91	193647	200.0	157.5	
115 Hexachlorobutadiene	225	15.281	15.281	0.000	91	291624	200.0	152.3	
116 Naphthalene	128	15.433	15.433	0.000	78	87008	200.0	77.5	
117 1,2,3-Trichlorobenzene	180	15.676	15.676	0.000	91	121648	200.0	131.2	
S 130 Xylenes, Total	106				0		400.0	378.4	
S 129 1,2-Dichloroethene, Total	96				0		400.0	362.4	
S 131 1,3-Dichloropropene, Total	1				0		400.0	366.2	

Reagents:

VOA8260INT_00013	Amount Added:	10.00	Units: uL
VOA8260SURR_00017	Amount Added:	8.00	Units: uL
VOAACROLEINPR_00003	Amount Added:	35.00	Units: uL
voaW VA pri R_00003	Amount Added:	8.00	Units: uL
VOA8260VOAPRI_00071	Amount Added:	8.00	Units: uL

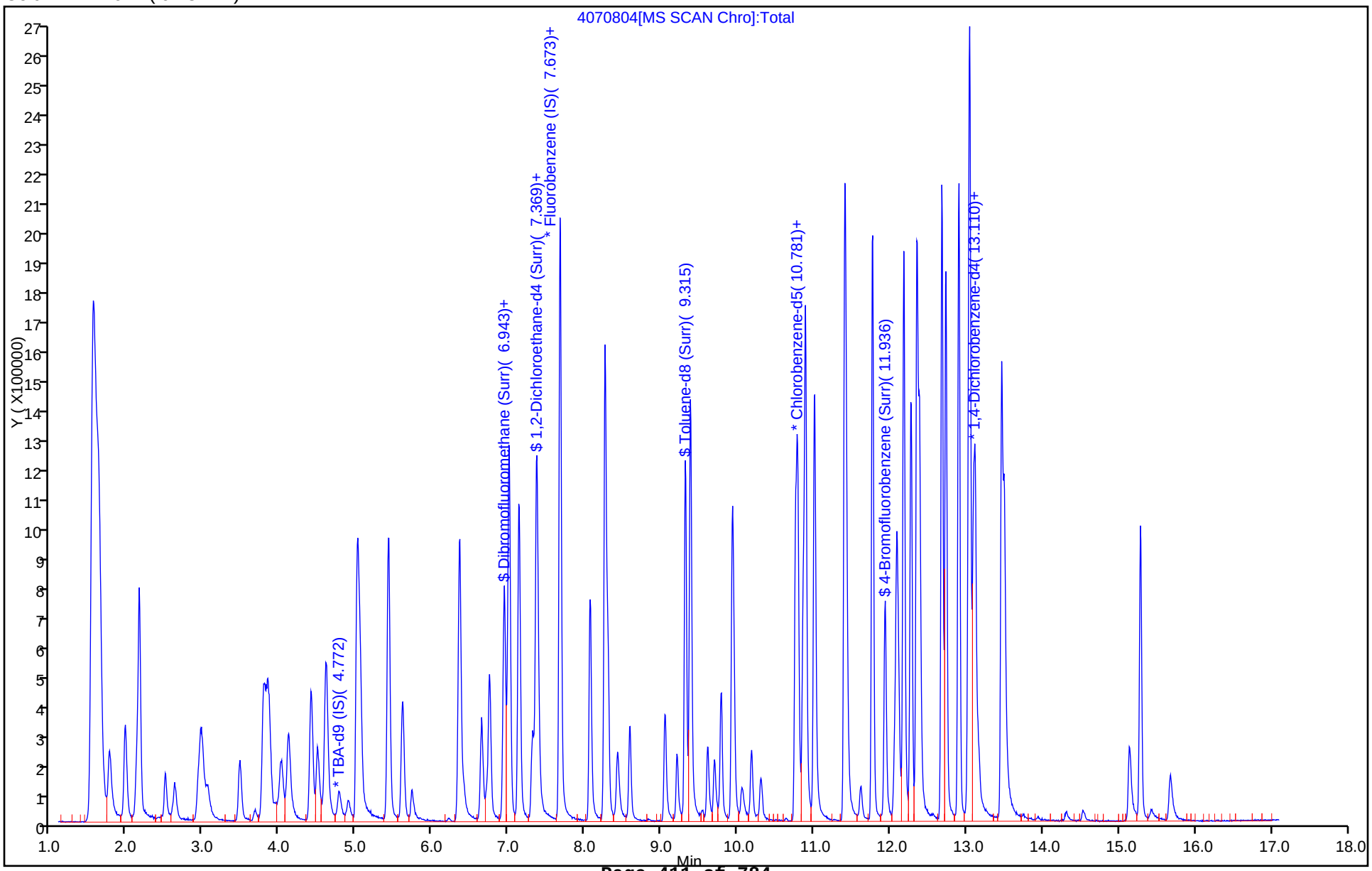
Report Date: 08-Jul-2014 12:29:33 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140708-2090.b\4070804.D

Injection Date:	08-Jul-2014 10:37:30	Instrument ID:	CHHP4	Operator ID:	430936
Lims ID:	CCVIS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
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\20140304-97.b\4062401.D
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 24-Jun-2013 08:22:30 ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 4062413d.b,tBFB.m,all.sub =4062413D.B,TBFB.M,ALL.SUB
Operator ID: 034635 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20140304-97.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Mar-2014 12:36:52 Calib Date: 16-Dec-2013 16:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140220-45.b\4121613.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK036

First Level Reviewer: gordonk Date: 04-Mar-2014 11:50:05

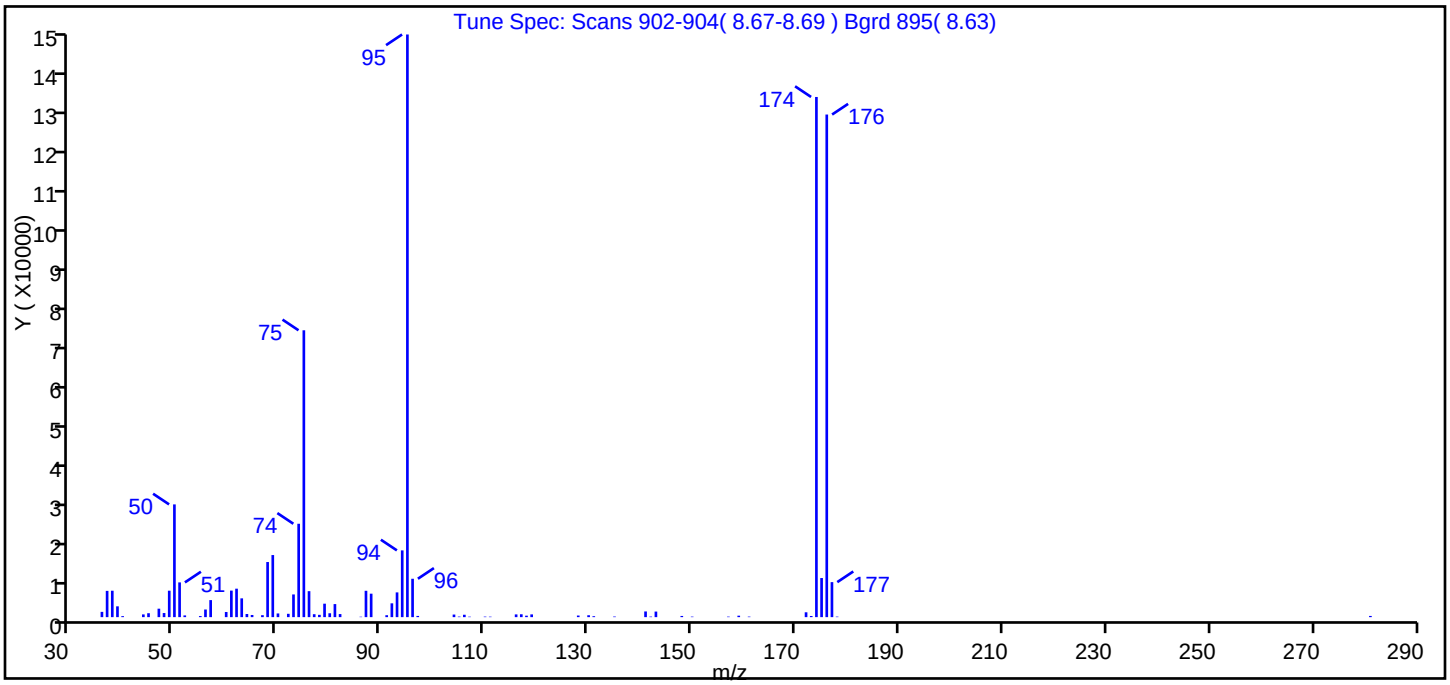
Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng	Flags
$ 140 BFB	95	8.681	8.681	0.0	0	450459	NR	

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062401.D
Injection Date: 24-Jun-2013 08:22:30 Instrument ID: CHHP4
Lims ID: bfb
Client ID:
Operator ID: 034635 ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_CHHP4 Limit Group: VOA 8260C ICAL
Tune Method: BFB Method 8260

$ 140 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.40
75	30.00 - 60.00% of mass 95	49.20
96	5.00 - 9.00% of mass 95	6.60
173	Less than 2.00% of mass 174	0.20 (0.20)
174	50.00 - 120.00% of mass 95	89.30
175	5.00 - 9.00% of mass 174	6.70 (7.50)
176	95.00 - 101.00% of mass 174	86.30 (96.60)
177	5.00 - 9.00% of mass 176	6.00 (7.00)

Data File: \\PITCHROM\ChromData\CHHP4\20140304-97.b\4062401.D\MSVOA_CHHP4.rslt\spectra.d
Injection Date: 24-Jun-2013 08:22:30
Spectrum: Tune Spec: Scans 902-904(8.67-8.69) Bgrd 895(8.63)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 77

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1274	64.00	757	91.00	467	135.00	144
37.00	6337	65.00	520	92.00	3334	141.00	1373
38.00	6376	67.00	473	93.00	5972	142.00	132
39.00	2610	68.00	13300	94.00	16109	143.00	1345
40.00	242	69.00	14983	95.00	140608	148.00	288
44.00	661	70.00	891	96.00	9262	150.00	126
45.00	948	72.00	807	97.00	293	157.00	126
47.00	2040	73.00	5479	104.00	626	159.00	351
48.00	994	74.00	22536	105.00	130	161.00	130
49.00	6381	75.00	69224	106.00	579	172.00	1174
50.00	27208	76.00	6269	107.00	112	173.00	279
51.00	8385	77.00	710	110.00	128	174.00	125528
52.00	417	78.00	558	111.00	115	175.00	9437
55.00	260	79.00	3248	116.00	661	176.00	121288
56.00	1843	80.00	937	117.00	694	177.00	8449
57.00	4112	81.00	3151	118.00	354	178.00	127
60.00	1244	82.00	741	119.00	665	281.00	290
61.00	6405	86.00	101	128.00	389		
62.00	6868	87.00	6360	130.00	457		
63.00	4536	88.00	5662	131.00	226		

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060301.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 03-Jun-2014 09:50:30 ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 180-0001537-001
Operator ID: 034635 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Jun-2014 14:33:53 Calib Date: 03-Jun-2014 14:15:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK040

First Level Reviewer: journetp Date: 03-Jun-2014 09:14:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 9 BFB	95	8.691	8.691	0.000	0	635662	NR	NR	

QC Flag Legend

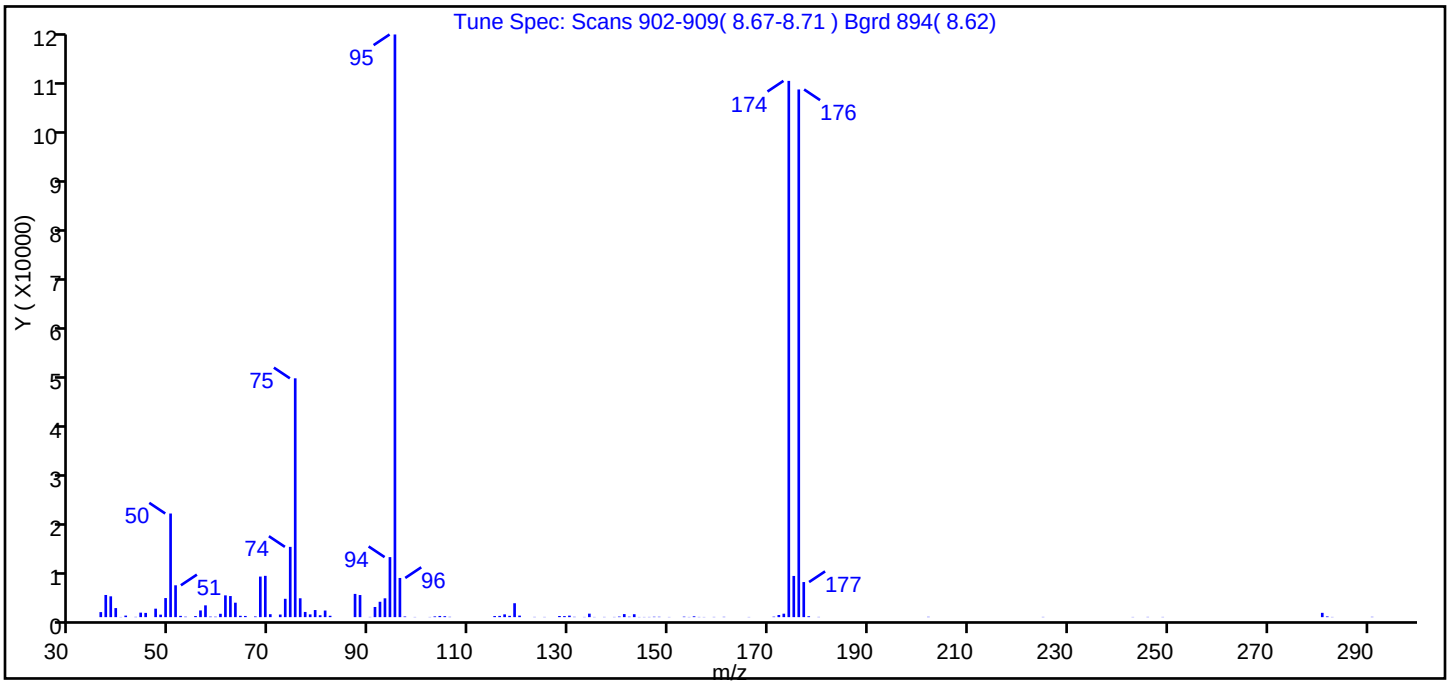
Processing Flags
NR - Missing Quant Standard

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060301.D
Injection Date: 03-Jun-2014 09:50:30 Instrument ID: CHHP4
Lims ID: BFB
Client ID:
Operator ID: 034635 ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 5.000 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	17.80
75	30.00 - 60.00% of mass 95	41.00
96	5.00 - 9.00% of mass 95	6.70
173	Less than 2.00% of mass 174	0.60 (0.60)
174	50.00 - 120.00% of mass 95	92.00
175	5.00 - 9.00% of mass 174	7.10 (7.70)
176	95.00 - 101.00% of mass 174	90.60 (98.40)
177	5.00 - 9.00% of mass 176	6.00 (6.70)

Data File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060301.D\MSVOA_CHHP4.rslt\spectra.d
Injection Date: 03-Jun-2014 09:50:30
Spectrum: Tune Spec: Scans 902-909(8.67-8.71) Bgrd 894(8.62)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 111

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1020	68.00	8206	105.00	195	150.00	39
37.00	4483	69.00	8352	106.00	66	153.00	101
38.00	4211	70.00	594	115.00	221	154.00	40
39.00	1832	72.00	525	116.00	248	155.00	169
40.00	35	73.00	3711	117.00	564	156.00	44
41.00	312	74.00	14214	118.00	263	157.00	38
43.00	55	75.00	48304	119.00	2815	159.00	47
44.00	910	76.00	3817	120.00	310	161.00	64
45.00	859	77.00	1053	123.00	49	166.00	39
47.00	1714	78.00	556	125.00	44	171.00	99
48.00	503	79.00	1436	128.00	232	172.00	435
49.00	3859	80.00	380	129.00	211	173.00	699
50.00	20960	81.00	1337	130.00	305	174.00	108464
51.00	6442	82.00	281	131.00	66	175.00	8333
52.00	257	87.00	4701	133.00	43	176.00	106728
53.00	92	88.00	4472	134.00	706	177.00	7098
55.00	221	90.00	46	135.00	40	178.00	176
56.00	1356	91.00	2057	137.00	46	180.00	48
57.00	2383	92.00	3109	139.00	44	202.00	65
58.00	105	93.00	3810	140.00	117	225.00	47
59.00	87	94.00	12142	141.00	619	243.00	40
60.00	678	95.00	117848	142.00	90	246.00	50
61.00	4406	96.00	7926	143.00	593	249.00	44
62.00	4267	97.00	134	144.00	38	281.00	870
63.00	2922	99.00	39	145.00	40	282.00	141
64.00	271	102.00	40	146.00	44	283.00	41
65.00	242	103.00	151	147.00	82	291.00	63
67.00	141	104.00	238	148.00	74		

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File:	\\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070601.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	07-Jul-2014 00:09:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	180-0002060-001				
Operator ID:	430936	Instrument ID:	CHHP4		
Method:	\\PITCHROM\ChromData\CHHP4\20140706-2060.b\MSVOA_CHHP4.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	07-Jul-2014 02:58:22	Calib Date:	03-Jun-2014 14:15:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK009				
First Level Reviewer: zukowskim		Date:	06-Jul-2014 23:31:50		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 9 BFB	95	8.679	8.679	0.000	0	405055	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

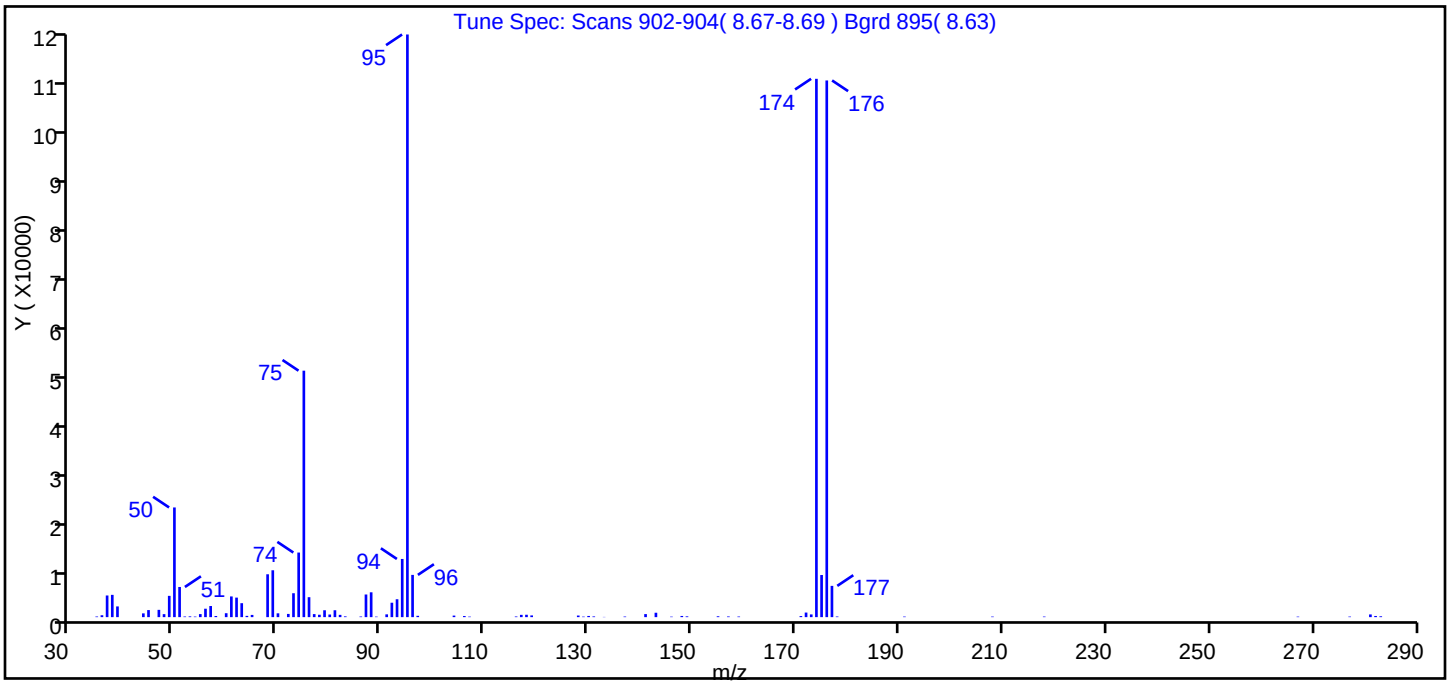
VOABFB50_00051 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070601.D
Injection Date: 07-Jul-2014 00:09:30 Instrument ID: CHHP4
Lims ID: BFB
Client ID:
Operator ID: 430936 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	18.80
75	30.00 - 60.00% of mass 95	42.30
96	5.00 - 9.00% of mass 95	7.30
173	Less than 2.00% of mass 174	0.50 (0.50)
174	50.00 - 120.00% of mass 95	92.40
175	5.00 - 9.00% of mass 174	7.20 (7.80)
176	95.00 - 101.00% of mass 174	92.10 (99.70)
177	5.00 - 9.00% of mass 176	5.40 (5.80)

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070601.D\MSVOA_CHHP4.rslt\spectra.d
Injection Date: 07-Jul-2014 00:09:30
Spectrum: Tune Spec: Scans 902-904(8.67-8.69) Bgrd 895(8.63)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 88

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	131	63.00	2849	91.00	570	146.00	101
36.00	388	64.00	259	92.00	2942	148.00	242
37.00	4420	65.00	454	93.00	3653	149.00	161
38.00	4548	68.00	8749	94.00	11873	155.00	177
39.00	2189	69.00	9565	95.00	118904	157.00	139
44.00	770	70.00	781	96.00	8623	159.00	123
45.00	1441	72.00	658	97.00	271	171.00	221
47.00	1489	73.00	4880	104.00	317	172.00	935
48.00	614	74.00	13182	106.00	224	173.00	555
49.00	4344	75.00	50296	107.00	108	174.00	109856
50.00	22384	76.00	4071	116.00	137	175.00	8597
51.00	6156	77.00	622	117.00	468	176.00	109520
52.00	131	78.00	490	118.00	487	177.00	6382
53.00	157	79.00	1404	119.00	353	178.00	132
54.00	112	80.00	533	128.00	327	191.00	114
55.00	621	81.00	1409	129.00	107	208.00	114
56.00	1720	82.00	467	130.00	244	218.00	116
57.00	2270	83.00	157	131.00	148	267.00	105
58.00	230	86.00	131	133.00	44	277.00	115
60.00	803	87.00	4622	137.00	122	281.00	553
61.00	4226	88.00	5070	141.00	624	282.00	238
62.00	3985	89.00	107	143.00	898	283.00	174

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File:	\\PITCHROM\ChromData\CHHP4\20140708-2090.b\4070801.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	08-Jul-2014 08:52:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	180-0002090-001				
Operator ID:	430936	Instrument ID:	CHHP4		
Method:	\\PITCHROM\ChromData\CHHP4\20140708-2090.b\MSVOA_CHHP4.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	08-Jul-2014 12:29:28	Calib Date:	03-Jun-2014 14:15:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK029				
First Level Reviewer: zukowskim		Date:	08-Jul-2014 08:13:51		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 9 BFB	95	8.697	8.697	0.000	0	330630	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

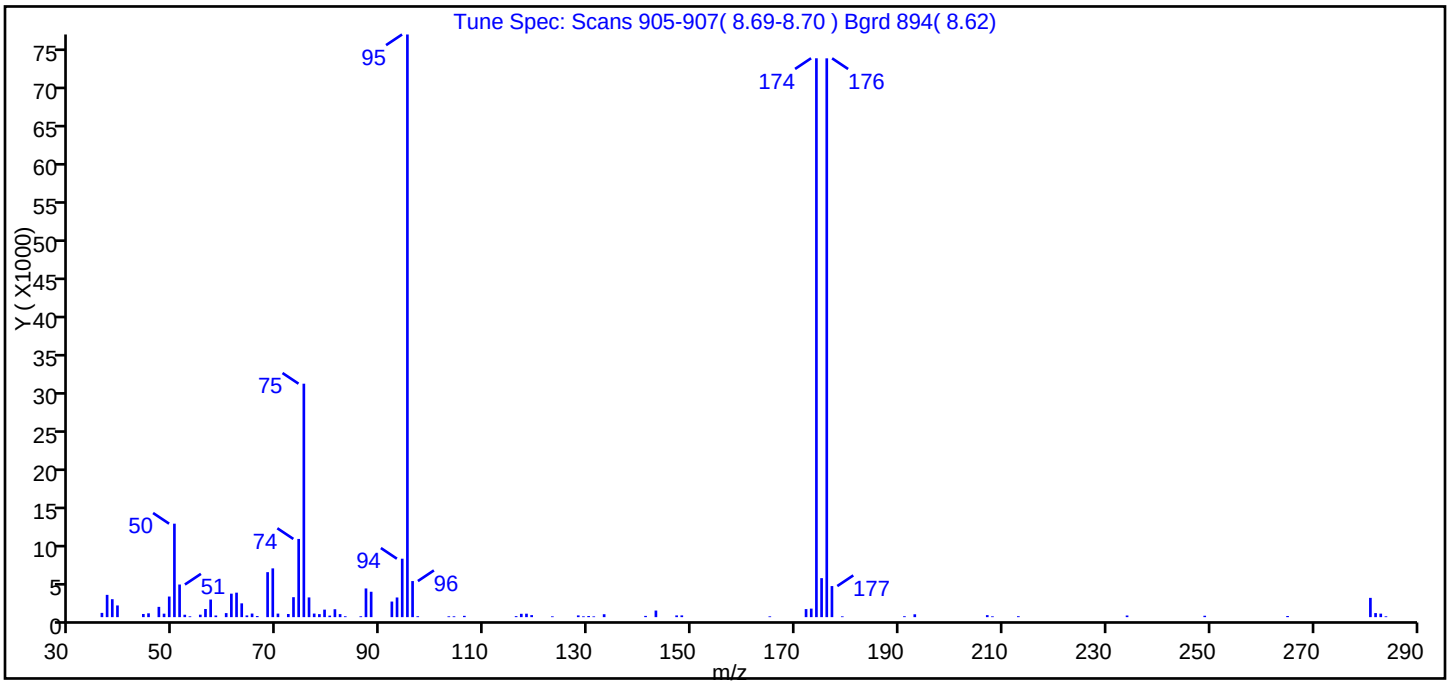
VOABFB50_00051 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140708-2090.b\4070801.D
Injection Date: 08-Jul-2014 08:52:30 Instrument ID: CHHP4
Lims ID: BFB
Client ID:
Operator ID: 430936 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	16.00
75	30.00 - 60.00% of mass 95	40.10
96	5.00 - 9.00% of mass 95	6.20
173	Less than 2.00% of mass 174	1.50 (1.50)
174	50.00 - 120.00% of mass 95	95.90
175	5.00 - 9.00% of mass 174	6.70 (7.00)
176	95.00 - 101.00% of mass 174	95.90 (100.00)
177	5.00 - 9.00% of mass 176	5.30 (5.60)

Data File: \\PITCHROM\ChromData\CHHP4\20140708-2090.b\4070801.D\MSVOA_CHHP4.rslt\spectra.d
Injection Date: 08-Jul-2014 08:52:30
Spectrum: Tune Spec: Scans 905-907(8.69-8.70) Bgrd 894(8.62)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 85

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	562	65.00	475	94.00	7702	172.00	1062
37.00	2936	66.00	143	95.00	76792	173.00	1123
38.00	2365	68.00	5929	96.00	4755	174.00	73656
39.00	1542	69.00	6427	97.00	117	175.00	5139
44.00	417	70.00	468	103.00	109	176.00	73648
45.00	503	72.00	416	104.00	109	177.00	4096
47.00	1355	73.00	2630	106.00	172	179.00	103
48.00	458	74.00	10307	116.00	134	191.00	121
49.00	2716	75.00	30768	117.00	441	193.00	378
50.00	12319	76.00	2600	118.00	456	207.00	265
51.00	4299	77.00	471	119.00	266	208.00	107
52.00	317	78.00	398	123.00	106	213.00	122
53.00	106	79.00	991	128.00	228	234.00	216
55.00	324	80.00	201	129.00	107	249.00	184
56.00	1072	81.00	1042	130.00	147	265.00	151
57.00	2320	82.00	400	131.00	100	281.00	2541
58.00	217	83.00	116	133.00	385	282.00	535
60.00	534	86.00	114	141.00	165	283.00	463
61.00	3095	87.00	3782	143.00	868	284.00	109
62.00	3226	88.00	3346	147.00	228		
63.00	1819	92.00	2054	148.00	231		
64.00	226	93.00	2592	165.00	103		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-110534/10

Matrix: Water Lab File ID: 4070606.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 03:18

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.: 110534 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.: 180-34362-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-110534/10

Matrix: Water Lab File ID: 4070606.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 03:18

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.: 110534 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		62-123
460-00-4	4-Bromofluorobenzene (Surr)	94		75-120
1868-53-7	Dibromofluoromethane (Surr)	90		80-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070606.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 07-Jul-2014 03:18:30 ALS Bottle#: 5 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 180-0002060-005
Operator ID: 430936 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 07-Jul-2014 02:46:29 Calib Date: 03-Jun-2014 14:15:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: zukowskim Date: 07-Jul-2014 02:46:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.751	4.755	-0.004	90	138864	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.683	7.680	0.003	99	1197437	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.772	10.763	0.009	81	266245	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	13.125	13.104	0.021	91	303788	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.935	6.932	0.003	60	331622	250.0	226.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.312	7.303	0.009	67	262763	250.0	221.2	
$ 7 Toluene-d8 (Surr)	98	9.318	9.316	0.002	93	1507096	250.0	249.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.946	11.931	0.015	95	453820	250.0	235.6	
10 Dichlorodifluoromethane	85		1.769					ND	
11 Chloromethane	50		1.976					ND	
12 Vinyl chloride	62		2.128					ND	
13 Butadiene	39		2.158					ND	
14 Bromomethane	94		2.493					ND	
15 Chloroethane	64		2.614					ND	
16 Dichlorofluoromethane	67		2.937					ND	
17 Trichlorofluoromethane	101		2.967					ND	
19 Ethyl ether	59		3.472					ND	
18 Ethanol	45		3.532					ND	
20 Acrolein	56		3.673					ND	
21 1,1-Dichloroethene	96		3.782					ND	
22 1,1,2-Trichloro-1,2,2-trif	101		3.843					ND	
26 Isopropyl alcohol	45		3.940					ND	
23 Acetone	43	3.985	3.940	0.045	68	5172		7.02	
24 Iodomethane	142		4.001					ND	
25 Carbon disulfide	76		4.104					ND	
28 3-Chloro-1-propene	76		4.408					ND	
27 Acetonitrile	40		4.414					ND	
29 Methyl acetate	43		4.488					ND	
30 Methylene Chloride	84		4.603					ND	
31 2-Methyl-2-propanol	59		4.901					ND	
32 Acrylonitrile	53		5.004					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		5.011					ND	
34 Methyl tert-butyl ether	73		5.053					ND	
35 Hexane	57		5.418					ND	
36 1,1-Dichloroethane	63		5.607					ND	
38 Vinyl acetate	43		5.734					ND	
37 2-Chloro-1,3-butadiene	53		5.740					ND	
39 Isopropyl ether	45		5.752					ND	
40 Tert-butyl ethyl ether	59		6.214					ND	
41 2,2-Dichloropropane	77		6.342					ND	
42 cis-1,2-Dichloroethene	96		6.355					ND	
43 2-Butanone (MEK)	43		6.415					ND	
44 Propionitrile	54		6.476					ND	
45 Ethyl acetate	43		6.500					ND	
46 Chlorobromomethane	128		6.640					ND	
47 Methacrylonitrile	41		6.652					ND	
48 Tetrahydrofuran	42		6.713					ND	
49 Chloroform	83		6.750					ND	
50 1,1,1-Trichloroethane	97		6.938					ND	
51 Cyclohexane	56		6.999					ND	
53 Carbon tetrachloride	117		7.127					ND	
52 1,1-Dichloropropene	75		7.139					ND	
54 Benzene	78		7.364					ND	
55 1,2-Dichloroethane	62		7.388					ND	
57 Isooctane	57		7.467					ND	
56 Tert-amyl methyl ether	73		7.509					ND	
58 n-Heptane	43		7.668					ND	
59 Isobutyl alcohol	41		7.668					ND	
61 Trichloroethene	130		8.063					ND	
60 n-Butanol	56		8.130					ND	
62 Ethyl acrylate	55		8.209					ND	
63 Methylcyclohexane	83		8.264					ND	
64 1,2-Dichloropropane	63		8.294					ND	
65 Dibromomethane	93		8.422					ND	
66 Methyl methacrylate	69		8.440					ND	
67 1,4-Dioxane	88		8.465					ND	
68 Dichlorobromomethane	83		8.586					ND	
69 2-Nitropropane	41		8.829					ND	
70 2-Chloroethyl vinyl ether	63		8.908					ND	
71 cis-1,3-Dichloropropene	75		9.049					ND	
72 4-Methyl-2-pentanone (MIBK	43		9.201					ND	
73 Toluene	91		9.383					ND	
74 trans-1,3-Dichloropropene	75		9.608					ND	
75 Ethyl methacrylate	69		9.693					ND	
76 1,1,2-Trichloroethane	97		9.784					ND	
77 Tetrachloroethene	164		9.930					ND	
78 1,3-Dichloropropane	76		9.955					ND	
79 2-Hexanone	43		10.052					ND	
80 n-Butyl acetate	43		10.173					ND	
81 Chlorodibromomethane	129		10.180					ND	
82 Ethylene Dibromide	107		10.301					ND	
83 4-Chlorobenzotrifluoride	180		10.744					ND	
84 Chlorobenzene	112		10.788					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
85 1,1,1,2-Tetrachloroethane	131		10.861					ND	
86 Ethylbenzene	106		10.891					ND	
87 m-Xylene & p-Xylene	106		11.007					ND	
88 o-Xylene	106		11.402					ND	
89 Styrene	104		11.426					ND	
90 Bromoform	173		11.609					ND	
91 Isopropylbenzene	105		11.773					ND	
92 Cyclohexanone	55		11.906					ND	
93 1,1,2,2-Tetrachloroethane	83		12.059					ND	
94 Bromobenzene	156		12.089					ND	
95 1,2,3-Trichloropropane	110		12.114					ND	
96 trans-1,4-Dichloro-2-buten	53		12.138					ND	
97 N-Propylbenzene	120		12.180					ND	
98 2-Chlorotoluene	126		12.272					ND	
99 1,3,5-Trimethylbenzene	105		12.351					ND	
100 4-Chlorotoluene	126		12.387					ND	
101 tert-Butylbenzene	119		12.679					ND	
102 Pentachloroethane	167		12.715					ND	
103 1,2,4-Trimethylbenzene	105		12.734					ND	
104 sec-Butylbenzene	105		12.904					ND	
105 1,3-Dichlorobenzene	146		13.026					ND	
106 4-Isopropyltoluene	119		13.044					ND	
107 1,4-Dichlorobenzene	146		13.117					ND	
108 1,2,3-Trimethylbenzene	105		13.159					ND	
109 Benzyl chloride	91		13.274					ND	
110 n-Butylbenzene	91		13.464					ND	
111 1,2-Dichlorobenzene	146		13.500					ND	
112 1,2-Dibromo-3-Chloropropan	157		14.297					ND	
113 1,2,4-Trichlorobenzene	180		15.130					ND	
114 1,3,5-Trichlorobenzene	180		15.154					ND	
115 Hexachlorobutadiene	225		15.282					ND	
116 Naphthalene	128		15.397					ND	
117 1,2,3-Trichlorobenzene	180		15.659					ND	
118 2-Methylnaphthalene	142		16.765					ND	
127 2,3- & 3,4- Dichlorotoluen	125		0.000					ND	
121 2,4,5-Trichlorotoluene	159		0.000					ND	
126 2,4-Dichloro-1-(triflourom	214		0.000					ND	
125 2-Chlorobenzotrifluoride	180		0.000					ND	
119 1,2-dichloro-4-(trifluorom	214		0.000					ND	
122 3-Chlorotoluene	126		0.000					ND	
120 2,4- & 2,5- & 2,6- Dichlor	125		0.000					ND	
128 2,3,6-Trichlorotoluene	159		0.000					ND	
123 2,5-Dichlorobenzotrifluori	214		0.000					ND	
124 3-Chlorobenzotrifluoride	180		0.000					ND	
S 130 Xylenes, Total	106		1.000					0	
S 129 1,2-Dichloroethene, Total	96		1.000					0	
S 131 1,3-Dichloropropene, Total	1		0.000					0	
T 134 Mesityl oxide TIC	83		0.000					0	
T 133 Methyl n-amyl ketone TIC	43		0.000					0	
T 132 Tetrahydrofuran TIC	42		0.000					0	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

VOA8260INT_00013	Amount Added:	10.00	Units: uL	Run Reagent
VOA8260SURR_00017	Amount Added:	10.00	Units: uL	Run Reagent

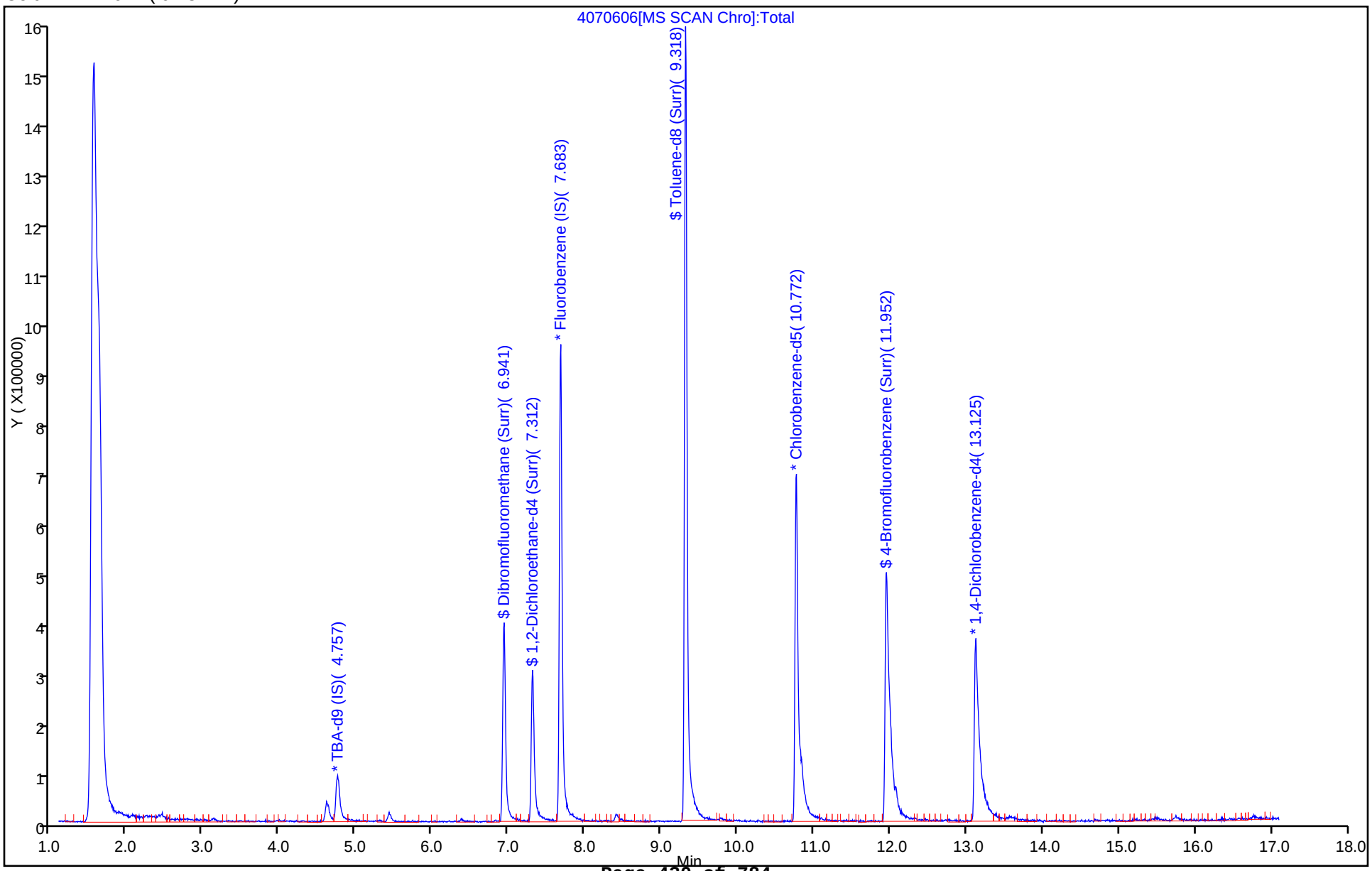
Report Date: 07-Jul-2014 02:58:19 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070606.D

Injection Date:	07-Jul-2014 03:18:30	Instrument ID:	CHHP4	Operator ID:	430936
Lims ID:	MB			Worklist Smp#:	10
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 I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-110699/6

Matrix: Water Lab File ID: 4070806.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/08/2014 11:56

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.: 110699 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.: 180-34362-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-110699/6

Matrix: Water Lab File ID: 4070806.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/08/2014 11:56

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.: 110699 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)	95		75-120
1868-53-7	Dibromofluoromethane (Surr)	95		80-120
2037-26-5	Toluene-d8 (Surr)	116		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140708-2090.b\4070806.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 08-Jul-2014 11:56:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 180-0002090-006
Operator ID: 430936 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20140708-2090.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 08-Jul-2014 12:29:32 Calib Date: 03-Jun-2014 14:15:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: zukowskim Date: 08-Jul-2014 12:17:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.761	4.772	-0.011	91	121267	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.686	7.679	0.007	99	934775	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.769	10.762	0.007	82	201597	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	13.129	13.091	0.038	91	234085	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.938	6.937	0.001	63	270537	250.0	236.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.315	7.308	0.007	66	226626	250.0	244.4	
$ 7 Toluene-d8 (Surr)	98	9.322	9.315	0.007	92	1323431	250.0	289.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.955	11.936	0.019	93	345234	250.0	236.7	
10 Dichlorodifluoromethane	85		1.768					ND	
11 Chloromethane	50		1.975					ND	
12 Vinyl chloride	62		2.127					ND	
13 Butadiene	39		2.157					ND	
14 Bromomethane	94		2.498					ND	
15 Chloroethane	64		2.619					ND	
16 Dichlorofluoromethane	67		2.954					ND	
17 Trichlorofluoromethane	101		2.984					ND	
19 Ethyl ether	59		3.471					ND	
18 Ethanol	45		3.541					ND	
20 Acrolein	56		3.678					ND	
21 1,1-Dichloroethene	96		3.787					ND	
22 1,1,2-Trichloro-1,2,2-trif	101		3.848					ND	
23 Acetone	43		3.957					ND	
24 Iodomethane	142		4.018					ND	
26 Isopropyl alcohol	45		4.058					ND	
25 Carbon disulfide	76		4.115					ND	
28 3-Chloro-1-propene	76		4.407					ND	
27 Acetonitrile	40		4.417					ND	
29 Methyl acetate	43		4.492					ND	
30 Methylene Chloride	84		4.602					ND	
31 2-Methyl-2-propanol	59		4.894					ND	
32 Acrylonitrile	53		5.015					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		5.021					ND	
34 Methyl tert-butyl ether	73		5.058					ND	
35 Hexane	57		5.429					ND	
36 1,1-Dichloroethane	63		5.611					ND	
38 Vinyl acetate	43		5.733					ND	
37 2-Chloro-1,3-butadiene	53		5.737					ND	
39 Isopropyl ether	45		5.749					ND	
40 Tert-butyl ethyl ether	59		6.211					ND	
41 2,2-Dichloropropane	77		6.347					ND	
42 cis-1,2-Dichloroethene	96		6.359					ND	
43 2-Butanone (MEK)	43		6.414					ND	
44 Propionitrile	54		6.479					ND	
45 Ethyl acetate	43		6.497					ND	
46 Chlorobromomethane	128		6.645					ND	
47 Methacrylonitrile	41		6.649					ND	
48 Tetrahydrofuran	42		6.712					ND	
49 Chloroform	83		6.749					ND	
50 1,1,1-Trichloroethane	97		6.949					ND	
51 Cyclohexane	56		7.004					ND	
53 Carbon tetrachloride	117		7.132					ND	
52 1,1-Dichloropropene	75		7.138					ND	
54 Benzene	78		7.363					ND	
55 1,2-Dichloroethane	62		7.387					ND	
57 Isooctane	57		7.470					ND	
56 Tert-amyl methyl ether	73		7.513					ND	
59 Isobutyl alcohol	41		7.673					ND	
58 n-Heptane	43		7.673					ND	
60 n-Butanol	56		8.054					ND	
61 Trichloroethene	130		8.068					ND	
62 Ethyl acrylate	55		8.218					ND	
63 Methylcyclohexane	83		8.263					ND	
64 1,2-Dichloropropane	63		8.299					ND	
65 Dibromomethane	93		8.427					ND	
66 Methyl methacrylate	69		8.443					ND	
67 1,4-Dioxane	88		8.451					ND	
68 Dichlorobromomethane	83		8.591					ND	
69 2-Nitropropane	41		8.826					ND	
70 2-Chloroethyl vinyl ether	63		8.911					ND	
71 cis-1,3-Dichloropropene	75		9.047					ND	
72 4-Methyl-2-pentanone (MIBK	43		9.205					ND	
73 Toluene	91		9.382					ND	
74 trans-1,3-Dichloropropene	75		9.613					ND	
75 Ethyl methacrylate	69		9.698					ND	
76 1,1,2-Trichloroethane	97		9.789					ND	
77 Tetrachloroethene	164		9.935					ND	
78 1,3-Dichloropropane	76		9.953					ND	
79 2-Hexanone	43		10.057					ND	
80 n-Butyl acetate	43		10.182					ND	
81 Chlorodibromomethane	129		10.185					ND	
82 Ethylene Dibromide	107		10.300					ND	
83 4-Chlorobenzotrifluoride	180		10.744					ND	
84 Chlorobenzene	112		10.787					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
85 1,1,1,2-Tetrachloroethane	131		10.860					ND	
86 Ethylbenzene	106		10.890					ND	
87 m-Xylene & p-Xylene	106		11.012					ND	
88 o-Xylene	106		11.407					ND	
89 Styrene	104		11.425					ND	
90 Bromoform	173		11.614					ND	
91 Isopropylbenzene	105		11.772					ND	
92 Cyclohexanone	55		11.909					ND	
93 1,1,2,2-Tetrachloroethane	83		12.058					ND	
94 Bromobenzene	156		12.094					ND	
95 1,2,3-Trichloropropane	110		12.112					ND	
96 trans-1,4-Dichloro-2-buten	53		12.149					ND	
97 N-Propylbenzene	120		12.179					ND	
98 2-Chlorotoluene	126		12.277					ND	
99 1,3,5-Trimethylbenzene	105		12.349					ND	
100 4-Chlorotoluene	126		12.386					ND	
101 tert-Butylbenzene	119		12.678					ND	
102 Pentachloroethane	167		12.712					ND	
103 1,2,4-Trimethylbenzene	105		12.733					ND	
104 sec-Butylbenzene	105		12.903					ND	
105 1,3-Dichlorobenzene	146		13.025					ND	
106 4-Isopropyltoluene	119		13.043					ND	
107 1,4-Dichlorobenzene	146		13.116					ND	
108 1,2,3-Trimethylbenzene	105		13.162					ND	
109 Benzyl chloride	91		13.284					ND	
110 n-Butylbenzene	91		13.462					ND	
111 1,2-Dichlorobenzene	146		13.499					ND	
112 1,2-Dibromo-3-Chloropropan	157		14.308					ND	
113 1,2,4-Trichlorobenzene	180		15.135					ND	
114 1,3,5-Trichlorobenzene	180		15.181					ND	
115 Hexachlorobutadiene	225		15.281					ND	
116 Naphthalene	128	15.494	15.433	0.061	1	35112		57.1	
117 1,2,3-Trichlorobenzene	180		15.676					ND	
118 2-Methylnaphthalene	142		16.765					ND	
119 1,2-dichloro-4-(trifluorom	214		0.000					ND	
125 2-Chlorobenzotrifluoride	180		0.000					ND	
120 2,4- & 2,5- & 2,6- Dichlor	125		0.000					ND	
124 3-Chlorobenzotrifluoride	180		0.000					ND	
123 2,5-Dichlorobenzotrifluori	214		0.000					ND	
128 2,3,6-Trichlorotoluene	159		0.000					ND	
122 3-Chlorotoluene	126		0.000					ND	
121 2,4,5-Trichlorotoluene	159		0.000					ND	
127 2,3- & 3,4- Dichlorotoluen	125		0.000					ND	
126 2,4-Dichloro-1-(triflourom	214		0.000					ND	
S 130 Xylenes, Total	106		1.000					0	
S 129 1,2-Dichloroethene, Total	96		1.000					0	
S 131 1,3-Dichloropropene, Total	1		0.000					0	
T 134 Mesityl oxide TIC	83		0.000					0	
T 133 Methyl n-amyl ketone TIC	43		0.000					0	
T 132 Tetrahydrofuran TIC	42		0.000					0	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

VOA8260INT_00013	Amount Added:	10.00	Units: uL	Run Reagent
VOA8260SURR_00017	Amount Added:	10.00	Units: uL	Run Reagent

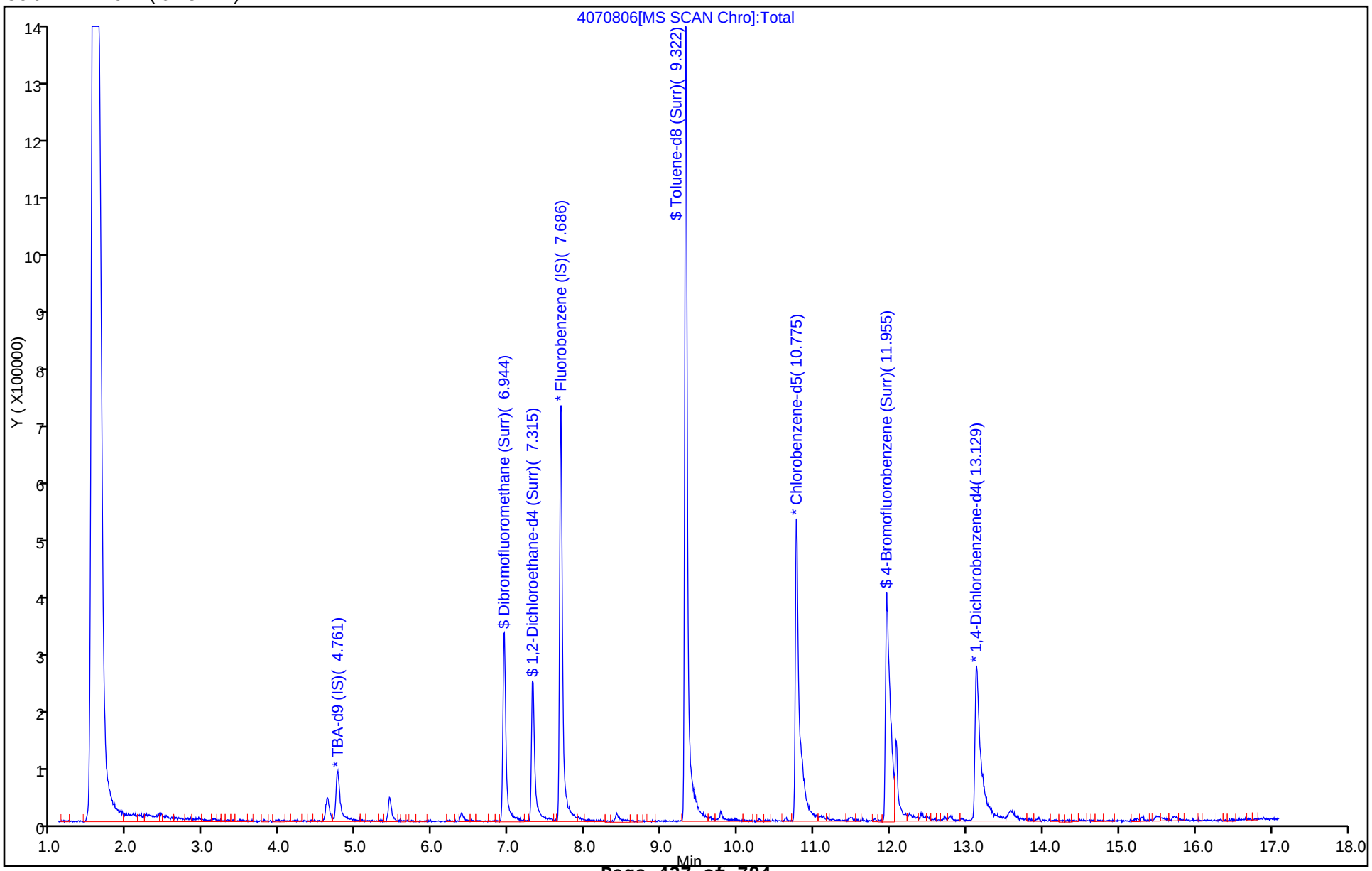
Report Date: 08-Jul-2014 12:29:34 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140708-2090.b\4070806.D

Injection Date:	08-Jul-2014 11:56:30	Instrument ID:	CHHP4	Operator ID:	430936
Lims ID:	MB			Worklist Smp#:	6
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 I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-110534/7

Matrix: Water Lab File ID: 4070608.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 04:12

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.: 110534 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	35.9		5.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	33.6		5.0	0.93
79-00-5	1,1,2-Trichloroethane	35.8		5.0	1.2
75-34-3	1,1-Dichloroethane	38.4		5.0	1.0
75-35-4	1,1-Dichloroethene	37.2		5.0	1.1
95-50-1	1,2-Dichlorobenzene	32.9		5.0	0.68
107-06-2	1,2-Dichloroethane	40.1		5.0	0.96
78-87-5	1,2-Dichloropropane	38.0		5.0	1.3
541-73-1	1,3-Dichlorobenzene	39.1		5.0	0.51
106-46-7	1,4-Dichlorobenzene	33.1		5.0	0.53
107-02-8	Acrolein	185		100	5.7
107-13-1	Acrylonitrile	382		50	9.0
71-43-2	Benzene	39.3		5.0	0.99
75-25-2	Bromoform	32.1		5.0	1.1
74-83-9	Bromomethane	35.2		5.0	1.6
56-23-5	Carbon tetrachloride	34.6		5.0	1.1
108-90-7	Chlorobenzene	37.1		5.0	0.53
67-66-3	Chloroform	38.1		5.0	1.0
74-87-3	Chloromethane	35.7		5.0	1.4
124-48-1	Chlorodibromomethane	34.7		5.0	0.65
10061-01-5	cis-1,3-Dichloropropene	36.0		5.0	0.73
75-27-4	Dichlorobromomethane	37.0		5.0	0.93
100-41-4	Ethylbenzene	38.1		5.0	0.62
75-09-2	Methylene Chloride	32.9		5.0	1.1
127-18-4	Tetrachloroethene	35.3		5.0	0.82
108-88-3	Toluene	36.1		5.0	0.85
156-60-5	trans-1,2-Dichloroethene	37.6		5.0	0.75
10061-02-6	trans-1,3-Dichloropropene	35.3		5.0	0.58
79-01-6	Trichloroethene	39.0		5.0	0.80
75-01-4	Vinyl chloride	35.6		5.0	1.3
75-00-3	Chloroethane	30.1		5.0	0.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-110534/7

Matrix: Water Lab File ID: 4070608.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 04:12

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.: 110534 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		62-123
460-00-4	4-Bromofluorobenzene (Surr)	113		75-120
1868-53-7	Dibromofluoromethane (Surr)	95		80-120
2037-26-5	Toluene-d8 (Surr)	92		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070608.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 07-Jul-2014 04:12:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 180-0002060-007
Operator ID: 430936 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 07-Jul-2014 03:32:34 Calib Date: 03-Jun-2014 14:15:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: zukowskim Date: 07-Jul-2014 03:32:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.779	4.792	-0.013	95	134424	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.674	7.674	0.000	93	965613	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.763	10.763	0.000	83	236320	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	13.092	13.093	-0.001	93	382161	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.932	6.932	0.000	85	280534	250.0	237.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.309	7.303	0.006	93	226550	250.0	236.5	
$ 7 Toluene-d8 (Surr)	98	9.316	9.316	0.000	92	1230128	250.0	229.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.937	11.931	0.006	96	484090	250.0	283.1	
10 Dichlorodifluoromethane	85	1.769	1.769	0.000	87	376012	200.0	164.5	
11 Chloromethane	50	1.975	1.976	-0.001	99	531256	200.0	178.4	
12 Vinyl chloride	62	2.121	2.128	-0.007	98	431445	200.0	178.1	
13 Butadiene	39	2.158	2.158	0.000	90	420106	200.0	173.9	
14 Bromomethane	94	2.498	2.493	0.005	87	124125	200.0	176.2	
15 Chloroethane	64	2.620	2.614	0.006	94	139345	200.0	150.5	
16 Dichlorofluoromethane	67	2.948	2.937	0.011	81	460627	200.0	176.5	
17 Trichlorofluoromethane	101	2.973	2.967	0.006	86	410623	200.0	170.2	
19 Ethyl ether	59	3.471	3.472	-0.001	93	202808	200.0	171.0	
20 Acrolein	56	3.672	3.673	-0.001	88	58513	875.0	927.1	
21 1,1-Dichloroethene	96	3.782	3.782	0.000	87	351895	200.0	186.2	
22 1,1,2-Trichloro-1,2,2-trif	101	3.855	3.843	0.012	80	391182	200.0	196.4	
23 Acetone	43	3.952	3.940	0.012	94	134400	200.0	226.1	
24 Iodomethane	142	4.007	4.001	0.006	98	493040	200.0	175.2	
25 Carbon disulfide	76	4.110	4.104	0.006	99	793398	200.0	168.3	
28 3-Chloro-1-propene	76	4.408	4.408	0.000	93	191707	200.0	174.6	
29 Methyl acetate	43	4.499	4.488	0.011	98	588251	1000.0	930.6	
30 Methylene Chloride	84	4.609	4.603	0.006	92	367407	200.0	164.7	
31 2-Methyl-2-propanol	59	4.901	4.901	0.000	83	93629	2000.0	1808.9	
32 Acrylonitrile	53	5.010	5.004	0.006	99	555297	2000.0	1911.1	
33 trans-1,2-Dichloroethene	96	5.016	5.011	0.005	98	361884	200.0	187.8	
34 Methyl tert-butyl ether	73	5.053	5.053	0.000	88	471122	200.0	166.4	
35 Hexane	57	5.417	5.418	-0.001	91	574743	200.0	168.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 1,1-Dichloroethane	63	5.612	5.607	0.006	96	561805	200.0	192.2	
38 Vinyl acetate	43	5.734	5.734	0.000	97	75018	200.0	116.3	
41 2,2-Dichloropropane	77	6.348	6.342	0.006	76	285503	200.0	173.3	
42 cis-1,2-Dichloroethene	96	6.360	6.355	0.006	69	351295	200.0	191.8	
43 2-Butanone (MEK)	43	6.415	6.415	0.000	92	159882	200.0	237.4	
46 Chlorobromomethane	128	6.640	6.640	0.000	96	129591	200.0	192.8	
48 Tetrahydrofuran	42	6.713	6.713	0.000	90	88465	400.0	354.0	
49 Chloroform	83	6.749	6.750	-0.001	83	454006	200.0	190.5	
50 1,1,1-Trichloroethane	97	6.944	6.938	0.006	94	396050	200.0	179.7	
51 Cyclohexane	56	6.999	6.999	0.000	91	778485	200.0	184.5	
53 Carbon tetrachloride	117	7.138	7.127	0.011	76	331707	200.0	173.2	
52 1,1-Dichloropropene	75	7.138	7.139	-0.001	91	371007	200.0	198.3	
54 Benzene	78	7.363	7.364	-0.001	97	1180856	200.0	196.3	
55 1,2-Dichloroethane	62	7.394	7.388	0.006	86	248098	200.0	200.4	
58 n-Heptane	43	7.674	7.668	0.006	91	543743	200.0	186.5	
59 Isobutyl alcohol	41	7.674	7.668	0.006	61	297874	5000.0	4798.7	
61 Trichloroethene	130	8.069	8.063	0.006	93	331583	200.0	194.8	
63 Methylcyclohexane	83	8.264	8.264	0.000	90	682544	200.0	186.3	
64 1,2-Dichloropropane	63	8.300	8.294	0.006	92	257822	200.0	189.9	
65 Dibromomethane	93	8.428	8.422	0.006	90	107686	200.0	198.4	
67 1,4-Dioxane	88	8.458	8.465	-0.007	78	29356	4000.0	3722.5	
68 Dichlorobromomethane	83	8.592	8.586	0.006	97	233169	200.0	184.9	
71 cis-1,3-Dichloropropene	75	9.048	9.049	-0.001	90	270030	200.0	179.9	
72 4-Methyl-2-pentanone (MIBK	43	9.212	9.201	0.011	96	232580	200.0	176.3	
73 Toluene	91	9.382	9.383	-0.001	98	1264080	200.0	180.7	
74 trans-1,3-Dichloropropene	75	9.608	9.608	0.000	90	183161	200.0	176.5	
75 Ethyl methacrylate	69	9.699	9.693	0.006	88	154754	200.0	172.9	
76 1,1,2-Trichloroethane	97	9.784	9.784	0.000	83	174672	200.0	179.2	
77 Tetrachloroethene	164	9.936	9.930	0.006	91	290187	200.0	176.3	
78 1,3-Dichloropropane	76	9.954	9.955	-0.001	92	288497	200.0	194.5	
79 2-Hexanone	43	10.058	10.052	0.006	97	175496	200.0	197.7	
81 Chlorodibromomethane	129	10.185	10.180	0.005	89	150224	200.0	173.3	
82 Ethylene Dibromide	107	10.307	10.301	0.006	95	151051	200.0	192.4	
84 Chlorobenzene	112	10.787	10.788	-0.001	95	866501	200.0	185.3	
85 1,1,1,2-Tetrachloroethane	131	10.860	10.861	-0.001	90	252148	200.0	183.4	
86 Ethylbenzene	106	10.891	10.891	0.000	98	505268	200.0	190.5	
87 m-Xylene & p-Xylene	106	11.012	11.007	0.005	98	640083	200.0	185.9	
88 o-Xylene	106	11.401	11.402	-0.001	95	600050	200.0	184.9	
89 Styrene	104	11.426	11.426	0.000	95	922031	200.0	198.1	
90 Bromoform	173	11.614	11.609	0.005	99	82646	200.0	160.4	
91 Isopropylbenzene	105	11.772	11.773	-0.001	95	1636522	200.0	189.2	
93 1,1,2,2-Tetrachloroethane	83	12.058	12.059	-0.001	86	182051	200.0	168.1	
94 Bromobenzene	156	12.095	12.089	0.006	86	362196	200.0	171.6	
95 1,2,3-Trichloropropane	110	12.113	12.114	-0.001	68	58061	200.0	159.3	
96 trans-1,4-Dichloro-2-buten	53	12.180	12.138	0.042	4	36815	200.0	266.1	
97 N-Propylbenzene	120	12.180	12.180	0.000	97	528171	200.0	171.7	
98 2-Chlorotoluene	126	12.277	12.272	0.005	98	413095	200.0	163.7	
99 1,3,5-Trimethylbenzene	105	12.350	12.351	-0.001	83	1393182	200.0	157.6	
100 4-Chlorotoluene	126	12.387	12.387	0.000	97	414362	200.0	182.4	
101 tert-Butylbenzene	119	12.679	12.679	0.000	82	1306748	200.0	149.7	
103 1,2,4-Trimethylbenzene	105	12.733	12.734	-0.001	95	1376658	200.0	167.7	
104 sec-Butylbenzene	105	12.904	12.904	0.000	93	1926748	200.0	157.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 1,3-Dichlorobenzene	146	13.031	13.026	0.005	96	696435	200.0	195.4	
106 4-Isopropyltoluene	119	13.043	13.044	-0.001	94	1638190	200.0	159.6	
107 1,4-Dichlorobenzene	146	13.116	13.117	-0.001	94	769095	200.0	165.5	
110 n-Butylbenzene	91	13.463	13.464	-0.001	96	1502451	200.0	182.4	
111 1,2-Dichlorobenzene	146	13.500	13.500	0.000	98	640813	200.0	164.7	
112 1,2-Dibromo-3-Chloropropan	157	14.321	14.297	0.024	57	12175	200.0	125.2	
113 1,2,4-Trichlorobenzene	180	15.135	15.130	0.005	93	230528	200.0	176.9	
115 Hexachlorobutadiene	225	15.281	15.282	-0.001	91	340389	200.0	167.7	
116 Naphthalene	128	15.421	15.397	0.024	39	55922	200.0	56.3	
117 1,2,3-Trichlorobenzene	180	15.671	15.659	0.012	90	151936	200.0	151.2	
S 130 Xylenes, Total	106				0		400.0	370.7	
S 129 1,2-Dichloroethene, Total	96				0		400.0	379.6	
S 131 1,3-Dichloropropene, Total	1				0		400.0	356.3	

Reagents:

voaWVA 2nd Re_00001	Amount Added: 8.00	Units: uL	
VOAACRO2ND_00002	Amount Added: 35.00	Units: uL	
VOA8260VOA2ND_00073	Amount Added: 8.00	Units: uL	
VOA8260INT_00013	Amount Added: 10.00	Units: uL	Run Reagent
VOA8260SURR_00017	Amount Added: 10.00	Units: uL	Run Reagent

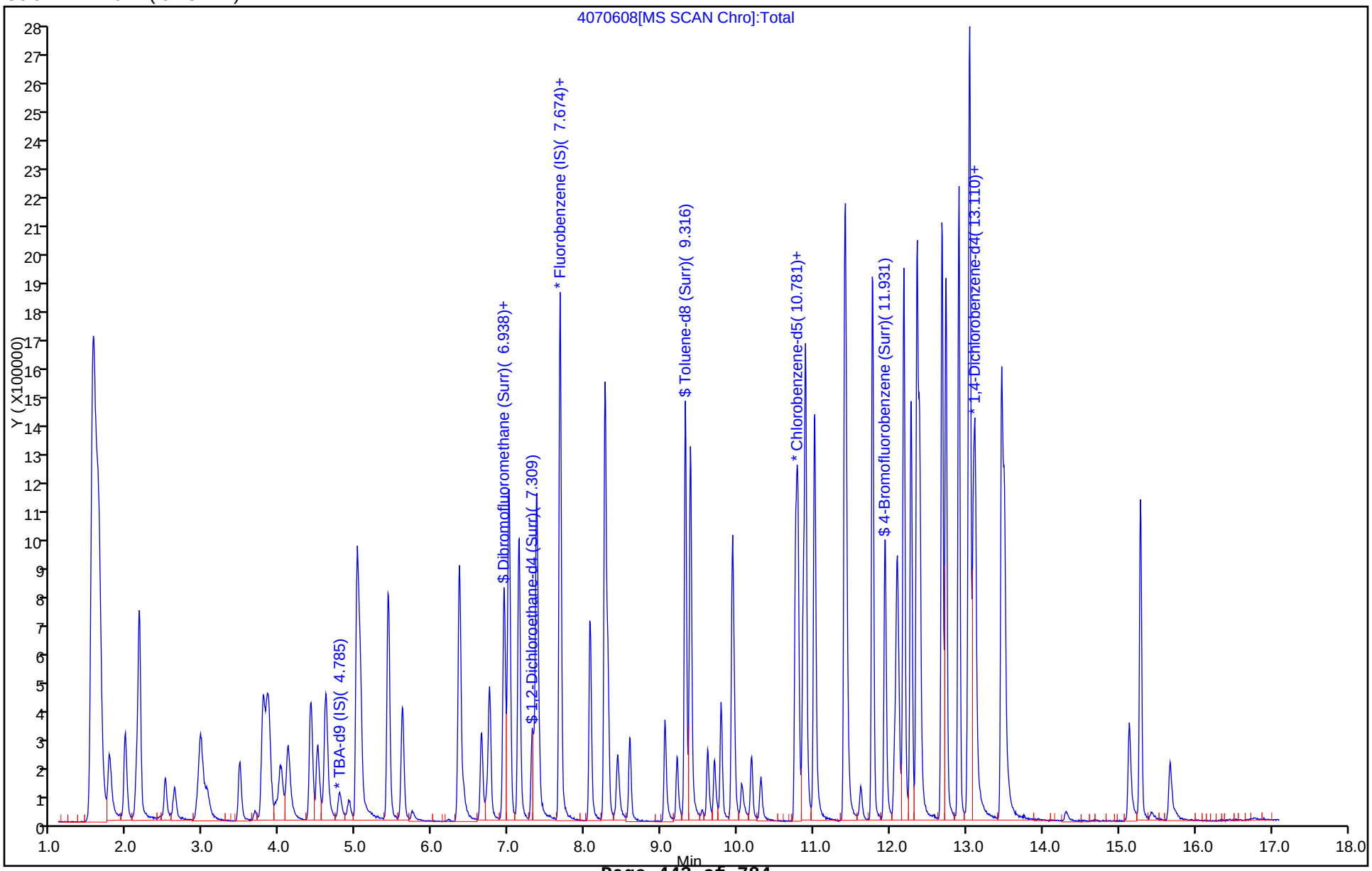
Report Date: 07-Jul-2014 03:32:34 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070608.D

Injection Date:	07-Jul-2014 04:12:30	Instrument ID:	CHHP4	Operator ID:	430936
Lims ID:	LCS			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)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-110699/8

Matrix: Water Lab File ID: 4070808.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/08/2014 12:51

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.: 110699 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	36.7		5.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	34.6		5.0	0.93
79-00-5	1,1,2-Trichloroethane	38.4		5.0	1.2
75-34-3	1,1-Dichloroethane	39.3		5.0	1.0
75-35-4	1,1-Dichloroethene	37.1		5.0	1.1
95-50-1	1,2-Dichlorobenzene	34.6		5.0	0.68
107-06-2	1,2-Dichloroethane	40.8		5.0	0.96
78-87-5	1,2-Dichloropropane	42.4		5.0	1.3
541-73-1	1,3-Dichlorobenzene	42.3		5.0	0.51
106-46-7	1,4-Dichlorobenzene	34.6		5.0	0.53
107-02-8	Acrolein	178		100	5.7
107-13-1	Acrylonitrile	387		50	9.0
71-43-2	Benzene	42.5		5.0	0.99
75-25-2	Bromoform	31.3		5.0	1.1
74-83-9	Bromomethane	33.3		5.0	1.6
56-23-5	Carbon tetrachloride	35.3		5.0	1.1
108-90-7	Chlorobenzene	39.4		5.0	0.53
67-66-3	Chloroform	39.0		5.0	1.0
74-87-3	Chloromethane	36.2		5.0	1.4
124-48-1	Chlorodibromomethane	36.2		5.0	0.65
10061-01-5	cis-1,3-Dichloropropene	38.8		5.0	0.73
75-27-4	Dichlorobromomethane	39.9		5.0	0.93
100-41-4	Ethylbenzene	42.7		5.0	0.62
75-09-2	Methylene Chloride	30.7		5.0	1.1
127-18-4	Tetrachloroethene	38.4		5.0	0.82
108-88-3	Toluene	40.9		5.0	0.85
156-60-5	trans-1,2-Dichloroethene	38.2		5.0	0.75
10061-02-6	trans-1,3-Dichloropropene	37.3		5.0	0.58
79-01-6	Trichloroethene	40.8		5.0	0.80
75-01-4	Vinyl chloride	34.3		5.0	1.3
75-00-3	Chloroethane	35.2		5.0	0.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-110699/8

Matrix: Water Lab File ID: 4070808.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/08/2014 12:51

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.: 110699 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		62-123
460-00-4	4-Bromofluorobenzene (Surr)	106		75-120
1868-53-7	Dibromofluoromethane (Surr)	94		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140708-2090.b\4070808.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 08-Jul-2014 12:51:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 180-0002090-008
Operator ID: 430936 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20140708-2090.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 09-Jul-2014 08:20:05 Calib Date: 03-Jun-2014 14:15:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK037

First Level Reviewer: zukowskim Date: 09-Jul-2014 08:20:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.772	4.772	0.000	95	137693	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.673	7.679	-0.006	92	1026625	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.762	10.762	0.000	83	243716	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	13.091	13.091	0.000	92	354201	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.931	6.937	-0.006	83	295146	250.0	234.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.308	7.308	0.000	92	244196	250.0	239.8	
$ 7 Toluene-d8 (Surr)	98	9.315	9.315	0.000	92	1334482	250.0	241.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.930	11.936	-0.006	96	467867	250.0	265.3	
10 Dichlorodifluoromethane	85	1.768	1.768	0.000	87	387647	200.0	159.5	
11 Chloromethane	50	1.975	1.975	0.000	89	572944	200.0	180.9	
12 Vinyl chloride	62	2.127	2.127	0.000	84	441533	200.0	171.5	
13 Butadiene	39	2.157	2.157	0.000	88	420172	200.0	163.6	
14 Bromomethane	94	2.498	2.498	0.000	87	124704	200.0	166.5	
15 Chloroethane	64	2.625	2.619	0.006	89	173095	200.0	175.9	
16 Dichlorofluoromethane	67	2.954	2.954	0.000	95	503533	200.0	181.5	
17 Trichlorofluoromethane	101	2.978	2.984	-0.006	86	444347	200.0	173.3	
19 Ethyl ether	59	3.477	3.471	0.006	93	213331	200.0	169.2	
20 Acrolein	56	3.671	3.678	-0.007	87	59675	875.0	889.3	
21 1,1-Dichloroethene	96	3.787	3.787	0.000	85	373159	200.0	185.7	
22 1,1,2-Trichloro-1,2,2-trif	101	3.854	3.848	0.006	81	408552	200.0	192.9	
23 Acetone	43	3.945	3.957	-0.012	94	117872	200.0	186.5	
24 Iodomethane	142	4.012	4.018	-0.006	94	524915	200.0	175.4	
25 Carbon disulfide	76	4.109	4.115	-0.006	99	874117	200.0	174.4	
28 3-Chloro-1-propene	76	4.413	4.407	0.006	92	209901	200.0	178.9	
29 Methyl acetate	43	4.492	4.492	0.000	98	555809	1000.0	827.0	
30 Methylene Chloride	84	4.602	4.602	0.000	93	368592	200.0	153.6	
31 2-Methyl-2-propanol	59	4.900	4.894	0.006	85	87759	2000.0	1655.2	
32 Acrylonitrile	53	5.003	5.015	-0.012	99	598600	2000.0	1936.1	
33 trans-1,2-Dichloroethene	96	5.015	5.021	-0.006	95	391705	200.0	191.2	
34 Methyl tert-butyl ether	73	5.046	5.058	-0.012	96	478740	200.0	159.0	
35 Hexane	57	5.423	5.429	-0.006	92	682977	200.0	188.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 1,1-Dichloroethane	63	5.605	5.611	-0.006	85	611039	200.0	196.6	
38 Vinyl acetate	43	5.727	5.733	-0.006	97	275983	200.0	331.9	
41 2,2-Dichloropropane	77	6.347	6.347	0.000	81	310999	200.0	177.5	
42 cis-1,2-Dichloroethene	96	6.359	6.359	0.000	68	377099	200.0	193.6	
43 2-Butanone (MEK)	43	6.414	6.414	0.000	94	147796	200.0	207.4	
46 Chlorobromomethane	128	6.639	6.645	-0.006	92	140483	200.0	196.5	
48 Tetrahydrofuran	42	6.712	6.712	0.000	89	90631	400.0	341.1	
49 Chloroform	83	6.749	6.749	0.000	81	493596	200.0	194.8	
50 1,1,1-Trichloroethane	97	6.943	6.949	-0.006	90	429527	200.0	183.3	
51 Cyclohexane	56	7.004	7.004	0.000	91	862730	200.0	192.3	
53 Carbon tetrachloride	117	7.132	7.132	0.000	80	359645	200.0	176.7	
52 1,1-Dichloropropene	75	7.138	7.138	0.000	91	409772	200.0	206.0	
54 Benzene	78	7.369	7.363	0.006	97	1360053	200.0	212.7	
55 1,2-Dichloroethane	62	7.393	7.387	0.006	87	268466	200.0	204.0	
58 n-Heptane	43	7.673	7.673	0.000	84	669361	200.0	215.9	
59 Isobutyl alcohol	41	7.673	7.673	0.000	66	348698	5000.0	5283.6	
61 Trichloroethene	130	8.068	8.068	0.000	91	369301	200.0	204.1	
63 Methylcyclohexane	83	8.263	8.263	0.000	91	749465	200.0	192.4	
64 1,2-Dichloropropane	63	8.299	8.299	0.000	93	305699	200.0	211.8	
65 Dibromomethane	93	8.421	8.427	-0.006	90	116749	200.0	202.3	
67 1,4-Dioxane	88	8.463	8.451	0.012	72	28059	4000.0	3346.6	
68 Dichlorobromomethane	83	8.585	8.591	-0.006	92	267366	200.0	199.5	
71 cis-1,3-Dichloropropene	75	9.047	9.047	0.000	89	310017	200.0	194.2	
72 4-Methyl-2-pentanone (MIBK	43	9.211	9.205	0.006	96	233361	200.0	171.5	
73 Toluene	91	9.382	9.382	0.000	99	1476814	200.0	204.7	
74 trans-1,3-Dichloropropene	75	9.613	9.613	0.000	93	199453	200.0	186.3	
75 Ethyl methacrylate	69	9.698	9.698	0.000	90	170047	200.0	182.5	
76 1,1,2-Trichloroethane	97	9.783	9.789	-0.006	83	192951	200.0	192.0	
77 Tetrachloroethene	164	9.929	9.935	-0.006	92	325725	200.0	191.8	
78 1,3-Dichloropropane	76	9.953	9.953	0.000	91	307256	200.0	200.8	
79 2-Hexanone	43	10.057	10.057	0.000	94	152441	200.0	171.1	
81 Chlorodibromomethane	129	10.191	10.185	0.006	91	162051	200.0	181.2	
82 Ethylene Dibromide	107	10.306	10.300	0.006	94	150362	200.0	186.5	
84 Chlorobenzene	112	10.787	10.787	0.000	95	949740	200.0	197.0	
85 1,1,1,2-Tetrachloroethane	131	10.860	10.860	0.000	95	269237	200.0	189.9	
86 Ethylbenzene	106	10.890	10.890	0.000	97	584184	200.0	213.5	
87 m-Xylene & p-Xylene	106	11.012	11.012	0.000	99	709763	200.0	199.4	
88 o-Xylene	106	11.407	11.407	0.000	93	677194	200.0	202.3	
89 Styrene	104	11.425	11.425	0.000	93	998905	200.0	208.1	
90 Bromoform	173	11.614	11.614	0.000	97	82918	200.0	156.5	
91 Isopropylbenzene	105	11.766	11.772	-0.006	95	1768014	200.0	198.2	
93 1,1,2,2-Tetrachloroethane	83	12.064	12.058	0.006	88	193188	200.0	173.0	
94 Bromobenzene	156	12.094	12.094	0.000	80	380640	200.0	194.5	
95 1,2,3-Trichloropropane	110	12.106	12.112	-0.006	55	57629	200.0	170.6	
96 trans-1,4-Dichloro-2-buten	53	12.149	12.149	0.000	22	26484	200.0	206.5	
97 N-Propylbenzene	120	12.179	12.179	0.000	96	561502	200.0	196.9	
98 2-Chlorotoluene	126	12.276	12.277	-0.001	98	428741	200.0	183.3	
99 1,3,5-Trimethylbenzene	105	12.356	12.349	0.007	95	1470808	200.0	182.3	
100 4-Chlorotoluene	126	12.386	12.386	0.000	88	424157	200.0	201.4	
101 tert-Butylbenzene	119	12.684	12.678	0.006	83	1382216	200.0	174.5	
103 1,2,4-Trimethylbenzene	105	12.733	12.733	0.000	95	1418482	200.0	186.5	
104 sec-Butylbenzene	105	12.903	12.903	0.000	93	2014639	200.0	180.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 1,3-Dichlorobenzene	146	13.031	13.025	0.006	96	699049	200.0	211.7	
106 4-Isopropyltoluene	119	13.043	13.043	0.000	95	1690835	200.0	180.1	
107 1,4-Dichlorobenzene	146	13.122	13.116	0.006	94	744351	200.0	172.8	
110 n-Butylbenzene	91	13.462	13.462	0.000	96	1505627	200.0	197.2	
111 1,2-Dichlorobenzene	146	13.499	13.499	0.000	98	623978	200.0	173.0	
112 1,2-Dibromo-3-Chloropropan	157	14.314	14.308	0.006	51	13877	200.0	146.3	
113 1,2,4-Trichlorobenzene	180	15.141	15.135	0.006	89	203912	200.0	168.8	
115 Hexachlorobutadiene	225	15.287	15.281	0.006	90	313175	200.0	166.5	
116 Naphthalene	128	15.433	15.433	0.000	28	46380	200.0	52.9	
117 1,2,3-Trichlorobenzene	180	15.682	15.676	0.006	89	126061	200.0	137.3	
S 129 1,2-Dichloroethene, Total	96				0		400.0	384.9	
S 130 Xylenes, Total	106				0		400.0	401.7	
S 131 1,3-Dichloropropene, Total	1				0		400.0	380.6	

Reagents:

VOAACRO2ND_00002	Amount Added: 35.00	Units: uL		
VOA8260VOA2ND_00073	Amount Added: 8.00	Units: uL		
voaWVA 2nd Re_00001	Amount Added: 8.00	Units: uL		
VOA8260INT_00013	Amount Added: 10.00	Units: uL	Run Reagent	
VOA8260SURR_00017	Amount Added: 10.00	Units: uL	Run Reagent	

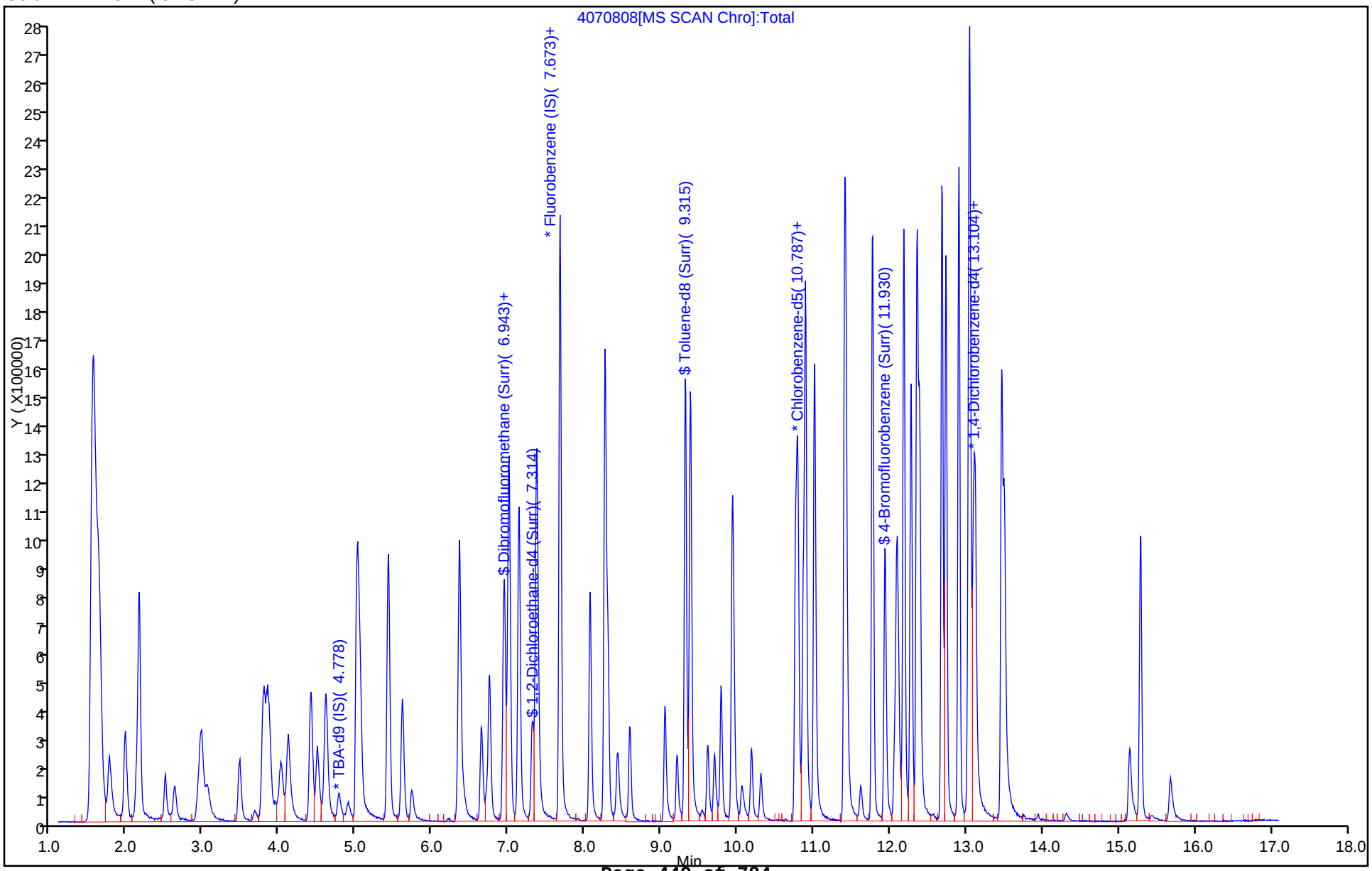
Report Date: 09-Jul-2014 08:20:06 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140708-2090.b\4070808.D

Injection Date:	08-Jul-2014 12:51:30	Instrument ID:	CHHP4	Operator ID:	430936
Lims ID:	LCS			Worklist Smp#:	8
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)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 180-110534/8

Matrix: Water Lab File ID: 4070609.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 04:39

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.: 110534 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	34.0		5.0	0.93
79-00-5	1,1,2-Trichloroethane	38.3		5.0	1.2
75-34-3	1,1-Dichloroethane	38.3		5.0	1.0
75-35-4	1,1-Dichloroethene	36.8		5.0	1.1
95-50-1	1,2-Dichlorobenzene	36.0		5.0	0.68
107-06-2	1,2-Dichloroethane	40.9		5.0	0.96
78-87-5	1,2-Dichloropropane	41.7		5.0	1.3
541-73-1	1,3-Dichlorobenzene	43.1		5.0	0.51
106-46-7	1,4-Dichlorobenzene	36.4		5.0	0.53
107-02-8	Acrolein	183		100	5.7
107-13-1	Acrylonitrile	400		50	9.0
71-43-2	Benzene	41.6		5.0	0.99
75-25-2	Bromoform	32.8		5.0	1.1
74-83-9	Bromomethane	35.4		5.0	1.6
56-23-5	Carbon tetrachloride	35.8		5.0	1.1
108-90-7	Chlorobenzene	39.7		5.0	0.53
67-66-3	Chloroform	39.0		5.0	1.0
74-87-3	Chloromethane	35.7		5.0	1.4
124-48-1	Chlorodibromomethane	38.2		5.0	0.65
10061-01-5	cis-1,3-Dichloropropene	40.0		5.0	0.73
75-27-4	Dichlorobromomethane	40.8		5.0	0.93
100-41-4	Ethylbenzene	41.3		5.0	0.62
75-09-2	Methylene Chloride	31.9		5.0	1.1
127-18-4	Tetrachloroethene	40.2		5.0	0.82
108-88-3	Toluene	40.8		5.0	0.85
156-60-5	trans-1,2-Dichloroethene	38.0		5.0	0.75
10061-02-6	trans-1,3-Dichloropropene	38.5		5.0	0.58
79-01-6	Trichloroethene	42.4		5.0	0.80
75-01-4	Vinyl chloride	35.1		5.0	1.3
75-00-3	Chloroethane	30.3		5.0	0.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 180-110534/8

Matrix: Water Lab File ID: 4070609.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 04:39

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.: 110534 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		62-123
460-00-4	4-Bromofluorobenzene (Surr)	108		75-120
1868-53-7	Dibromofluoromethane (Surr)	91		80-120
2037-26-5	Toluene-d8 (Surr)	94		80-120

Report Date: 07-Jul-2014 04:29:36 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070609.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 07-Jul-2014 04:39:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 180-0002060-008
Operator ID: 430936 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 07-Jul-2014 04:29:36 Calib Date: 03-Jun-2014 14:15:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: zukowskim Date: 07-Jul-2014 04:29:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.790	4.792	-0.002	97	147258	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.673	7.674	-0.001	95	1088977	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.762	10.763	-0.001	81	254495	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	13.091	13.093	-0.002	93	392514	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.937	6.932	0.005	82	304662	250.0	228.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.308	7.303	0.005	82	256361	250.0	237.3	
$ 7 Toluene-d8 (Surr)	98	9.315	9.316	-0.001	92	1361081	250.0	235.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.930	11.931	-0.001	95	497371	250.0	270.1	
10 Dichlorodifluoromethane	85	1.768	1.769	-0.001	87	430552	200.0	167.0	
11 Chloromethane	50	1.974	1.976	-0.002	89	599742	200.0	178.5	
12 Vinyl chloride	62	2.133	2.128	0.005	82	479772	200.0	175.6	
13 Butadiene	39	2.157	2.158	-0.001	89	461451	200.0	169.4	
14 Bromomethane	94	2.497	2.493	0.004	87	140727	200.0	177.2	
15 Chloroethane	64	2.625	2.614	0.011	92	157947	200.0	151.3	
16 Dichlorofluoromethane	67	2.947	2.937	0.010	81	514005	200.0	174.6	
17 Trichlorofluoromethane	101	2.966	2.967	-0.001	84	463046	200.0	170.2	
19 Ethyl ether	59	3.477	3.472	0.005	92	231274	200.0	172.9	
20 Acrolein	56	3.677	3.673	0.004	89	65033	875.0	913.7	
21 1,1-Dichloroethene	96	3.787	3.782	0.005	86	391907	200.0	183.8	
22 1,1,2-Trichloro-1,2,2-trif	101	3.841	3.843	-0.002	80	430237	200.0	191.5	
23 Acetone	43	3.957	3.940	0.017	97	153079	200.0	228.4	
24 Iodomethane	142	4.012	4.001	0.011	94	564228	200.0	177.8	
25 Carbon disulfide	76	4.109	4.104	0.005	99	928885	200.0	174.7	
28 3-Chloro-1-propene	76	4.407	4.408	-0.001	93	222987	200.0	179.1	
29 Methyl acetate	43	4.492	4.488	0.004	98	647229	1000.0	907.9	
30 Methylene Chloride	84	4.596	4.603	-0.007	94	402927	200.0	159.3	
31 2-Methyl-2-propanol	59	4.906	4.901	0.005	91	92340	2000.0	1628.5	
32 Acrylonitrile	53	5.009	5.004	0.005	99	657180	2000.0	1999.9	
33 trans-1,2-Dichloroethene	96	5.015	5.011	0.004	98	413023	200.0	190.1	
34 Methyl tert-butyl ether	73	5.058	5.053	0.005	91	521157	200.0	163.2	
35 Hexane	57	5.423	5.418	0.005	93	680919	200.0	177.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 1,1-Dichloroethane	63	5.605	5.607	-0.001	84	630879	200.0	191.4	
38 Vinyl acetate	43	5.739	5.734	0.005	97	81719	200.0	113.2	
41 2,2-Dichloropropane	77	6.347	6.342	0.005	80	334416	200.0	180.0	
42 cis-1,2-Dichloroethene	96	6.359	6.355	0.005	69	403476	200.0	195.3	
43 2-Butanone (MEK)	43	6.414	6.415	-0.001	99	173899	200.0	229.2	
46 Chlorobromomethane	128	6.639	6.640	-0.001	94	151251	200.0	199.5	
48 Tetrahydrofuran	42	6.712	6.713	-0.001	92	98830	400.0	350.7	
49 Chloroform	83	6.748	6.750	-0.002	81	524598	200.0	195.2	
50 1,1,1-Trichloroethane	97	6.943	6.938	0.005	95	463366	200.0	186.5	
51 Cyclohexane	56	7.004	6.999	0.005	91	900062	200.0	189.1	
53 Carbon tetrachloride	117	7.131	7.127	0.004	77	386646	200.0	179.1	
52 1,1-Dichloropropene	75	7.131	7.139	-0.008	90	461050	200.0	218.5	
54 Benzene	78	7.363	7.364	-0.001	97	1412632	200.0	208.2	
55 1,2-Dichloroethane	62	7.387	7.388	-0.001	86	285744	200.0	204.7	
59 Isobutyl alcohol	41	7.673	7.668	0.005	66	374915	5000.0	5355.6	
58 n-Heptane	43	7.673	7.668	0.005	91	699140	200.0	212.6	
61 Trichloroethene	130	8.068	8.063	0.005	91	406971	200.0	212.0	
63 Methylcyclohexane	83	8.263	8.264	-0.001	89	796945	200.0	192.8	
64 1,2-Dichloropropane	63	8.299	8.294	0.005	95	318874	200.0	208.3	
65 Dibromomethane	93	8.427	8.422	0.005	87	119443	200.0	195.1	
67 1,4-Dioxane	88	8.445	8.465	-0.020	93	23884	4000.0	2685.5	
68 Dichlorobromomethane	83	8.591	8.586	0.005	92	290140	200.0	204.1	
71 cis-1,3-Dichloropropene	75	9.053	9.049	0.004	90	338849	200.0	200.2	
72 4-Methyl-2-pentanone (MIBK	43	9.205	9.201	0.004	95	281125	200.0	197.9	
73 Toluene	91	9.382	9.383	-0.001	99	1534882	200.0	203.8	
74 trans-1,3-Dichloropropene	75	9.607	9.608	-0.001	90	215269	200.0	192.6	
75 Ethyl methacrylate	69	9.692	9.693	-0.001	91	199012	200.0	201.4	
76 1,1,2-Trichloroethane	97	9.783	9.784	-0.001	82	201233	200.0	191.7	
77 Tetrachloroethene	164	9.935	9.930	0.005	90	356570	200.0	201.1	
78 1,3-Dichloropropane	76	9.953	9.955	-0.002	90	332498	200.0	208.1	
79 2-Hexanone	43	10.057	10.052	0.005	97	200488	200.0	208.0	
81 Chlorodibromomethane	129	10.184	10.180	0.004	88	178129	200.0	190.8	
82 Ethylene Dibromide	107	10.306	10.301	0.005	97	163798	200.0	193.6	
84 Chlorobenzene	112	10.786	10.788	-0.002	97	1000537	200.0	198.7	
85 1,1,1,2-Tetrachloroethane	131	10.859	10.861	-0.002	91	295510	200.0	199.6	
86 Ethylbenzene	106	10.890	10.891	-0.001	97	589319	200.0	206.3	
87 m-Xylene & p-Xylene	106	11.005	11.007	-0.002	99	718901	200.0	193.6	
88 o-Xylene	106	11.401	11.402	-0.001	95	714461	200.0	204.4	
89 Styrene	104	11.419	11.426	-0.007	93	1093850	200.0	218.2	
90 Bromoform	173	11.619	11.609	0.010	98	91193	200.0	163.9	
91 Isopropylbenzene	105	11.771	11.773	-0.002	95	1884565	200.0	202.4	
93 1,1,2,2-Tetrachloroethane	83	12.057	12.059	-0.002	79	197999	200.0	169.8	
94 Bromobenzene	156	12.094	12.089	0.005	87	400876	200.0	184.9	
95 1,2,3-Trichloropropane	110	12.112	12.114	-0.002	64	61102	200.0	163.2	
96 trans-1,4-Dichloro-2-buten	53	12.155	12.138	0.017	1	20404	200.0	143.6	
97 N-Propylbenzene	120	12.179	12.180	-0.001	97	606720	200.0	192.0	
98 2-Chlorotoluene	126	12.276	12.272	0.004	98	476011	200.0	183.6	
99 1,3,5-Trimethylbenzene	105	12.355	12.351	0.004	95	1589032	200.0	177.2	
100 4-Chlorotoluene	126	12.386	12.387	-0.001	96	468969	200.0	201.0	
101 tert-Butylbenzene	119	12.684	12.679	0.005	82	1496071	200.0	169.8	
103 1,2,4-Trimethylbenzene	105	12.732	12.734	-0.002	96	1554815	200.0	184.4	
104 sec-Butylbenzene	105	12.903	12.904	-0.001	94	2186332	200.0	176.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 1,3-Dichlorobenzene	146	13.030	13.026	0.004	91	788515	200.0	215.4	
106 4-Isopropyltoluene	119	13.049	13.044	0.005	96	1860652	200.0	178.7	
107 1,4-Dichlorobenzene	146	13.115	13.117	-0.002	94	868866	200.0	182.0	
110 n-Butylbenzene	91	13.462	13.464	-0.002	94	1683733	200.0	199.0	
111 1,2-Dichlorobenzene	146	13.499	13.500	-0.001	97	719901	200.0	180.2	
112 1,2-Dibromo-3-Chloropropan	157	14.313	14.297	0.016	64	16281	200.0	152.9	
113 1,2,4-Trichlorobenzene	180	15.128	15.130	-0.002	93	310151	200.0	231.7	
115 Hexachlorobutadiene	225	15.280	15.282	-0.002	90	382121	200.0	183.3	
116 Naphthalene	128	15.408	15.397	0.011	92	252707	200.0	167.5	
117 1,2,3-Trichlorobenzene	180	15.664	15.659	0.005	94	215949	200.0	202.1	
S 129 1,2-Dichloroethene, Total	96				0		400.0	385.4	
S 130 Xylenes, Total	106				0		400.0	398.0	
S 131 1,3-Dichloropropene, Total	1				0		400.0	392.7	

Reagents:

voaWVA 2nd Re_00001	Amount Added: 8.00	Units: uL		
VOAACRO2ND_00002	Amount Added: 35.00	Units: uL		
VOA8260VOA2ND_00073	Amount Added: 8.00	Units: uL		
VOA8260INT_00013	Amount Added: 10.00	Units: uL	Run Reagent	
VOA8260SURR_00017	Amount Added: 10.00	Units: uL	Run Reagent	

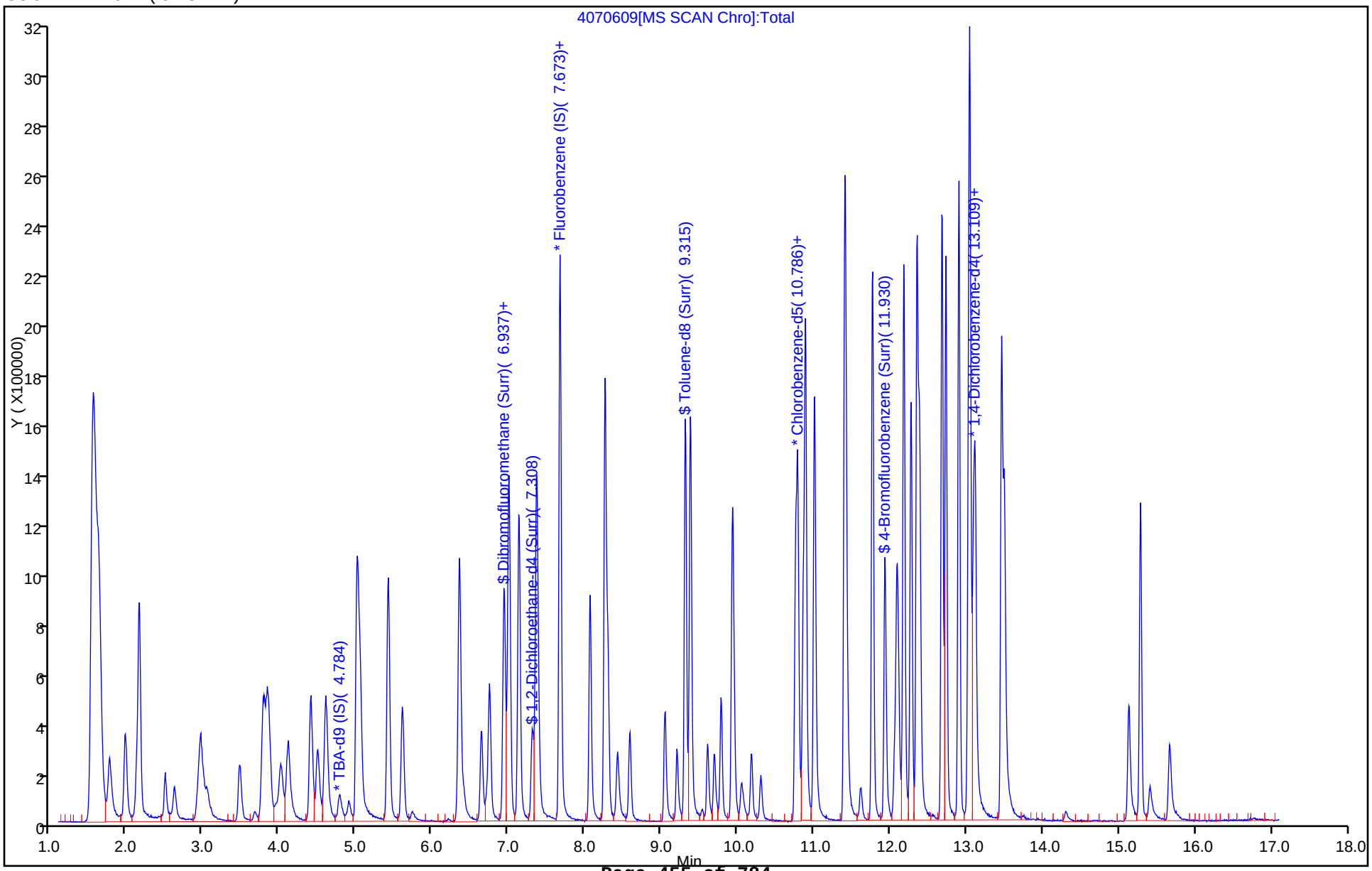
Report Date: 07-Jul-2014 04:29:37 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070609.D

Injection Date:	07-Jul-2014 04:39:30	Instrument ID:	CHHP4	Operator ID:	430936
Lims ID:	LCSD			Worklist Smp#:	8
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)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 180-110699/9

Matrix: Water Lab File ID: 4070809.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/08/2014 13:18

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.: 110699 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	33.9		5.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	33.3		5.0	0.93
79-00-5	1,1,2-Trichloroethane	36.4		5.0	1.2
75-34-3	1,1-Dichloroethane	36.5		5.0	1.0
75-35-4	1,1-Dichloroethene	34.7		5.0	1.1
95-50-1	1,2-Dichlorobenzene	33.7		5.0	0.68
107-06-2	1,2-Dichloroethane	37.9		5.0	0.96
78-87-5	1,2-Dichloropropane	39.4		5.0	1.3
541-73-1	1,3-Dichlorobenzene	39.9		5.0	0.51
106-46-7	1,4-Dichlorobenzene	33.5		5.0	0.53
107-02-8	Acrolein	170		100	5.7
107-13-1	Acrylonitrile	342		50	9.0
71-43-2	Benzene	39.5		5.0	0.99
75-25-2	Bromoform	30.1		5.0	1.1
74-83-9	Bromomethane	31.8		5.0	1.6
56-23-5	Carbon tetrachloride	33.9		5.0	1.1
108-90-7	Chlorobenzene	38.4		5.0	0.53
67-66-3	Chloroform	36.3		5.0	1.0
74-87-3	Chloromethane	33.3		5.0	1.4
124-48-1	Chlorodibromomethane	35.9		5.0	0.65
10061-01-5	cis-1,3-Dichloropropene	37.4		5.0	0.73
75-27-4	Dichlorobromomethane	37.5		5.0	0.93
100-41-4	Ethylbenzene	40.7		5.0	0.62
75-09-2	Methylene Chloride	28.5		5.0	1.1
127-18-4	Tetrachloroethene	37.7		5.0	0.82
108-88-3	Toluene	39.6		5.0	0.85
156-60-5	trans-1,2-Dichloroethene	34.8		5.0	0.75
10061-02-6	trans-1,3-Dichloropropene	35.7		5.0	0.58
79-01-6	Trichloroethene	39.5		5.0	0.80
75-01-4	Vinyl chloride	31.4		5.0	1.3
75-00-3	Chloroethane	28.7		5.0	0.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 180-110699/9

Matrix: Water Lab File ID: 4070809.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/08/2014 13:18

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.: 110699 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)	103		75-120
1868-53-7	Dibromofluoromethane (Surr)	92		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140708-2090.b\4070809.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 08-Jul-2014 13:18:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 180-0002090-009
Operator ID: 430936 Instrument ID: CHHP4

Method: \\PITCHROM\ChromData\CHHP4\20140708-2090.b\MSVOA_CHHP4.m
Limit Group: VOA 8260C ICAL
Last Update: 09-Jul-2014 08:20:16 Calib Date: 03-Jun-2014 14:15:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP4\20140603-1537.b\4060309.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK037

First Level Reviewer: zukowskim Date: 08-Jul-2014 13:10:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.790	4.772	0.018	93	141637	5000.0	5000.0	
* 2 Fluorobenzene (IS)	96	7.679	7.679	0.000	93	1125778	250.0	250.0	
* 3 Chlorobenzene-d5	119	10.762	10.762	0.000	80	263919	250.0	250.0	
* 4 1,4-Dichlorobenzene-d4	152	13.091	13.091	0.000	93	381904	250.0	250.0	
$ 5 Dibromofluoromethane (Surr	113	6.931	6.937	-0.006	82	317589	250.0	230.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.308	7.308	0.000	80	258483	250.0	231.5	
$ 7 Toluene-d8 (Surr)	98	9.315	9.315	0.000	93	1424527	250.0	237.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.930	11.936	-0.006	97	489598	250.0	256.4	
10 Dichlorodifluoromethane	85	1.768	1.768	0.000	87	391835	200.0	147.0	
11 Chloromethane	50	1.968	1.975	-0.007	89	577410	200.0	166.3	
12 Vinyl chloride	62	2.127	2.127	0.000	84	443831	200.0	157.2	
13 Butadiene	39	2.157	2.157	0.000	91	443088	200.0	157.3	
14 Bromomethane	94	2.497	2.498	-0.001	86	130426	200.0	158.8	
15 Chloroethane	64	2.625	2.619	0.006	91	154923	200.0	143.6	
16 Dichlorofluoromethane	67	2.954	2.954	0.000	89	497196	200.0	163.4	
17 Trichlorofluoromethane	101	2.972	2.984	-0.012	97	432135	200.0	153.7	
19 Ethyl ether	59	3.477	3.471	0.006	92	223968	200.0	161.9	
20 Acrolein	56	3.677	3.678	-0.001	89	62531	875.0	849.8	
21 1,1-Dichloroethene	96	3.787	3.787	0.000	87	382604	200.0	173.6	
22 1,1,2-Trichloro-1,2,2-trif	101	3.841	3.848	-0.007	89	407209	200.0	175.3	
23 Acetone	43	3.957	3.957	0.000	97	141798	200.0	204.6	
24 Iodomethane	142	4.018	4.018	0.000	94	542299	200.0	165.3	
25 Carbon disulfide	76	4.109	4.115	-0.006	99	916740	200.0	166.8	
28 3-Chloro-1-propene	76	4.407	4.407	0.000	94	197558	200.0	157.9	
29 Methyl acetate	43	4.492	4.492	0.000	98	577579	1000.0	783.7	
30 Methylene Chloride	84	4.602	4.602	0.000	96	379529	200.0	142.3	
31 2-Methyl-2-propanol	59	4.900	4.894	0.006	85	95731	2000.0	1755.3	
32 Acrylonitrile	53	5.009	5.015	-0.006	98	575541	2000.0	1711.7	
33 trans-1,2-Dichloroethene	96	5.021	5.021	0.000	97	390424	200.0	173.8	
34 Methyl tert-butyl ether	73	5.052	5.058	-0.006	91	493277	200.0	149.4	
35 Hexane	57	5.423	5.429	-0.006	93	675717	200.0	170.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 1,1-Dichloroethane	63	5.605	5.611	-0.006	85	621541	200.0	182.4	
38 Vinyl acetate	43	5.727	5.733	-0.006	97	272587	200.0	302.5	
41 2,2-Dichloropropane	77	6.347	6.347	0.000	85	320597	200.0	166.9	
42 cis-1,2-Dichloroethene	96	6.365	6.359	0.006	69	391990	200.0	183.5	
43 2-Butanone (MEK)	43	6.414	6.414	0.000	99	153255	200.0	196.5	
46 Chlorobromomethane	128	6.639	6.645	-0.006	93	138120	200.0	176.2	
48 Tetrahydrofuran	42	6.712	6.712	0.000	88	88904	400.0	305.1	
49 Chloroform	83	6.748	6.749	-0.001	82	504132	200.0	181.4	
50 1,1,1-Trichloroethane	97	6.943	6.949	-0.006	90	435229	200.0	169.4	
51 Cyclohexane	56	7.004	7.004	0.000	92	851226	200.0	173.0	
53 Carbon tetrachloride	117	7.131	7.132	-0.001	81	378284	200.0	169.5	
52 1,1-Dichloropropene	75	7.138	7.138	0.000	91	436564	200.0	200.2	
54 Benzene	78	7.369	7.363	0.006	97	1383814	200.0	197.3	
55 1,2-Dichloroethane	62	7.393	7.387	0.006	79	273716	200.0	189.6	
58 n-Heptane	43	7.673	7.673	0.000	90	677624	200.0	199.3	
59 Isobutyl alcohol	41	7.673	7.673	0.000	69	361885	5000.0	5000.5	
61 Trichloroethene	130	8.068	8.068	0.000	93	391547	200.0	197.3	
63 Methylcyclohexane	83	8.263	8.263	0.000	91	755025	200.0	176.7	
64 1,2-Dichloropropane	63	8.299	8.299	0.000	96	311972	200.0	197.1	
65 Dibromomethane	93	8.427	8.427	0.000	89	111358	200.0	175.9	
67 1,4-Dioxane	88	8.451	8.451	0.000	79	31913	4000.0	3471.0	
68 Dichlorobromomethane	83	8.591	8.591	0.000	93	275380	200.0	187.4	
71 cis-1,3-Dichloropropene	75	9.047	9.047	0.000	92	327627	200.0	187.2	
72 4-Methyl-2-pentanone (MIBK	43	9.205	9.205	0.000	94	257243	200.0	174.6	
73 Toluene	91	9.382	9.382	0.000	99	1546783	200.0	198.0	
74 trans-1,3-Dichloropropene	75	9.607	9.613	-0.006	89	207092	200.0	178.6	
75 Ethyl methacrylate	69	9.692	9.698	-0.006	91	193915	200.0	190.8	
76 1,1,2-Trichloroethane	97	9.789	9.789	0.000	81	197828	200.0	181.8	
77 Tetrachloroethene	164	9.929	9.935	-0.006	91	346633	200.0	188.5	
78 1,3-Dichloropropane	76	9.953	9.953	0.000	90	328358	200.0	198.2	
79 2-Hexanone	43	10.057	10.057	0.000	95	205784	200.0	206.1	
81 Chlorodibromomethane	129	10.184	10.185	-0.001	90	173794	200.0	179.5	
82 Ethylene Dibromide	107	10.312	10.300	0.012	96	163981	200.0	187.6	
84 Chlorobenzene	112	10.786	10.787	-0.001	96	1003216	200.0	192.1	
85 1,1,1,2-Tetrachloroethane	131	10.859	10.860	-0.001	91	281759	200.0	183.5	
86 Ethylbenzene	106	10.890	10.890	0.000	97	602852	200.0	203.5	
87 m-Xylene & p-Xylene	106	11.011	11.012	-0.001	98	722466	200.0	187.8	
88 o-Xylene	106	11.407	11.407	0.000	93	705854	200.0	194.7	
89 Styrene	104	11.419	11.425	-0.006	93	1060818	200.0	204.1	
90 Bromoform	173	11.613	11.614	-0.001	97	85851	200.0	150.4	
91 Isopropylbenzene	105	11.772	11.772	0.000	95	1827100	200.0	189.2	
93 1,1,2,2-Tetrachloroethane	83	12.057	12.058	-0.001	80	201039	200.0	166.3	
94 Bromobenzene	156	12.094	12.094	0.000	88	375320	200.0	177.9	
95 1,2,3-Trichloropropane	110	12.112	12.112	0.000	62	61859	200.0	169.8	
96 trans-1,4-Dichloro-2-buten	53	12.173	12.149	0.024	14	32524	200.0	235.2	
97 N-Propylbenzene	120	12.179	12.179	0.000	96	593411	200.0	193.0	
98 2-Chlorotoluene	126	12.276	12.277	-0.001	98	444690	200.0	176.3	
99 1,3,5-Trimethylbenzene	105	12.355	12.349	0.006	95	1526277	200.0	174.6	
100 4-Chlorotoluene	126	12.386	12.386	0.000	96	436542	200.0	192.3	
101 tert-Butylbenzene	119	12.684	12.678	0.006	78	1425428	200.0	165.7	
103 1,2,4-Trimethylbenzene	105	12.732	12.733	-0.001	94	1489757	200.0	181.6	
104 sec-Butylbenzene	105	12.903	12.903	0.000	93	2081103	200.0	172.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 1,3-Dichlorobenzene	146	13.030	13.025	0.005	96	710188	200.0	199.4	
106 4-Isopropyltoluene	119	13.043	13.043	0.000	95	1759798	200.0	173.1	
107 1,4-Dichlorobenzene	146	13.115	13.116	-0.001	93	777024	200.0	167.3	
110 n-Butylbenzene	91	13.462	13.462	0.000	93	1575197	200.0	191.3	
111 1,2-Dichlorobenzene	146	13.499	13.499	0.000	98	654686	200.0	168.4	
112 1,2-Dibromo-3-Chloropropan	157	14.307	14.308	-0.001	55	18995	200.0	176.4	
113 1,2,4-Trichlorobenzene	180	15.128	15.135	-0.007	90	250816	200.0	192.6	
115 Hexachlorobutadiene	225	15.287	15.281	0.006	92	332730	200.0	164.0	
116 Naphthalene	128	15.414	15.433	-0.019	90	225540	200.0	155.6	
117 1,2,3-Trichlorobenzene	180	15.670	15.676	-0.006	94	188802	200.0	183.4	
S 129 1,2-Dichloroethene, Total	96				0		400.0	357.4	
S 130 Xylenes, Total	106				0		400.0	382.5	
S 131 1,3-Dichloropropene, Total	1				0		400.0	365.8	

Reagents:

VOAACRO2ND_00002	Amount Added: 35.00	Units: uL		
VOA8260VOA2ND_00073	Amount Added: 8.00	Units: uL		
voaWVA 2nd Re_00001	Amount Added: 8.00	Units: uL		
VOA8260INT_00013	Amount Added: 10.00	Units: uL	Run Reagent	
VOA8260SURR_00017	Amount Added: 10.00	Units: uL	Run Reagent	

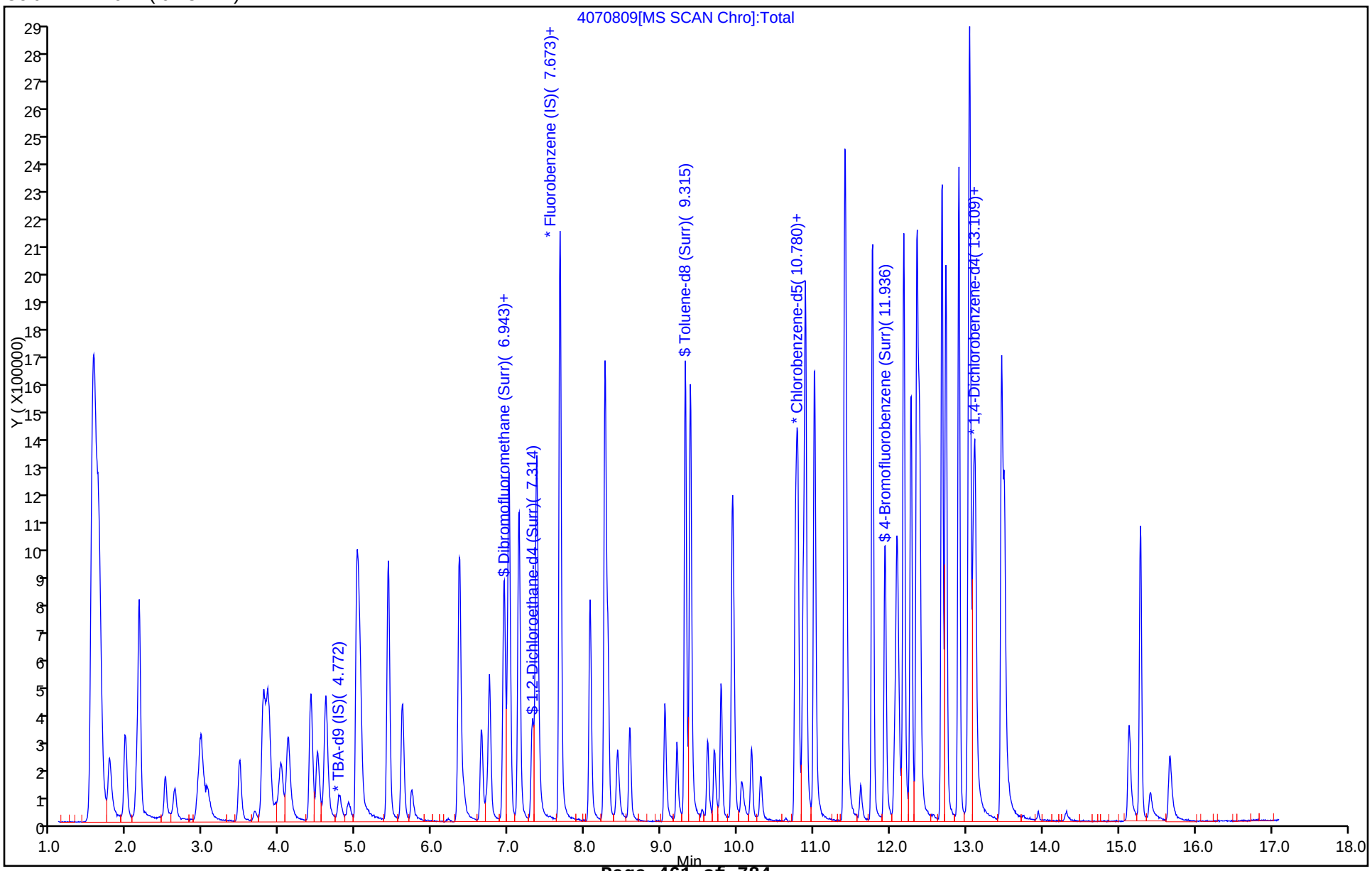
Report Date: 09-Jul-2014 08:20:16 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140708-2090.b\4070809.D

Injection Date:	08-Jul-2014 13:18:30	Instrument ID:	CHHP4	Operator ID:	430936
Lims ID:	LCSD			Worklist Smp#:	9
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)



GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Instrument ID: CHHP4 Start Date: 06/24/2013 08:22

Analysis Batch Number: 98677 End Date: 06/24/2013 17:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-98677/1		06/24/2013 08:22	1	4062401.D	DB-624 0.18(mm)
IC 180-98677/4		06/24/2013 11:49	1	4062405.D	DB-624 0.18(mm)
ICIS 180-98677/5		06/24/2013 12:17	1	4062406.D	DB-624 0.18(mm)
IC 180-98677/6		06/24/2013 12:47	1	4062407.D	DB-624 0.18(mm)
IC 180-98677/7		06/24/2013 13:14	1	4062408.D	DB-624 0.18(mm)
IC 180-98677/8		06/24/2013 13:39	1	4062409.D	DB-624 0.18(mm)
IC 180-98677/2		06/24/2013 15:03	1	4062412.D	DB-624 0.18(mm)
IC 180-98677/3		06/24/2013 15:43	1	4062413.D	DB-624 0.18(mm)
ICV 180-98677/10		06/24/2013 17:05	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Instrument ID: CHHP4 Start Date: 06/03/2014 09:50

Analysis Batch Number: 107478 End Date: 06/03/2014 16:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-107478/1		06/03/2014 09:50	1	4060301.D	DB-624 0.18(mm)
IC 180-107478/3		06/03/2014 11:03	1	4060303.D	DB-624 0.18(mm)
IC 180-107478/4		06/03/2014 11:43	1	4060304.D	DB-624 0.18(mm)
IC 180-107478/5		06/03/2014 12:13	1	4060305.D	DB-624 0.18(mm)
ICIS 180-107478/6		06/03/2014 12:43	1	4060306.D	DB-624 0.18(mm)
IC 180-107478/7		06/03/2014 13:14	1	4060307.D	DB-624 0.18(mm)
IC 180-107478/8		06/03/2014 13:44	1	4060308.D	DB-624 0.18(mm)
IC 180-107478/9		06/03/2014 14:15	1	4060309.D	DB-624 0.18(mm)
ICV 180-107478/13		06/03/2014 16:53	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Instrument ID: CHHP4 Start Date: 07/07/2014 00:09

Analysis Batch Number: 110534 End Date: 07/07/2014 09:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-110534/1		07/07/2014 00:09	1	4070601.D	DB-624 0.18(mm)
CCVIS 180-110534/2		07/07/2014 00:53	1	4070602.D	DB-624 0.18(mm)
CCV 180-110534/3		07/07/2014 01:20	1	4070603.D	DB-624 0.18(mm)
MB 180-110534/10		07/07/2014 03:18	1	4070606.D	DB-624 0.18(mm)
ZZZZZ		07/07/2014 03:45	1		DB-624 0.18(mm)
LCS 180-110534/7		07/07/2014 04:12	1	4070608.D	DB-624 0.18(mm)
LCSD 180-110534/8		07/07/2014 04:39	1	4070609.D	DB-624 0.18(mm)
ZZZZZ		07/07/2014 05:34	1		DB-624 0.18(mm)
ZZZZZ		07/07/2014 06:01	1		DB-624 0.18(mm)
ZZZZZ		07/07/2014 06:28	1		DB-624 0.18(mm)
ZZZZZ		07/07/2014 06:55	1		DB-624 0.18(mm)
180-34362-1	H108-PZM003	07/07/2014 07:22	1	4070615.D	DB-624 0.18(mm)
180-34362-2	RW19-PZP000	07/07/2014 07:49	1	4070616.D	DB-624 0.18(mm)
180-34362-3	RW19-PZM050	07/07/2014 08:16	1	4070617.D	DB-624 0.18(mm)
180-34362-4	H108-PZM060	07/07/2014 08:44	1	4070618.D	DB-624 0.18(mm)
180-34362-5	RW19-PZM020	07/07/2014 09:11	1	4070619.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Instrument ID: CHHP4 Start Date: 07/08/2014 08:52

Analysis Batch Number: 110699 End Date: 07/08/2014 15:34

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-110699/1		07/08/2014 08:52	1	4070801.D	DB-624 0.18(mm)
CCV 180-110699/3		07/08/2014 10:10	1	4070803.D	DB-624 0.18(mm)
CCVIS 180-110699/4		07/08/2014 10:37	1	4070804.D	DB-624 0.18(mm)
MB 180-110699/6		07/08/2014 11:56	1	4070806.D	DB-624 0.18(mm)
180-34362-6	062614-TB	07/08/2014 12:23	1	4070807.D	DB-624 0.18(mm)
LCS 180-110699/8		07/08/2014 12:51	1	4070808.D	DB-624 0.18(mm)
LCSD 180-110699/9		07/08/2014 13:18	1	4070809.D	DB-624 0.18(mm)
ZZZZZ		07/08/2014 14:12	1		DB-624 0.18(mm)
ZZZZZ		07/08/2014 14:39	1		DB-624 0.18(mm)
ZZZZZ		07/08/2014 15:07	1		DB-624 0.18(mm)
ZZZZZ		07/08/2014 15:34	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.: 180-34362-1

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 #
H108-PZM003	180-34362-1	56	58	94	86	83	45
RW19-PZP000	180-34362-2	57	60	85	80	85	89
RW19-PZM050	180-34362-3	68	70	93	88	92	85
H108-PZM060	180-34362-4	52	54	73	72	74	90
RW19-PZM020	180-34362-5	64	77	102	101	106	108
	MB 180-110402/1-A	84	73	81	77	68	79
	LCS 180-110402/2-A	55	53	66	66	62	62
	LCSD 180-110402/3-A	60	57	68	71	64	62

	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.: 180-34362-1

SDG No.:

Matrix: Water Level: Low Lab File ID: V0708009.D

Lab ID: LCS 180-110402/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acenaphthene	20.0	13.2	66	30-150	
Acenaphthylene	20.0	12.7	64	30-150	
Anthracene	20.0	13.0	65	30-150	
Benzidine	20.0	11.4 J	57	10-150	
Benzo[a]anthracene	20.0	12.7	64	30-150	
Benzo[b]fluoranthene	20.0	12.9	64	30-150	
Benzo[k]fluoranthene	20.0	13.3	66	30-150	
Benzoic acid	20.0	8.93	45	10-150	
Benzo[g,h,i]perylene	20.0	14.5	73	30-150	
Benzo[a]pyrene	20.0	13.9	69	30-150	
Bis(2-chloroethoxy)methane	20.0	11.1	56	30-150	
Bis(2-chloroethyl)ether	20.0	9.53	48	30-150	
Bis(2-ethylhexyl) phthalate	20.0	11.6	58	30-150	
2,2'-oxybis[1-chloropropane]	20.0	8.29	41	30-150	
4-Bromophenyl phenyl ether	20.0	14.4	72	30-150	
4-Chlorophenyl phenyl ether	20.0	14.1	70	30-150	
2-Chloronaphthalene	20.0	12.3	62	30-150	
Butyl benzyl phthalate	20.0	11.5	58	30-150	
Chrysene	20.0	13.4	67	30-150	
Dibenz(a,h)anthracene	20.0	14.7	73	30-150	
Di-n-butyl phthalate	20.0	13.0	65	30-150	
Di-n-octyl phthalate	20.0	11.2	56	10-150	
Diethyl phthalate	20.0	14.7	74	30-150	
Dimethyl phthalate	20.0	13.8	69	30-150	
3,3'-Dichlorobenzidine	20.0	12.7	64	10-150	
2,4-Dinitrotoluene	20.0	14.1	71	30-150	
2,6-Dinitrotoluene	20.0	13.4	67	30-150	
2-Chlorophenol	20.0	10.7	54	30-150	
2,4-Dichlorophenol	20.0	12.9	65	30-150	
2,4-Dimethylphenol	20.0	13.4	67	30-150	
2,4-Dinitrophenol	40.0	23.0	58	10-150	
2-Nitrophenol	20.0	12.1	60	30-150	
2,4,6-Trichlorophenol	20.0	14.8	74	30-150	
1,2-Diphenylhydrazine(as Azobenzene)	20.0	13.5	67	30-150	
1,2,4-Trichlorobenzene	20.0	13.3	67	30-150	
4-Chloro-3-methylphenol	20.0	12.2	61	30-150	
4-Nitrophenol	40.0	38.2	95	30-150	
4,6-Dinitro-2-methylphenol	40.0	26.9	67	30-150	
Fluoranthene	20.0	14.1	70	30-150	
Fluorene	20.0	13.2	66	30-150	
Hexachlorobenzene	20.0	14.1	70	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.: 180-34362-1

SDG No.:

Matrix: Water Level: Low Lab File ID: V0708009.D

Lab ID: LCS 180-110402/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Hexachlorobutadiene	20.0	14.1	71	30-150	
Hexachlorocyclopentadiene	20.0	16.1	80	30-150	
Hexachloroethane	20.0	11.1	55	30-150	
Indeno[1,2,3-cd]pyrene	20.0	15.0	75	30-150	
Isophorone	20.0	12.8	64	30-150	
Naphthalene	20.0	11.5	58	30-150	
Nitrobenzene	20.0	12.9	64	30-150	
N-Nitrosodi-n-propylamine	20.0	10.2	51	30-150	
N-Nitrosodimethylamine	20.0	13.6	68	30-150	
N-Nitrosodiphenylamine	20.0	12.6	63	30-150	
Phenanthrene	20.0	12.5	63	30-150	
Pyrene	20.0	11.9	59	30-150	
Pentachlorophenol	40.0	28.7	72	10-150	
Phenol	20.0	10.5	52	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.: 180-34362-1

SDG No.:

Matrix: Water Level: Low Lab File ID: V0708010.D

Lab ID: LCSD 180-110402/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acenaphthene	20.0	14.1	70	7	35	30-150	
Acenaphthylene	20.0	13.8	69	8	35	30-150	
Anthracene	20.0	13.9	69	6	35	30-150	
Benzidine	20.0	10.5 J	53	8	35	10-150	
Benzo[a]anthracene	20.0	13.2	66	3	35	30-150	
Benzo[b]fluoranthene	20.0	13.8	69	7	35	30-150	
Benzo[k]fluoranthene	20.0	13.6	68	3	35	30-150	
Benzoic acid	20.0	9.45	47	6	35	10-150	
Benzo[g,h,i]perylene	20.0	15.2	76	5	35	30-150	
Benzo[a]pyrene	20.0	14.9	74	7	35	30-150	
Bis(2-chloroethoxy)methane	20.0	12.1	61	9	35	30-150	
Bis(2-chloroethyl)ether	20.0	10.4	52	8	35	30-150	
Bis(2-ethylhexyl) phthalate	20.0	11.8	59	1	35	30-150	
2,2'-oxybis[1-chloropropane]	20.0	8.52	43	3	35	30-150	
4-Bromophenyl phenyl ether	20.0	14.8	74	3	35	30-150	
4-Chlorophenyl phenyl ether	20.0	15.1	76	7	35	30-150	
2-Chloronaphthalene	20.0	12.9	64	5	35	30-150	
Butyl benzyl phthalate	20.0	11.9	60	3	35	30-150	
Chrysene	20.0	13.4	67	0	35	30-150	
Dibenz(a,h)anthracene	20.0	15.5	77	5	35	30-150	
Di-n-butyl phthalate	20.0	13.8	69	6	35	30-150	
Di-n-octyl phthalate	20.0	11.8	59	5	35	10-150	
Diethyl phthalate	20.0	15.4	77	4	35	30-150	
Dimethyl phthalate	20.0	14.8	74	7	35	30-150	
3,3'-Dichlorobenzidine	20.0	13.0	65	2	35	10-150	
2,4-Dinitrotoluene	20.0	14.6	73	4	35	30-150	
2,6-Dinitrotoluene	20.0	14.4	72	7	35	30-150	
2-Chlorophenol	20.0	11.6	58	8	35	30-150	
2,4-Dichlorophenol	20.0	13.8	69	6	35	30-150	
2,4-Dimethylphenol	20.0	14.0	70	4	35	30-150	
2,4-Dinitrophenol	40.0	24.8	62	8	35	10-150	
2-Nitrophenol	20.0	13.2	66	8	35	30-150	
2,4,6-Trichlorophenol	20.0	15.7	78	6	35	30-150	
1,2-Diphenylhydrazine(as Azobenzene)	20.0	13.9	69	3	35	30-150	
1,2,4-Trichlorobenzene	20.0	14.5	72	8	35	30-150	
4-Chloro-3-methylphenol	20.0	12.6	63	3	35	30-150	
4-Nitrophenol	40.0	40.4	101	6	35	30-150	
4,6-Dinitro-2-methylphenol	40.0	27.8	70	3	35	30-150	
Fluoranthene	20.0	14.9	74	6	35	30-150	
Fluorene	20.0	14.4	72	9	35	30-150	
Hexachlorobenzene	20.0	14.6	73	4	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.: 180-34362-1

SDG No.:

Matrix: Water Level: Low Lab File ID: V0708010.D

Lab ID: LCSD 180-110402/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Hexachlorobutadiene	20.0	14.7	73	4	35	30-150	
Hexachlorocyclopentadiene	20.0	17.1	85	6	35	30-150	
Hexachloroethane	20.0	12.0	60	8	35	30-150	
Indeno[1,2,3-cd]pyrene	20.0	15.5	77	3	35	30-150	
Isophorone	20.0	13.7	68	7	35	30-150	
Naphthalene	20.0	12.8	64	10	35	30-150	
Nitrobenzene	20.0	14.1	70	9	35	30-150	
N-Nitrosodi-n-propylamine	20.0	10.8	54	7	35	30-150	
N-Nitrosodimethylamine	20.0	14.6	73	7	35	30-150	
N-Nitrosodiphenylamine	20.0	13.8	69	9	35	30-150	
Phenanthrene	20.0	13.4	67	7	35	30-150	
Pyrene	20.0	11.9	59	0	35	30-150	
Pentachlorophenol	40.0	29.6	74	3	35	10-150	
Phenol	20.0	11.0	55	5	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.: 180-34362-1

SDG No.:

Lab File ID: V0708005.D Lab Sample ID: MB 180-110402/1-A

Matrix: Water Date Extracted: 07/03/2014 07:30

Instrument ID: CH731 Date Analyzed: 07/08/2014 14:57

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-110402/2-A	V0708009.D	07/08/2014 16:51
	LCSD 180-110402/3-A	V0708010.D	07/08/2014 17:20
H108-PZM003	180-34362-1	V0708021.D	07/08/2014 22:34
RW19-PZP000	180-34362-2	V0708022.D	07/08/2014 23:02
RW19-PZM050	180-34362-3	V0708023.D	07/08/2014 23:30
H108-PZM060	180-34362-4	V0708024.D	07/08/2014 23:59
RW19-PZM020	180-34362-5	V0708025.D	07/09/2014 00:27

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Lab File ID: V0605002.D DFTPP Injection Date: 06/05/2014

Instrument ID: CH731 DFTPP Injection Time: 08:07

Analysis Batch No.: 107633

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	53.2	
68	Less than 2.0 % of mass 69	0.8	(1.2)1
69	Mass 69 relative abundance	69.0	
70	Less than 2.0 % of mass 69	0.3	(0.4)1
127	40.0 - 60.0 % of mass 198	52.6	
197	Less than 1.0 % of mass 198	0.6	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.7	
275	10.0 - 30.0 % of mass 198	24.5	
365	Greater than 1.0 % of mass 198	2.7	
441	Present but less than mass 443	8.0	(76.3)3
442	Greater than 40.0 % of mass 198	51.7	
443	17.0 - 23.0 % of mass 442	10.5	(20.2)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 180-107633/3	V0605003.D	06/05/2014	08:25
	IC 180-107633/4	V0605004.D	06/05/2014	08:54
	IC 180-107633/5	V0605005.D	06/05/2014	09:23
	ICIS 180-107633/6	V0605006.D	06/05/2014	09:51
	IC 180-107633/7	V0605007.D	06/05/2014	10:19
	IC 180-107633/8	V0605008.D	06/05/2014	10:48
	IC 180-107633/9	V0605009.D	06/05/2014	11:17
	IC 180-107633/10	V0605010.D	06/05/2014	11:45

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Lab File ID: V0708002.D DFTPP Injection Date: 07/08/2014

Instrument ID: CH731 DFTPP Injection Time: 13:42

Analysis Batch No.: 110717

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	54.1	
68	Less than 2.0 % of mass 69	0.8	(1.1)1
69	Mass 69 relative abundance	69.1	
70	Less than 2.0 % of mass 69	0.0	(0.0)1
127	40.0 - 60.0 % of mass 198	51.9	
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	6.1	
275	10.0 - 30.0 % of mass 198	24.2	
365	Greater than 1.0 % of mass 198	3.0	
441	Present but less than mass 443	7.2	(75.6)3
442	Greater than 40.0 % of mass 198	51.6	
443	17.0 - 23.0 % of mass 442	9.6	(18.6)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 180-110717/3	V0708003.D	07/08/2014	14:00
	MB 180-110402/1-A	V0708005.D	07/08/2014	14:57
	LCS 180-110402/2-A	V0708009.D	07/08/2014	16:51
	LCSD 180-110402/3-A	V0708010.D	07/08/2014	17:20
H108-PZM003	180-34362-1	V0708021.D	07/08/2014	22:34
RW19-PZP000	180-34362-2	V0708022.D	07/08/2014	23:02
RW19-PZM050	180-34362-3	V0708023.D	07/08/2014	23:30
H108-PZM060	180-34362-4	V0708024.D	07/08/2014	23:59
RW19-PZM020	180-34362-5	V0708025.D	07/09/2014	00:27

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Sample No.: CCVIS 180-110717/3 Date Analyzed: 07/08/2014 14:00

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): V0708003.D Heated Purge: (Y/N) N

Calibration ID: 16153

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		121636	6.24	433656	7.44	247506	9.06
UPPER LIMIT		243272	6.74	867312	7.94	495012	9.56
LOWER LIMIT		60818	5.74	216828	6.94	123753	8.56
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-110402/1-A		125905	6.25	447268	7.45	259480	9.06
LCS 180-110402/2-A		130670	6.25	426518	7.46	254372	9.07
LCSD 180-110402/3-A		121681	6.25	391892	7.45	232538	9.06
180-34362-1	H108-PZM003	131138	6.24	421377	7.45	259244	9.06
180-34362-2	RW19-PZP000	150896	6.24	488521	7.44	287458	9.06
180-34362-3	RW19-PZM050	149907	6.24	496452	7.45	285414	9.06
180-34362-4	H108-PZM060	166137	6.25	540650	7.45	308985	9.07
180-34362-5	RW19-PZM020	156255	6.24	492170	7.45	285443	9.06

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.: 180-34362-1

SDG No.:

Sample No.: CCVIS 180-110717/3 Date Analyzed: 07/08/2014 14:00

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): V0708003.D Heated Purge: (Y/N) N

Calibration ID: 16153

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		461674	10.43	547261	13.90	489119	16.81
UPPER LIMIT		923348	10.93	1094522	14.40	978238	17.31
LOWER LIMIT		230837	9.93	273631	13.40	244560	16.31
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-110402/1-A		470885	10.42	518026	13.89	461202	16.79
LCS 180-110402/2-A		498301	10.44	609026	13.91	505262	16.82
LCSD 180-110402/3-A		465088	10.42	595299	13.90	479914	16.79
180-34362-1	H108-PZM003	470578	10.42	664089	13.89	673553	16.79
180-34362-2	RW19-PZP000	500827	10.43	626905	13.89	628625	16.79
180-34362-3	RW19-PZM050	503461	10.42	648341	13.89	638535	16.79
180-34362-4	H108-PZM060	553017	10.43	612410	13.90	579068	16.80
180-34362-5	RW19-PZM020	482831	10.42	600567	13.88	577739	16.78

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.: 180-34362-1

SDG No.:

Client Sample ID: H108-PZM003 | Lab Sample ID: 180-34362-1

Matrix: Water | Lab File ID: V0708021.D

Analysis Method: 8270D LL | Date Collected: 06/26/2014 09:55

Extract. Method: 3520C | Date Extracted: 07/03/2014 07:30

Sample wt/vol: 220(mL) | Date Analyzed: 07/08/2014 22:34

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.: 110717 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		0.23	0.033
208-96-8	Acenaphthylene	0.21	J	0.23	0.024
120-12-7	Anthracene	0.15	J	0.23	0.021
92-87-5	Benzidine	ND		23	5.4
56-55-3	Benzo[a]anthracene	0.21	J	0.23	0.042
205-99-2	Benzo[b]fluoranthene	ND		0.23	0.055
207-08-9	Benzo[k]fluoranthene	ND		0.23	0.034
65-85-0	Benzoic acid	ND		5.7	1.9
191-24-2	Benzo[g,h,i]perylene	ND		0.23	0.033
50-32-8	Benzo[a]pyrene	ND		0.23	0.032
111-91-1	Bis(2-chloroethoxy)methane	ND		1.1	0.15
111-44-4	Bis(2-chloroethyl)ether	ND		1.1	0.036
117-81-7	Bis(2-ethylhexyl) phthalate	11		2.3	0.50
108-60-1	2,2'-oxybis[1-chloropropane]	ND		1.1	0.027
101-55-3	4-Bromophenyl phenyl ether	ND		1.1	0.13
7005-72-3	4-Chlorophenyl phenyl ether	ND		1.1	0.091
91-58-7	2-Chloronaphthalene	ND		0.23	0.035
85-68-7	Butyl benzyl phthalate	0.39	J	1.1	0.24
218-01-9	Chrysene	0.22	J	0.23	0.035
53-70-3	Dibenz(a,h)anthracene	ND		0.23	0.030
84-74-2	Di-n-butyl phthalate	ND		1.1	0.28
117-84-0	Di-n-octyl phthalate	ND		1.1	0.23
84-66-2	Diethyl phthalate	ND		1.1	0.34
131-11-3	Dimethyl phthalate	ND		1.1	0.21
91-94-1	3,3'-Dichlorobenzidine	ND		1.1	0.17
121-14-2	2,4-Dinitrotoluene	ND		1.1	0.24
606-20-2	2,6-Dinitrotoluene	ND		1.1	0.16
95-57-8	2-Chlorophenol	ND		1.1	0.26
120-83-2	2,4-Dichlorophenol	ND		1.1	0.076
105-67-9	2,4-Dimethylphenol	ND		1.1	0.19
51-28-5	2,4-Dinitrophenol	ND		5.7	2.8
88-75-5	2-Nitrophenol	ND		1.1	0.13
88-06-2	2,4,6-Trichlorophenol	ND		1.1	0.34
122-66-7	1,2-Diphenylhydrazine(as Azobenzene)	ND		1.1	0.14

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-34362-1

SDG No.:

Client Sample ID: H108-PZM003 | Lab Sample ID: 180-34362-1

Matrix: Water | Lab File ID: V0708021.D

Analysis Method: 8270D LL | Date Collected: 06/26/2014 09:55

Extract. Method: 3520C | Date Extracted: 07/03/2014 07:30

Sample wt/vol: 220(mL) | Date Analyzed: 07/08/2014 22:34

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.: 110717 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-82-1	1,2,4-Trichlorobenzene	ND		1.1	0.097
59-50-7	4-Chloro-3-methylphenol	ND		1.1	0.19
100-02-7	4-Nitrophenol	ND		5.7	0.91
534-52-1	4,6-Dinitro-2-methylphenol	ND		5.7	1.8
206-44-0	Fluoranthene	0.32		0.23	0.024
86-73-7	Fluorene	ND		0.23	0.027
118-74-1	Hexachlorobenzene	ND		1.1	0.069
87-68-3	Hexachlorobutadiene	ND		1.1	0.11
77-47-4	Hexachlorocyclopentadiene	ND		1.1	0.15
67-72-1	Hexachloroethane	ND		1.1	0.16
193-39-5	Indeno[1,2,3-cd]pyrene	ND		0.23	0.049
78-59-1	Isophorone	ND		1.1	0.084
91-20-3	Naphthalene	ND		0.23	0.026
98-95-3	Nitrobenzene	ND		2.3	0.17
621-64-7	N-Nitrosodi-n-propylamine	ND		1.1	0.057
62-75-9	N-Nitrosodimethylamine	ND		1.1	0.14
86-30-6	N-Nitrosodiphenylamine	ND		1.1	0.14
85-01-8	Phenanthrene	0.20	J	0.23	0.047
129-00-0	Pyrene	0.25		0.23	0.026
87-86-5	Pentachlorophenol	ND		1.1	0.57
108-95-2	Phenol	ND		1.1	0.063

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	83		30-150
321-60-8	2-Fluorobiphenyl	86		30-150
367-12-4	2-Fluorophenol (Surr)	56		30-150
4165-60-0	Nitrobenzene-d5 (Surr)	94		30-150
4165-62-2	Phenol-d5 (Surr)	58		30-150
1718-51-0	Terphenyl-d14 (Surr)	45		10-150

Report Date: 09-Jul-2014 03:32:00 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708021.D
Lims ID: 180-34362-A-1-A Lab Sample ID: 180-34362-1
Client ID: H108-PZM003
Sample Type: Client
Inject. Date: 08-Jul-2014 22:34:30 ALS Bottle#: 20 Worklist Smp#: 21
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0002096-021
Misc. Info.: 180-34362-A-1-A
Operator ID: 003200 Instrument ID: CH731

Method: \\PITCHROM\ChromData\CH731\20140708-2096.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 09-Jul-2014 03:31:39 Calib Date: 27-Jun-2014 09:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20140626-1923.b\V0627010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: piccolinov Date: 09-Jul-2014 03:06:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.240	6.237	0.003	87	131138	8.00	
* 2 Naphthalene-d8	136	7.447	7.444	0.003	97	421377	8.00	
* 3 Acenaphthene-d10	164	9.061	9.063	-0.002	92	259244	8.00	
* 4 Phenanthrene-d10	188	10.423	10.430	-0.007	96	470578	8.00	
* 5 Chrysene-d12	240	13.890	13.903	-0.013	96	664089	8.00	
* 6 Perylene-d12	264	16.791	16.809	-0.018	97	673553	8.00	
$ 7 2-Fluorophenol	112	4.905	4.896	0.009	90	536346	22.2	
$ 8 Phenol-d5	99	5.898	5.895	0.003	81	681328	23.4	
$ 9 Nitrobenzene-d5	82	6.769	6.766	0.003	92	1030753	37.5	
$ 10 2-Fluorobiphenyl	172	8.425	8.427	-0.002	98	1642342	34.5	
$ 11 2,4,6-Tribromophenol	330	9.782	9.784	-0.002	85	224044	33.2	
$ 12 Terphenyl-d14	244	12.165	12.172	-0.007	98	1465534	18.1	
14 N-Nitrosodimethylamine	74		2.374				ND	
26 Phenol	94		5.906				ND	
29 Bis(2-chloroethyl)ether	93		5.980				ND	
30 2-Chlorophenol	128		6.039				ND	
38 2,2'-oxybis[1-chloropropan	45		6.499				ND	
41 N-Nitrosodi-n-propylamine	70		6.621				ND	
45 Hexachloroethane	117		6.734				ND	
46 Nitrobenzene	77		6.782				ND	
48 Isophorone	82		7.006				ND	
49 2-Nitrophenol	139		7.086				ND	
50 2,4-Dimethylphenol	107		7.118				ND	
52 Benzoic acid	122		7.182				ND	
53 Bis(2-chloroethoxy)methane	93		7.198				ND	
54 2,4-Dichlorophenol	162		7.311				ND	
56 1,2,4-Trichlorobenzene	180		7.391				ND	
58 Naphthalene	128		7.466				ND	
62 Hexachlorobutadiene	225		7.583				ND	
67 4-Chloro-3-methylphenol	107		7.936				ND	
72 Hexachlorocyclopentadiene	237		8.251				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
74 2,4,6-Trichlorophenol	196		8.352				ND	
77 2-Chloronaphthalene	162		8.550				ND	
82 Dimethyl phthalate	163		8.780				ND	
84 2,6-Dinitrotoluene	165		8.844				ND	
85 Acenaphthylene	152	8.933	8.935	-0.002	94	23900	0.3717	
87 2,4-Dinitrophenol	184		9.095				ND	
88 Acenaphthene	153		9.095				ND	
89 4-Nitrophenol	109		9.138				ND	
91 2,4-Dinitrotoluene	165		9.212				ND	
98 Diethyl phthalate	149	9.408	9.415	-0.007	70	14807	0.2976	
100 4-Chlorophenyl phenyl ethe	204		9.544				ND	
103 Fluorene	166		9.565				ND	
104 4,6-Dinitro-2-methylphenol	198		9.586				ND	
105 N-Nitrosodiphenylamine	169		9.645				ND	
90 1,2-Diphenylhydrazine	77		9.688				ND	
110 4-Bromophenyl phenyl ether	248		9.992				ND	
112 Hexachlorobenzene	284		10.078				ND	
116 Pentachlorophenol	266		10.249				ND	
121 Phenanthrene	178	10.444	10.452	-0.008	96	25242	0.3567	
122 Anthracene	178	10.492	10.500	-0.008	90	18966	0.2704	
126 Di-n-butyl phthalate	149		10.927				ND	
131 Fluoranthene	202	11.716	11.723	-0.007	95	42198	0.5712	
132 Benzidine	184		11.851				ND	
133 Pyrene	202	12.010	12.022	-0.012	96	45909	0.4405	
138 Butyl benzyl phthalate	149	12.848	12.850	-0.002	84	28548	0.6795	
144 3,3'-Dichlorobenzidine	252		13.807				ND	
145 Bis(2-ethylhexyl) phthalat	149	13.826	13.839	-0.013	95	1159961	19.9	
146 Benzo[a]anthracene	228	13.879	13.881	-0.002	47	35781	0.3623	M
147 Chrysene	228	13.943	13.951	-0.008	19	36472	0.3953	M
150 Di-n-octyl phthalate	149		15.126				ND	
152 Benzo[b]fluoranthene	252		16.013				ND	
153 Benzo[k]fluoranthene	252		16.066				ND	
154 Benzo[a]pyrene	252		16.691				ND	
157 Indeno[1,2,3-cd]pyrene	276		19.005				ND	
158 Dibenz(a,h)anthracene	278		19.037				ND	
159 Benzo[g,h,i]perylene	276		19.597				ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Review Flags
M - Manually Integrated

Reagents:

SVTAPITINTRNi_00005 Amount Added: 1.00 Units: uL Run Reagent

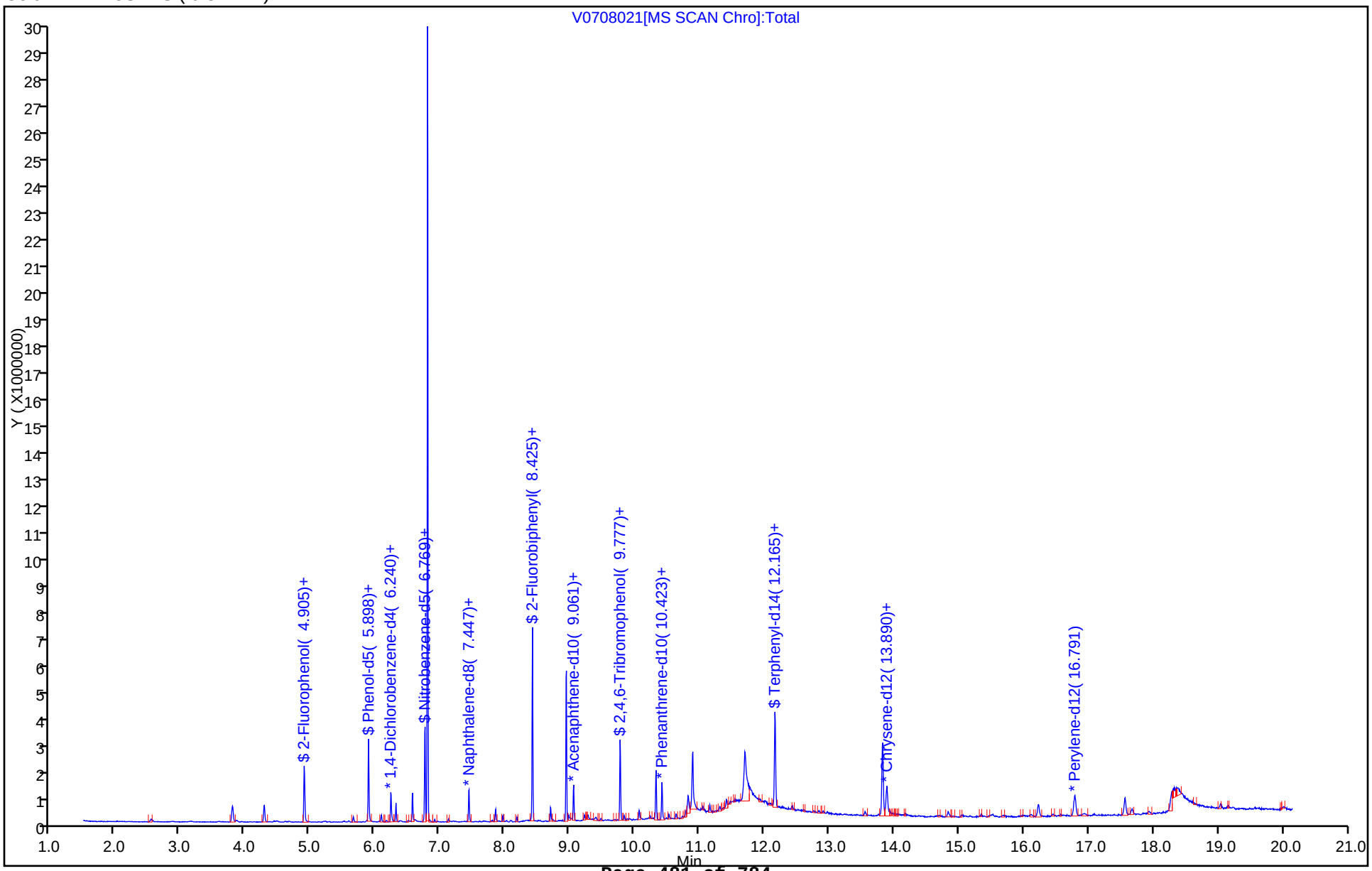
Report Date: 09-Jul-2014 03:32:00 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708021.D

Injection Date:	08-Jul-2014 22:34:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	180-34362-A-1-A	Lab Sample ID:	180-34362-1	Worklist Smp#:	21
Client ID:	H108-PZM003				
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Report Date: 09-Jul-2014 03:32:00 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708021.D

Injection Date: 08-Jul-2014 22:34:30 Instrument ID: CH731

Lims ID: 180-34362-A-1-A Lab Sample ID: 180-34362-1

Client ID: H108-PZM003

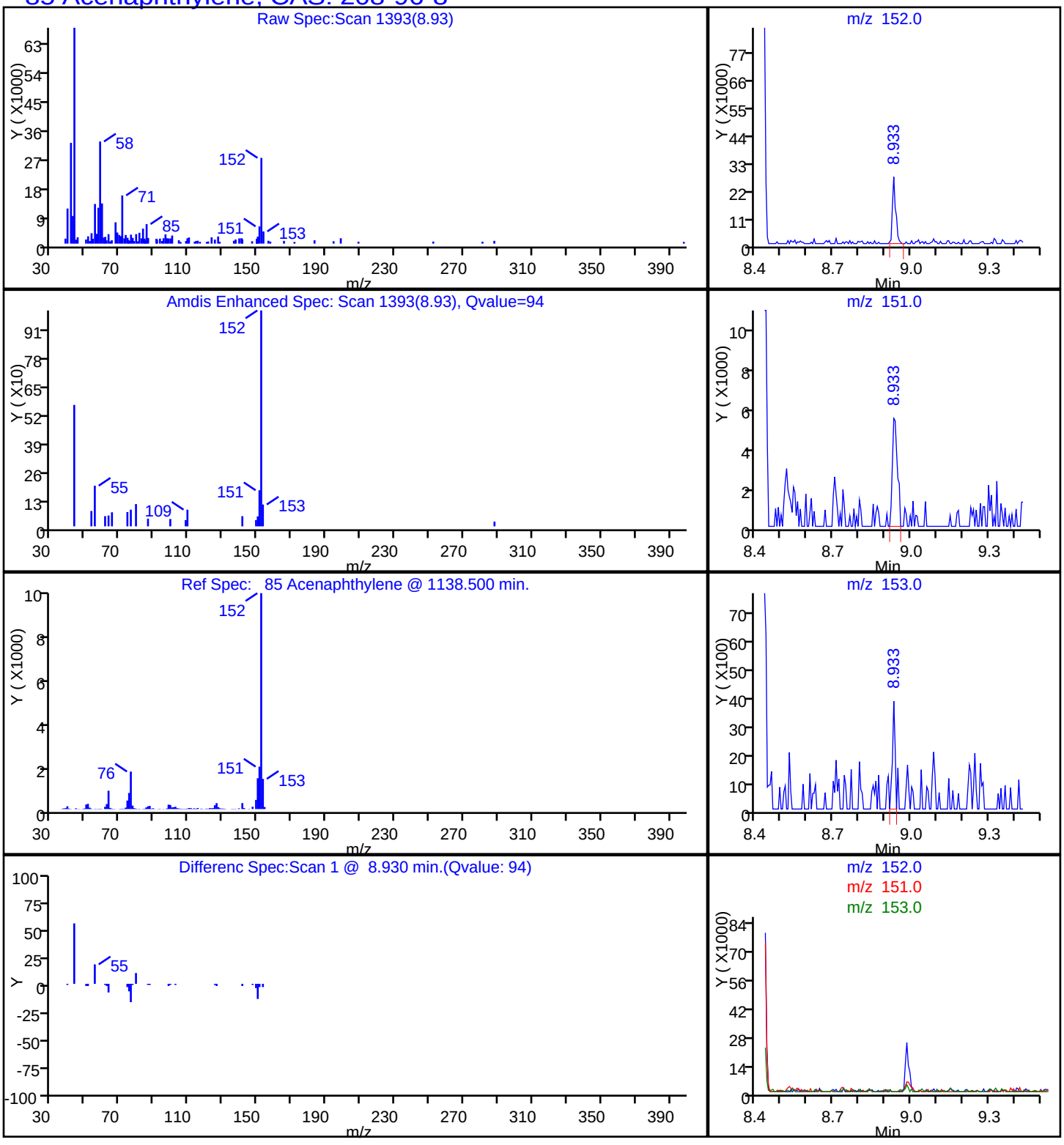
Operator ID: 003200 ALS Bottle#: 20 Worklist Smp#: 21

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

85 Acenaphthylene, CAS: 208-96-8

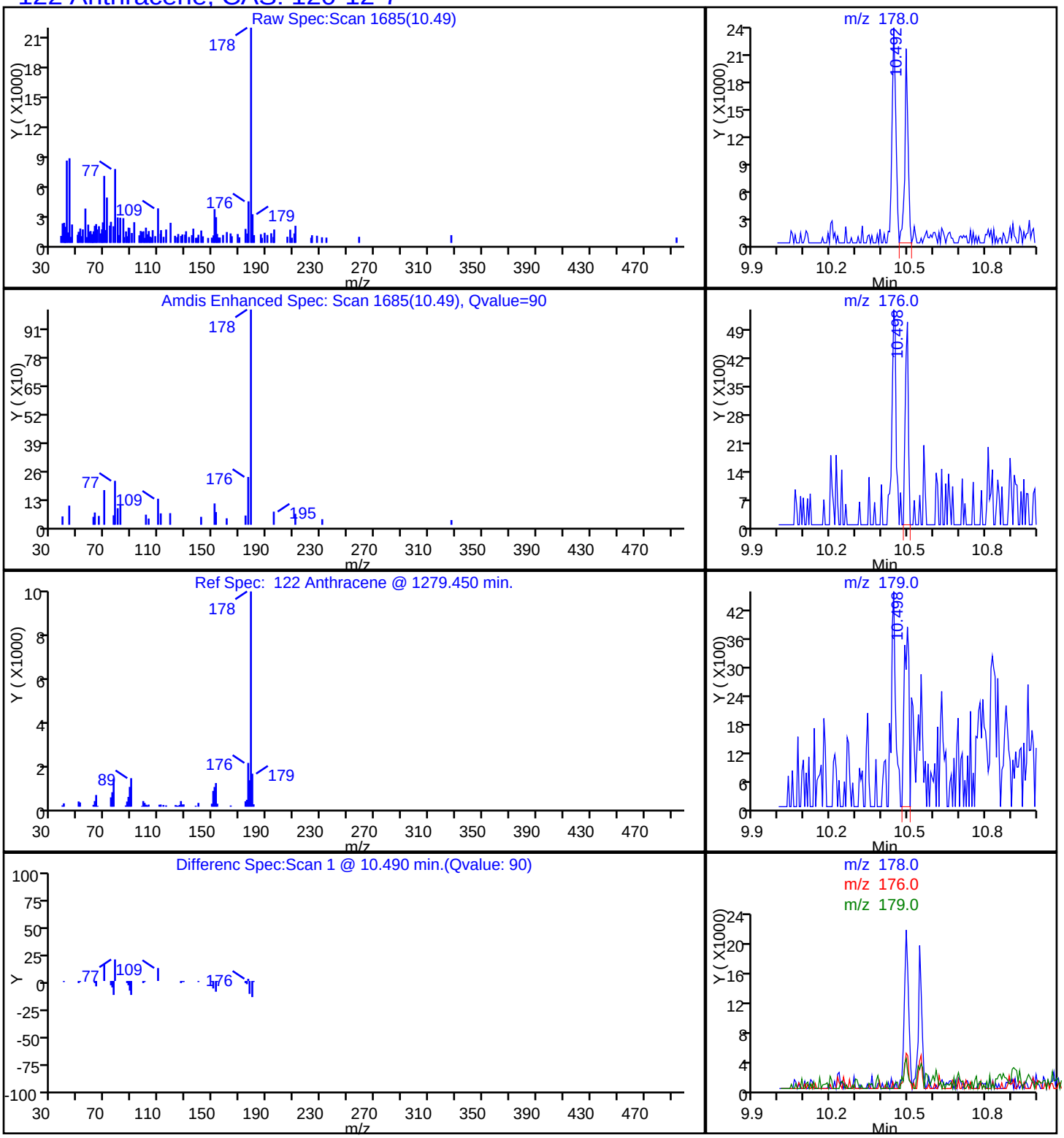


Report Date: 09-Jul-2014 03:32:00 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140708-2096.b\V0708021.D				
Injection Date:	08-Jul-2014 22:34:30	Instrument ID:	CH731		
Lims ID:	180-34362-A-1-A	Lab Sample ID:	180-34362-1		
Client ID:	H108-PZM003				
Operator ID:	003200	ALS Bottle#:	20	Worklist Smp#:	21
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		

122 Anthracene, CAS: 120-12-7

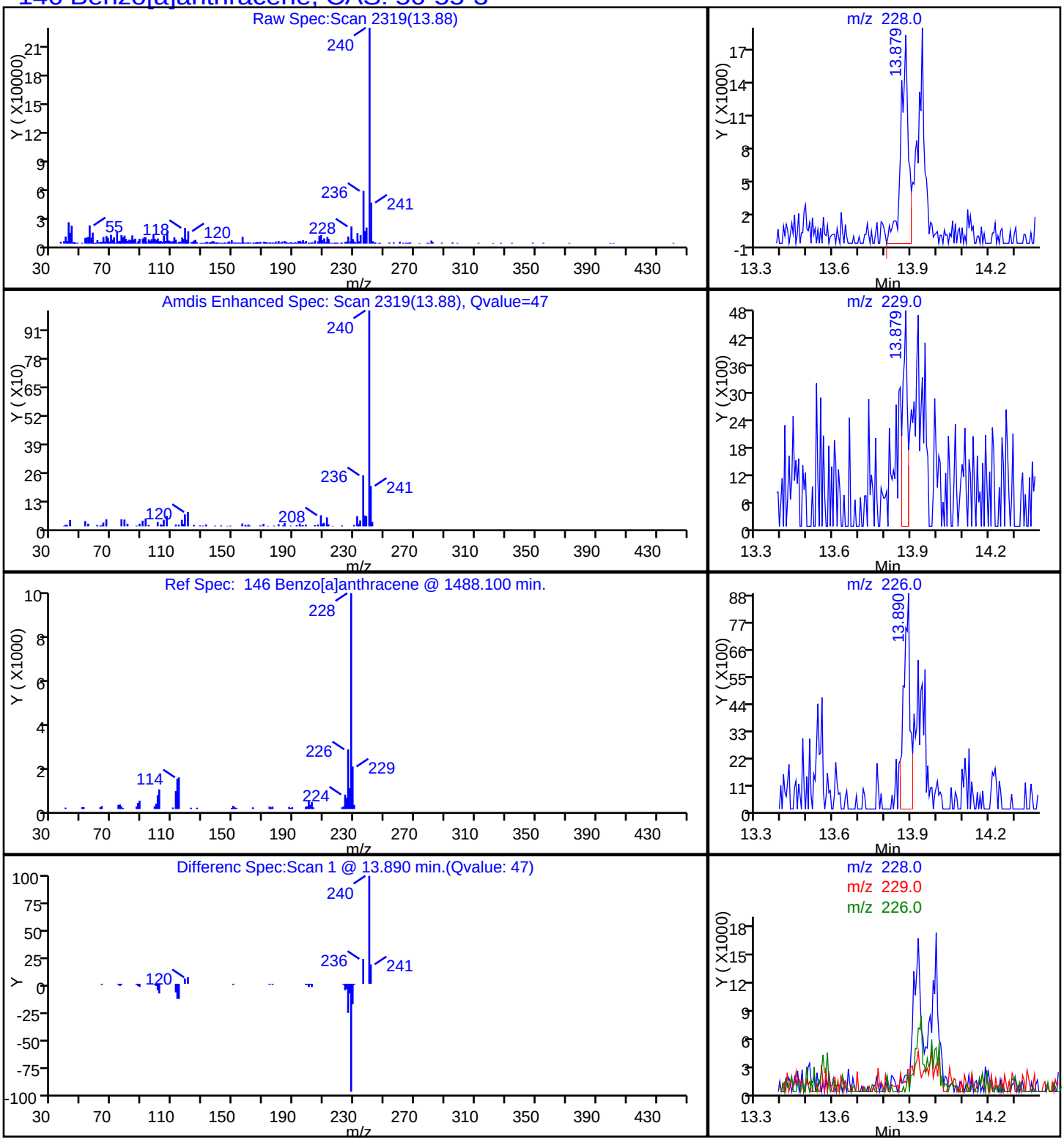


Report Date: 09-Jul-2014 03:32:00 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140708-2096.b\V0708021.D				
Injection Date:	08-Jul-2014 22:34:30	Instrument ID:	CH731		
Lims ID:	180-34362-A-1-A	Lab Sample ID:	180-34362-1		
Client ID:	H108-PZM003				
Operator ID:	003200	ALS Bottle#:	20	Worklist Smp#:	21
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		

146 Benzo[a]anthracene, CAS: 56-55-3



Report Date: 09-Jul-2014 03:32:00 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708021.D

Injection Date: 08-Jul-2014 22:34:30 Instrument ID: CH731

Lims ID: 180-34362-A-1-A Lab Sample ID: 180-34362-1

Client ID: H108-PZM003

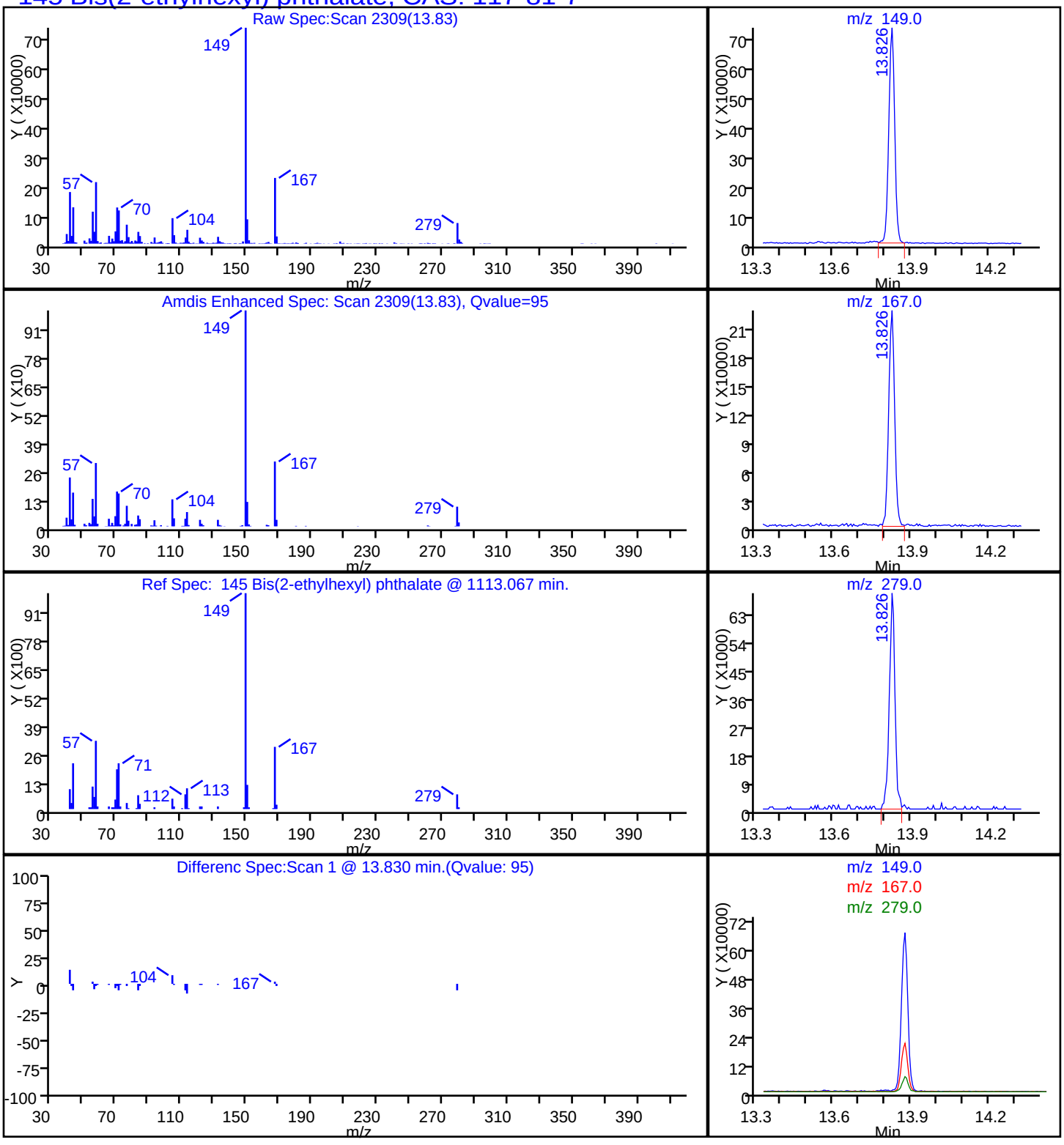
Operator ID: 003200 ALS Bottle#: 20 Worklist Smp#: 21

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

145 Bis(2-ethylhexyl) phthalate, CAS: 117-81-7

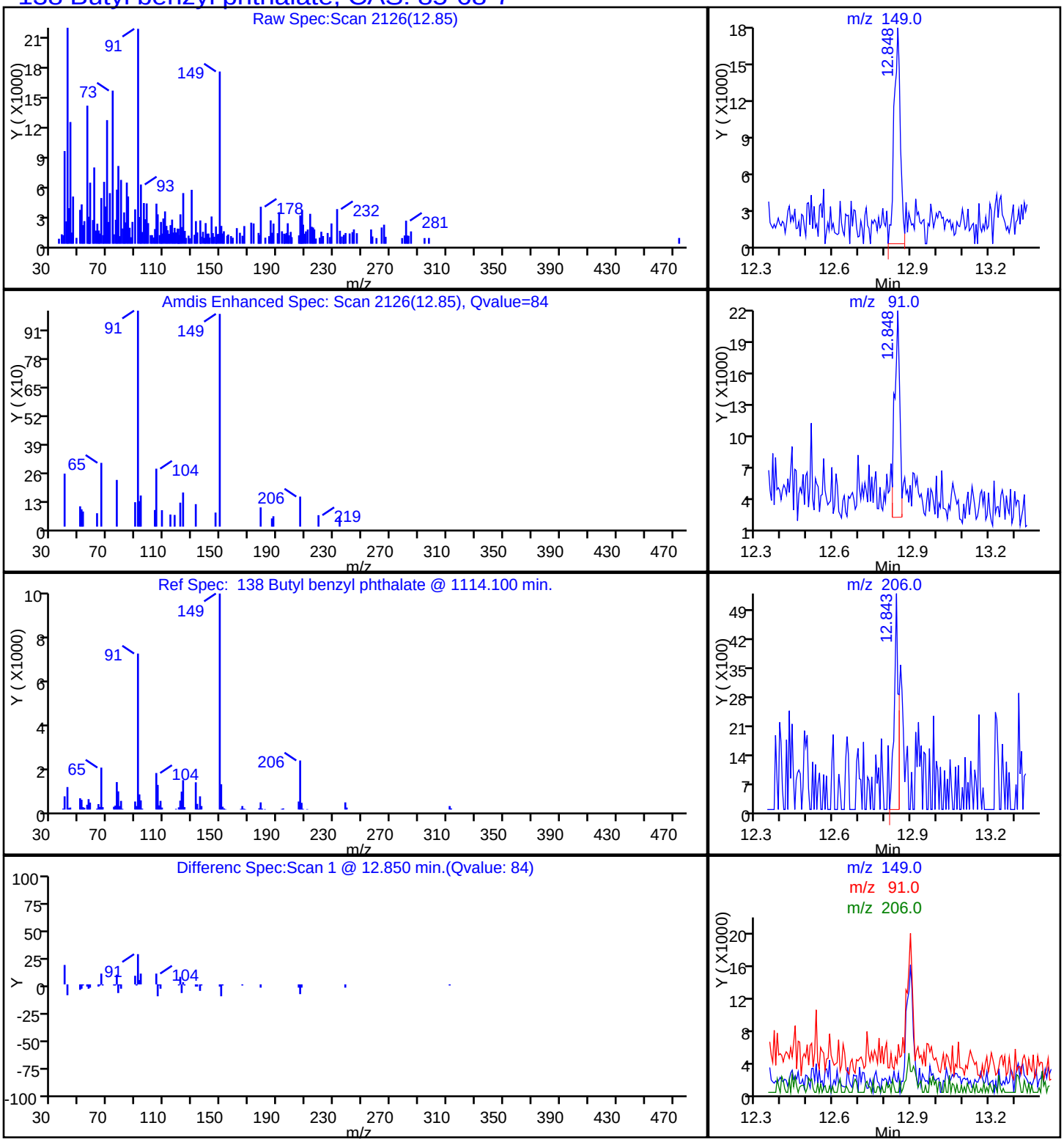


Report Date: 09-Jul-2014 03:32:00 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140708-2096.b\V0708021.D				
Injection Date:	08-Jul-2014 22:34:30	Instrument ID:	CH731		
Lims ID:	180-34362-A-1-A	Lab Sample ID:	180-34362-1		
Client ID:	H108-PZM003				
Operator ID:	003200	ALS Bottle#:	20	Worklist Smp#:	21
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		

138 Butyl benzyl phthalate, CAS: 85-68-7



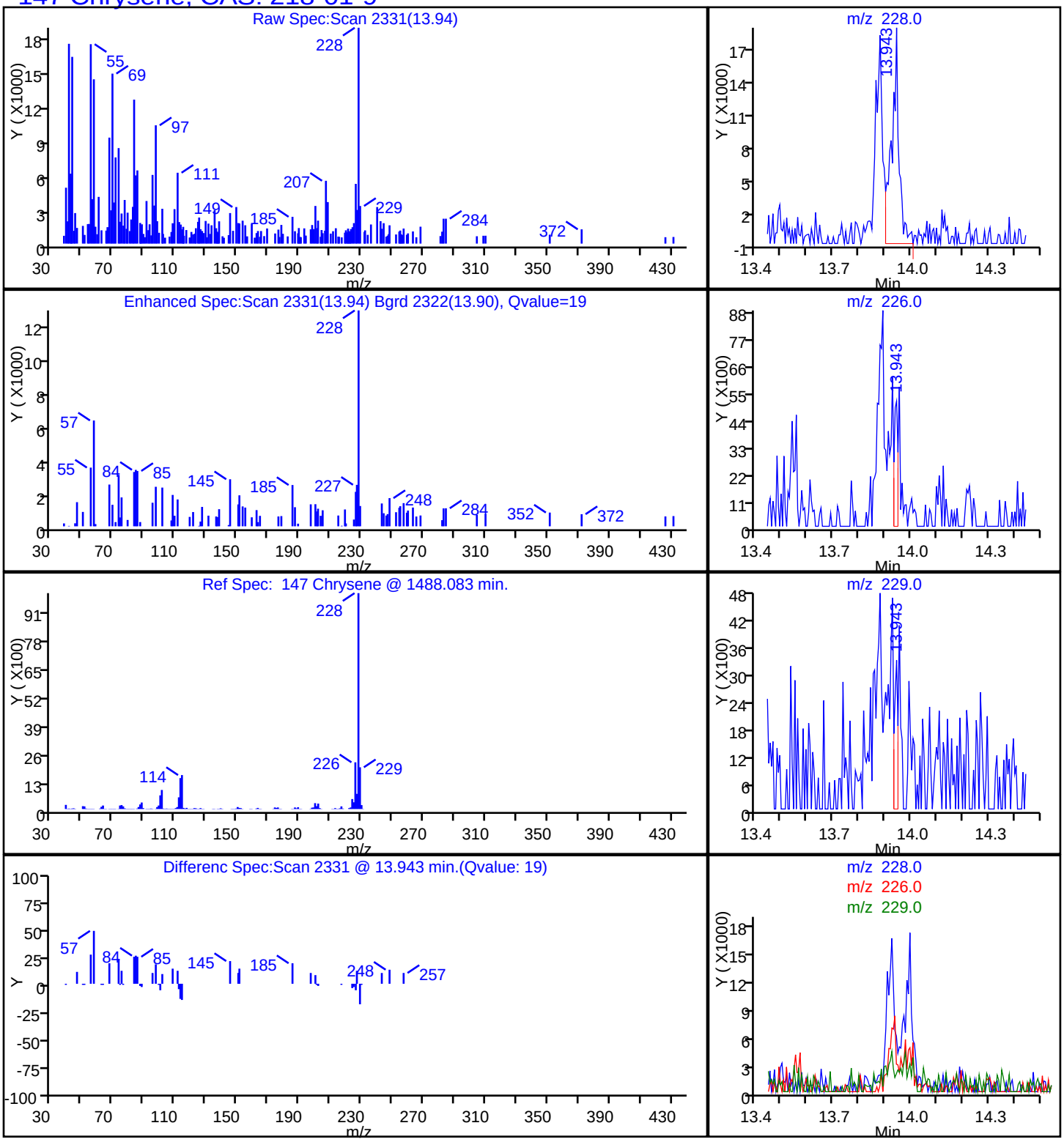
Report Date: 09-Jul-2014 03:32:01 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708021.D

Injection Date:	08-Jul-2014 22:34:30	Instrument ID:	CH731		
Lims ID:	180-34362-A-1-A	Lab Sample ID:	180-34362-1		
Client ID:	H108-PZM003				
Operator ID:	003200	ALS Bottle#:	20	Worklist Smp#:	21
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		

147 Chrysene, CAS: 218-01-9



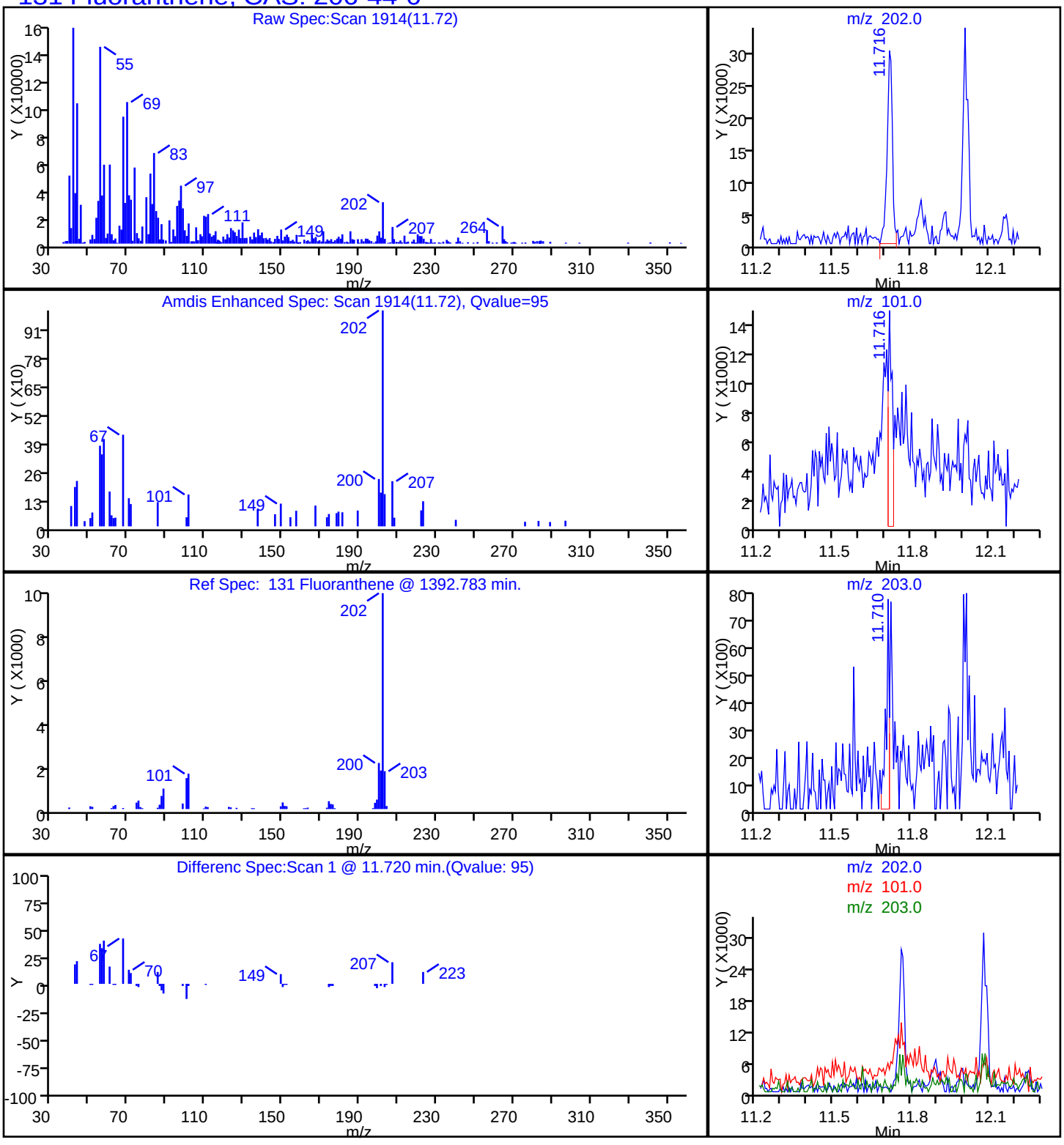
Report Date: 09-Jul-2014 03:32:00 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708021.D

Injection Date:	08-Jul-2014 22:34:30	Instrument ID:	CH731		
Lims ID:	180-34362-A-1-A	Lab Sample ID:	180-34362-1		
Client ID:	H108-PZM003				
Operator ID:	003200	ALS Bottle#:	20	Worklist Smp#:	21
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		

131 Fluoranthene, CAS: 206-44-0



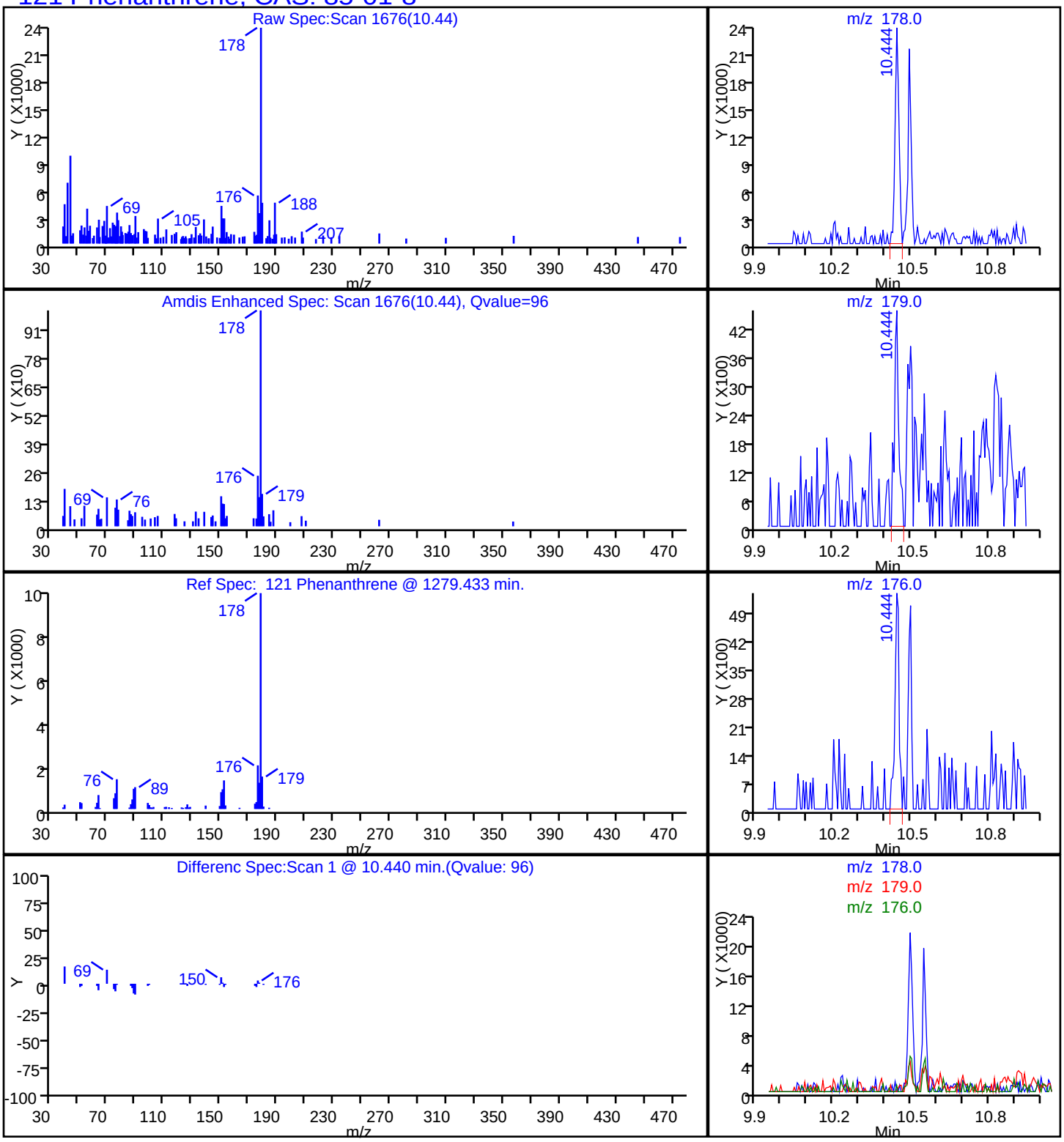
Report Date: 09-Jul-2014 03:32:00 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708021.D

Injection Date:	08-Jul-2014 22:34:30	Instrument ID:	CH731		
Lims ID:	180-34362-A-1-A	Lab Sample ID:	180-34362-1		
Client ID:	H108-PZM003				
Operator ID:	003200	ALS Bottle#:	20	Worklist Smp#:	21
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		

121 Phenanthrene, CAS: 85-01-8



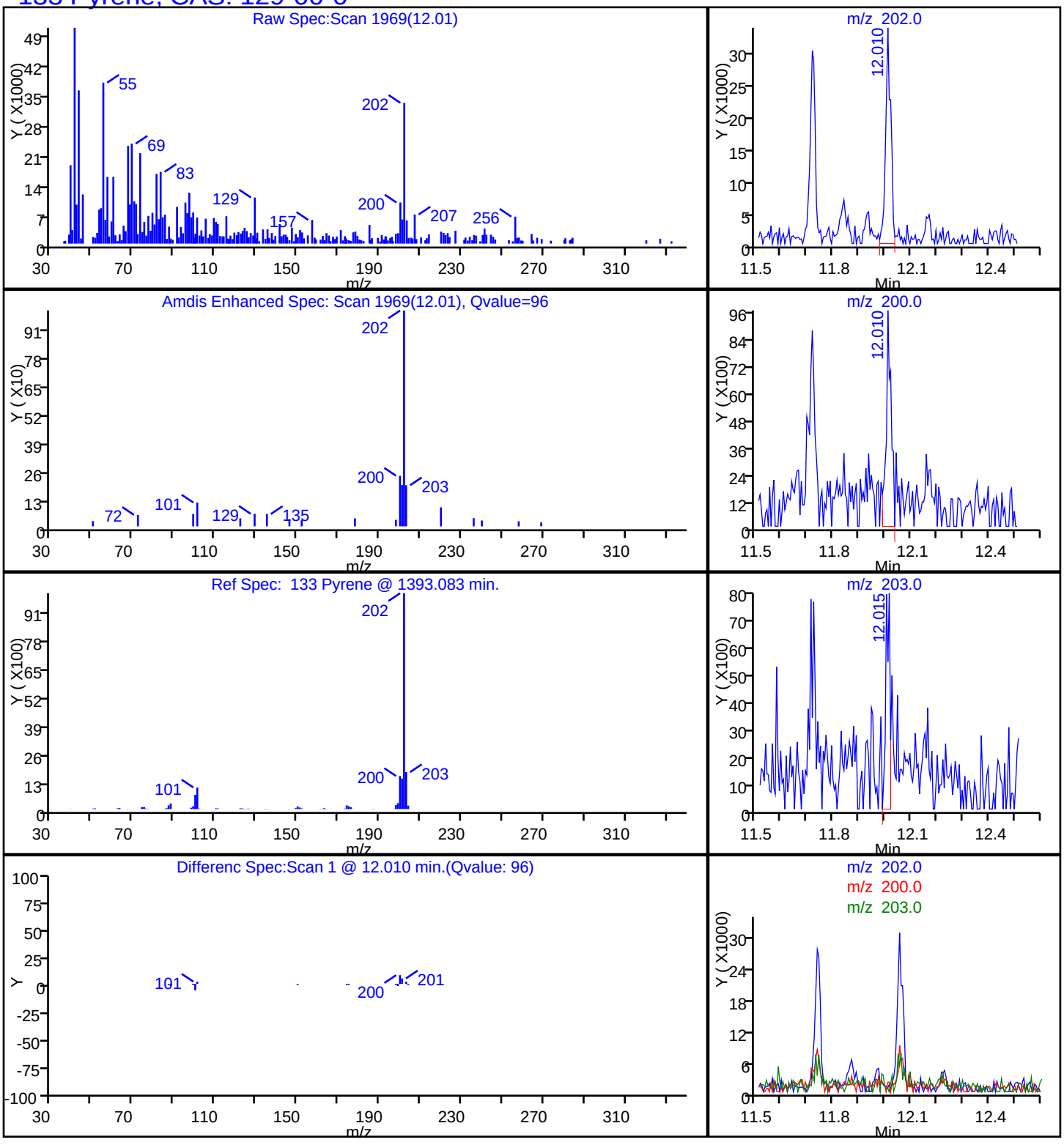
Report Date: 09-Jul-2014 03:32:00 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708021.D

Injection Date:	08-Jul-2014 22:34:30	Instrument ID:	CH731		
Lims ID:	180-34362-A-1-A	Lab Sample ID:	180-34362-1		
Client ID:	H108-PZM003				
Operator ID:	003200	ALS Bottle#:	20	Worklist Smp#:	21
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		

133 Pyrene, CAS: 129-00-0



Manual Integration/User Assign Peak Report

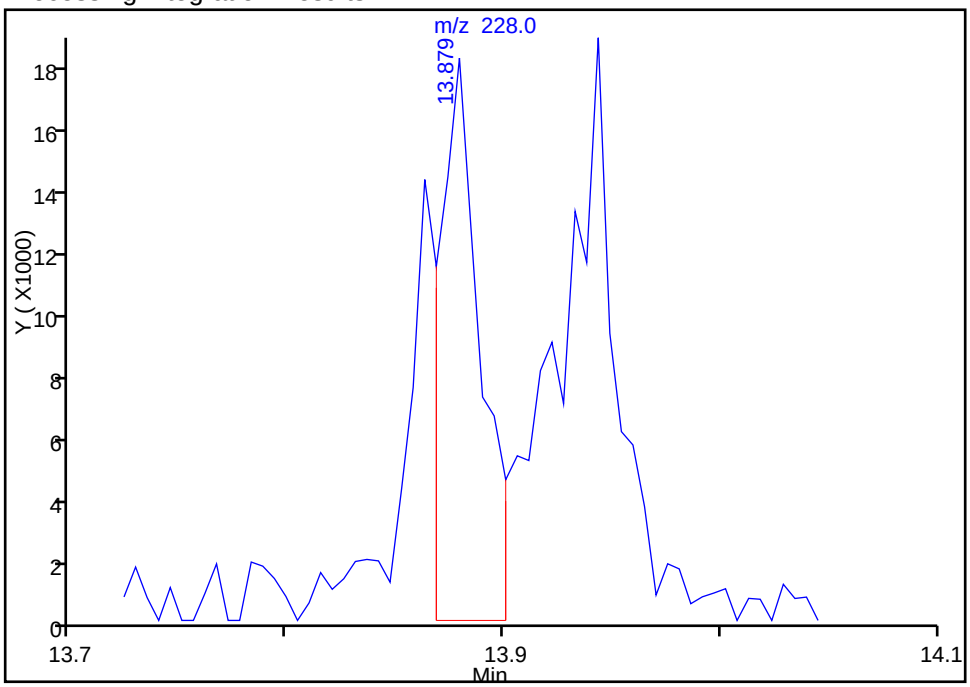
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140708-2096.b\V0708021.D				
Injection Date:	08-Jul-2014 22:34:30	Instrument ID:	CH731		
Lims ID:	180-34362-A-1-A	Lab Sample ID:	180-34362-1		
Client ID:	H108-PZM003				
Operator ID:	003200	ALS Bottle#:	20	Worklist Smp#:	21
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		

146 Benzo[a]anthracene, CAS: 56-55-3

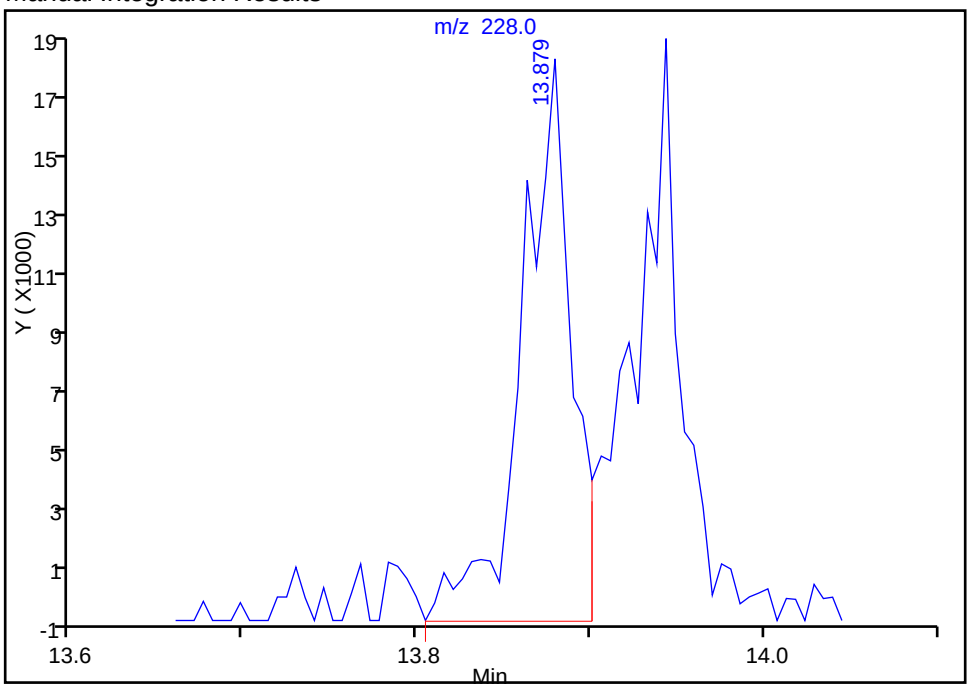
Processing Integration Results

RT: 13.88
Response: 23745
Amount: 0.240447



Manual Integration Results

RT: 13.88
Response: 35781
Amount: 0.362326



Reviewer: piccolinov, 09-Jul-2014 03:06:26
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

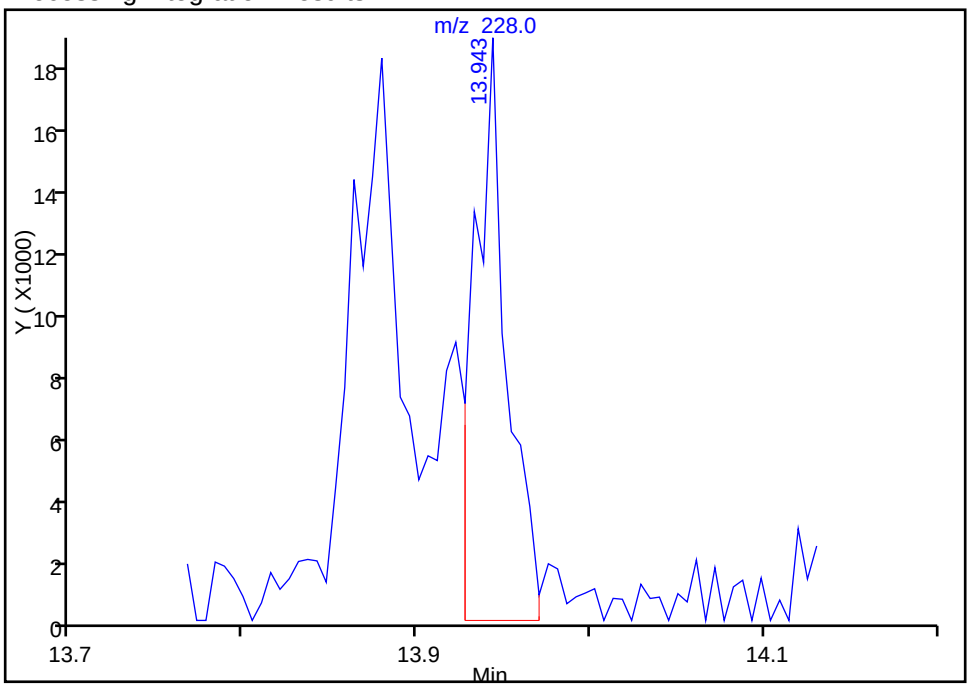
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140708-2096.b\V0708021.D				
Injection Date:	08-Jul-2014 22:34:30	Instrument ID:	CH731		
Lims ID:	180-34362-A-1-A	Lab Sample ID:	180-34362-1		
Client ID:	H108-PZM003				
Operator ID:	003200	ALS Bottle#:	20	Worklist Smp#:	21
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		

147 Chrysene, CAS: 218-01-9

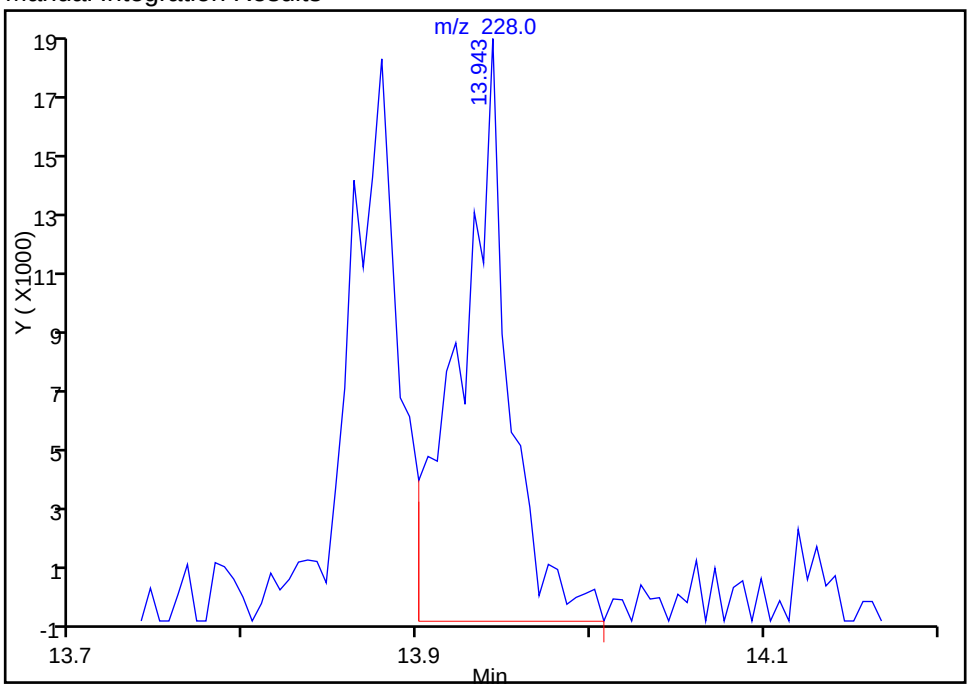
Processing Integration Results

RT: 13.94
Response: 24123
Amount: 0.261427



Manual Integration Results

RT: 13.94
Response: 36472
Amount: 0.395256



Reviewer: piccolinov, 09-Jul-2014 03:06:26
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-34362-1

SDG No.:

Client Sample ID: RW19-PZP000 | Lab Sample ID: 180-34362-2

Matrix: Water | Lab File ID: V0708022.D

Analysis Method: 8270D LL | Date Collected: 06/26/2014 10:10

Extract. Method: 3520C | Date Extracted: 07/03/2014 07:30

Sample wt/vol: 260(mL) | Date Analyzed: 07/08/2014 23:02

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.: 110717 | 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	0.093	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	2.2		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	0.37	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	0.30	J	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.: 180-34362-1

SDG No.:

Client Sample ID: RW19-PZP000 | Lab Sample ID: 180-34362-2

Matrix: Water | Lab File ID: V0708022.D

Analysis Method: 8270D LL | Date Collected: 06/26/2014 10:10

Extract. Method: 3520C | Date Extracted: 07/03/2014 07:30

Sample wt/vol: 260(mL) | Date Analyzed: 07/08/2014 23:02

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.: 110717 | 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	0.15	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)	85		30-150
321-60-8	2-Fluorobiphenyl	80		30-150
367-12-4	2-Fluorophenol (Surr)	57		30-150
4165-60-0	Nitrobenzene-d5 (Surr)	85		30-150
4165-62-2	Phenol-d5 (Surr)	60		30-150
1718-51-0	Terphenyl-d14 (Surr)	89		10-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708022.D
Lims ID: 180-34362-A-2-A Lab Sample ID: 180-34362-2
Client ID: RW19-PZP000
Sample Type: Client
Inject. Date: 08-Jul-2014 23:02:30 ALS Bottle#: 21 Worklist Smp#: 22
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0002096-022
Misc. Info.: 180-34362-A-2-A
Operator ID: 003200 Instrument ID: CH731

Method: \\PITCHROM\ChromData\CH731\20140708-2096.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 09-Jul-2014 03:31:39 Calib Date: 27-Jun-2014 09:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20140626-1923.b\V0627010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: piccolinov Date: 09-Jul-2014 03:07:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.242	6.237	0.005	87	150896	8.00	
* 2 Naphthalene-d8	136	7.444	7.444	0.000	97	488521	8.00	
* 3 Acenaphthene-d10	164	9.058	9.063	-0.005	92	287458	8.00	
* 4 Phenanthrene-d10	188	10.425	10.430	-0.005	96	500827	8.00	
* 5 Chrysene-d12	240	13.892	13.903	-0.011	96	626905	8.00	
* 6 Perylene-d12	264	16.788	16.809	-0.021	97	628625	8.00	
$ 7 2-Fluorophenol	112	4.907	4.896	0.011	91	634296	22.8	
$ 8 Phenol-d5	99	5.900	5.895	0.005	85	809147	24.1	
$ 9 Nitrobenzene-d5	82	6.766	6.766	0.000	92	1080280	33.9	
$ 10 2-Fluorobiphenyl	172	8.427	8.427	0.000	98	1695473	32.2	
$ 11 2,4,6-Tribromophenol	330	9.779	9.784	-0.005	80	243315	33.8	
$ 12 Terphenyl-d14	244	12.167	12.172	-0.005	98	2736881	35.7	
14 N-Nitrosodimethylamine	74		2.374				ND	
26 Phenol	94		5.906				ND	
29 Bis(2-chloroethyl)ether	93		5.980				ND	
30 2-Chlorophenol	128		6.039				ND	
38 2,2'-oxybis[1-chloropropan	45		6.499				ND	
41 N-Nitrosodi-n-propylamine	70		6.621				ND	
45 Hexachloroethane	117		6.734				ND	
46 Nitrobenzene	77		6.782				ND	
48 Isophorone	82		7.006				ND	
49 2-Nitrophenol	139		7.086				ND	
50 2,4-Dimethylphenol	107		7.118				ND	
52 Benzoic acid	122		7.182				ND	
53 Bis(2-chloroethoxy)methane	93		7.198				ND	
54 2,4-Dichlorophenol	162		7.311				ND	
56 1,2,4-Trichlorobenzene	180		7.391				ND	
58 Naphthalene	128		7.466				ND	
62 Hexachlorobutadiene	225		7.583				ND	
67 4-Chloro-3-methylphenol	107		7.936				ND	
72 Hexachlorocyclopentadiene	237		8.251				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
74 2,4,6-Trichlorophenol	196		8.352				ND	
77 2-Chloronaphthalene	162		8.550				ND	
82 Dimethyl phthalate	163		8.780				ND	
84 2,6-Dinitrotoluene	165		8.844				ND	
85 Acenaphthylene	152		8.935				ND	
87 2,4-Dinitrophenol	184		9.095				ND	
88 Acenaphthene	153		9.095				ND	
89 4-Nitrophenol	109		9.138				ND	
91 2,4-Dinitrotoluene	165		9.212				ND	
98 Diethyl phthalate	149	9.410	9.415	-0.005	94	25573	0.4636	
100 4-Chlorophenyl phenyl ethe	204		9.544				ND	
103 Fluorene	166		9.565				ND	
104 4,6-Dinitro-2-methylphenol	198		9.586				ND	
105 N-Nitrosodiphenylamine	169		9.645				ND	
90 1,2-Diphenylhydrazine	77		9.688				ND	
110 4-Bromophenyl phenyl ether	248		9.992				ND	
112 Hexachlorobenzene	284		10.078				ND	
116 Pentachlorophenol	266		10.249				ND	
121 Phenanthrene	178	10.447	10.452	-0.005	87	23421	0.3110	
122 Anthracene	178	10.489	10.500	-0.011	92	14501	0.1942	
126 Di-n-butyl phthalate	149	10.922	10.927	-0.005	96	50202	0.6241	
131 Fluoranthene	202		11.723				ND	
132 Benzidine	184		11.851				ND	
133 Pyrene	202		12.022				ND	
138 Butyl benzyl phthalate	149	12.845	12.850	-0.005	88	30364	0.7656	
144 3,3'-Dichlorobenzidine	252		13.807				ND	
145 Bis(2-ethylhexyl) phthalat	149	13.823	13.839	-0.016	95	247246	4.48	
146 Benzo[a]anthracene	228		13.881				ND	
147 Chrysene	228		13.951				ND	
150 Di-n-octyl phthalate	149		15.126				ND	
152 Benzo[b]fluoranthene	252		16.013				ND	
153 Benzo[k]fluoranthene	252		16.066				ND	
154 Benzo[a]pyrene	252		16.691				ND	
157 Indeno[1,2,3-cd]pyrene	276		19.005				ND	
158 Dibenz(a,h)anthracene	278		19.037				ND	
159 Benzo[g,h,i]perylene	276		19.597				ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

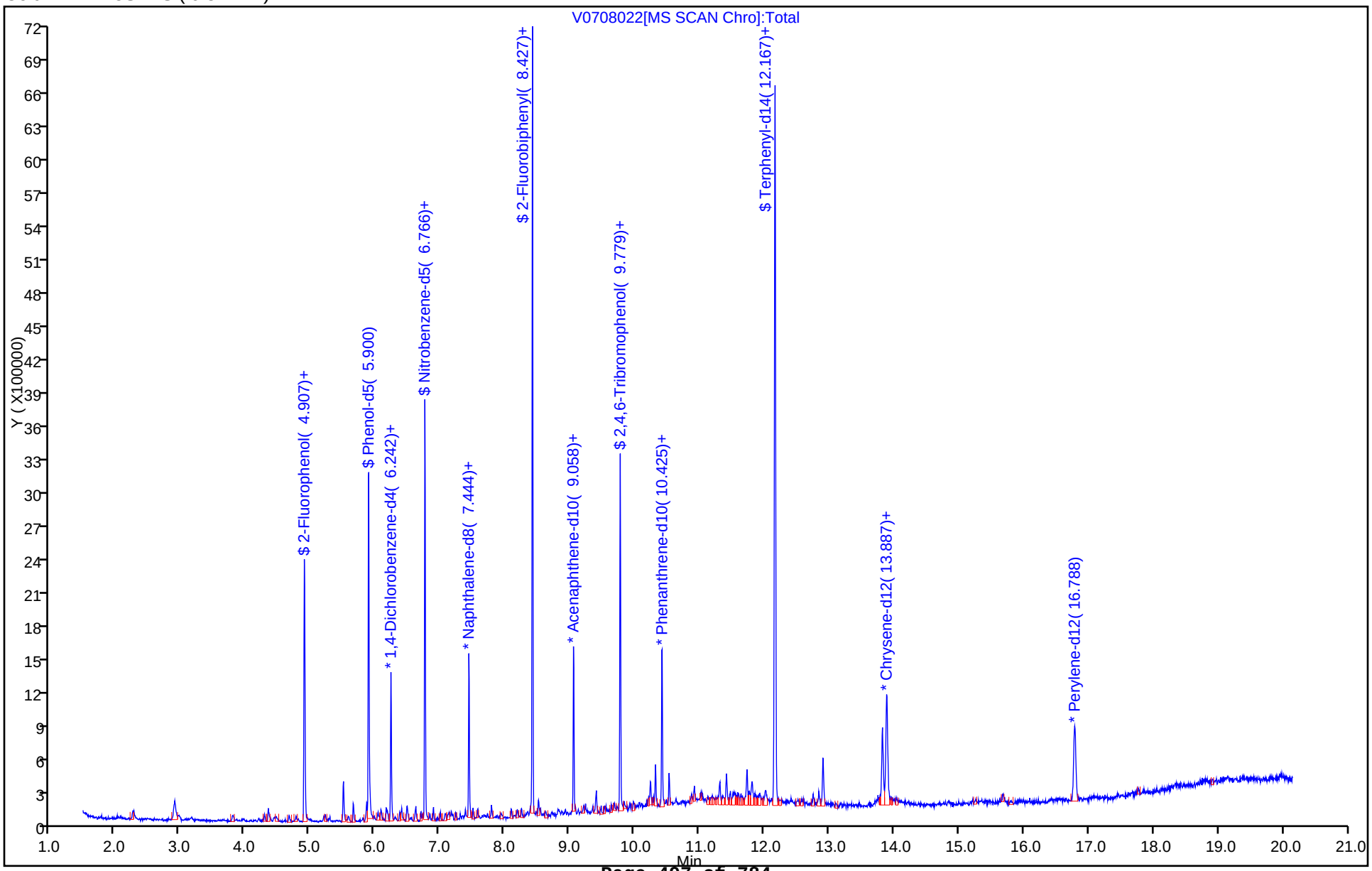
SVTAPITINTRNi_00005 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 09-Jul-2014 03:32:03 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140708-2096.b\V0708022.D				
Injection Date:	08-Jul-2014 23:02:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	180-34362-A-2-A	Lab Sample ID:	180-34362-2	Worklist Smp#:	22
Client ID:	RW19-PZP000				
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



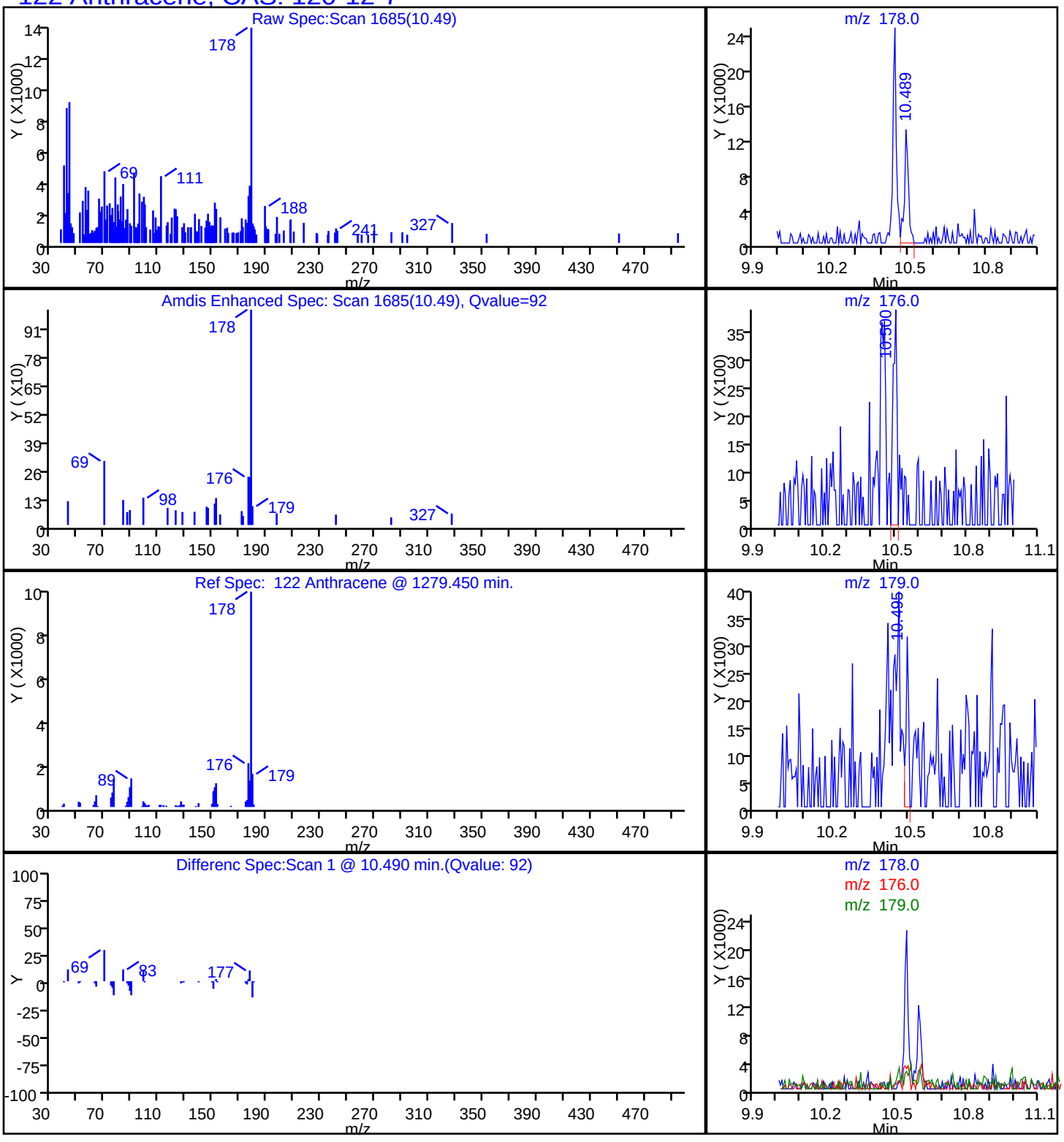
Report Date: 09-Jul-2014 03:32:04 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708022.D

Injection Date:	08-Jul-2014 23:02:30	Instrument ID:	CH731		
Lims ID:	180-34362-A-2-A	Lab Sample ID:	180-34362-2		
Client ID:	RW19-PZP000				
Operator ID:	003200	ALS Bottle#:	21	Worklist Smp#:	22
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		

122 Anthracene, CAS: 120-12-7

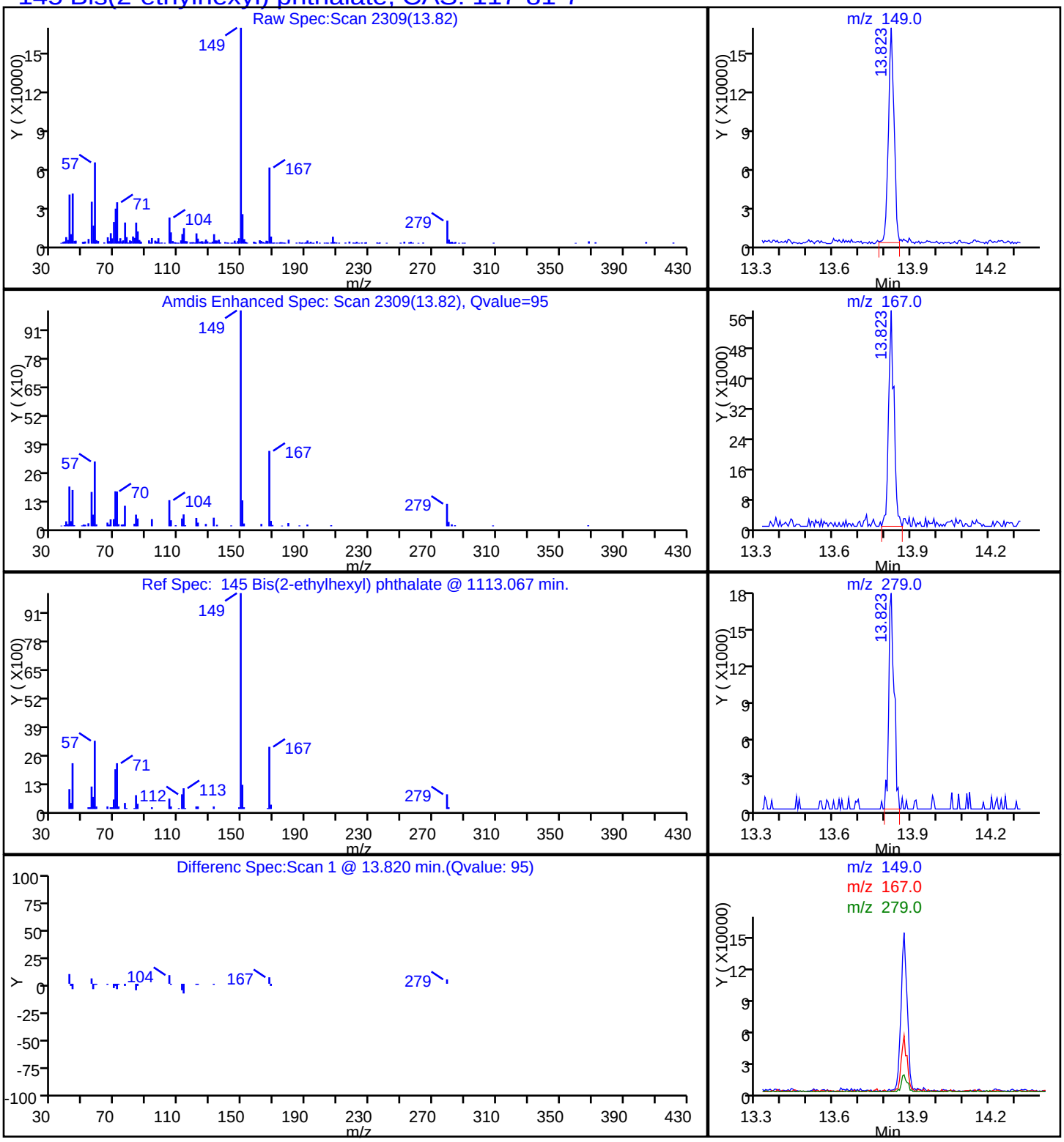


Report Date: 09-Jul-2014 03:32:04 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140708-2096.b\V0708022.D				
Injection Date:	08-Jul-2014 23:02:30	Instrument ID:	CH731		
Lims ID:	180-34362-A-2-A	Lab Sample ID:	180-34362-2		
Client ID:	RW19-PZP000				
Operator ID:	003200	ALS Bottle#:	21	Worklist Smp#:	22
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		

145 Bis(2-ethylhexyl) phthalate, CAS: 117-81-7



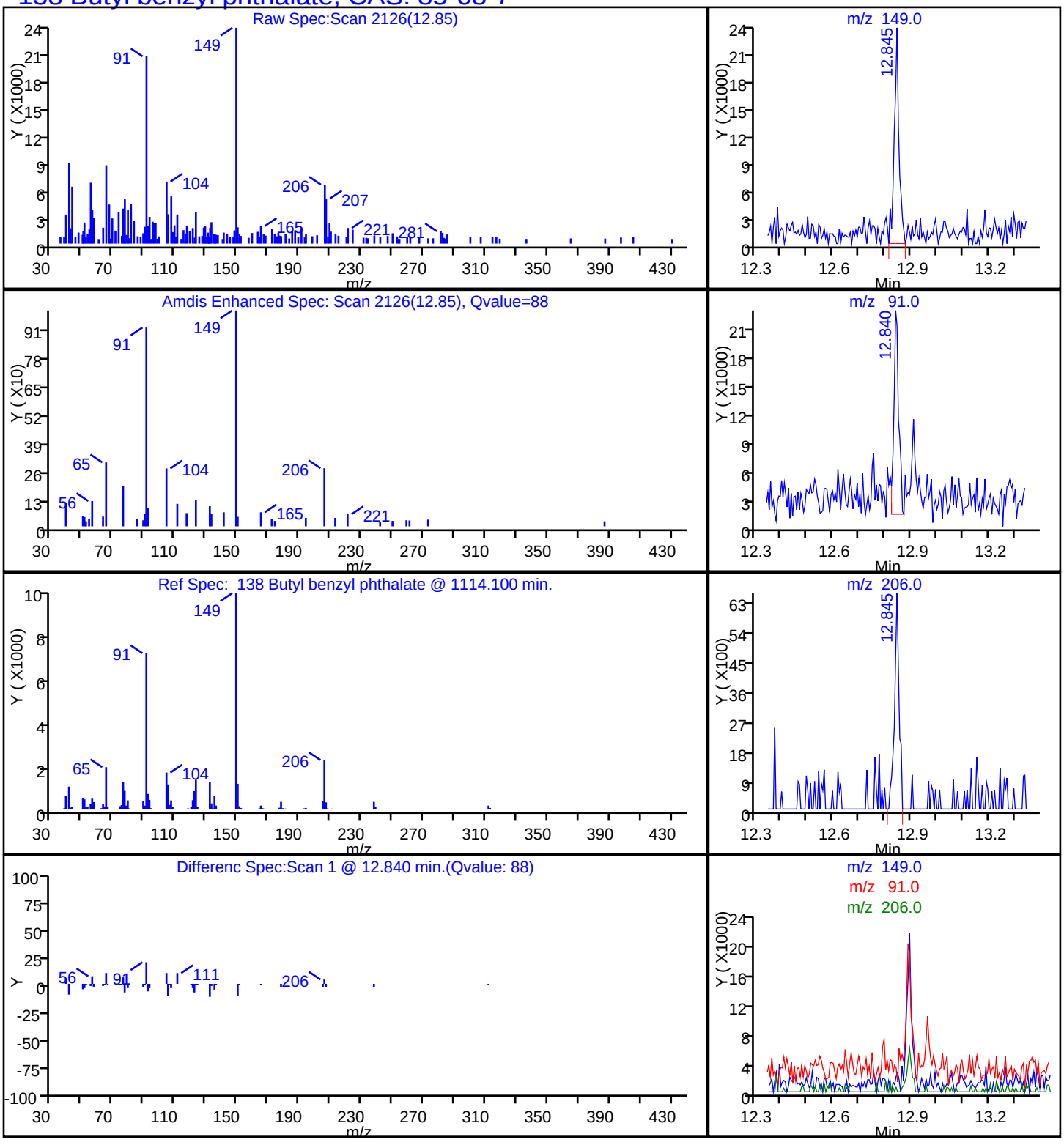
Report Date: 09-Jul-2014 03:32:04 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708022.D

Injection Date:	08-Jul-2014 23:02:30	Instrument ID:	CH731		
Lims ID:	180-34362-A-2-A	Lab Sample ID:	180-34362-2		
Client ID:	RW19-PZP000				
Operator ID:	003200	ALS Bottle#:	21	Worklist Smp#:	22
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		

138 Butyl benzyl phthalate, CAS: 85-68-7



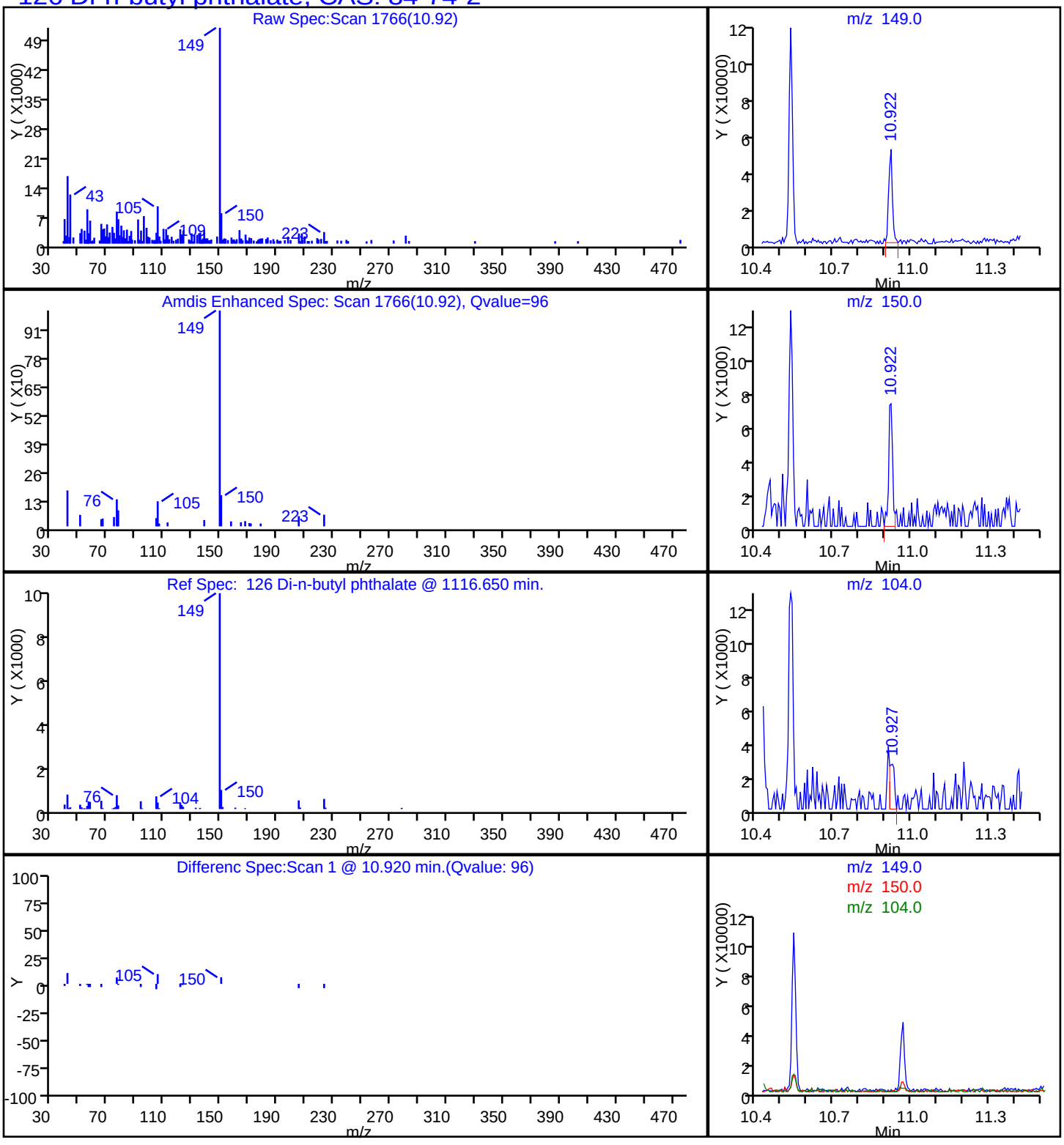
Report Date: 09-Jul-2014 03:32:04 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708022.D

Injection Date:	08-Jul-2014 23:02:30	Instrument ID:	CH731		
Lims ID:	180-34362-A-2-A	Lab Sample ID:	180-34362-2		
Client ID:	RW19-PZP000				
Operator ID:	003200	ALS Bottle#:	21	Worklist Smp#:	22
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 Di-n-butyl phthalate, CAS: 84-74-2



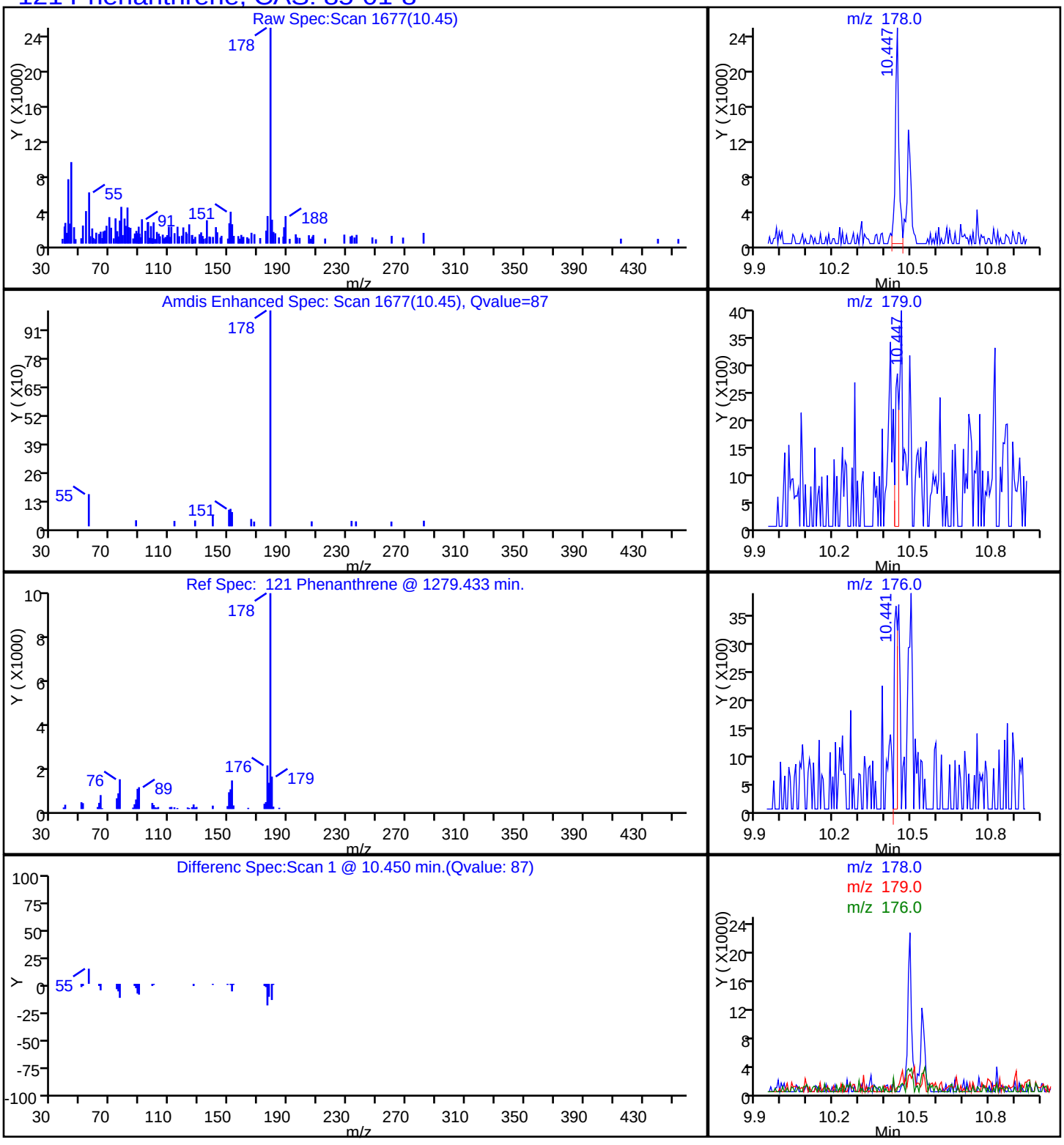
Report Date: 09-Jul-2014 03:32:04 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708022.D

Injection Date:	08-Jul-2014 23:02:30	Instrument ID:	CH731		
Lims ID:	180-34362-A-2-A	Lab Sample ID:	180-34362-2		
Client ID:	RW19-PZP000				
Operator ID:	003200	ALS Bottle#:	21	Worklist Smp#:	22
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		

121 Phenanthrene, CAS: 85-01-8



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-34362-1

SDG No.:

Client Sample ID: RW19-PZM050 | Lab Sample ID: 180-34362-3

Matrix: Water | Lab File ID: V0708023.D

Analysis Method: 8270D LL | Date Collected: 06/26/2014 11:05

Extract. Method: 3520C | Date Extracted: 07/03/2014 07:30

Sample wt/vol: 250(mL) | Date Analyzed: 07/08/2014 23:30

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.: 110717 | 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	3.2		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	2.5		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	1.4		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.: 180-34362-1

SDG No.:

Client Sample ID: RW19-PZM050 | Lab Sample ID: 180-34362-3

Matrix: Water | Lab File ID: V0708023.D

Analysis Method: 8270D LL | Date Collected: 06/26/2014 11:05

Extract. Method: 3520C | Date Extracted: 07/03/2014 07:30

Sample wt/vol: 250(mL) | Date Analyzed: 07/08/2014 23:30

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.: 110717 | 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)	92		30-150
321-60-8	2-Fluorobiphenyl	88		30-150
367-12-4	2-Fluorophenol (Surr)	68		30-150
4165-60-0	Nitrobenzene-d5 (Surr)	93		30-150
4165-62-2	Phenol-d5 (Surr)	70		30-150
1718-51-0	Terphenyl-d14 (Surr)	85		10-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708023.D
Lims ID: 180-34362-A-3-A Lab Sample ID: 180-34362-3
Client ID: RW19-PZM050
Sample Type: Client
Inject. Date: 08-Jul-2014 23:30:30 ALS Bottle#: 22 Worklist Smp#: 23
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0002096-023
Misc. Info.: 180-34362-A-3-A
Operator ID: 003200 Instrument ID: CH731

Method: \\PITCHROM\ChromData\CH731\20140708-2096.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 09-Jul-2014 03:31:39 Calib Date: 27-Jun-2014 09:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20140626-1923.b\V0627010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: piccolinov Date: 09-Jul-2014 03:08:14

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 1,4-Dichlorobenzene-d4	152	6.244	6.237	0.007	88	149907	8.00	
*	2 Naphthalene-d8	136	7.446	7.444	0.002	97	496452	8.00	
*	3 Acenaphthene-d10	164	9.059	9.063	-0.004	93	285414	8.00	
*	4 Phenanthrene-d10	188	10.421	10.430	-0.009	96	503461	8.00	
*	5 Chrysene-d12	240	13.888	13.903	-0.015	96	648341	8.00	
*	6 Perylene-d12	264	16.794	16.809	-0.015	98	638535	8.00	
$	7 2-Fluorophenol	112	4.908	4.896	0.012	91	746265	27.0	
$	8 Phenol-d5	99	5.896	5.895	0.001	84	935818	28.1	
$	9 Nitrobenzene-d5	82	6.767	6.766	0.001	91	1198966	37.0	
$	10 2-Fluorobiphenyl	172	8.429	8.427	0.002	98	1834471	35.1	
$	11 2,4,6-Tribromophenol	330	9.780	9.784	-0.004	79	265895	36.8	
$	12 Terphenyl-d14	244	12.168	12.172	-0.004	98	2694566	34.0	
	14 N-Nitrosodimethylamine	74		2.374				ND	
	26 Phenol	94		5.906				ND	
	29 Bis(2-chloroethyl)ether	93		5.980				ND	
	30 2-Chlorophenol	128		6.039				ND	
	38 2,2'-oxybis[1-chloropropan	45		6.499				ND	
	41 N-Nitrosodi-n-propylamine	70		6.621				ND	
	45 Hexachloroethane	117		6.734				ND	
	46 Nitrobenzene	77		6.782				ND	
	48 Isophorone	82		7.006				ND	
	49 2-Nitrophenol	139		7.086				ND	
	50 2,4-Dimethylphenol	107		7.118				ND	
	52 Benzoic acid	122		7.182				ND	
	53 Bis(2-chloroethoxy)methane	93		7.198				ND	
	54 2,4-Dichlorophenol	162		7.311				ND	
	56 1,2,4-Trichlorobenzene	180		7.391				ND	
	58 Naphthalene	128		7.466				ND	
	62 Hexachlorobutadiene	225		7.583				ND	
	67 4-Chloro-3-methylphenol	107		7.936				ND	
	72 Hexachlorocyclopentadiene	237		8.251				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
74 2,4,6-Trichlorophenol	196		8.352				ND	
77 2-Chloronaphthalene	162		8.550				ND	
82 Dimethyl phthalate	163		8.780				ND	
84 2,6-Dinitrotoluene	165		8.844				ND	
85 Acenaphthylene	152		8.935				ND	
87 2,4-Dinitrophenol	184		9.095				ND	
88 Acenaphthene	153		9.095				ND	
89 4-Nitrophenol	109		9.138				ND	
91 2,4-Dinitrotoluene	165		9.212				ND	
98 Diethyl phthalate	149	9.412	9.415	-0.003	92	24261	0.4430	
100 4-Chlorophenyl phenyl ethe	204		9.544				ND	
103 Fluorene	166		9.565				ND	
104 4,6-Dinitro-2-methylphenol	198		9.586				ND	
105 N-Nitrosodiphenylamine	169		9.645				ND	
90 1,2-Diphenylhydrazine	77		9.688				ND	
110 4-Bromophenyl phenyl ether	248		9.992				ND	
112 Hexachlorobenzene	284		10.078				ND	
116 Pentachlorophenol	266		10.249				ND	
121 Phenanthrene	178		10.452				ND	
122 Anthracene	178		10.500				ND	
126 Di-n-butyl phthalate	149	10.923	10.927	-0.004	98	224301	2.77	
131 Fluoranthene	202		11.723				ND	
132 Benzidine	184		11.851				ND	
133 Pyrene	202		12.022				ND	
138 Butyl benzyl phthalate	149	12.847	12.850	-0.003	95	203045	4.95	
144 3,3'-Dichlorobenzidine	252		13.807				ND	
145 Bis(2-ethylhexyl) phthalat	149	13.824	13.839	-0.015	96	365628	6.41	
146 Benzo[a]anthracene	228		13.881				ND	
147 Chrysene	228		13.951				ND	
150 Di-n-octyl phthalate	149		15.126				ND	
152 Benzo[b]fluoranthene	252		16.013				ND	
153 Benzo[k]fluoranthene	252		16.066				ND	
154 Benzo[a]pyrene	252		16.691				ND	
157 Indeno[1,2,3-cd]pyrene	276		19.005				ND	
158 Dibenz(a,h)anthracene	278		19.037				ND	
159 Benzo[g,h,i]perylene	276		19.597				ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

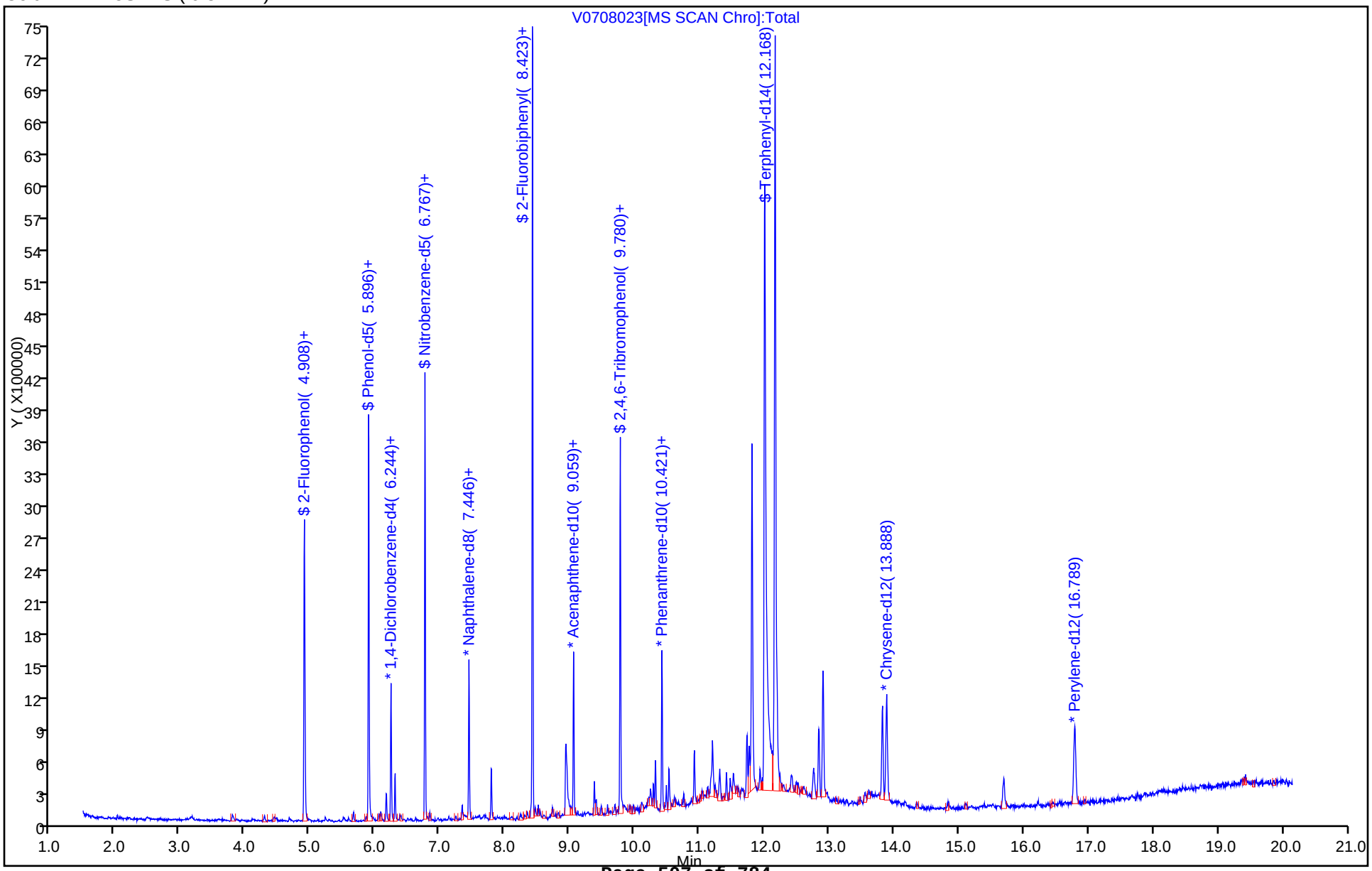
SVTAPITINTRNi_00005 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 09-Jul-2014 03:32:05 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140708-2096.b\V0708023.D				
Injection Date:	08-Jul-2014 23:30:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	180-34362-A-3-A	Lab Sample ID:	180-34362-3	Worklist Smp#:	23
Client ID:	RW19-PZM050				
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)

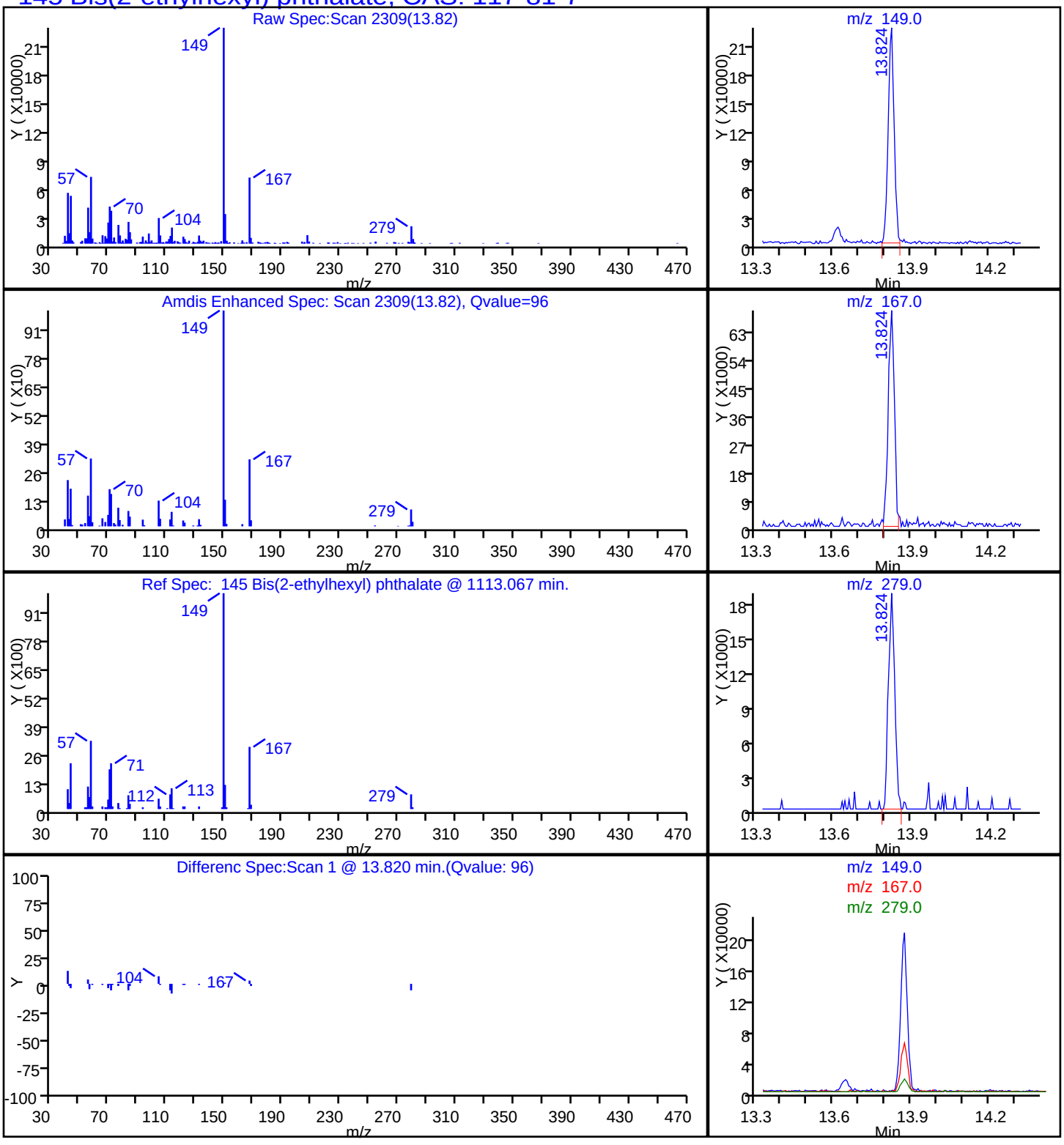


Report Date: 09-Jul-2014 03:32:07 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140708-2096.b\V0708023.D				
Injection Date:	08-Jul-2014 23:30:30	Instrument ID:	CH731		
Lims ID:	180-34362-A-3-A	Lab Sample ID:	180-34362-3		
Client ID:	RW19-PZM050				
Operator ID:	003200	ALS Bottle#:	22	Worklist Smp#:	23
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		

145 Bis(2-ethylhexyl) phthalate, CAS: 117-81-7

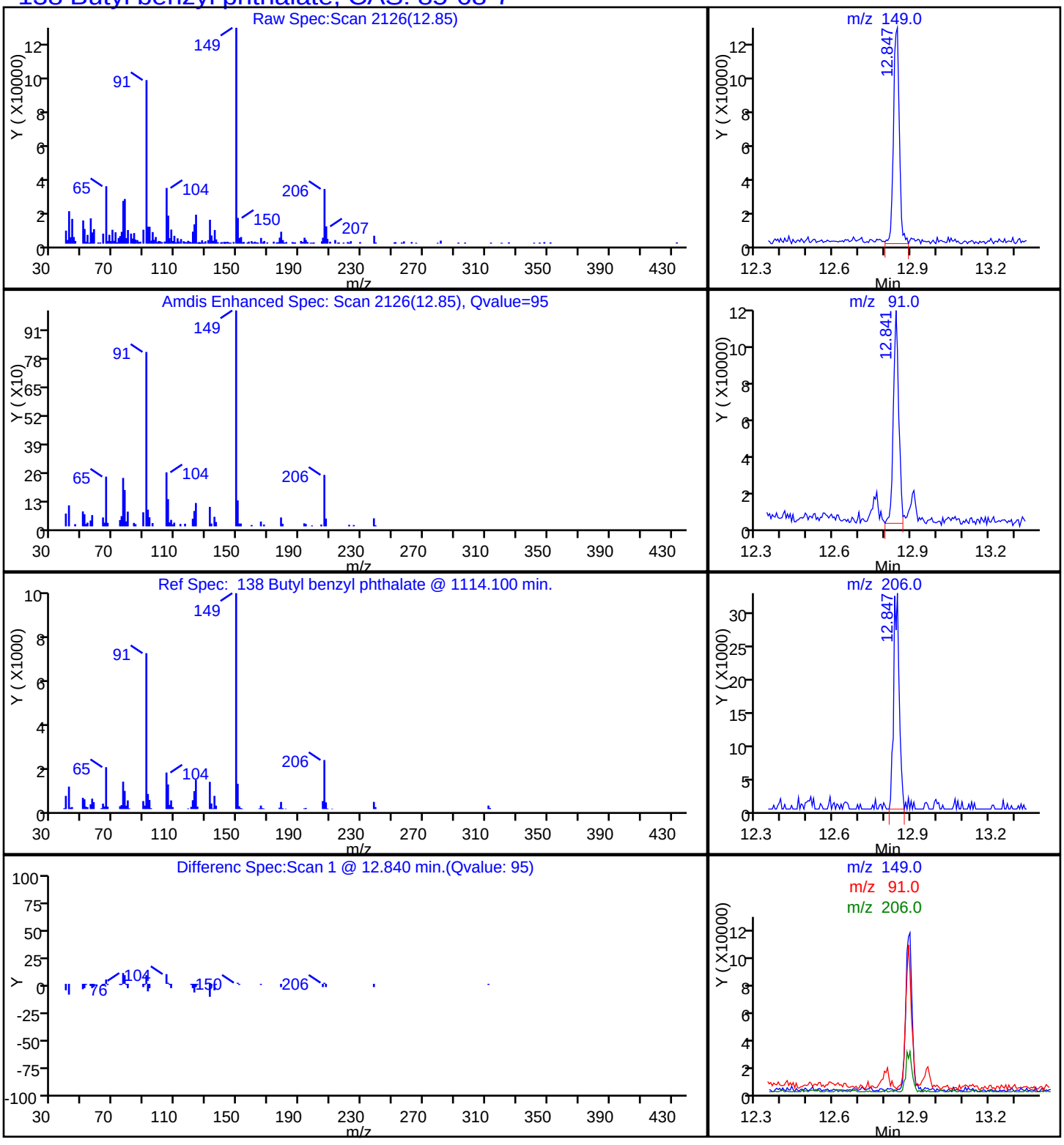


Report Date: 09-Jul-2014 03:32:07 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140708-2096.b\V0708023.D				
Injection Date:	08-Jul-2014 23:30:30	Instrument ID:	CH731		
Lims ID:	180-34362-A-3-A	Lab Sample ID:	180-34362-3		
Client ID:	RW19-PZM050				
Operator ID:	003200	ALS Bottle#:	22	Worklist Smp#:	23
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		

138 Butyl benzyl phthalate, CAS: 85-68-7



Report Date: 09-Jul-2014 03:32:06 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708023.D

Injection Date: 08-Jul-2014 23:30:30 Instrument ID: CH731

Lims ID: 180-34362-A-3-A Lab Sample ID: 180-34362-3

Client ID: RW19-PZM050

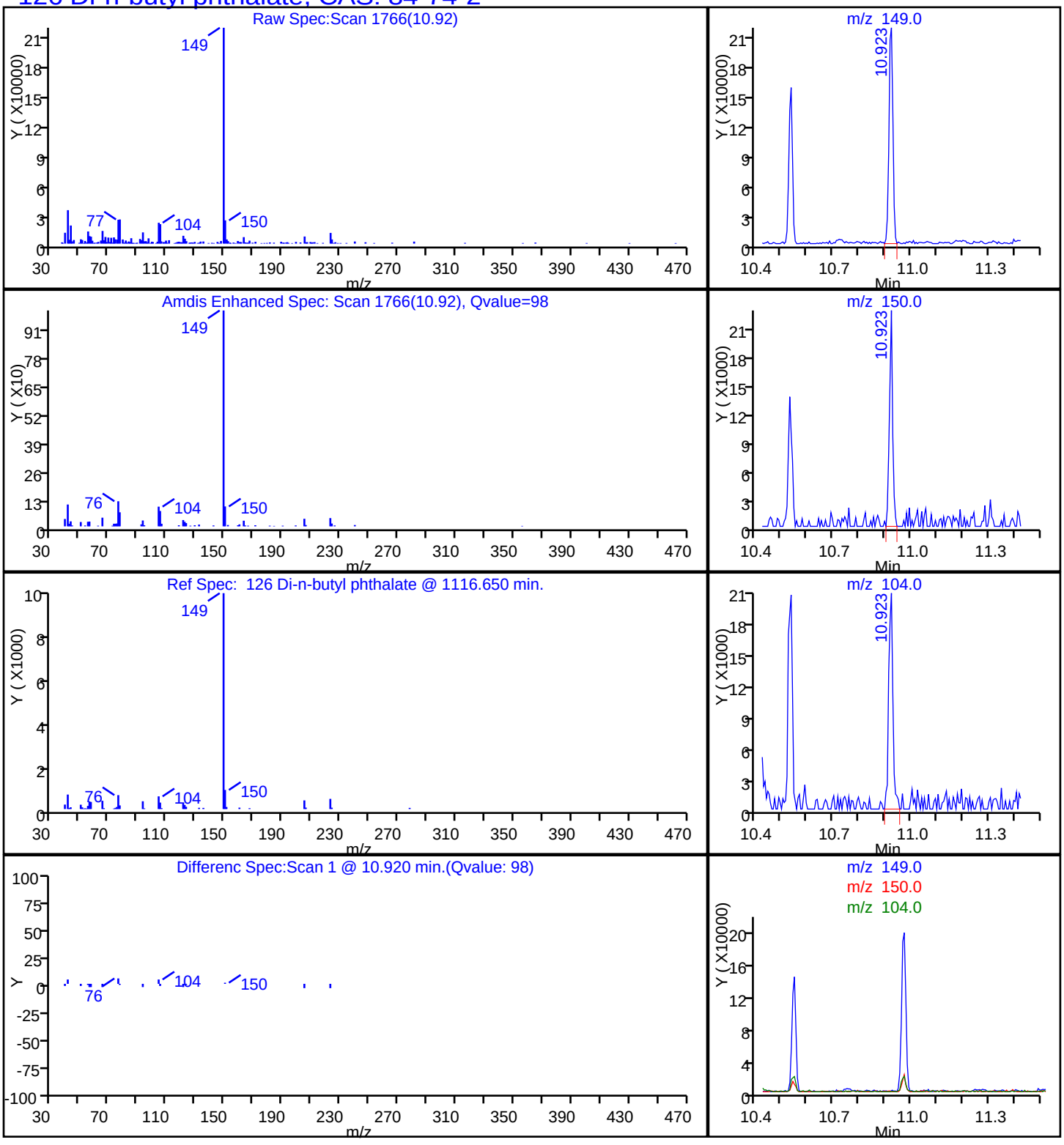
Operator ID: 003200 ALS Bottle#: 22 Worklist Smp#: 23

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 Di-n-butyl phthalate, CAS: 84-74-2



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-34362-1

SDG No.:

Client Sample ID: H108-PZM060 | Lab Sample ID: 180-34362-4

Matrix: Water | Lab File ID: V0708024.D

Analysis Method: 8270D LL | Date Collected: 06/26/2014 11:30

Extract. Method: 3520C | Date Extracted: 07/03/2014 07:30

Sample wt/vol: 250(mL) | Date Analyzed: 07/08/2014 23:59

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.: 110717 | 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	14		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	0.32	J	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.: 180-34362-1

SDG No.:

Client Sample ID: H108-PZM060 | Lab Sample ID: 180-34362-4

Matrix: Water | Lab File ID: V0708024.D

Analysis Method: 8270D LL | Date Collected: 06/26/2014 11:30

Extract. Method: 3520C | Date Extracted: 07/03/2014 07:30

Sample wt/vol: 250(mL) | Date Analyzed: 07/08/2014 23:59

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.: 110717 | 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)	74		30-150
321-60-8	2-Fluorobiphenyl	72		30-150
367-12-4	2-Fluorophenol (Surr)	52		30-150
4165-60-0	Nitrobenzene-d5 (Surr)	73		30-150
4165-62-2	Phenol-d5 (Surr)	54		30-150
1718-51-0	Terphenyl-d14 (Surr)	90		10-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708024.D
Lims ID: 180-34362-B-4-A Lab Sample ID: 180-34362-4
Client ID: H108-PZM060
Sample Type: Client
Inject. Date: 08-Jul-2014 23:59:30 ALS Bottle#: 23 Worklist Smp#: 24
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0002096-024
Misc. Info.: 180-34362-B-4-A
Operator ID: 003200 Instrument ID: CH731

Method: \\PITCHROM\ChromData\CH731\20140708-2096.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 09-Jul-2014 03:31:39 Calib Date: 27-Jun-2014 09:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20140626-1923.b\V0627010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: piccolinov Date: 09-Jul-2014 03:09:02

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 1,4-Dichlorobenzene-d4	152	6.252	6.237	0.015	88	166137	8.00	
*	2 Naphthalene-d8	136	7.454	7.444	0.010	97	540650	8.00	
*	3 Acenaphthene-d10	164	9.068	9.063	0.005	91	308985	8.00	
*	4 Phenanthrene-d10	188	10.430	10.430	0.000	96	553017	8.00	
*	5 Chrysene-d12	240	13.902	13.903	-0.001	96	612410	8.00	
*	6 Perylene-d12	264	16.803	16.809	-0.006	97	579068	8.00	
$	7 2-Fluorophenol	112	4.917	4.896	0.021	91	632050	20.7	
$	8 Phenol-d5	99	5.905	5.895	0.010	84	800100	21.7	
$	9 Nitrobenzene-d5	82	6.776	6.766	0.010	91	1024406	29.0	
$	10 2-Fluorobiphenyl	172	8.432	8.427	0.005	98	1621597	28.6	
$	11 2,4,6-Tribromophenol	330	9.789	9.784	0.005	79	236600	29.8	
$	12 Terphenyl-d14	244	12.177	12.172	0.005	98	2681030	35.8	
	14 N-Nitrosodimethylamine	74		2.374				ND	
	26 Phenol	94		5.906				ND	
	29 Bis(2-chloroethyl)ether	93		5.980				ND	
	30 2-Chlorophenol	128		6.039				ND	
	38 2,2'-oxybis[1-chloropropan	45		6.499				ND	
	41 N-Nitrosodi-n-propylamine	70		6.621				ND	
	45 Hexachloroethane	117		6.734				ND	
	46 Nitrobenzene	77		6.782				ND	
	48 Isophorone	82		7.006				ND	
	49 2-Nitrophenol	139		7.086				ND	
	50 2,4-Dimethylphenol	107		7.118				ND	
	52 Benzoic acid	122		7.182				ND	
	53 Bis(2-chloroethoxy)methane	93		7.198				ND	
	54 2,4-Dichlorophenol	162		7.311				ND	
	56 1,2,4-Trichlorobenzene	180		7.391				ND	
	58 Naphthalene	128		7.466				ND	
	62 Hexachlorobutadiene	225		7.583				ND	
	67 4-Chloro-3-methylphenol	107		7.936				ND	
	72 Hexachlorocyclopentadiene	237		8.251				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
74 2,4,6-Trichlorophenol	196		8.352				ND	
77 2-Chloronaphthalene	162		8.550				ND	
82 Dimethyl phthalate	163		8.780				ND	
84 2,6-Dinitrotoluene	165		8.844				ND	
85 Acenaphthylene	152		8.935				ND	
87 2,4-Dinitrophenol	184		9.095				ND	
88 Acenaphthene	153		9.095				ND	
89 4-Nitrophenol	109		9.138				ND	
91 2,4-Dinitrotoluene	165		9.212				ND	
98 Diethyl phthalate	149	9.420	9.415	0.005	91	14800	0.2496	
100 4-Chlorophenyl phenyl ethe	204		9.544				ND	
103 Fluorene	166		9.565				ND	
104 4,6-Dinitro-2-methylphenol	198		9.586				ND	
105 N-Nitrosodiphenylamine	169		9.645				ND	
90 1,2-Diphenylhydrazine	77		9.688				ND	
110 4-Bromophenyl phenyl ether	248		9.992				ND	
112 Hexachlorobenzene	284		10.078				ND	
116 Pentachlorophenol	266		10.249				ND	
121 Phenanthrene	178		10.452				ND	
122 Anthracene	178		10.500				ND	
126 Di-n-butyl phthalate	149	10.932	10.927	0.005	91	39183	0.4412	
131 Fluoranthene	202		11.723				ND	
132 Benzidine	184		11.851				ND	
133 Pyrene	202		12.022				ND	
138 Butyl benzyl phthalate	149	12.861	12.850	0.011	91	24479	0.6319	
144 3,3'-Dichlorobenzidine	252		13.807				ND	
145 Bis(2-ethylhexyl) phthalat	149	13.838	13.839	-0.001	95	1534808	28.5	
146 Benzo[a]anthracene	228		13.881				ND	
147 Chrysene	228		13.951				ND	
150 Di-n-octyl phthalate	149		15.126				ND	
152 Benzo[b]fluoranthene	252		16.013				ND	
153 Benzo[k]fluoranthene	252		16.066				ND	
154 Benzo[a]pyrene	252		16.691				ND	
157 Indeno[1,2,3-cd]pyrene	276		19.005				ND	
158 Dibenz(a,h)anthracene	278		19.037				ND	
159 Benzo[g,h,i]perylene	276		19.597				ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

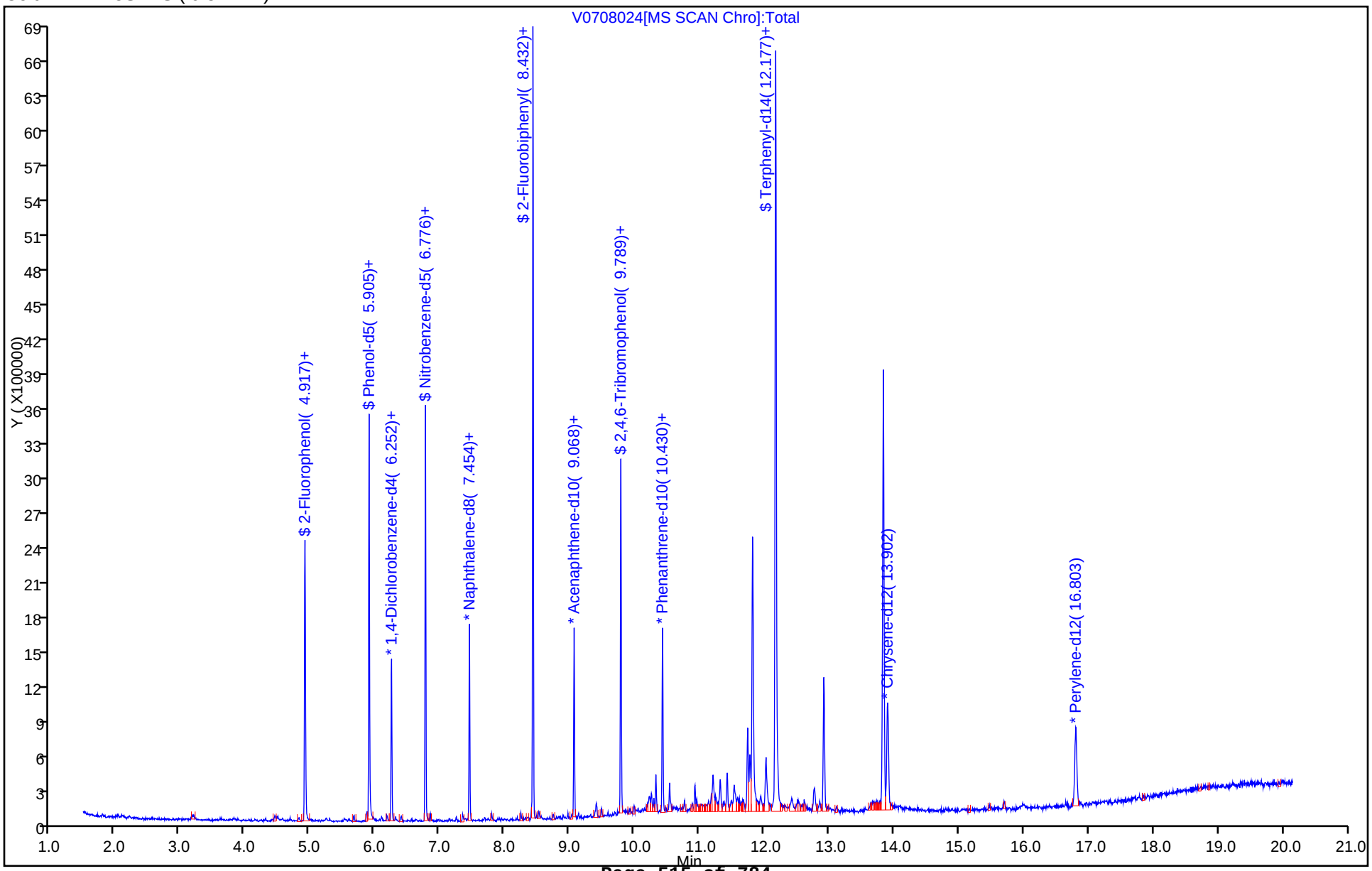
SVTAPITINTRNi_00005 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 09-Jul-2014 03:32:08 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140708-2096.b\V0708024.D				
Injection Date:	08-Jul-2014 23:59:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	180-34362-B-4-A	Lab Sample ID:	180-34362-4	Worklist Smp#:	24
Client ID:	H108-PZM060				
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Report Date: 09-Jul-2014 03:32:08 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708024.D

Injection Date: 08-Jul-2014 23:59:30 Instrument ID: CH731

Lims ID: 180-34362-B-4-A Lab Sample ID: 180-34362-4

Client ID: H108-PZM060

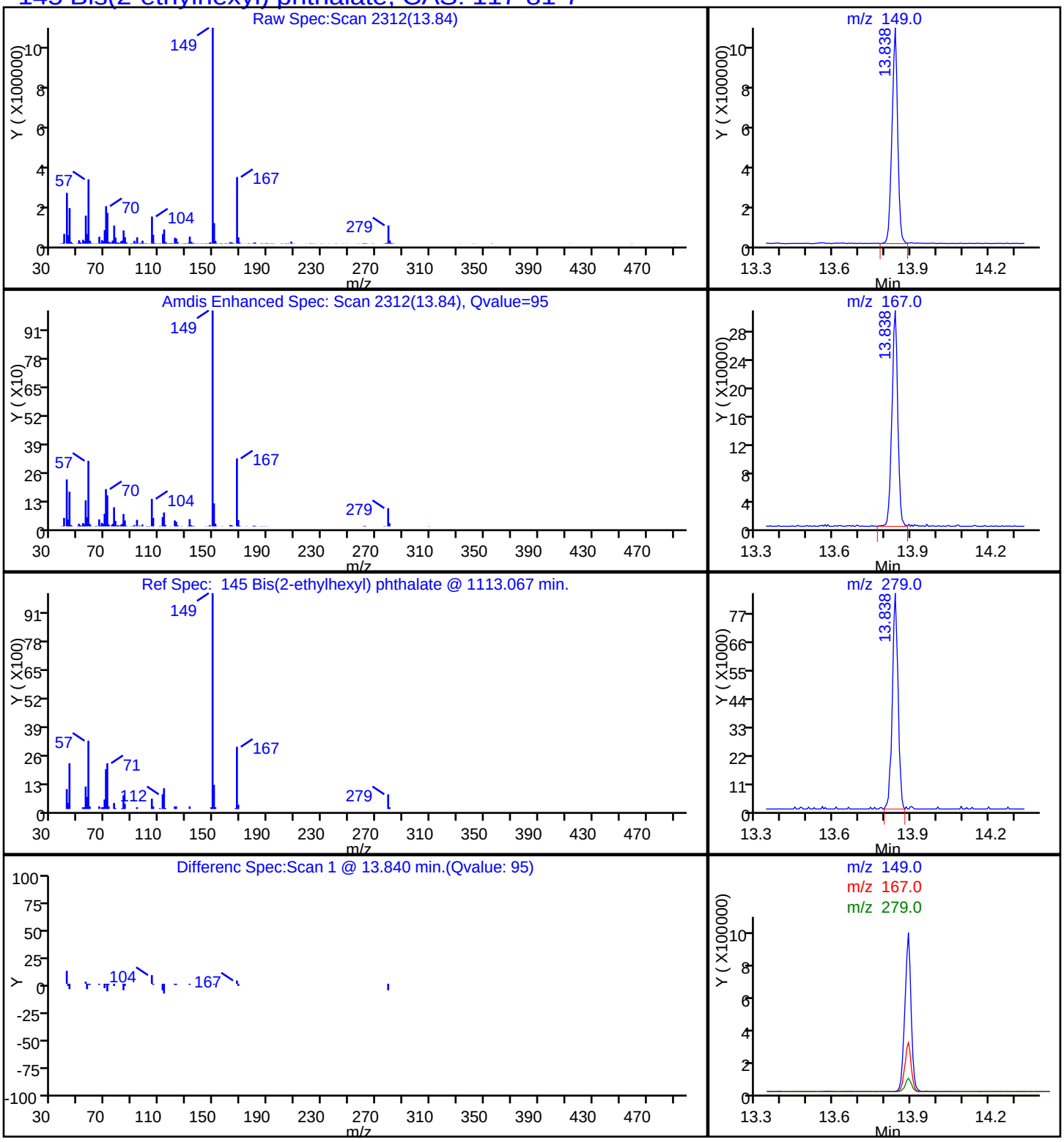
Operator ID: 003200 ALS Bottle#: 23 Worklist Smp#: 24

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

145 Bis(2-ethylhexyl) phthalate, CAS: 117-81-7

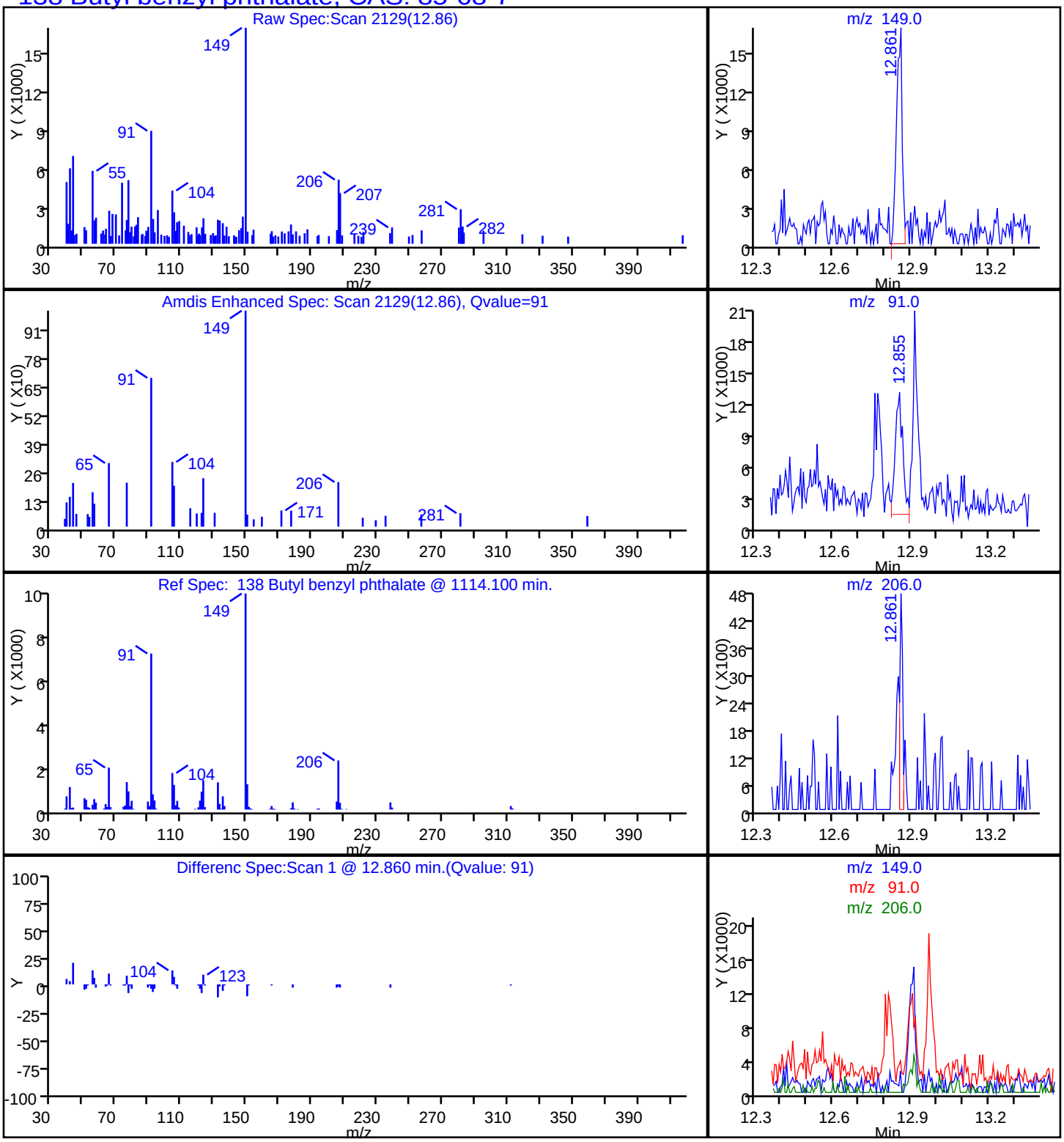


Report Date: 09-Jul-2014 03:32:08 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140708-2096.b\V0708024.D				
Injection Date:	08-Jul-2014 23:59:30	Instrument ID:	CH731		
Lims ID:	180-34362-B-4-A	Lab Sample ID:	180-34362-4		
Client ID:	H108-PZM060				
Operator ID:	003200	ALS Bottle#:	23	Worklist Smp#:	24
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		

138 Butyl benzyl phthalate, CAS: 85-68-7



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-34362-1

SDG No.:

Client Sample ID: RW19-PZM020 | Lab Sample ID: 180-34362-5

Matrix: Water | Lab File ID: V0708025.D

Analysis Method: 8270D LL | Date Collected: 06/26/2014 11:55

Extract. Method: 3520C | Date Extracted: 07/03/2014 07:30

Sample wt/vol: 260(mL) | Date Analyzed: 07/09/2014 00:27

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.: 110717 | 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	16		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	2.4		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	0.25	J	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.: 180-34362-1

SDG No.:

Client Sample ID: RW19-PZM020 | Lab Sample ID: 180-34362-5

Matrix: Water | Lab File ID: V0708025.D

Analysis Method: 8270D LL | Date Collected: 06/26/2014 11:55

Extract. Method: 3520C | Date Extracted: 07/03/2014 07:30

Sample wt/vol: 260(mL) | Date Analyzed: 07/09/2014 00:27

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.: 110717 | 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)	106		30-150
321-60-8	2-Fluorobiphenyl	101		30-150
367-12-4	2-Fluorophenol (Surr)	64		30-150
4165-60-0	Nitrobenzene-d5 (Surr)	102		30-150
4165-62-2	Phenol-d5 (Surr)	77		30-150
1718-51-0	Terphenyl-d14 (Surr)	108		10-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708025.D
Lims ID: 180-34362-A-5-A Lab Sample ID: 180-34362-5
Client ID: RW19-PZM020
Sample Type: Client
Inject. Date: 09-Jul-2014 00:27:30 ALS Bottle#: 24 Worklist Smp#: 25
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0002096-025
Misc. Info.: 180-34362-A-5-A
Operator ID: 003200 Instrument ID: CH731

Method: \\PITCHROM\ChromData\CH731\20140708-2096.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 09-Jul-2014 03:31:39 Calib Date: 27-Jun-2014 09:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20140626-1923.b\V0627010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: piccolinov Date: 09-Jul-2014 03:10:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.243	6.237	0.006	88	156255	8.00	
* 2 Naphthalene-d8	136	7.445	7.444	0.001	97	492170	8.00	
* 3 Acenaphthene-d10	164	9.059	9.063	-0.004	92	285443	8.00	
* 4 Phenanthrene-d10	188	10.416	10.430	-0.014	96	482831	8.00	
* 5 Chrysene-d12	240	13.883	13.903	-0.020	95	600567	8.00	
* 6 Perylene-d12	264	16.778	16.809	-0.031	98	577739	8.00	
$ 7 2-Fluorophenol	112	4.908	4.896	0.012	90	732715	25.5	
$ 8 Phenol-d5	99	5.896	5.895	0.001	86	1071717	30.8	
$ 9 Nitrobenzene-d5	82	6.767	6.766	0.001	92	1309383	40.8	
$ 10 2-Fluorobiphenyl	172	8.423	8.427	-0.004	98	2116266	40.4	
$ 11 2,4,6-Tribromophenol	330	9.775	9.784	-0.009	80	295268	42.6	
$ 12 Terphenyl-d14	244	12.157	12.172	-0.015	98	3160043	43.1	
14 N-Nitrosodimethylamine	74		2.374				ND	
26 Phenol	94		5.906				ND	
29 Bis(2-chloroethyl)ether	93		5.980				ND	
30 2-Chlorophenol	128		6.039				ND	
38 2,2'-oxybis[1-chloropropan	45		6.499				ND	
41 N-Nitrosodi-n-propylamine	70		6.621				ND	
45 Hexachloroethane	117		6.734				ND	
46 Nitrobenzene	77		6.782				ND	
48 Isophorone	82		7.006				ND	
49 2-Nitrophenol	139		7.086				ND	
50 2,4-Dimethylphenol	107		7.118				ND	
52 Benzoic acid	122		7.182				ND	
53 Bis(2-chloroethoxy)methane	93		7.198				ND	
54 2,4-Dichlorophenol	162		7.311				ND	
56 1,2,4-Trichlorobenzene	180		7.391				ND	
58 Naphthalene	128		7.466				ND	
62 Hexachlorobutadiene	225		7.583				ND	
67 4-Chloro-3-methylphenol	107		7.936				ND	
72 Hexachlorocyclopentadiene	237		8.251				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
74 2,4,6-Trichlorophenol	196		8.352				ND	
77 2-Chloronaphthalene	162		8.550				ND	
82 Dimethyl phthalate	163		8.780				ND	
84 2,6-Dinitrotoluene	165		8.844				ND	
85 Acenaphthylene	152		8.935				ND	
87 2,4-Dinitrophenol	184		9.095				ND	
88 Acenaphthene	153		9.095				ND	
89 4-Nitrophenol	109		9.138				ND	
91 2,4-Dinitrotoluene	165		9.212				ND	
98 Diethyl phthalate	149	9.406	9.415	-0.009	91	14283	0.2608	
100 4-Chlorophenyl phenyl ethe	204		9.544				ND	
103 Fluorene	166		9.565				ND	
104 4,6-Dinitro-2-methylphenol	198		9.586				ND	
105 N-Nitrosodiphenylamine	169		9.645				ND	
90 1,2-Diphenylhydrazine	77		9.688				ND	
110 4-Bromophenyl phenyl ether	248		9.992				ND	
112 Hexachlorobenzene	284		10.078				ND	
116 Pentachlorophenol	266		10.249				ND	
121 Phenanthrene	178		10.452				ND	
122 Anthracene	178		10.500				ND	
126 Di-n-butyl phthalate	149	10.918	10.927	-0.009	95	40109	0.5172	
131 Fluoranthene	202		11.723				ND	
132 Benzidine	184		11.851				ND	
133 Pyrene	202		12.022				ND	
138 Butyl benzyl phthalate	149	12.836	12.850	-0.014	93	192481	5.07	
144 3,3'-Dichlorobenzidine	252		13.807				ND	
145 Bis(2-ethylhexyl) phthalat	149	13.819	13.839	-0.020	95	1779705	33.7	
146 Benzo[a]anthracene	228		13.881				ND	
147 Chrysene	228		13.951				ND	
150 Di-n-octyl phthalate	149		15.126				ND	
152 Benzo[b]fluoranthene	252		16.013				ND	
153 Benzo[k]fluoranthene	252		16.066				ND	
154 Benzo[a]pyrene	252		16.691				ND	
157 Indeno[1,2,3-cd]pyrene	276		19.005				ND	
158 Dibenz(a,h)anthracene	278		19.037				ND	
159 Benzo[g,h,i]perylene	276		19.597				ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

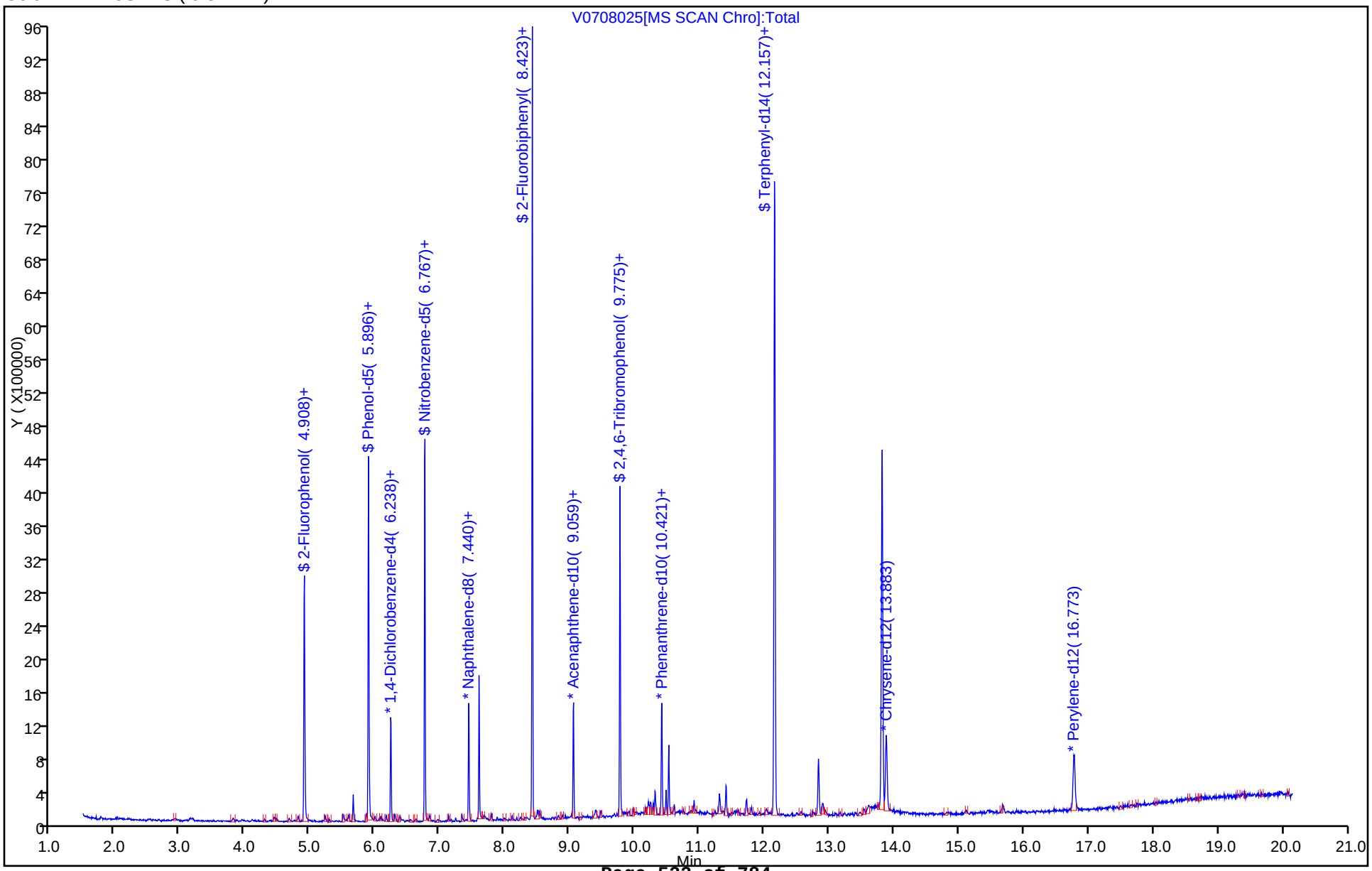
SVTAPITINTRNi_00005 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 09-Jul-2014 03:32:09 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140708-2096.b\V0708025.D				
Injection Date:	09-Jul-2014 00:27:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	180-34362-A-5-A	Lab Sample ID:	180-34362-5	Worklist Smp#:	25
Client ID:	RW19-PZM020				
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	BNA_CH731	Limit Group:	BNA 8270D ICAL		

Column: Rxi-5SilMS (0.32 mm)



Report Date: 09-Jul-2014 03:32:09 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708025.D

Injection Date: 09-Jul-2014 00:27:30 Instrument ID: CH731

Lims ID: 180-34362-A-5-A Lab Sample ID: 180-34362-5

Client ID: RW19-PZM020

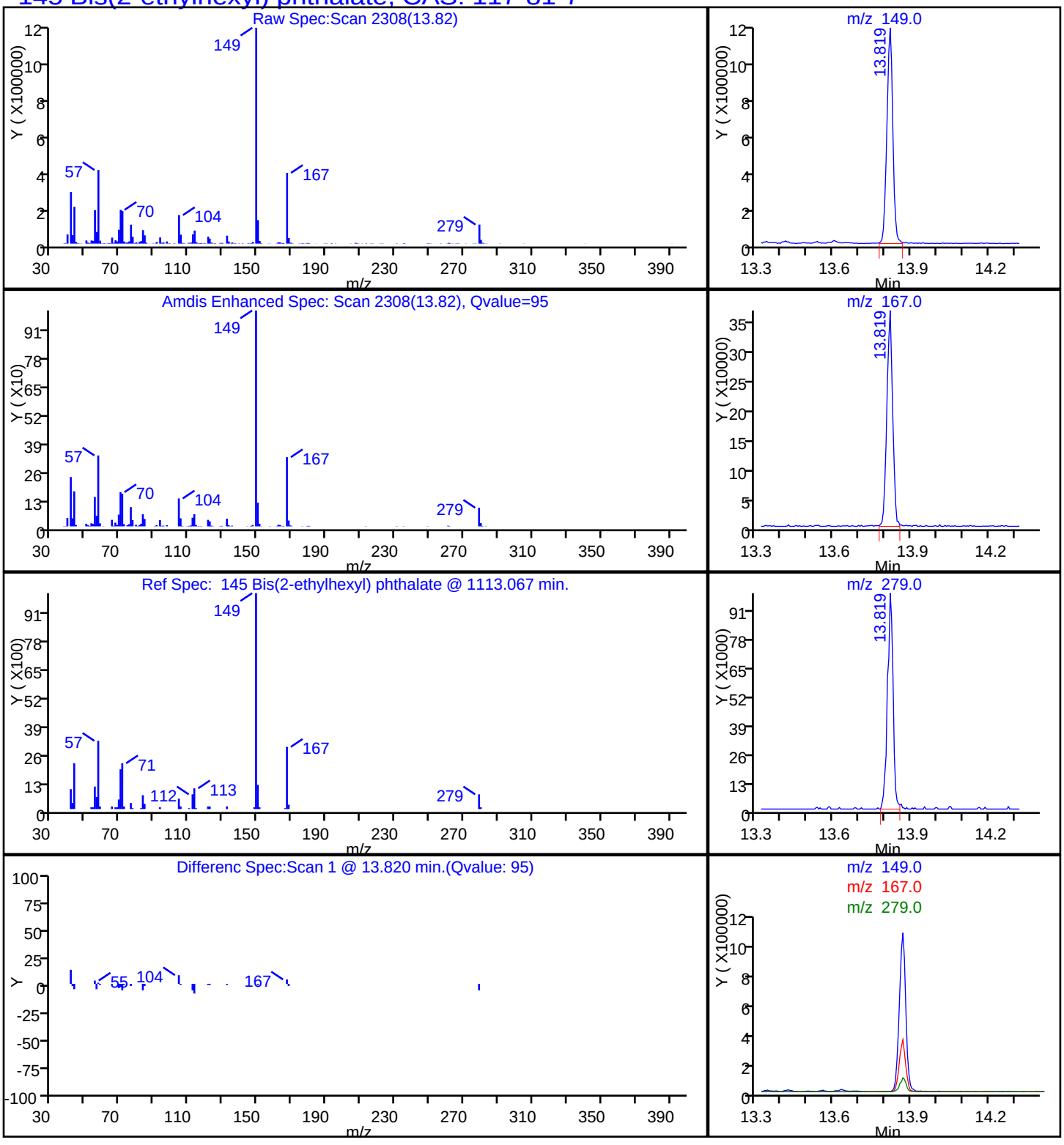
Operator ID: 003200 ALS Bottle#: 24 Worklist Smp#: 25

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

145 Bis(2-ethylhexyl) phthalate, CAS: 117-81-7

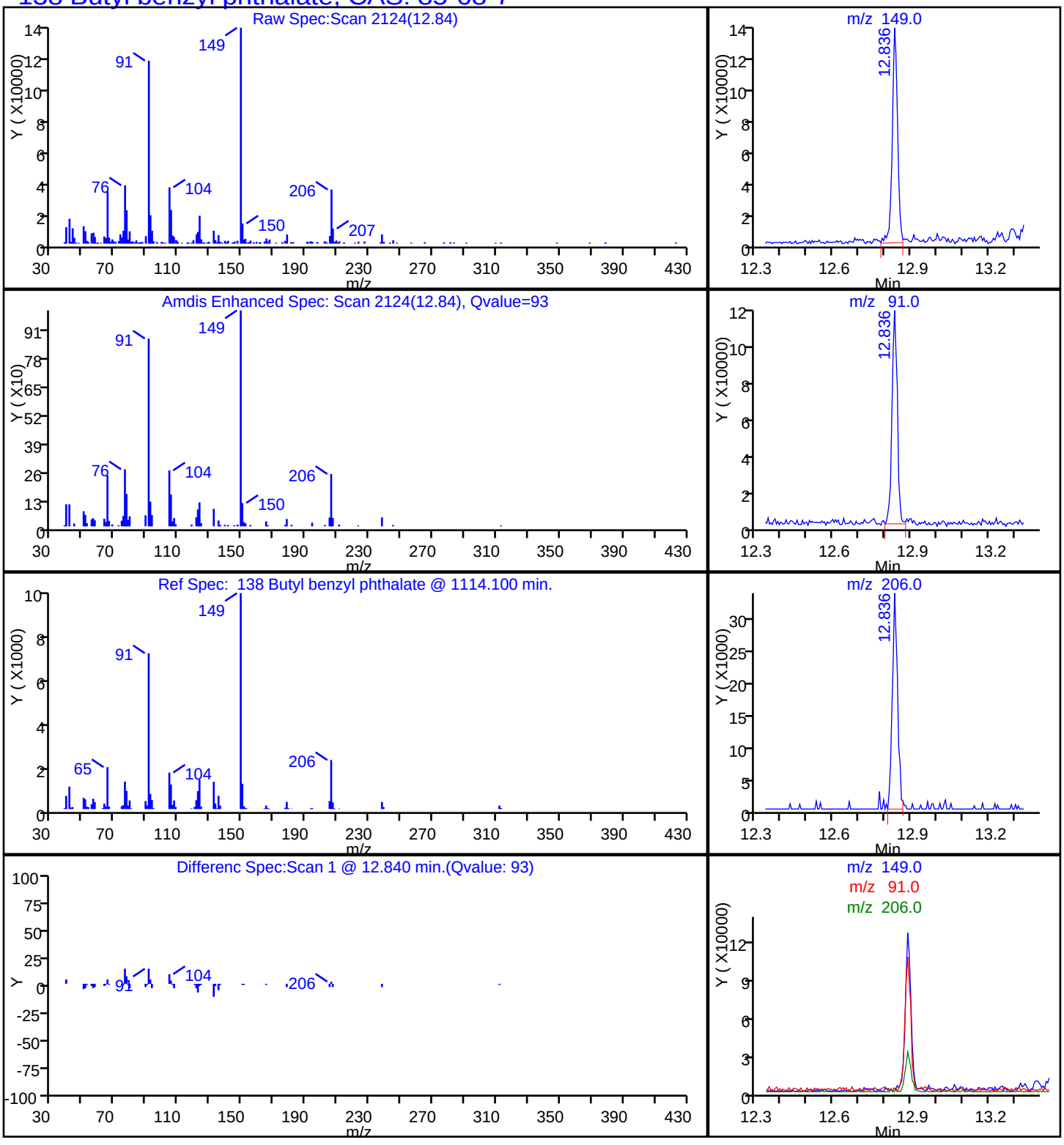


Report Date: 09-Jul-2014 03:32:09 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140708-2096.b\V0708025.D				
Injection Date:	09-Jul-2014 00:27:30	Instrument ID:	CH731		
Lims ID:	180-34362-A-5-A	Lab Sample ID:	180-34362-5		
Client ID:	RW19-PZM020				
Operator ID:	003200	ALS Bottle#:	24	Worklist Smp#:	25
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		

138 Butyl benzyl phthalate, CAS: 85-68-7



Report Date: 09-Jul-2014 03:32:09 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708025.D

Injection Date: 09-Jul-2014 00:27:30 Instrument ID: CH731

Lims ID: 180-34362-A-5-A Lab Sample ID: 180-34362-5

Client ID: RW19-PZM020

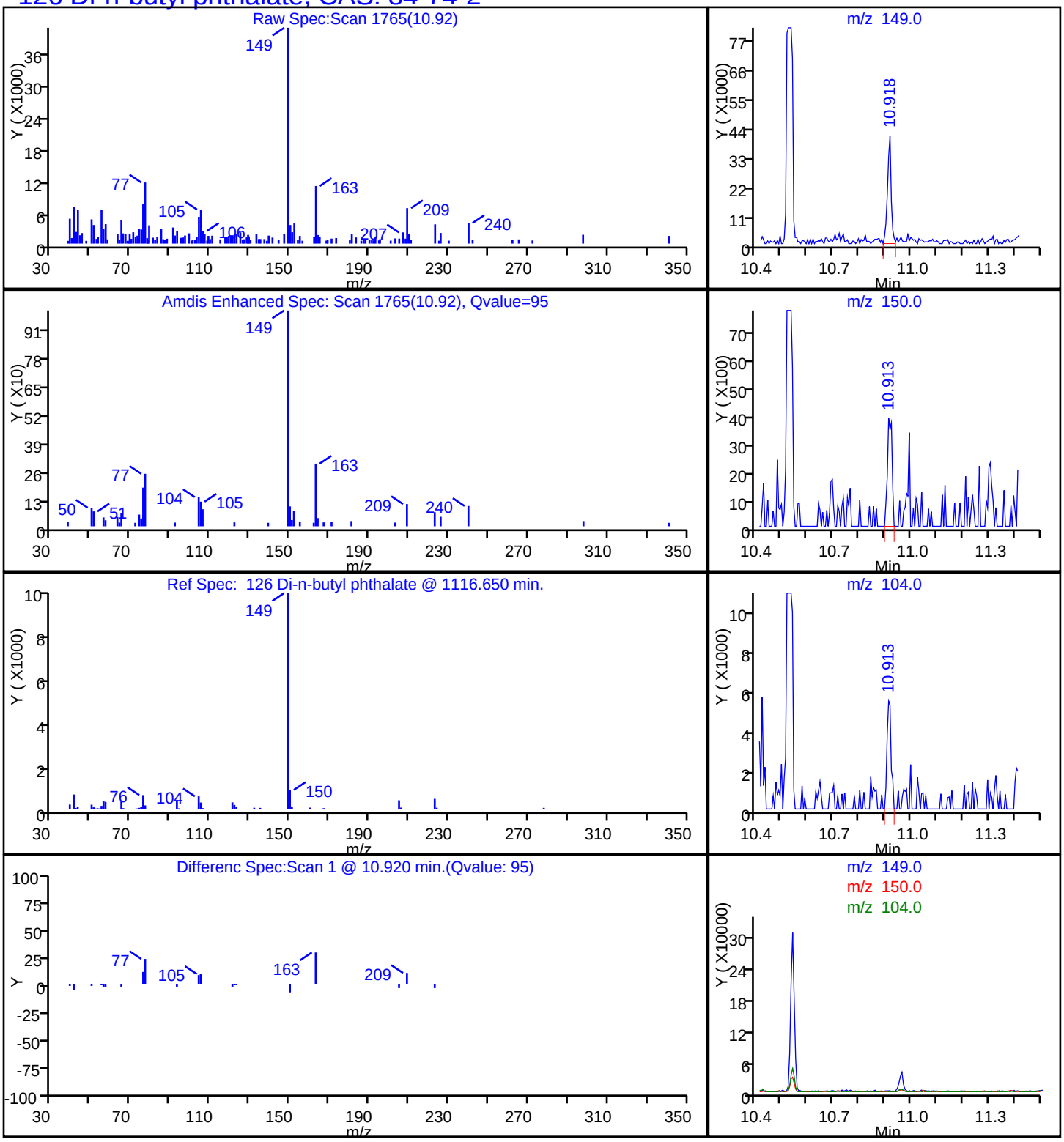
Operator ID: 003200 ALS Bottle#: 24 Worklist Smp#: 25

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 Di-n-butyl phthalate, CAS: 84-74-2



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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1 Analy Batch No.: 107633

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/05/2014 08:25 Calibration End Date: 06/05/2014 11:45 Calibration ID: 16153

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-107633/3	V0605003.D
Level 2	IC 180-107633/4	V0605004.D
Level 3	IC 180-107633/5	V0605005.D
Level 4	ICIS 180-107633/6	V0605006.D
Level 5	IC 180-107633/7	V0605007.D
Level 6	IC 180-107633/8	V0605008.D
Level 7	IC 180-107633/9	V0605009.D
Level 8	IC 180-107633/10	V0605010.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	0.9062 0.6967	0.7314 0.6523	0.7833 0.6664	0.7329	0.7136	Ave		0.7353			0.0100	11.0		20.0			
N-Nitrosodimethylamine	0.9321 1.0475	1.0150 1.0197	1.0363 1.0681	1.0277	1.1166	Ave		1.0329			0.0100	5.1		20.0			
Pyridine	1.7607 1.7882	1.7826 1.7127	1.8906 1.7542	1.8878	1.8472	Ave		1.8030			0.0100	3.6		20.0			
Methyl methanesulfonate	1.0416 1.0116	1.1597 0.9939	1.0558 0.9961	1.0520	1.0717	Ave		1.0478			0.0100	5.1		20.0			
Benzaldehyde	1.0036 1.1657	0.8133 1.0628	0.8864 1.0175	1.2306	1.2905	Ave		1.0588			0.0100	16.0		20.0			
Phenol	2.1479 2.1139	1.9526 2.1964	1.9841 2.3683	2.0097	2.1412	Ave		2.1142			0.8000	6.4		20.0			
Aniline	1.9453 2.0935	1.8455 2.0732	1.9378 2.1919	1.9639	2.0884	Ave		2.0174			0.0100	5.6		20.0			
Bis(2-chloroethyl)ether	1.3445 1.3849	1.3189 1.3862	1.4686 1.4540	1.3397	1.4002	Ave		1.3871			0.7000	3.9		20.0			
2-Chlorophenol	1.3670 1.4248	1.3323 1.4628	1.3852 1.5319	1.4163	1.5155	Ave		1.4295			0.8000	4.9		20.0			
n-Decane	1.3470 1.3637	1.2187 1.4465	1.2772 1.5552	1.2697	1.3358	Ave		1.3517				7.9		20.0			
1,3-Dichlorobenzene	1.8750 1.6477	1.6336 1.6399	1.5986 1.7615	1.6403	1.7039	Ave		1.6876			0.0100	5.4		20.0			
1,4-Dichlorobenzene	1.7800 1.6456	1.5996 1.6963	1.6564 1.7639	1.6765	1.6845	Ave		1.6879			0.0100	3.5		20.0			
Benzyl alcohol	0.8098 0.9463	0.7541 0.9703	0.8499 1.0263	0.9177	0.9822	Ave		0.9071			0.0100	10.0		20.0			
1,2-Dichlorobenzene	1.5119 1.5711	1.6573 1.5980	1.5515 1.6787	1.5987	1.6022	Ave		1.5962			0.0100	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 CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1 Analy Batch No.: 107633

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/05/2014 08:25 Calibration End Date: 06/05/2014 11:45 Calibration ID: 16153

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	1.4579 1.5308	1.2356 1.5882	1.3044 1.6591	1.4333	1.4797	Ave		1.4611			0.7000	9.6		20.0			
Indene	2.7879 2.8365	2.4779 2.9750	2.5890 3.2131	2.6180	2.8264	Ave		2.7905			0.0100	8.4		20.0			
2,2'-oxybis[1-chloropropane]	1.5279 1.5104	1.3227 1.6385	1.3567 1.8177	1.3410	1.4545	Ave		1.4962			0.0100	11.0		20.0			
N-Nitrosopyrrolidine	0.5827 0.6393	0.5355 0.6591	0.6107 0.6864	0.6225	0.6630	Ave		0.6249			0.0100	7.8		20.0			
N-Nitrosodi-n-propylamine	1.4280 1.4797	1.3032 1.5031	1.3314 1.5478	1.3876	1.4735	Ave		1.4318			0.5000	6.0		20.0			
Acetophenone	2.8159 2.4820	2.2239 2.5093	2.3214 2.6607	2.2706	2.4909	Ave		2.4719			0.0100	8.1		20.0			
Methylphenol, 3 & 4	1.4599 1.6191	1.3081 1.7269	1.3677 1.8145	1.4866	1.6195	Ave		1.5503			0.6000	11.0		20.0			
Hexachloroethane	0.7566 0.7923	0.7914 0.7948	0.7781 0.8246	0.7962	0.8095	Ave		0.7929			0.3000	2.5		20.0			
Nitrobenzene	0.5540 0.5340	0.5431 0.5418	0.5347 0.5354	0.5197	0.5347	Ave		0.5372			0.2000	1.8		20.0			
Isophorone	0.7636 0.8437	0.7369 0.8713	0.7894 0.8602	0.8159	0.8261	Ave		0.8134			0.4000	5.8		20.0			
2-Nitrophenol	+++++ 0.2089	0.1766 0.2169	0.1858 0.2138	0.1994	0.1941	Ave		0.1994			0.1000	7.5		20.0			
2,4-Dimethylphenol	0.4353 0.4623	0.4283 0.4692	0.4585 0.4617	0.4619	0.4610	Ave		0.4548			0.2000	3.2		20.0			
Bis(2-chloroethoxy)methane	0.4238 0.4488	0.4096 0.4692	0.4153 0.4665	0.4283	0.4421	Ave		0.4379			0.3000	5.1		20.0			
Benzoic acid	+++++ 0.2105	+++++ 0.2215	0.1472 0.2143	0.1745	0.1935	Ave		0.1936			0.0100	15.0		20.0			
2,4-Dichlorophenol	0.3133 0.3322	0.2843 0.3396	0.3230 0.3350	0.3226	0.3246	Ave		0.3218			0.2000	5.4		20.0			
1,2,4-Trichlorobenzene	0.4084 0.3750	0.3471 0.3949	0.3875 0.3861	0.3852	0.3737	Ave		0.3822			0.0100	4.7		20.0			
Naphthalene	1.1719 1.1802	1.0232 1.2431	1.1003 1.2294	1.1149	1.1368	Ave		1.1500			0.7000	6.3		20.0			
4-Chloroaniline	0.4089 0.4632	0.4160 0.4852	0.4383 0.4799	0.4511	0.4517	Ave		0.4493			0.0100	6.1		20.0			
2,6-Dichlorophenol	0.3374 0.3259	0.3081 0.3350	0.3189 0.3323	0.3409	0.3189	Ave		0.3272			0.0100	3.4		20.0			
Hexachlorobutadiene	0.3135 0.2619	0.2563 0.2608	0.2598 0.2554	0.2582	0.2544	Ave		0.2650			0.0100	7.5		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.: 180-34362-1 Analy Batch No.: 107633

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/05/2014 08:25 Calibration End Date: 06/05/2014 11:45 Calibration ID: 16153

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	+++++ 0.1070	0.0855 0.1045	0.0902 0.0987	0.1000	0.1054	Ave		0.0987			0.0100	8.2		20.0			
4-Chloro-3-methylphenol	0.3739 0.4000	0.3619 0.4076	0.3845 0.4104	0.3891	0.3905	Ave		0.3897			0.2000	4.2		20.0			
2-Methylnaphthalene	0.8058 0.8355	0.7790 0.8701	0.7773 0.8752	0.7961	0.8223	Ave		0.8202			0.4000	4.6		20.0			
1-Methylnaphthalene	0.7371 0.7737	0.7099 0.8092	0.7096 0.8129	0.7612	0.7644	Ave		0.7598			0.0100	5.2		20.0			
Hexachlorocyclopentadiene	0.4157 0.5044	0.4084 0.4779	0.4694 0.4772	0.5077	0.4860	Ave		0.4683			0.0500	7.9		20.0			
1,2,4,5-Tetrachlorobenzene	0.5869 0.6435	0.6683 0.6057	0.6490 0.5920	0.6689	0.6432	Ave		0.6322			0.0100	5.2		20.0			
2,4,6-Trichlorophenol	0.3100 0.4146	0.4022 0.4091	0.4041 0.4288	0.4112	0.4265	Ave		0.4008			0.2000	9.5		20.0			
2,4,5-Trichlorophenol	0.3967 0.4340	0.4081 0.4220	0.4294 0.4271	0.4273	0.4313	Ave		0.4220			0.2000	3.1		20.0			
1,1'-Biphenyl	1.5949 1.5746	1.5843 1.5794	1.5461 1.6345	1.5568	1.5653	Ave		1.5795			0.0100	1.7		20.0			
2-Chloronaphthalene	1.2806 1.3181	1.1539 1.3169	1.2871 1.4495	1.2987	1.3316	Ave		1.3045			0.8000	6.2		20.0			
2-Nitroaniline	0.3839 0.4460	0.4030 0.4090	0.4200 0.4080	0.4497	0.4421	Ave		0.4202			0.0100	5.6		20.0			
Dimethyl phthalate	1.3725 1.4431	1.3779 1.3905	1.4086 1.3982	1.4191	1.4589	Ave		1.4086			0.0100	2.2		20.0			
1,3-Dinitrobenzene	0.2021 0.2443	0.1798 0.2319	0.1926 0.2351	0.2331	0.2344	Ave		0.2192			0.0100	11.0		20.0			
2,6-Dinitrotoluene	0.2306 0.3205	0.3178 0.3098	0.3186 0.3146	0.3250	0.3198	Ave		0.3071			0.2000	10.0		20.0			
Acenaphthylene	1.8257 2.0870	1.8965 2.0336	1.9760 1.9840	2.0285	2.0419	Ave		1.9842			0.9000	4.3		20.0			
3-Nitroaniline	+++++ 0.3279	0.2534 0.3027	0.2938 0.3215	0.3198	0.3286	Ave		0.3068			0.0100	8.8		20.0			
Acenaphthene	1.3474 1.3199	1.2566 1.2645	1.2363 1.2905	1.2807	1.2943	Ave		1.2863			0.9000	2.8		20.0			
2,4-Dinitrophenol	+++++ 0.2349	+++++ 0.2234	0.1182 0.2288	0.1790	0.2117	Lin2	-0.961	0.2357			0.0100				0.9990		0.9900
4-Nitrophenol	+++++ 0.2978	0.2156 0.2678	0.2566 0.2632	0.2921	0.2965	Ave		0.2699			0.0100	11.0		20.0			
2,4-Dinitrotoluene	0.3103 0.4579	0.3936 0.4166	0.3959 0.4201	0.4369	0.4513	Ave		0.4103			0.2000	11.0		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.: 180-34362-1 Analy Batch No.: 107633

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/05/2014 08:25 Calibration End Date: 06/05/2014 11:45 Calibration ID: 16153

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	1.9750 1.9376	1.7784 1.8000	1.7813 1.8777	1.8642	1.8711	Ave		1.8607			0.8000	3.9		20.0			
2,3,5,6-Tetrachlorophenol	+++++ 0.4443	0.3457 0.4363	0.3340 0.4325	0.3959	0.4301	Ave		0.4027			0.0100	11.0		20.0			
2,3,4,6-Tetrachlorophenol	0.2987 0.4230	0.3579 0.4024	0.3566 0.4075	0.3935	0.4137	Ave		0.3817			0.0100	11.0		20.0			
2-Naphthylamine	0.2897 0.3456	0.3782 0.2997	0.3727 0.2815	0.3988	0.4000	Ave		0.3458			0.0100	14.0		20.0			
Diethyl phthalate	1.4710 1.5880	1.4524 1.5306	1.5225 1.5232	1.5769	1.6167	Ave		1.5352			0.0100	3.7		20.0			
Hexadecane	+++++ 0.5150	0.3985 0.5670	0.4032 +++++	0.4238	0.4600	Ave		0.4612				15.0		20.0			
4-Chlorophenyl phenyl ether	0.6973 0.7911	0.7074 0.7851	0.7687 0.7804	0.8136	0.8053	Ave		0.7686			0.4000	5.6		20.0			
4-Nitroaniline	+++++ 0.3679	0.2750 0.3314	0.2946 0.3397	0.3288	0.3548	Ave		0.3275			0.0100	10.0		20.0			
Fluorene	1.3213 1.5341	1.3592 1.4844	1.4370 1.4719	1.4633	1.5138	Ave		1.4481			0.9000	5.1		20.0			
4,6-Dinitro-2-methylphenol	+++++ 0.1589	+++++ 0.1642	0.1122 0.1619	0.1413	0.1563	Ave		0.1491			0.0100	13.0		20.0			
N-Nitrosodiphenylamine	0.5519 0.5722	0.5363 0.5883	0.5774 0.5811	0.5784	0.5714	Ave		0.5696			0.0100	3.0		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	0.9381 0.9203	0.9446 0.9342	1.0206 0.9148	1.0037	0.9292	Ave		0.9507			0.0100	4.1		20.0			
4-Bromophenyl phenyl ether	0.2611 0.2567	0.2508 0.2702	0.2517 0.2588	0.2481	0.2546	Ave		0.2565			0.1000	2.7		20.0			
Hexachlorobenzene	0.2685 0.2928	0.2555 0.3045	0.2688 0.2933	0.2601	0.2801	Ave		0.2780			0.1000	6.3		20.0			
Atrazine	0.0805 0.0755	0.0717 0.0735	0.0831 0.0584	0.0880	0.0925	Ave		0.0779			0.0100	14.0		20.0			
Pentachlorophenol	0.1931 0.1745	0.0952 0.1617	0.1141 0.1550	0.1407	0.1653	Lin	-0.021	0.1599			0.0500				0.9960		0.9900
n-Octadecane	+++++ 2.0352	1.4372 2.2809	1.6140 2.4717	1.7203	1.9233	Ave		1.9261				19.0		20.0			
Phenanthrene	1.2145 1.2391	1.1474 1.2589	1.1713 1.2210	1.1708	1.2020	Ave		1.2031			0.7000	3.1		20.0			
Anthracene	1.1494 1.2231	1.1610 1.2273	1.1966 1.1822	1.1798	1.2204	Ave		1.1925			0.7000	2.5		20.0			
Carbazole	0.9414 1.0836	0.9950 1.0769	1.0596 1.0616	1.0318	1.0803	Ave		1.0413			0.0100	4.8		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.: 180-34362-1 Analy Batch No.: 107633

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/05/2014 08:25 Calibration End Date: 06/05/2014 11:45 Calibration ID: 16153

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	1.1289 1.3603	1.2260 1.3369	1.2954 1.2521	1.3140	1.3654	Ave		1.2849			0.0100	6.2		20.0			
Fluoranthene	1.3332 1.2958	1.2186 1.2296	1.2470 1.2044	1.2486	1.2694	Ave		1.2558			0.6000	3.4		20.0			
Benzidine	+++++ 0.1548	+++++ 0.1825	0.0829 0.1942	0.1548	0.1535	Lin2	-0.399	0.1840			0.0100				0.9920		0.9900
Pyrene	1.1239 1.2451	1.2008 1.3162	1.2863 1.3321	1.2785	1.2602	Ave		1.2554			0.6000	5.3		20.0			
Butyl benzyl phthalate	0.4595 0.5285	0.4664 0.5333	0.4770 0.5439	0.5141	0.5260	Ave		0.5061			0.0100	6.6		20.0			
3,3'-Dichlorobenzidine	+++++ 0.4213	0.2998 0.4140	0.3339 0.4142	0.3794	0.4186	Ave		0.3830			0.0100	13.0		20.0			
Bis(2-ethylhexyl) phthalate	+++++ 0.7508	0.5925 0.7481	0.6276 0.7655	0.7110	0.7294	Ave		0.7036			0.0100	9.5		20.0			
Benzo[a]anthracene	1.0826 1.2255	1.1478 1.2163	1.1865 1.2291	1.2145	1.2148	Ave		1.1896			0.8000	4.3		20.0			
Chrysene	1.1179 1.0816	1.1149 1.1150	1.1082 1.1319	1.1360	1.0872	Ave		1.1116			0.7000	1.7		20.0			
Di-n-octyl phthalate	+++++ 1.5659	1.0037 1.4852	1.1253 1.4547	1.3603	1.4670	Ave		1.3517			0.0100	15.0		20.0			
7,12-Dimethylbenz(a)anthracene	0.5260 0.6856	0.5879 0.6776	0.6384 0.6552	0.6951	0.6735	Ave		0.6424			0.0100	9.0		20.0			
Benzo[b]fluoranthene	1.2377 1.4990	1.3802 1.4045	1.3834 1.4303	1.4581	1.4022	Ave		1.3994			0.7000	5.5		20.0			
Benzo[k]fluoranthene	1.1993 1.4209	1.2313 1.4435	1.3743 1.4321	1.4469	1.4232	Ave		1.3714			0.7000	7.2		20.0			
Benzo[a]pyrene	1.1115 1.2699	1.0407 1.2342	1.1470 1.2642	1.2476	1.2056	Ave		1.1901			0.7000	6.9		20.0			
Indeno[1,2,3-cd]pyrene	1.0114 1.2649	1.1305 1.3499	1.2034 1.4003	1.2603	1.2261	Ave		1.2309			0.5000	9.9		20.0			
Dibenz(a,h)anthracene	0.8908 1.1257	0.9947 1.2043	0.9938 1.2611	1.0963	1.0581	Ave		1.0781			0.4000	11.0		20.0			
Benzo[g,h,i]perylene	1.0794 1.0734	1.0179 1.1669	0.9926 1.2149	1.0656	1.0275	Ave		1.0798			0.5000	7.0		20.0			
2-Fluorophenol (Surr)	1.3373 1.5068	1.3743 1.5012	1.4286 1.5894	1.4614	1.5814	Ave		1.4726				6.2		20.0			
Phenol-d5 (Surr)	1.5916 1.8333	1.5848 1.8602	1.7495 1.9942	1.7547	1.8615	Ave		1.7787				7.9		20.0			
Nitrobenzene-d5 (Surr)	0.5253 0.5199	0.5105 0.5410	0.4967 0.5235	0.5269	0.5330	Ave		0.5221				2.6		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.: 180-34362-1 Analy Batch No.: 107633

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/05/2014 08:25 Calibration End Date: 06/05/2014 11:45 Calibration ID: 16153

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-Fluorobiphenyl	1.4376 1.4565	1.4695 1.4407	1.5024 1.4743	1.4939	1.4602	Ave		1.4669				1.6		20.0			
2,4,6-Tribromophenol (Surr)	+++++ 0.1277	0.0810 0.1420	0.1019 0.1409	0.0960	0.1145	Ave		0.1149			0.0100	20.0		20.0			
Terphenyl-d14 (Surr)	0.8490 0.9987	0.9174 1.0631	0.9692 1.0413	0.9762	1.0010	Ave		0.9770				7.0		20.0			

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1 Analy Batch No.: 107633

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/05/2014 08:25 Calibration End Date: 06/05/2014 11:45 Calibration ID: 16153

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-107633/3	V0605003.D
Level 2	IC 180-107633/4	V0605004.D
Level 3	IC 180-107633/5	V0605005.D
Level 4	ICIS 180-107633/6	V0605006.D
Level 5	IC 180-107633/7	V0605007.D
Level 6	IC 180-107633/8	V0605008.D
Level 7	IC 180-107633/9	V0605009.D
Level 8	IC 180-107633/10	V0605010.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	7247 580983	29859 823905	63569 1096150	146931	318559	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosodimethylamine	DCB	Ave	7454 873555	41438 1287851	84098 1756989	206028	498476	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pyridine	DCB	Ave	14081 1491259	72772 2163223	153428 2885670	378460	824653	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Methyl methanesulfonate	DCB	Ave	8330 843582	47345 1255323	85684 1638628	210904	478414	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzaldehyde	DCB	Ave	8026 972133	33204 1342379	71936 1673715	246710	576090	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenol	DCB	Ave	17177 1762830	79713 2774038	161012 3895931	402886	955863	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Aniline	DCB	Ave	15557 1745816	75339 2618514	157256 3605615	393715	932304	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-chloroethyl)ether	DCB	Ave	10752 1154924	53843 1750792	119185 2391839	268584	625082	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Chlorophenol	DCB	Ave	10932 1188204	54390 1847521	112415 2519935	283926	676562	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
n-Decane	DCB	Ave	10772 1137262	49754 1827009	103646 2558299	254546	596313	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	14995 1374093	66689 2071235	129735 2897708	328837	760680	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	14235 1372351	65303 2142481	134420 2901626	336100	752002	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzyl alcohol	DCB	Ave	6476 789124	30787 1225463	68972 1688333	183984	438488	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	12091 1310185	67659 2018236	125907 2761496	320492	715251	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Methylphenol	DCB	Ave	11659 1276560	50442 2005962	105858 2729222	287346	660554	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.: 180-34362-1 Analy Batch No.: 107633

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/05/2014 08:25 Calibration End Date: 06/05/2014 11:45 Calibration ID: 16153

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	22295 2365469	101158 3757530	210102 5285589	524841	1261763	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,2'-oxybis[1-chloropropane]	DCB	Ave	12219 1259576	53997 2069403	110100 2990195	268830	649327	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosopyrrolidine	DCB	Ave	4660 533098	21861 832483	49564 1129165	124795	295998	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosodi-n-propylamine	DCB	Ave	11420 1234007	53203 1898437	108050 2546108	278170	657802	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acetophenone	DCB	Ave	22519 2069827	90789 3169309	188392 4376876	455205	1112015	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Methylphenol, 3 & 4	DCB	Ave	11675 1350248	53403 2181055	110997 2984867	298028	722981	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachloroethane	DCB	Ave	6051 660741	32308 1003783	63143 1356431	159628	361374	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Nitrobenzene	NPT	Ave	17529 1697756	83727 2565184	165276 3529890	393466	946602	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Isophorone	NPT	Ave	24159 2682444	113596 4124861	244001 5671369	617698	1462423	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Nitrophenol	NPT	Ave	+++++ 664055	27219 1026967	57439 1409659	150974	343710	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dimethylphenol	NPT	Ave	13772 1469784	66029 2221538	141737 3044155	349685	816147	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-chloroethoxy)methane	NPT	Ave	13409 1427009	63145 2221305	128373 3075746	324255	782624	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzoic acid	NPT	Ave	+++++ 1338614	+++++ 2097306	91013 2826502	264302	685183	+++++ 80.0	+++++ 120	8.00 160	20.0	40.0
2,4-Dichlorophenol	NPT	Ave	9914 1056291	43829 1607962	99837 2208916	244249	574748	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2,4-Trichlorobenzene	NPT	Ave	12921 1192146	53504 1869723	119784 2545721	291675	661650	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Naphthalene	NPT	Ave	37077 3752263	157732 5885289	340100 8105619	844109	2012618	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chloroaniline	NPT	Ave	12939 1472612	64125 2296948	135478 3164409	341552	799719	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,6-Dichlorophenol	NPT	Ave	10674 1036214	47495 1586033	98574 2191038	258134	564548	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorobutadiene	NPT	Ave	9920 832620	39509 1234537	80320 1683692	195449	450425	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Caprolactam	NPT	Ave	+++++ 340121	13184 494722	27873 650551	75707	186605	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chloro-3-methylphenol	NPT	Ave	11830 1271736	55785 1929623	118857 2706161	294618	691354	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.: 180-34362-1 Analy Batch No.: 107633

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/05/2014 08:25 Calibration End Date: 06/05/2014 11:45 Calibration ID: 16153

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	25494 2656453	120088 4119481	240276 5770551	602710	1455837	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1-Methylnaphthalene	NPT	Ave	23321 2460105	109432 3830898	219343 5359788	576340	1353337	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorocyclopentadiene	ANT	Ave	8189 1039310	38212 1564073	89679 2095970	237709	545651	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2,4,5-Tetrachlorobenzene	ANT	Ave	11561 1325804	62539 1982226	124010 2600260	313201	722134	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,6-Trichlorophenol	ANT	Ave	6107 854189	37635 1338762	77212 1883378	192551	478919	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,5-Trichlorophenol	ANT	Ave	7813 894117	38183 1381011	82049 1875939	200100	484316	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,1'-Biphenyl	ANT	Ave	31415 3244233	148250 5169163	295415 7179848	728950	1757514	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Chloronaphthalene	ANT	Ave	25224 2715681	107974 4309958	245923 6366944	608099	1495121	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Nitroaniline	ANT	Ave	7561 918830	37709 1338581	80256 1792249	210552	496435	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dimethyl phthalate	ANT	Ave	27035 2973340	128933 4550807	269138 6141800	664468	1638057	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,3-Dinitrobenzene	ANT	Ave	3981 503273	16829 758942	36803 1032639	109129	263204	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,6-Dinitrotoluene	ANT	Ave	4543 660434	29741 1014045	60872 1381892	152179	359049	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acenaphthylene	ANT	Ave	35961 4299999	177464 6655570	377537 8715068	949855	2292689	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
3-Nitroaniline	ANT	Ave	+++++ 675519	23713 990686	56142 1412213	149732	368947	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acenaphthene	ANT	Ave	26540 2719537	117586 4138437	236206 5668477	599696	1453220	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dinitrophenol	ANT	Lin2	+++++ 968102	+++++ 1462583	45186 2009765	167603	475344	+++++ 80.0	+++++ 120	8.00 160	20.0	40.0
4-Nitrophenol	ANT	Ave	+++++ 1227007	40350 1752899	98063 2312015	273563	665802	+++++ 80.0	4.00 120	8.00 160	20.0	40.0
2,4-Dinitrotoluene	ANT	Ave	6112 943333	36829 1363381	75647 1845503	204567	506728	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dibenzofuran	ANT	Ave	38903 3992133	166408 5891147	340352 8248009	872922	2100889	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,3,5,6-Tetrachlorophenol	ANT	Ave	+++++ 915418	32347 1427873	63821 1900027	185361	482921	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,3,4,6-Tetrachlorophenol	ANT	Ave	5884 871584	33494 1317104	68129 1789830	184240	464492	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.: 180-34362-1 Analy Batch No.: 107633

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/05/2014 08:25 Calibration End Date: 06/05/2014 11:45 Calibration ID: 16153

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	5707 712138	35385 980725	71216 1236702	186756	449069	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Diethyl phthalate	ANT	Ave	28974 3271831	135908 5009323	290903 6690900	738358	1815207	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexadecane	NPT	Ave	+++++ 1637359	61437 2684349	124625 +++++	320883	814297	+++++ 40.0	2.00 60.0	4.00 +++++	10.0	20.0
4-Chlorophenyl phenyl ether	ANT	Ave	13735 1630020	66196 2569404	146875 3428115	380957	904191	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Nitroaniline	ANT	Ave	+++++ 758034	25736 1084684	56288 1492119	153972	398324	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Fluorene	ANT	Ave	26026 3160710	127186 4858093	274564 6465444	685183	1699727	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4,6-Dinitro-2-methylphenol	PHN	Ave	+++++ 1277970	+++++ 1962885	76115 2641673	247435	681816	+++++ 80.0	+++++ 120	8.00 160	20.0	40.0
N-Nitrosodiphenylamine	PHN	Ave	20042 2300632	91226 3515866	195905 4741201	506495	1245988	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2-Diphenylhydrazine(as Azobenzene)	PHN	Ave	34069 3700202	160665 5582995	346283 7463694	878883	2026115	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Bromophenyl phenyl ether	PHN	Ave	9484 1032089	42665 1614568	85403 2111586	217271	555138	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorobenzene	PHN	Ave	9750 1177193	43464 1820044	91219 2392847	227773	610803	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Atrazine	PHN	Ave	2923 303450	12190 439026	28206 476849	77042	201608	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pentachlorophenol	PHN	Lin	14022 1403152	32397 1933208	77455 2530021	246409	720983	0.800 80.0	4.00 120	8.00 160	20.0	40.0
n-Octadecane	DCB	Ave	+++++ 1697263	58671 2880777	130983 4065990	344880	858587	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenanthrene	PHN	Ave	44106 4981937	195159 7523824	397424 9962250	1025191	2621094	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Anthracene	PHN	Ave	41742 4917873	197472 7334870	406029 9645656	1033097	2661198	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Carbazole	PHN	Ave	34190 4356998	169240 6435874	359519 8662051	903549	2355711	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Di-n-butyl phthalate	PHN	Ave	40996 5469338	208526 7989596	439543 10216086	1150643	2977280	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Fluoranthene	PHN	Ave	48417 5210003	207274 7348892	423132 9827023	1093373	2767966	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzidine	CRY	Lin2	+++++ 643569	+++++ 1024612	28139 1437687	132970	338982	+++++ 40.0	+++++ 60.0	4.00 80.0	10.0	20.0
Pyrene	CRY	Ave	42606 5176902	209652 7390038	436882 9862636	1098497	2782392	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.: 180-34362-1 Analy Batch No.: 107633

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/05/2014 08:25 Calibration End Date: 06/05/2014 11:45 Calibration ID: 16153

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	17421 2197384	81433 2994620	162011 4026875	441679	1161340	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
3,3'-Dichlorobenzidine	CRY	Ave	+++++ 1751600	52340 2324667	113407 3066829	326004	924260	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-ethylhexyl) phthalate	CRY	Ave	+++++ 3121939	103440 4200396	213167 5667796	610907	1610595	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[a]anthracene	CRY	Ave	41040 5095699	200399 6829441	402966 9099955	1043550	2682276	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Chrysene	CRY	Ave	42379 4497150	194663 6260675	376371 8380802	976061	2400416	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Di-n-octyl phthalate	PRY	Ave	+++++ 5039481	147151 6734100	308753 9089752	905313	2623733	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
7,12-Dimethylbenz(a)anthracene	PRY	Ave	17045 2206304	86182 3072560	175150 4094114	462623	1204581	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[b]fluoranthene	PRY	Ave	40110 4824218	202341 6368454	379552 8936771	970398	2507784	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[k]fluoranthene	PRY	Ave	38864 4572696	180507 6544993	377053 8948419	962921	2545386	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[a]pyrene	PRY	Ave	36021 4086943	152572 5595924	314704 7899067	830273	2156223	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Indeno[1,2,3-cd]pyrene	PRY	Ave	32776 4070677	165729 6120959	330177 8749573	838731	2192898	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dibenz(a,h)anthracene	PRY	Ave	28867 3622705	145822 5460456	272673 7879895	729631	1892437	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[g,h,i]perylene	PRY	Ave	34979 3454309	149235 5291168	272330 7591259	709204	1837569	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Fluorophenol (Surr)	DCB	Ave	10695 1256622	56106 1896008	115935 2614483	292974	705989	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenol-d5 (Surr)	DCB	Ave	12728 1528903	64696 2349465	141974 3280404	351776	831008	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Nitrobenzene-d5 (Surr)	NPT	Ave	16621 1652880	78700 2561460	153542 3451586	398903	943571	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Fluorobiphenyl	ANT	Ave	28317 3000858	137509 4715053	287062 6476034	699532	1639465	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,6-Tribromophenol (Surr)	PHN	Ave	+++++ 513493	13772 848546	34562 1149770	84072	249771	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Terphenyl-d14 (Surr)	CRY	Ave	32183 4152763	160180 5969087	329181 7709428	838748	2210124	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.: 180-34362-1 Analy Batch No.: 107633

SDG No.:

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/05/2014 08:25 Calibration End Date: 06/05/2014 11:45 Calibration ID: 16153

Curve Type Legend:

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

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605003.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 05-Jun-2014 08:25:30 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0001566-003
Misc. Info.: IC
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub2

Method: \\PITCHROM\ChromData\CH731\20140604-1566.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 06-Jun-2014 06:48:20 Calib Date: 05-Jun-2014 11:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK053

First Level Reviewer: piccolinov Date: 05-Jun-2014 10:17:03

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	6.254	6.255	0.000	90	159944	8.00	8.00	
* 2 Naphthalene-d8	136	7.456	7.456	0.000	99	632793	8.00	8.00	
* 3 Acenaphthene-d10	164	9.064	9.064	0.000	95	393946	8.00	8.00	
* 4 Phenanthrene-d10	188	10.421	10.421	0.000	96	726331	8.00	8.00	
* 5 Chrysene-d12	240	13.872	13.878	-0.006	84	758178	8.00	8.00	
* 6 Perylene-d12	264	16.762	16.762	0.000	98	648127	8.00	8.00	
$ 7 2-Fluorophenol	112	4.913	4.914	-0.001	55	10695	0.4000	0.3633	
$ 8 Phenol-d5	99	5.902	5.902	0.000	77	12728	0.4000	0.3579	
$ 9 Nitrobenzene-d5	82	6.778	6.778	0.000	72	16621	0.4000	0.4025	
$ 10 2-Fluorobiphenyl	172	8.428	8.434	-0.006	81	28317	0.4000	0.3920	
$ 11 2,4,6-Tribromophenol	330	9.780	9.780	0.000	5	2795	0.4000	0.2680	
$ 12 Terphenyl-d14	244	12.152	12.158	-0.006	62	32183	0.4000	0.3476	
13 1,4-Dioxane	88	1.799	1.794	0.005	26	7247	0.4000	0.4929	M
14 N-Nitrosodimethylamine	74	2.456	2.440	0.016	62	7454	0.4000	0.3610	M
15 Pyridine	79	2.579	2.515	0.064	69	14081	0.4000	0.3906	M
21 Methyl methanesulfonate	80	4.684	4.679	0.005	47	8330	0.4000	0.3976	M
25 Benzaldehyde	77	5.816	5.816	0.000	83	8026	0.4000	0.3791	
26 Phenol	94	5.912	5.918	-0.006	79	17177	0.4000	0.4064	
27 Aniline	93	5.928	5.929	-0.001	76	15557	0.4000	0.3857	
29 Bis(2-chloroethyl)ether	93	5.998	5.993	0.005	70	10752	0.4000	0.3877	
30 2-Chlorophenol	128	6.051	6.052	-0.001	60	10932	0.4000	0.3825	
31 n-Decane	43	6.110	6.105	0.005	71	10772	0.4000	0.3986	
32 1,3-Dichlorobenzene	146	6.201	6.201	0.000	76	14995	0.4000	0.4444	
33 1,4-Dichlorobenzene	146	6.276	6.271	0.005	58	14235	0.4000	0.4218	
34 Benzyl alcohol	108	6.382	6.383	-0.001	64	6476	0.4000	0.3571	
35 1,2-Dichlorobenzene	146	6.414	6.420	-0.006	66	12091	0.4000	0.3789	
36 2-Methylphenol	108	6.489	6.495	-0.006	77	11659	0.4000	0.3991	
37 Indene	116	6.505	6.506	-0.001	80	22295	0.4000	0.3996	
38 2,2'-oxybis[1-chloropropan	45	6.511	6.516	-0.005	36	12219	0.4000	0.4085	
39 N-Nitrosopyrrolidine	100	6.607	6.602	0.005	58	4660	0.4000	0.3730	

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	6.628	6.628	0.000	54	11420	0.4000	0.3989	
42 4-Methylphenol	108	6.633	6.634	-0.001	51	11675	0.4000	0.3767	
40 Acetophenone	105	6.633	6.634	-0.001	72	22519	0.4000	0.4557	
45 Hexachloroethane	117	6.746	6.746	0.000	70	6051	0.4000	0.3817	
46 Nitrobenzene	77	6.794	6.794	0.000	73	17529	0.4000	0.4125	
48 Isophorone	82	7.013	7.013	0.000	81	24159	0.4000	0.3755	
49 2-Nitrophenol	139	7.093	7.093	0.000	42	4050	0.4000	0.2568	
50 2,4-Dimethylphenol	107	7.125	7.125	0.000	81	13772	0.4000	0.3828	
52 Benzoic acid	122	7.152	7.195	-0.043	52	8189	0.8000	0.5347	
53 Bis(2-chloroethoxy)methane	93	7.205	7.205	0.000	80	13409	0.4000	0.3871	
54 2,4-Dichlorophenol	162	7.317	7.318	-0.001	73	9914	0.4000	0.3894	
56 1,2,4-Trichlorobenzene	180	7.397	7.403	-0.006	64	12921	0.4000	0.4274	
57 Azobenzene	77		7.408					ND	
58 Naphthalene	128	7.472	7.473	-0.001	59	37077	0.4000	0.4076	
59 4-Chloroaniline	127	7.515	7.515	0.000	65	12939	0.4000	0.3641	
60 2,6-Dichlorophenol	162	7.526	7.526	0.000	58	10674	0.4000	0.4125	
62 Hexachlorobutadiene	225	7.590	7.590	0.000	65	9920	0.4000	0.4732	
64 Caprolactam	113	7.787	7.809	-0.022	35	1966	0.4000	0.2517	
67 4-Chloro-3-methylphenol	107	7.942	7.943	-0.001	46	11830	0.4000	0.3837	
69 2-Methylnaphthalene	142	8.108	8.108	0.000	74	25494	0.4000	0.3930	
71 1-Methylnaphthalene	142	8.199	8.199	0.000	81	23321	0.4000	0.3881	
72 Hexachlorocyclopentadiene	237	8.257	8.258	-0.001	63	8189	0.4000	0.3551	
73 1,2,4,5-Tetrachlorobenzene	216	8.263	8.263	0.000	65	11561	0.4000	0.3714	
74 2,4,6-Trichlorophenol	196	8.359	8.359	0.000	52	6107	0.4000	0.3094	
75 2,4,5-Trichlorophenol	196	8.396	8.397	-0.001	62	7813	0.4000	0.3760	
76 1,1'-Biphenyl	154	8.525	8.530	-0.005	90	31415	0.4000	0.4039	
77 2-Chloronaphthalene	162	8.557	8.557	0.000	76	25224	0.4000	0.3927	
79 2-Nitroaniline	65	8.637	8.632	0.005	20	7561	0.4000	0.3654	
82 Dimethyl phthalate	163	8.781	8.781	0.000	85	27035	0.4000	0.3898	
83 1,3-Dinitrobenzene	168	8.813	8.813	0.000	61	3981	0.4000	0.3689	
84 2,6-Dinitrotoluene	165	8.840	8.840	0.000	40	4543	0.4000	0.3004	
85 Acenaphthylene	152	8.936	8.942	-0.006	77	35961	0.4000	0.3681	
86 3-Nitroaniline	138	9.000	9.000	0.000	41	4234	0.4000	0.2802	
87 2,4-Dinitrophenol	184	9.091	9.097	-0.006	9	2096	0.8000	4.26	
88 Acenaphthene	153	9.096	9.097	-0.001	84	26540	0.4000	0.4190	
89 4-Nitrophenol	109	9.128	9.134	-0.006	73	6686	0.8000	0.5030	
91 2,4-Dinitrotoluene	165	9.208	9.209	-0.001	56	6112	0.4000	0.3025	
93 Dibenzofuran	168	9.246	9.251	-0.005	81	38903	0.4000	0.4246	
95 2,3,5,6-Tetrachlorophenol	232	9.315	9.316	-0.001	18	4445	0.4000	0.2242	
96 2,3,4,6-Tetrachlorophenol	232	9.358	9.358	0.000	9	5884	0.4000	0.3131	
97 2-Naphthylamine	143	9.385	9.385	0.000	32	5707	0.4000	0.3352	
98 Diethyl phthalate	149	9.411	9.412	-0.001	87	28974	0.4000	0.3833	
99 Hexadecane	57	9.417	9.417	0.000	71	10081	0.4000	0.2763	
100 4-Chlorophenyl phenyl ethe	204	9.540	9.545	-0.005	62	13735	0.4000	0.3629	
101 4-Nitroaniline	138	9.556	9.556	0.000	26	3985	0.4000	0.2471	
103 Fluorene	166	9.561	9.561	0.000	68	26026	0.4000	0.3650	
104 4,6-Dinitro-2-methylphenol	198	9.582	9.583	-0.001	4	3858	0.8000	0.2849	
105 N-Nitrosodiphenylamine	169	9.646	9.647	-0.001	40	20042	0.4000	0.3875	
90 1,2-Diphenylhydrazine	77	9.684	9.690	-0.006	1	34069	0.4000	0.3947	
110 4-Bromophenyl phenyl ether	248	9.988	9.989	-0.001	58	9484	0.4000	0.4072	
112 Hexachlorobenzene	284	10.074	10.074	0.000	65	9750	0.4000	0.3864	
113 Atrazine	200	10.106	10.101	0.005	1	2923	0.4000	0.4134	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
116 Pentachlorophenol	266	10.239	10.245	-0.006	65	14022	0.8000	1.10	
115 n-Octadecane	57	10.245	10.245	0.000	71	9395	0.4000	0.2440	
121 Phenanthrene	178	10.442	10.443	-0.001	64	44106	0.4000	0.4038	
122 Anthracene	178	10.490	10.496	-0.006	82	41742	0.4000	0.3855	
124 Carbazole	167	10.629	10.630	-0.001	71	34190	0.4000	0.3616	
126 Di-n-butyl phthalate	149	10.918	10.918	0.000	92	40996	0.4000	0.3514	
131 Fluoranthene	202	11.708	11.714	-0.006	75	48417	0.4000	0.4246	
132 Benzidine	184	11.853	11.837	0.016	1	226	0.4000	2.18	M
133 Pyrene	202	12.002	12.008	-0.006	91	42606	0.4000	0.3581	
138 Butyl benzyl phthalate	149	12.830	12.831	-0.001	64	17421	0.4000	0.3632	
144 3,3'-Dichlorobenzidine	252	13.776	13.776	0.000	1	9777	0.4000	0.2693	
145 Bis(2-ethylhexyl) phthalat	149	13.813	13.814	-0.001	67	17519	0.4000	0.2627	
146 Benzo[a]anthracene	228	13.851	13.856	-0.005	57	41040	0.4000	0.3640	
147 Chrysene	228	13.920	13.926	-0.006	60	42379	0.4000	0.4023	
150 Di-n-octyl phthalate	149	15.085	15.096	-0.011	53	27044	0.4000	0.2469	M
151 7,12-Dimethylbenz(a)anthra	256	15.955	15.956	-0.001	26	17045	0.4000	0.3275	
152 Benzo[b]fluoranthene	252	15.972	15.972	0.000	72	40110	0.4000	0.3538	M
153 Benzo[k]fluoranthene	252	16.020	16.031	-0.011	47	38864	0.4000	0.3498	M
154 Benzo[a]pyrene	252	16.650	16.650	0.000	30	36021	0.4000	0.3736	
157 Indeno[1,2,3-cd]pyrene	276	18.942	18.947	-0.005	65	32776	0.4000	0.3287	
158 Dibenz(a,h)anthracene	278	18.968	18.979	-0.011	30	28867	0.4000	0.3305	
159 Benzo[g,h,i]perylene	276	19.535	19.530	0.005	66	34979	0.4000	0.3999	
S 197 Methyl Phenols,Total	108				0		0.8000	0.7758	
S 199 Total Cresols	108				0		0.8000	0.7758	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Review Flags
M - Manually Integrated

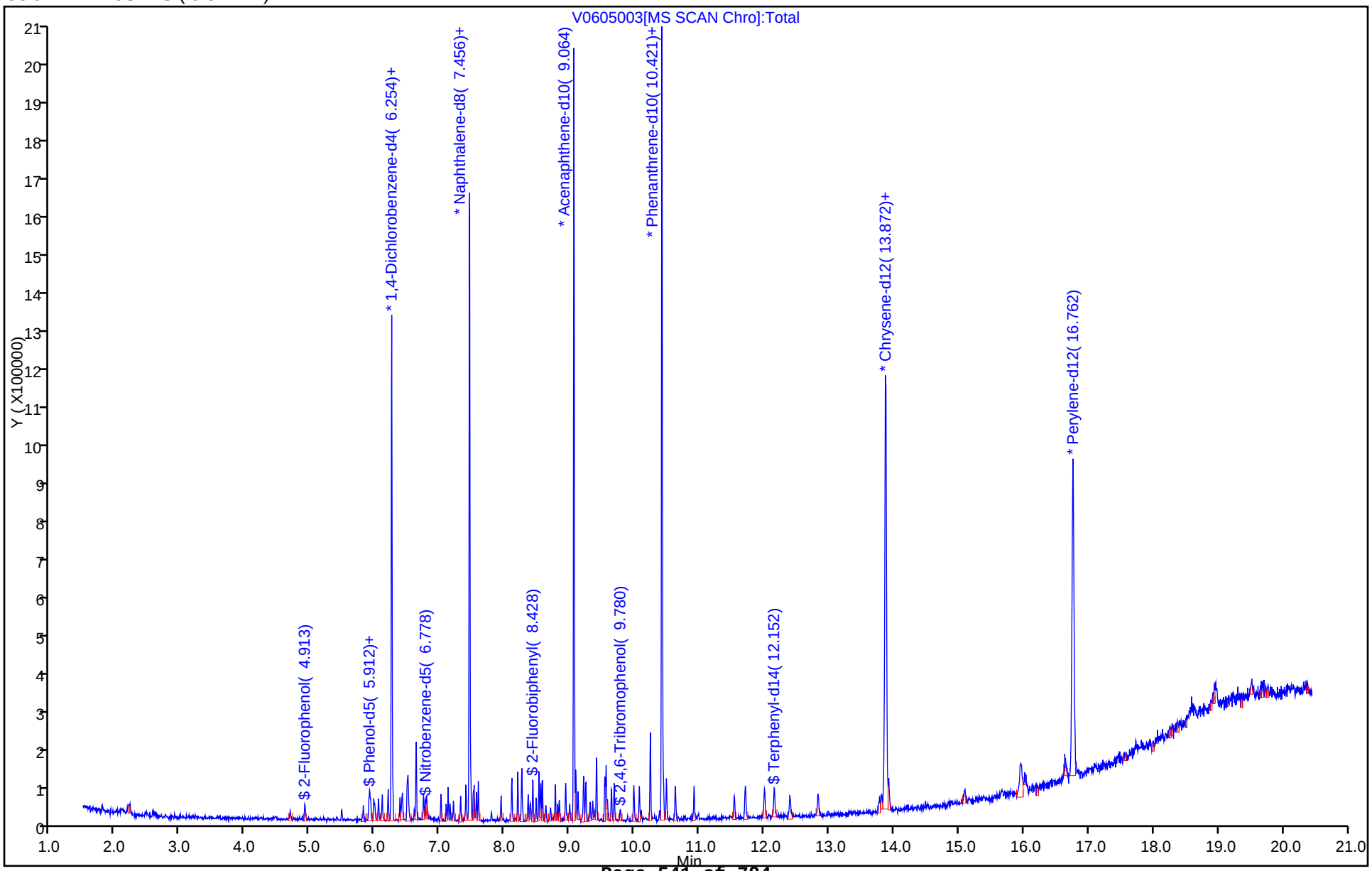
Report Date: 06-Jun-2014 06:48:22 Chrom Revision: 2.2 16-May-2014 10:46:48

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605003.D

Injection Date:	05-Jun-2014 08:25:30	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

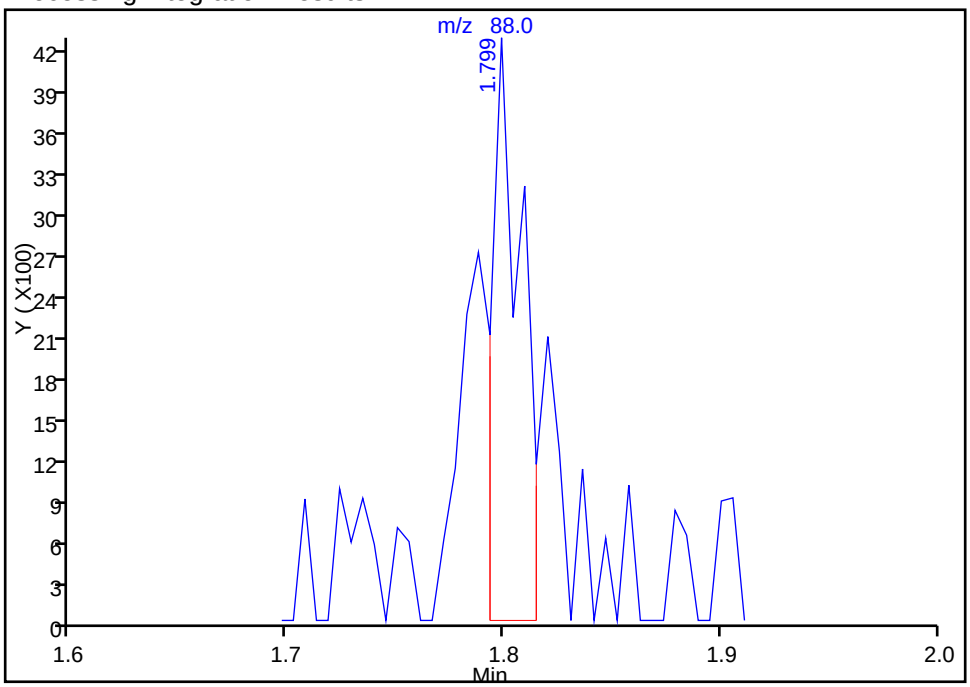
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605003.D
Injection Date: 05-Jun-2014 08:25:30 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

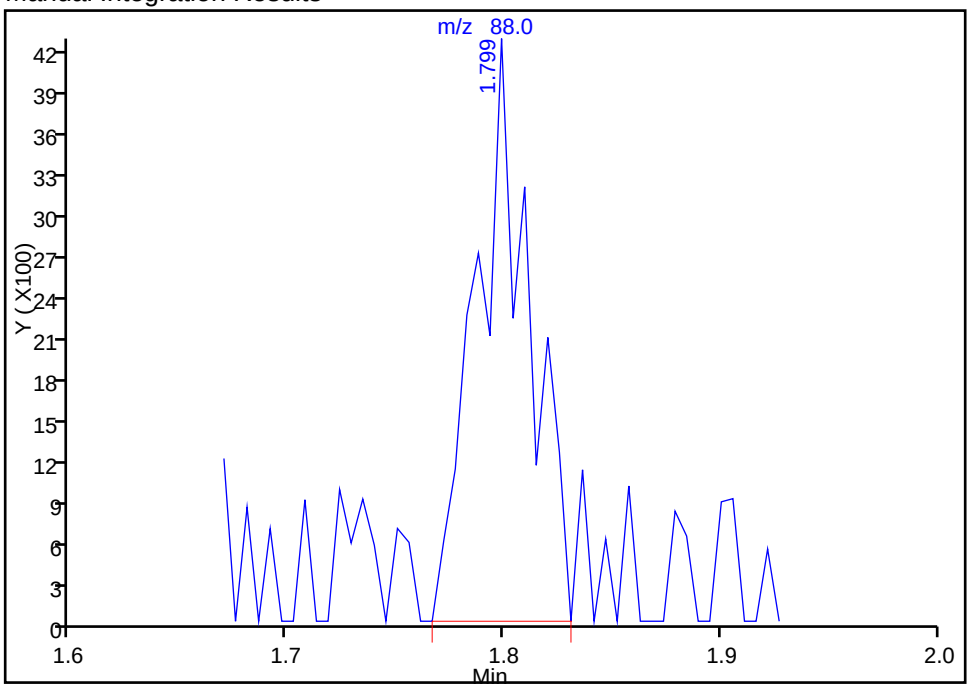
Processing Integration Results

RT: 1.80
Response: 4090
Amount: 0.297511



Manual Integration Results

RT: 1.80
Response: 7247
Amount: 0.492933



Reviewer: piccolinov, 05-Jun-2014 10:20:22
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

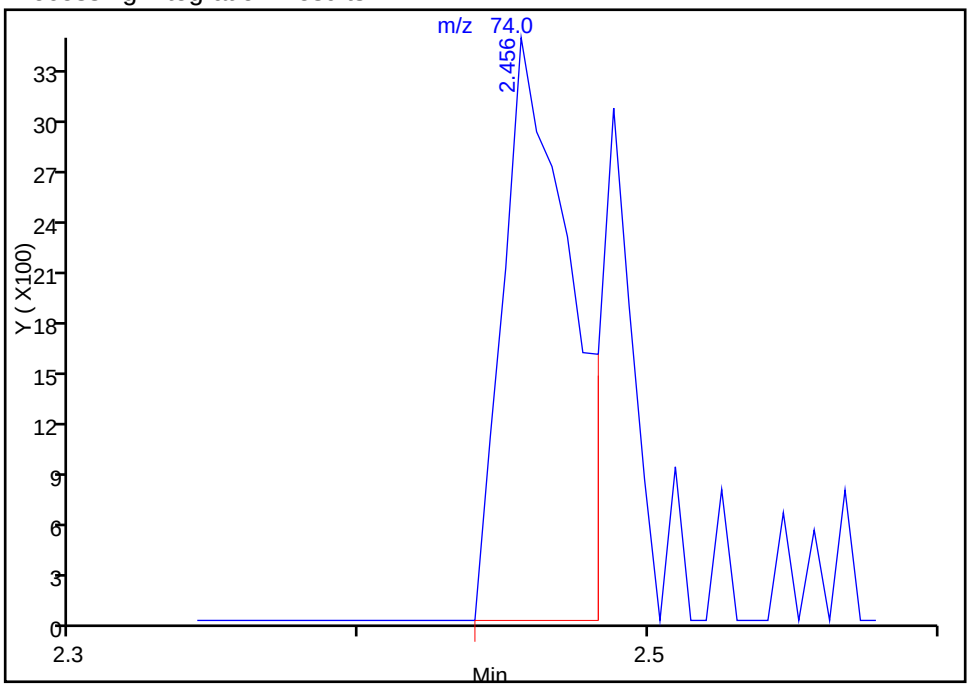
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140604-1566.b\V0605003.D				
Injection Date:	05-Jun-2014 08:25:30	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

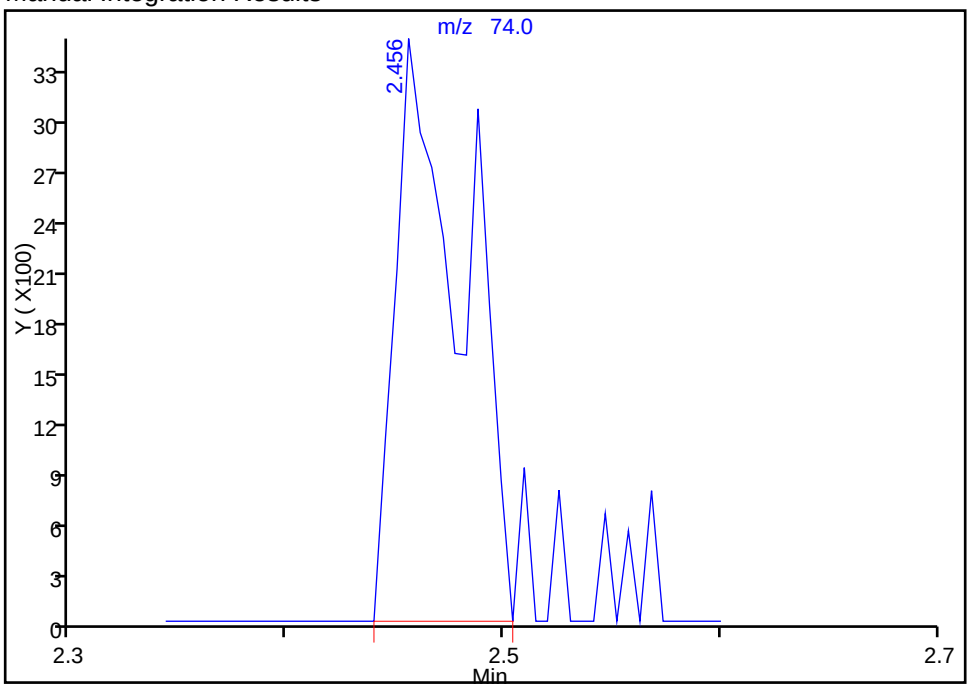
Processing Integration Results

RT: 2.46
Response: 5626
Amount: 0.298310



Manual Integration Results

RT: 2.46
Response: 7454
Amount: 0.360966



Reviewer: piccolinov, 05-Jun-2014 10:20:22
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

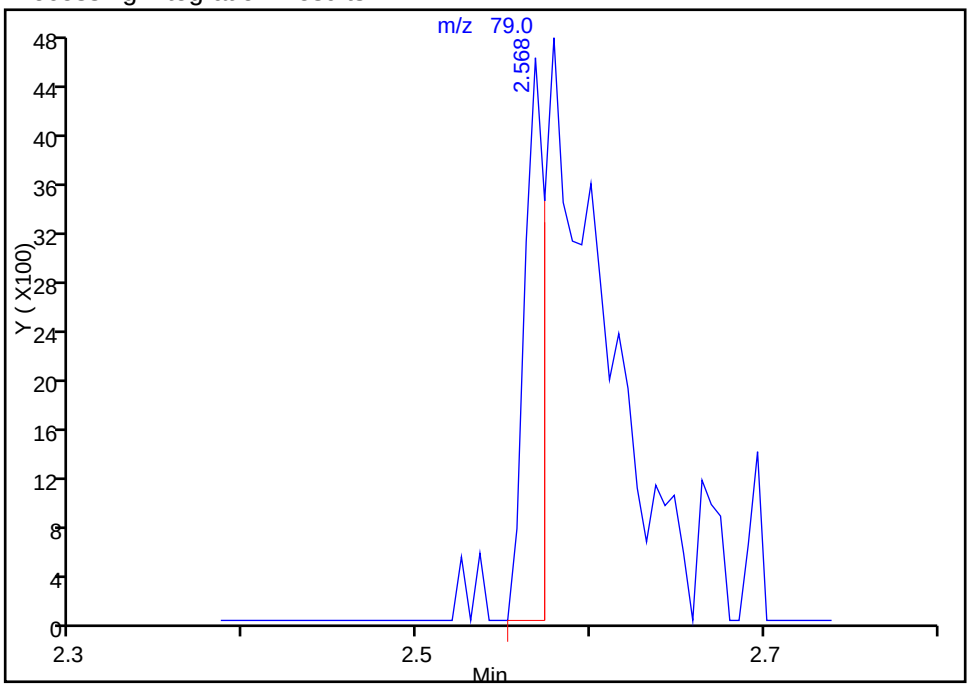
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140604-1566.b\V0605003.D				
Injection Date:	05-Jun-2014 08:25:30	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

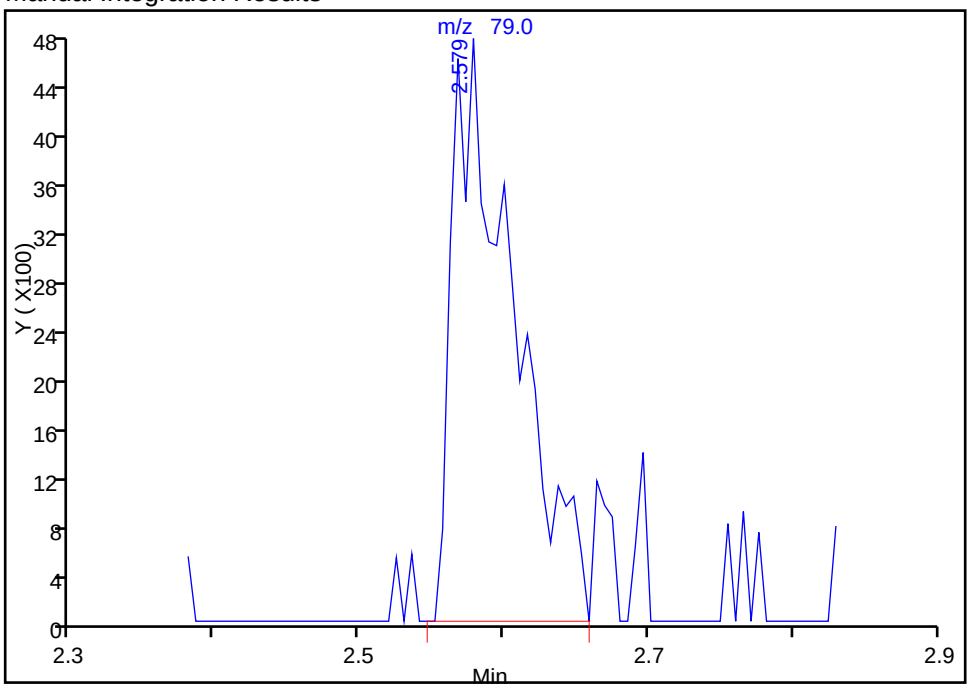
Processing Integration Results

RT: 2.57
Response: 3788
Amount: 0.104591



Manual Integration Results

RT: 2.58
Response: 14081
Amount: 0.390621



Reviewer: piccolinov, 05-Jun-2014 10:20:22
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

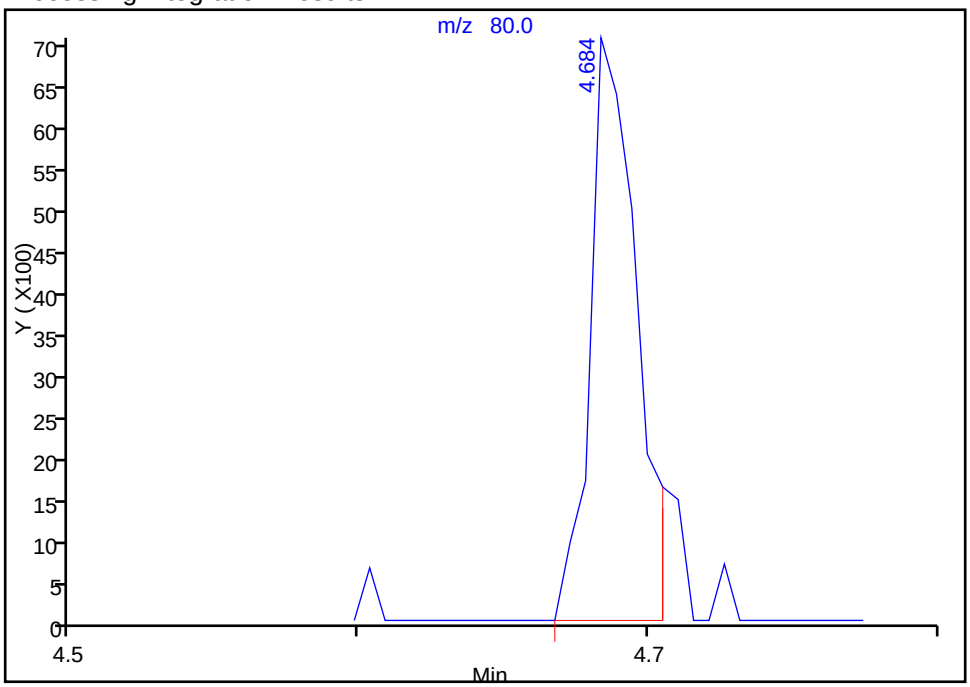
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140604-1566.b\V0605003.D				
Injection Date:	05-Jun-2014 08:25:30	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		

21 Methyl methanesulfonate, CAS: 66-27-3

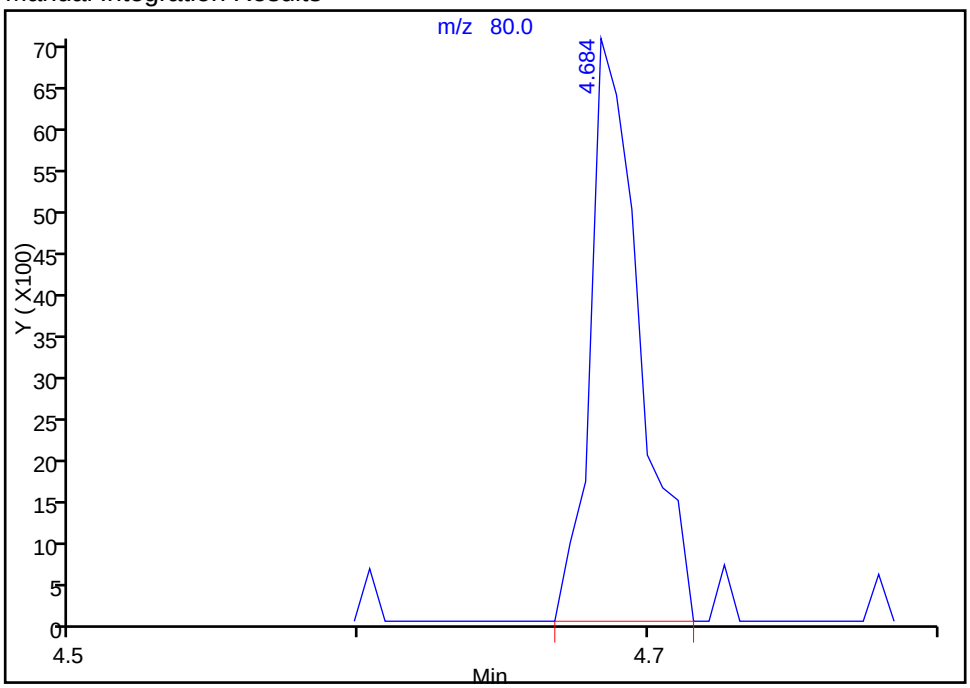
Processing Integration Results

RT: 4.68
Response: 7864
Amount: 0.375786



Manual Integration Results

RT: 4.68
Response: 8330
Amount: 0.397636



Reviewer: piccolinov, 05-Jun-2014 10:20:22
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

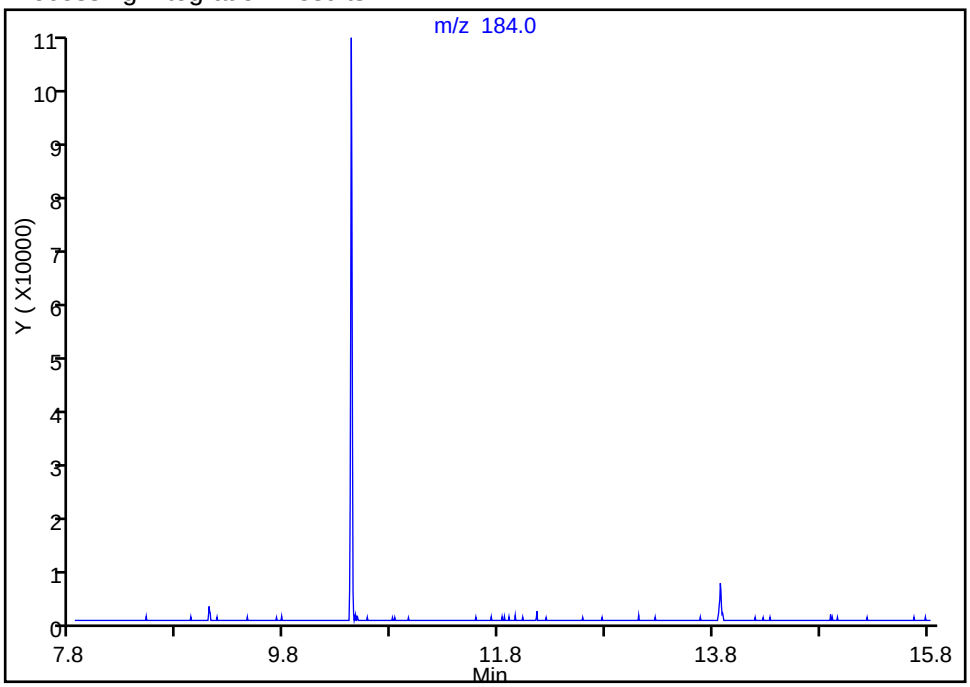
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140604-1566.b\V0605003.D				
Injection Date:	05-Jun-2014 08:25:30	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		

132 Benzidine, CAS: 92-87-5

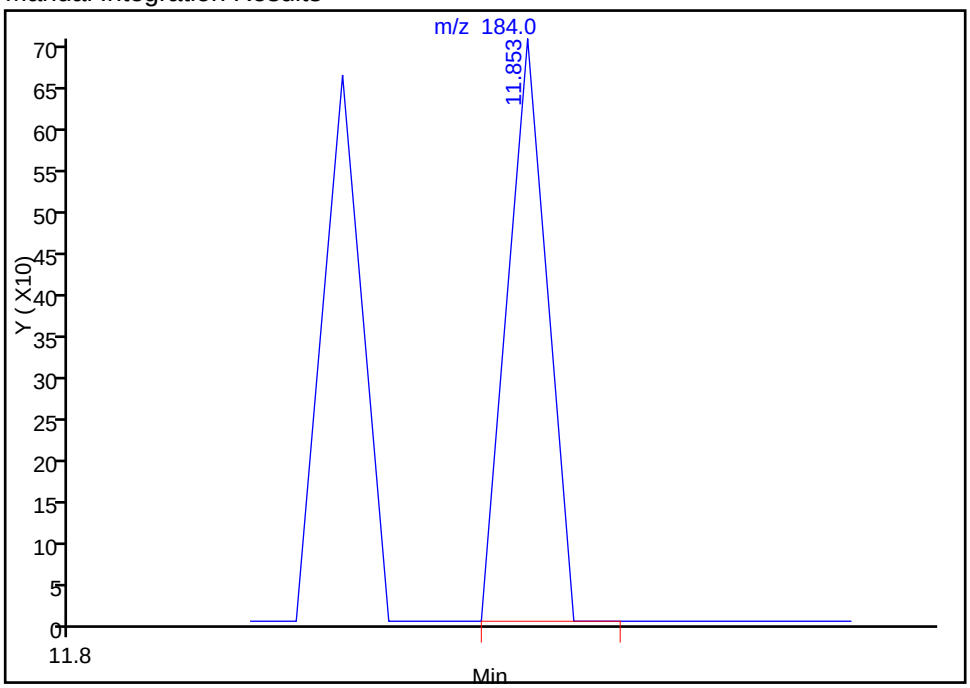
Not Detected
Expected RT: 11.84

Processing Integration Results



Manual Integration Results

RT: 11.85
Response: 226
Amount: 2.181861



Reviewer: piccolinov, 05-Jun-2014 10:20:22
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

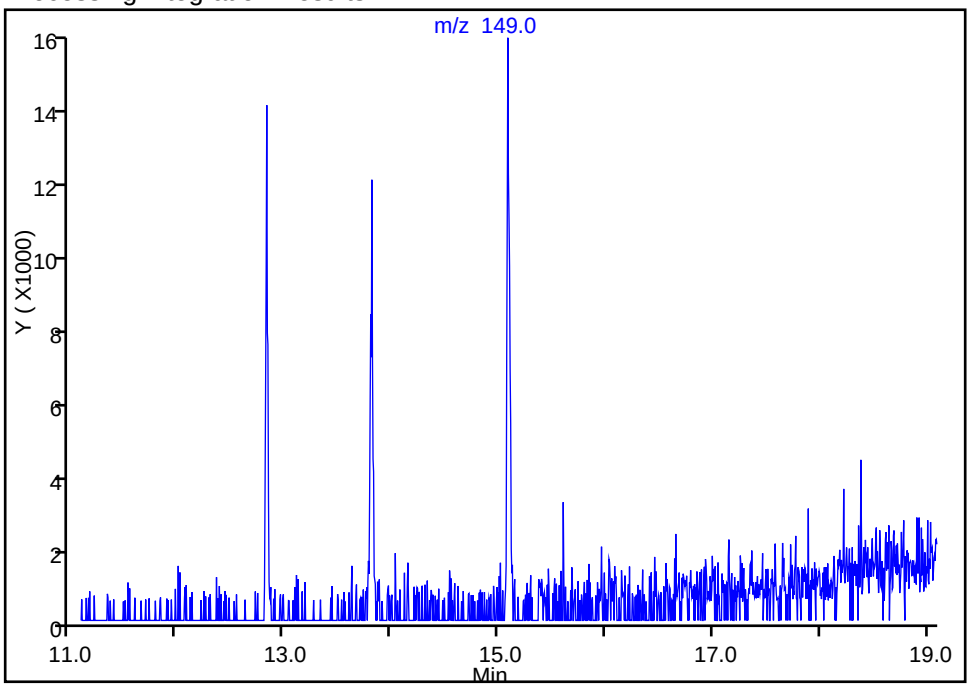
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140604-1566.b\V0605003.D				
Injection Date:	05-Jun-2014 08:25:30	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		

150 Di-n-octyl phthalate, CAS: 117-84-0

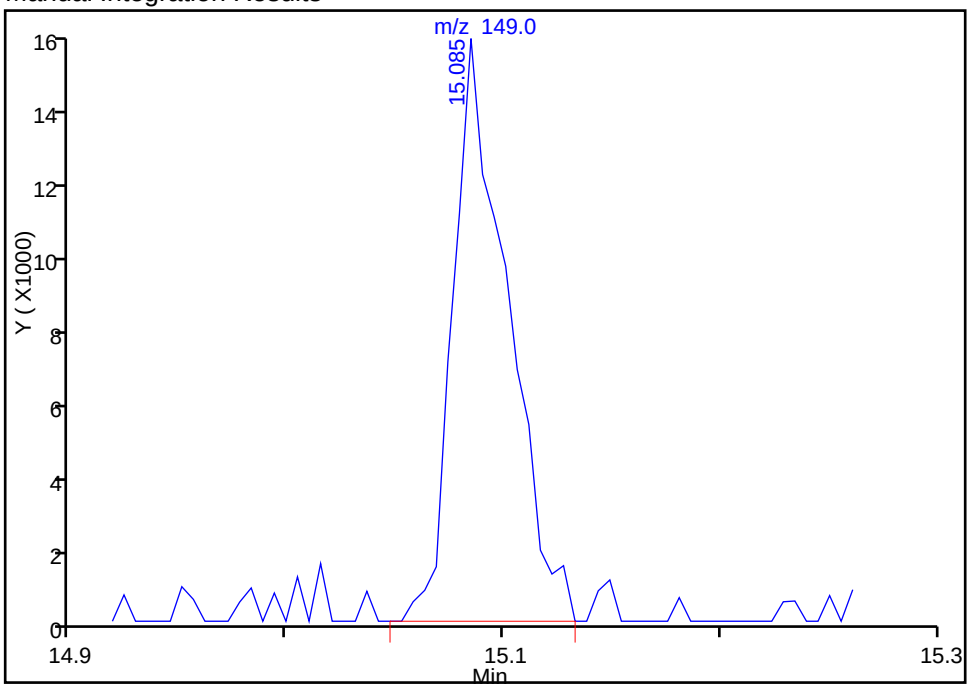
Not Detected
Expected RT: 15.10

Processing Integration Results



Manual Integration Results

RT: 15.08
Response: 27044
Amount: 0.246948



Reviewer: piccolinov, 05-Jun-2014 10:20:22
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

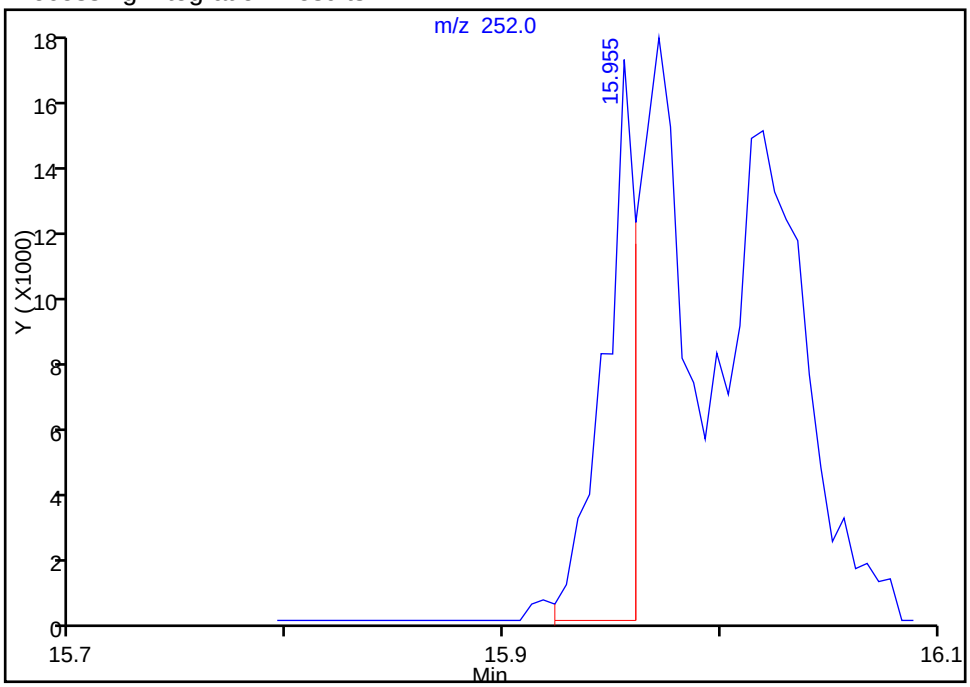
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140604-1566.b\V0605003.D				
Injection Date:	05-Jun-2014 08:25:30	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		

152 Benzo[b]fluoranthene, CAS: 205-99-2

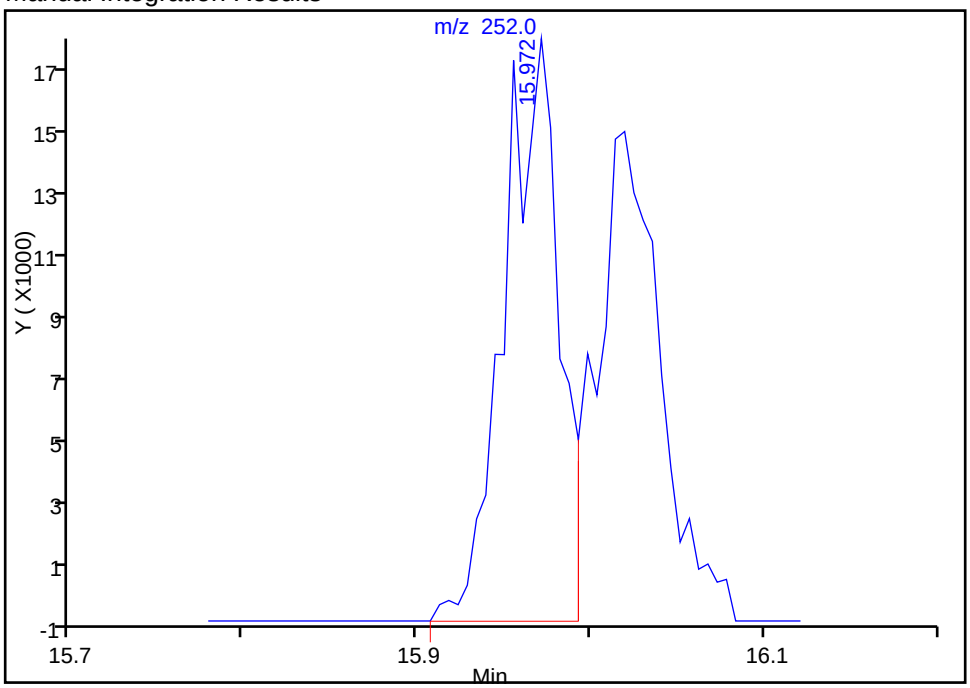
Processing Integration Results

RT: 15.96
Response: 17511
Amount: 0.180749



Manual Integration Results

RT: 15.97
Response: 40110
Amount: 0.353779



Reviewer: piccolinov, 05-Jun-2014 10:20:22
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

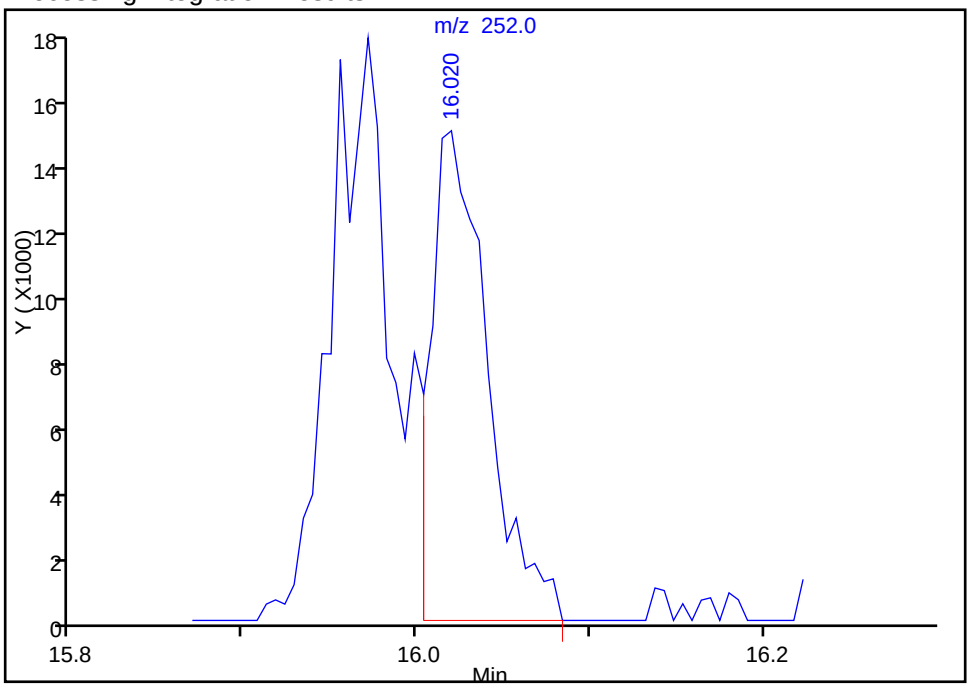
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140604-1566.b\V0605003.D				
Injection Date:	05-Jun-2014 08:25:30	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		

153 Benzo[k]fluoranthene, CAS: 207-08-9

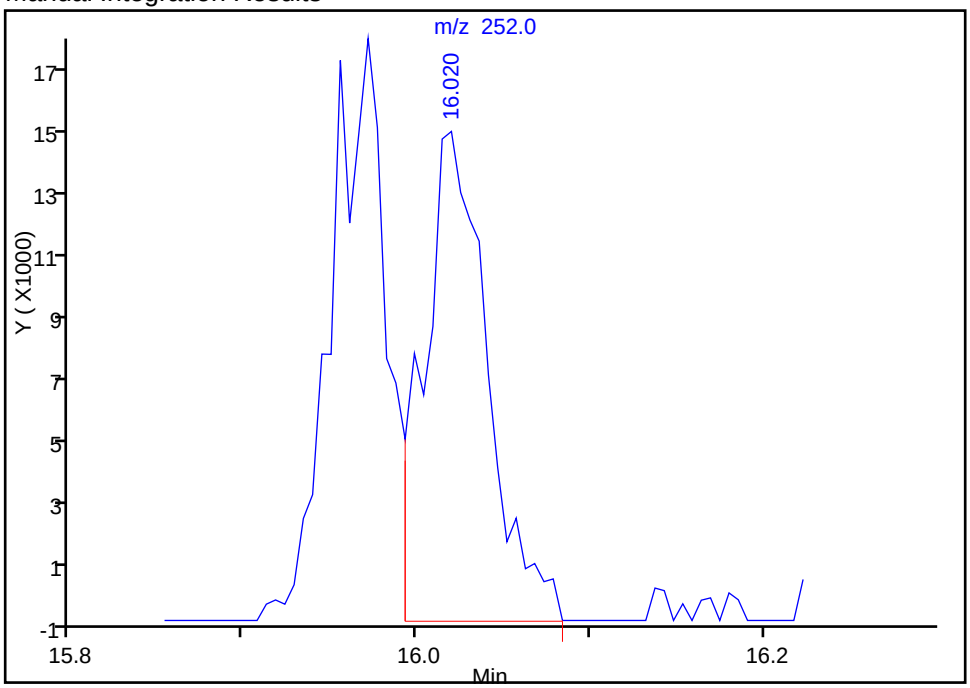
Processing Integration Results

RT: 16.02
Response: 34293
Amount: 0.305146



Manual Integration Results

RT: 16.02
Response: 38864
Amount: 0.349790



Reviewer: piccolinov, 05-Jun-2014 10:20:22
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605004.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 05-Jun-2014 08:54:30 ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0001566-004
Misc. Info.: IC
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub2

Method: \\PITCHROM\ChromData\CH731\20140604-1566.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 06-Jun-2014 06:48:27 Calib Date: 05-Jun-2014 11:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK053

First Level Reviewer: piccolinov Date: 05-Jun-2014 10:38:10

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	6.253	6.255	-0.001	89	163296	8.00	8.00	
* 2 Naphthalene-d8	136	7.455	7.456	-0.001	98	616639	8.00	8.00	
* 3 Acenaphthene-d10	164	9.069	9.064	0.005	92	374291	8.00	8.00	
* 4 Phenanthrene-d10	188	10.425	10.421	0.004	96	680365	8.00	8.00	
* 5 Chrysene-d12	240	13.876	13.878	-0.002	84	698376	8.00	8.00	
* 6 Perylene-d12	264	16.767	16.762	0.005	97	586417	8.00	8.00	
$ 7 2-Fluorophenol	112	4.918	4.914	0.004	86	56106	2.00	1.87	
$ 8 Phenol-d5	99	5.901	5.902	-0.001	86	64696	2.00	1.78	
$ 9 Nitrobenzene-d5	82	6.777	6.778	-0.001	87	78700	2.00	1.96	
$ 10 2-Fluorobiphenyl	172	8.433	8.434	-0.001	98	137509	2.00	2.00	
$ 11 2,4,6-Tribromophenol	330	9.784	9.780	0.004	67	13772	2.00	1.41	
$ 12 Terphenyl-d14	244	12.156	12.158	-0.002	92	160180	2.00	1.88	
13 1,4-Dioxane	88	1.793	1.794	-0.001	83	29859	2.00	1.99	
14 N-Nitrosodimethylamine	74	2.450	2.440	0.010	76	41438	2.00	1.97	
15 Pyridine	79	2.535	2.515	0.020	90	72772	2.00	1.98	M
21 Methyl methanesulfonate	80	4.683	4.679	0.004	87	47345	2.00	2.21	
25 Benzaldehyde	77	5.815	5.816	-0.001	86	33204	2.00	1.54	
26 Phenol	94	5.917	5.918	-0.001	86	79713	2.00	1.85	
27 Aniline	93	5.927	5.929	-0.002	86	75339	2.00	1.83	
29 Bis(2-chloroethyl)ether	93	5.991	5.993	-0.002	91	53843	2.00	1.90	
30 2-Chlorophenol	128	6.050	6.052	-0.002	90	54390	2.00	1.86	
31 n-Decane	43	6.109	6.105	0.004	80	49754	2.00	1.80	
32 1,3-Dichlorobenzene	146	6.200	6.201	-0.001	86	66689	2.00	1.94	
33 1,4-Dichlorobenzene	146	6.269	6.271	-0.002	72	65303	2.00	1.90	
34 Benzyl alcohol	108	6.381	6.383	-0.002	81	30787	2.00	1.66	
35 1,2-Dichlorobenzene	146	6.419	6.420	-0.001	89	67659	2.00	2.08	
36 2-Methylphenol	108	6.494	6.495	-0.001	88	50442	2.00	1.69	
37 Indene	116	6.504	6.506	-0.002	75	101158	2.00	1.78	
38 2,2'-oxybis[1-chloropropan	45	6.515	6.516	-0.001	74	53997	2.00	1.77	
39 N-Nitrosopyrrolidine	100	6.600	6.602	-0.002	72	21861	2.00	1.71	

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	6.633	6.628	0.005	69	53203	2.00	1.82	
42 4-Methylphenol	108	6.633	6.634	-0.001	80	53403	2.00	1.69	
40 Acetophenone	105	6.633	6.634	-0.001	80	90789	2.00	1.80	
45 Hexachloroethane	117	6.745	6.746	-0.001	86	32308	2.00	2.00	
46 Nitrobenzene	77	6.793	6.794	-0.001	85	83727	2.00	2.02	
48 Isophorone	82	7.017	7.013	0.004	92	113596	2.00	1.81	
49 2-Nitrophenol	139	7.097	7.093	0.004	82	27219	2.00	1.77	
50 2,4-Dimethylphenol	107	7.124	7.125	-0.001	95	66029	2.00	1.88	
52 Benzoic acid	122	7.167	7.195	-0.028	79	41192	4.00	2.76	M
53 Bis(2-chloroethoxy)methane	93	7.209	7.205	0.004	93	63145	2.00	1.87	
54 2,4-Dichlorophenol	162	7.316	7.318	-0.002	89	43829	2.00	1.77	
56 1,2,4-Trichlorobenzene	180	7.402	7.403	-0.001	88	53504	2.00	1.82	
57 Azobenzene	77		7.408					ND	
58 Naphthalene	128	7.477	7.473	0.004	88	157732	2.00	1.78	
59 4-Chloroaniline	127	7.514	7.515	-0.001	80	64125	2.00	1.85	
60 2,6-Dichlorophenol	162	7.525	7.526	-0.001	84	47495	2.00	1.88	
62 Hexachlorobutadiene	225	7.594	7.590	0.004	87	39509	2.00	1.93	
64 Caprolactam	113	7.797	7.809	-0.012	70	13184	2.00	1.73	
67 4-Chloro-3-methylphenol	107	7.941	7.943	-0.002	81	55785	2.00	1.86	
69 2-Methylnaphthalene	142	8.107	8.108	-0.001	85	120088	2.00	1.90	
71 1-Methylnaphthalene	142	8.203	8.199	0.004	80	109432	2.00	1.87	
72 Hexachlorocyclopentadiene	237	8.262	8.258	0.004	81	38212	2.00	1.74	
73 1,2,4,5-Tetrachlorobenzene	216	8.267	8.263	0.004	90	62539	2.00	2.11	
74 2,4,6-Trichlorophenol	196	8.358	8.359	-0.001	88	37635	2.00	2.01	
75 2,4,5-Trichlorophenol	196	8.395	8.397	-0.002	86	38183	2.00	1.93	
76 1,1'-Biphenyl	154	8.529	8.530	-0.001	96	148250	2.00	2.01	
77 2-Chloronaphthalene	162	8.556	8.557	-0.001	96	107974	2.00	1.77	
79 2-Nitroaniline	65	8.636	8.632	0.004	54	37709	2.00	1.92	
82 Dimethyl phthalate	163	8.780	8.781	-0.001	94	128933	2.00	1.96	
83 1,3-Dinitrobenzene	168	8.817	8.813	0.004	75	16829	2.00	1.64	
84 2,6-Dinitrotoluene	165	8.844	8.840	0.004	69	29741	2.00	2.07	
85 Acenaphthylene	152	8.940	8.942	-0.002	91	177464	2.00	1.91	
86 3-Nitroaniline	138	9.004	9.000	0.004	86	23713	2.00	1.65	
87 2,4-Dinitrophenol	184	9.095	9.097	-0.002	45	18152	4.00	5.72	
88 Acenaphthene	153	9.095	9.097	-0.002	90	117586	2.00	1.95	
89 4-Nitrophenol	109	9.127	9.134	-0.007	83	40350	4.00	3.19	
91 2,4-Dinitrotoluene	165	9.207	9.209	-0.002	78	36829	2.00	1.92	
93 Dibenzofuran	168	9.250	9.251	-0.001	78	166408	2.00	1.91	
95 2,3,5,6-Tetrachlorophenol	232	9.320	9.316	0.004	84	32347	2.00	1.72	
96 2,3,4,6-Tetrachlorophenol	232	9.357	9.358	-0.001	67	33494	2.00	1.88	
97 2-Naphthylamine	143	9.384	9.385	-0.001	73	35385	2.00	2.19	
98 Diethyl phthalate	149	9.410	9.412	-0.002	93	135908	2.00	1.89	
99 Hexadecane	57	9.416	9.417	-0.001	89	61437	2.00	1.73	
100 4-Chlorophenyl phenyl ethe	204	9.544	9.545	-0.001	95	66196	2.00	1.84	
101 4-Nitroaniline	138	9.555	9.556	-0.001	75	25736	2.00	1.68	
103 Fluorene	166	9.560	9.561	-0.001	83	127186	2.00	1.88	
104 4,6-Dinitro-2-methylphenol	198	9.587	9.583	0.004	73	32881	4.00	2.59	
105 N-Nitrosodiphenylamine	169	9.645	9.647	-0.002	64	91226	2.00	1.88	
90 1,2-Diphenylhydrazine	77	9.688	9.690	-0.002	1	160665	2.00	1.99	
110 4-Bromophenyl phenyl ether	248	9.993	9.989	0.004	71	42665	2.00	1.96	
112 Hexachlorobenzene	284	10.078	10.074	0.004	85	43464	2.00	1.84	
113 Atrazine	200	10.105	10.101	0.004	55	12190	2.00	1.84	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
116 Pentachlorophenol	266	10.244	10.245	-0.001	70	32397	4.00	2.52	
115 n-Octadecane	57	10.249	10.245	0.004	83	58671	2.00	1.49	
121 Phenanthrene	178	10.447	10.443	0.004	85	195159	2.00	1.91	
122 Anthracene	178	10.495	10.496	-0.001	97	197472	2.00	1.95	
124 Carbazole	167	10.628	10.630	-0.002	92	169240	2.00	1.91	
126 Di-n-butyl phthalate	149	10.917	10.918	-0.001	98	208526	2.00	1.91	
131 Fluoranthene	202	11.713	11.714	-0.001	95	207274	2.00	1.94	
132 Benzidine	184	11.836	11.837	-0.001	4	9957	2.00	2.79	
133 Pyrene	202	12.007	12.008	-0.001	94	209652	2.00	1.91	
138 Butyl benzyl phthalate	149	12.835	12.831	0.004	91	81433	2.00	1.84	
144 3,3'-Dichlorobenzidine	252	13.780	13.776	0.004	48	52340	2.00	1.57	
145 Bis(2-ethylhexyl) phthalat	149	13.818	13.814	0.004	90	103440	2.00	1.68	
146 Benzo[a]anthracene	228	13.855	13.856	-0.001	93	200399	2.00	1.93	
147 Chrysene	228	13.925	13.926	-0.001	89	194663	2.00	2.01	
150 Di-n-octyl phthalate	149	15.094	15.096	-0.002	96	147151	2.00	1.49	
151 7,12-Dimethylbenz(a)anthra	256	15.955	15.956	-0.001	77	86182	2.00	1.83	
152 Benzo[b]fluoranthene	252	15.971	15.972	-0.001	90	202341	2.00	1.97	
153 Benzo[k]fluoranthene	252	16.024	16.031	-0.007	91	180507	2.00	1.80	
154 Benzo[a]pyrene	252	16.654	16.650	0.004	62	152572	2.00	1.75	
157 Indeno[1,2,3-cd]pyrene	276	18.941	18.947	-0.006	93	165729	2.00	1.84	
158 Dibenz(a,h)anthracene	278	18.973	18.979	-0.006	76	145822	2.00	1.85	M
159 Benzo[g,h,i]perylene	276	19.534	19.530	0.004	83	149235	2.00	1.89	
S 197 Methyl Phenols,Total	108				0		4.00	3.38	
S 199 Total Cresols	108				0		4.00	3.38	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Review Flags
M - Manually Integrated

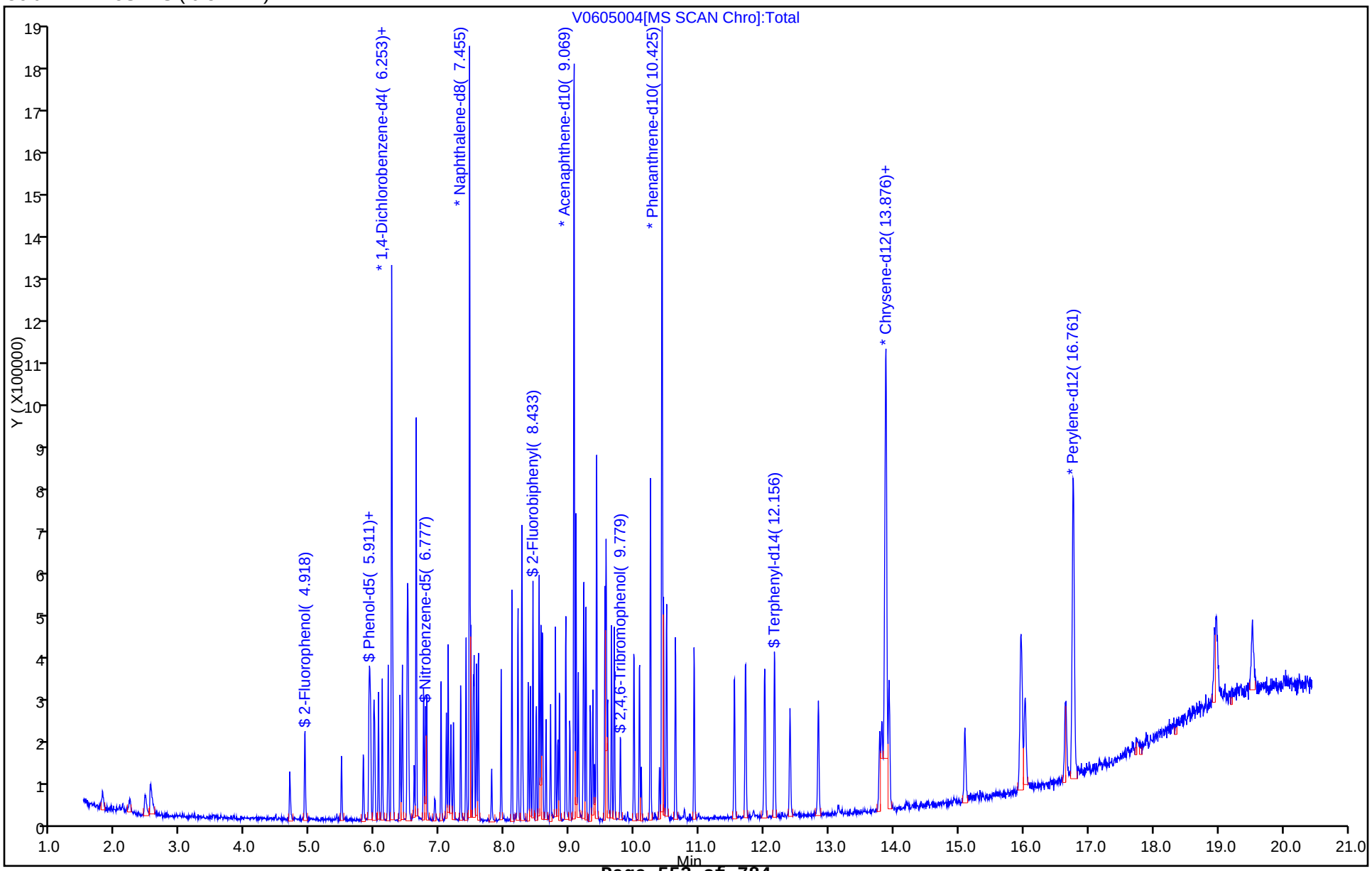
Report Date: 06-Jun-2014 06:48:29 Chrom Revision: 2.2 16-May-2014 10:46:48

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605004.D

Injection Date:	05-Jun-2014 08:54:30	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

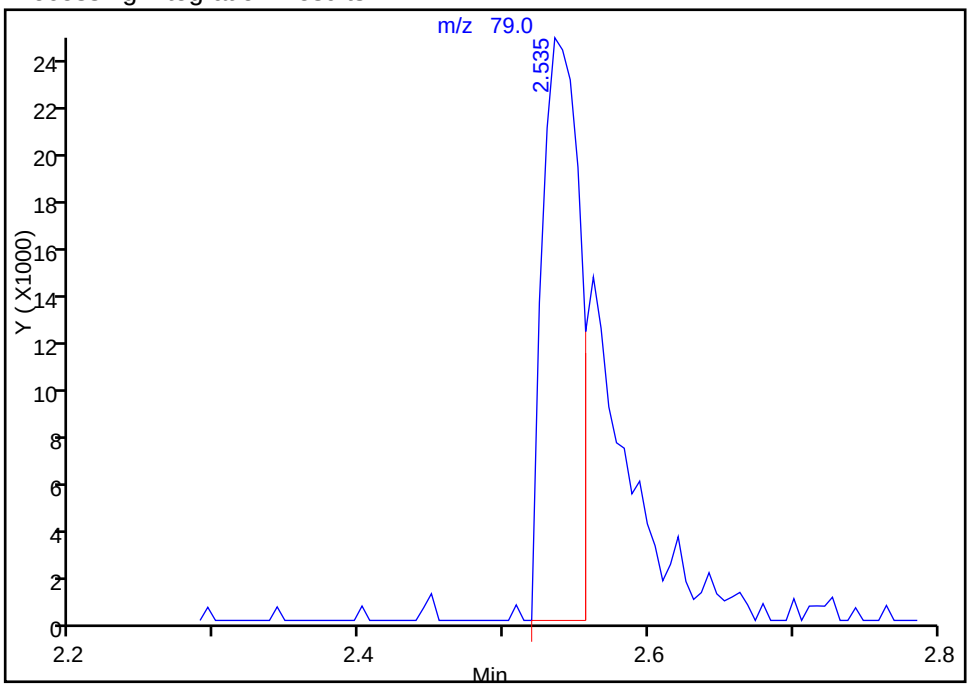
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140604-1566.b\V0605004.D				
Injection Date:	05-Jun-2014 08:54:30	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

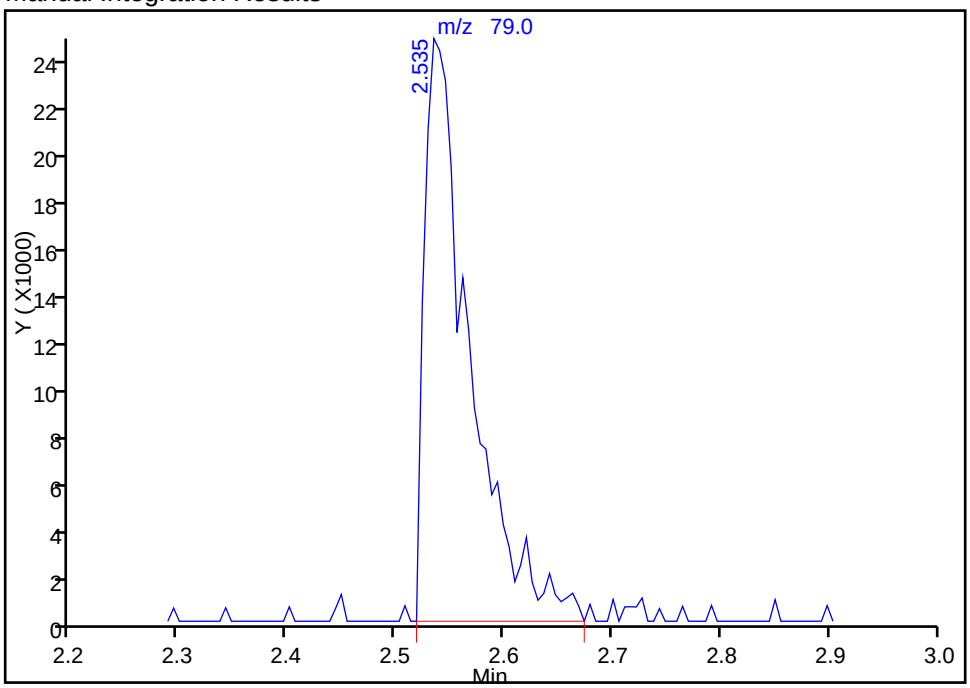
Processing Integration Results

RT: 2.54
Response: 44491
Amount: 1.464554



Manual Integration Results

RT: 2.54
Response: 72772
Amount: 1.977329



Reviewer: piccolinov, 05-Jun-2014 10:38:10
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

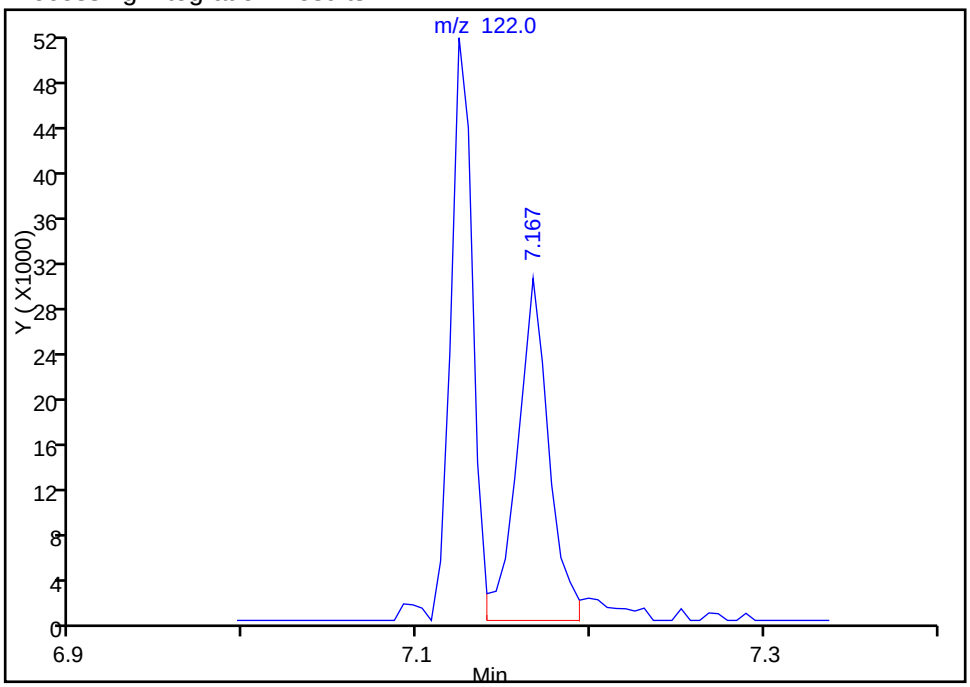
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140604-1566.b\V0605004.D				
Injection Date:	05-Jun-2014 08:54:30	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		

52 Benzoic acid, CAS: 65-85-0

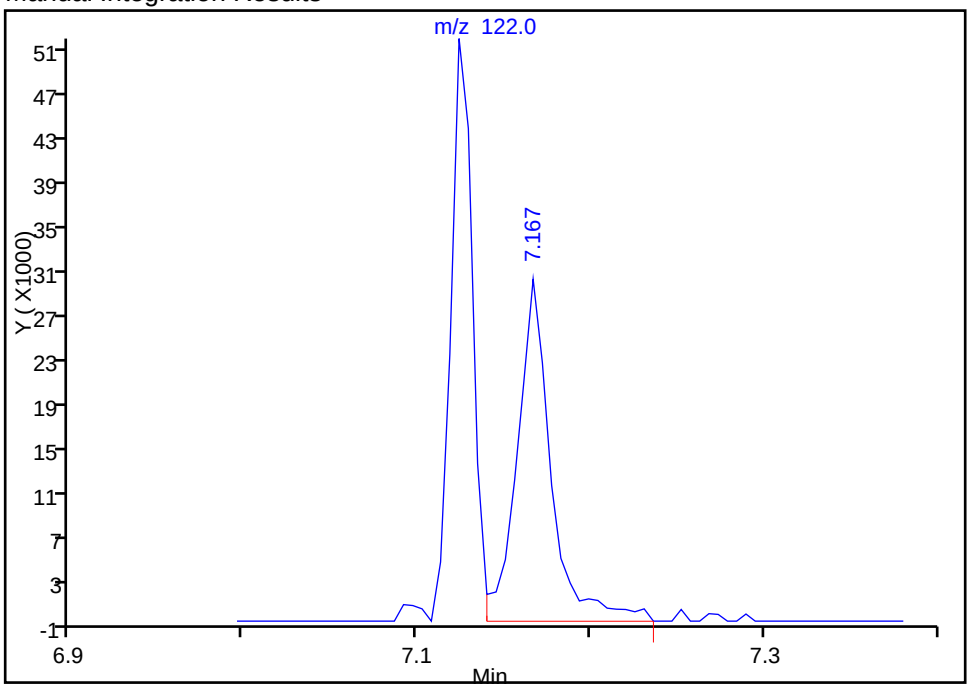
Processing Integration Results

RT: 7.17
Response: 38281
Amount: 3.523795



Manual Integration Results

RT: 7.17
Response: 41192
Amount: 2.760282



Reviewer: piccolinov, 05-Jun-2014 10:38:10
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

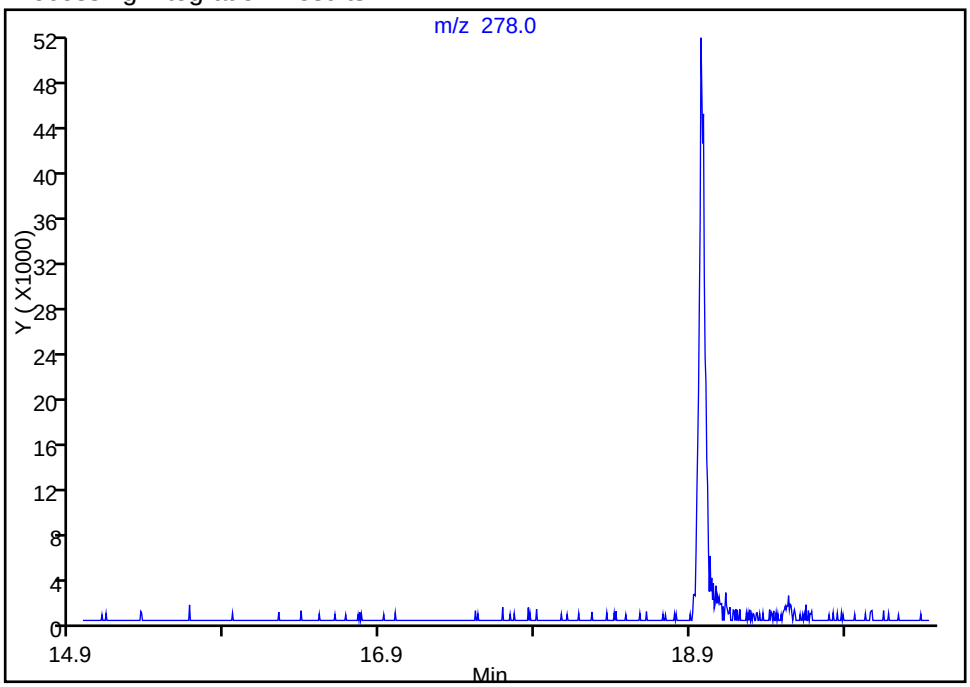
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140604-1566.b\V0605004.D				
Injection Date:	05-Jun-2014 08:54:30	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		

158 Dibenz(a,h)anthracene, CAS: 53-70-3

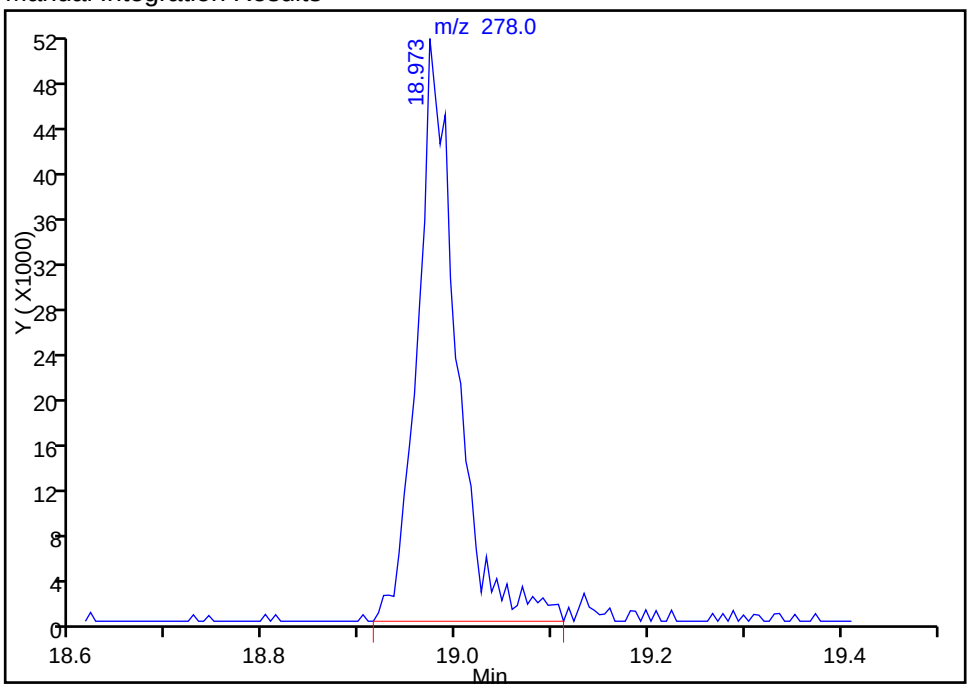
Not Detected
Expected RT: 18.98

Processing Integration Results



Manual Integration Results

RT: 18.97
Response: 145822
Amount: 1.845213



Reviewer: piccolinov, 05-Jun-2014 10:38:10
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605005.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 05-Jun-2014 09:23:30 ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0001566-005
Misc. Info.: IC
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub2

Method: \\PITCHROM\ChromData\CH731\20140604-1566.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 06-Jun-2014 06:48:31 Calib Date: 05-Jun-2014 11:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK053

First Level Reviewer: piccolinov Date: 05-Jun-2014 12:01:20

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	6.253	6.255	-0.001	87	162306	8.00	8.00	
* 2 Naphthalene-d8	136	7.455	7.456	-0.001	98	618221	8.00	8.00	
* 3 Acenaphthene-d10	164	9.063	9.064	-0.001	90	382131	8.00	8.00	
* 4 Phenanthrene-d10	188	10.425	10.421	0.004	94	678618	8.00	8.00	
* 5 Chrysene-d12	240	13.876	13.878	-0.002	83	679265	8.00	8.00	
* 6 Perylene-d12	264	16.766	16.762	0.004	93	548736	8.00	8.00	
$ 7 2-Fluorophenol	112	4.912	4.914	-0.002	89	115935	4.00	3.88	
$ 8 Phenol-d5	99	5.900	5.902	-0.002	88	141974	4.00	3.93	
$ 9 Nitrobenzene-d5	82	6.777	6.778	-0.001	88	153542	4.00	3.81	
$ 10 2-Fluorobiphenyl	172	8.433	8.434	-0.001	99	287062	4.00	4.10	
$ 11 2,4,6-Tribromophenol	330	9.779	9.780	-0.001	77	34562	4.00	3.55	
$ 12 Terphenyl-d14	244	12.156	12.158	-0.002	97	329181	4.00	3.97	
13 1,4-Dioxane	88	1.792	1.794	-0.002	85	63569	4.00	4.26	
14 N-Nitrosodimethylamine	74	2.449	2.440	0.009	81	84098	4.00	4.01	
15 Pyridine	79	2.519	2.515	0.004	92	153428	4.00	4.19	M
21 Methyl methanesulfonate	80	4.682	4.679	0.003	85	85684	4.00	4.03	
25 Benzaldehyde	77	5.815	5.816	-0.001	85	71936	4.00	3.35	
26 Phenol	94	5.916	5.918	-0.002	90	161012	4.00	3.75	
27 Aniline	93	5.927	5.929	-0.002	86	157256	4.00	3.84	
29 Bis(2-chloroethyl)ether	93	5.991	5.993	-0.002	91	119185	4.00	4.24	
30 2-Chlorophenol	128	6.050	6.052	-0.002	88	112415	4.00	3.88	
31 n-Decane	43	6.109	6.105	0.004	81	103646	4.00	3.78	
32 1,3-Dichlorobenzene	146	6.200	6.201	-0.001	89	129735	4.00	3.79	
33 1,4-Dichlorobenzene	146	6.269	6.271	-0.002	86	134420	4.00	3.93	
34 Benzyl alcohol	108	6.381	6.383	-0.002	82	68972	4.00	3.75	
35 1,2-Dichlorobenzene	146	6.419	6.420	-0.001	81	125907	4.00	3.89	
36 2-Methylphenol	108	6.493	6.495	-0.002	87	105858	4.00	3.57	
37 Indene	116	6.504	6.506	-0.002	73	210102	4.00	3.71	
38 2,2'-oxybis[1-chloropropan	45	6.509	6.516	-0.007	73	110100	4.00	3.63	
39 N-Nitrosopyrrolidine	100	6.600	6.602	-0.002	78	49564	4.00	3.91	

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	6.627	6.628	-0.001	79	108050	4.00	3.72	
42 4-Methylphenol	108	6.632	6.634	-0.002	65	110997	4.00	3.53	
40 Acetophenone	105	6.632	6.634	-0.002	77	188392	4.00	3.76	
45 Hexachloroethane	117	6.745	6.746	-0.002	88	63143	4.00	3.93	
46 Nitrobenzene	77	6.793	6.794	-0.001	82	165276	4.00	3.98	
48 Isophorone	82	7.012	7.013	-0.001	94	244001	4.00	3.88	
49 2-Nitrophenol	139	7.097	7.093	0.004	88	57439	4.00	3.73	
50 2,4-Dimethylphenol	107	7.124	7.125	-0.001	96	141737	4.00	4.03	
52 Benzoic acid	122	7.177	7.195	-0.018	81	91013	8.00	6.08	
53 Bis(2-chloroethoxy)methane	93	7.204	7.205	-0.001	94	128373	4.00	3.79	
54 2,4-Dichlorophenol	162	7.316	7.318	-0.002	92	99837	4.00	4.01	
56 1,2,4-Trichlorobenzene	180	7.402	7.403	-0.001	90	119784	4.00	4.06	
57 Azobenzene	77		7.408					ND	
58 Naphthalene	128	7.476	7.473	0.003	97	340100	4.00	3.83	
59 4-Chloroaniline	127	7.514	7.515	-0.001	79	135478	4.00	3.90	
60 2,6-Dichlorophenol	162	7.524	7.526	-0.002	86	98574	4.00	3.90	
62 Hexachlorobutadiene	225	7.589	7.590	-0.001	87	80320	4.00	3.92	
64 Caprolactam	113	7.797	7.809	-0.012	65	27873	4.00	3.65	
67 4-Chloro-3-methylphenol	107	7.941	7.943	-0.002	83	118857	4.00	3.95	
69 2-Methylnaphthalene	142	8.107	8.108	-0.001	84	240276	4.00	3.79	
71 1-Methylnaphthalene	142	8.203	8.199	0.004	80	219343	4.00	3.74	
72 Hexachlorocyclopentadiene	237	8.256	8.258	-0.002	92	89679	4.00	4.01	
73 1,2,4,5-Tetrachlorobenzene	216	8.262	8.263	-0.001	92	124010	4.00	4.11	
74 2,4,6-Trichlorophenol	196	8.358	8.359	-0.001	88	77212	4.00	4.03	
75 2,4,5-Trichlorophenol	196	8.395	8.397	-0.002	90	82049	4.00	4.07	
76 1,1'-Biphenyl	154	8.529	8.530	-0.001	96	295415	4.00	3.92	
77 2-Chloronaphthalene	162	8.555	8.557	-0.002	98	245923	4.00	3.95	
79 2-Nitroaniline	65	8.630	8.632	-0.002	72	80256	4.00	4.00	
82 Dimethyl phthalate	163	8.780	8.781	-0.001	94	269138	4.00	4.00	
83 1,3-Dinitrobenzene	168	8.817	8.813	0.004	77	36803	4.00	3.52	
84 2,6-Dinitrotoluene	165	8.844	8.840	0.004	82	60872	4.00	4.15	
85 Acenaphthylene	152	8.940	8.942	-0.002	91	377537	4.00	3.98	
86 3-Nitroaniline	138	9.004	9.000	0.004	87	56142	4.00	3.83	
87 2,4-Dinitrophenol	184	9.095	9.097	-0.002	52	45186	8.00	8.09	
88 Acenaphthene	153	9.095	9.097	-0.002	89	236206	4.00	3.84	
89 4-Nitrophenol	109	9.132	9.134	-0.002	87	98063	8.00	7.61	
91 2,4-Dinitrotoluene	165	9.207	9.209	-0.002	79	75647	4.00	3.86	
93 Dibenzofuran	168	9.250	9.251	-0.001	85	340352	4.00	3.83	
95 2,3,5,6-Tetrachlorophenol	232	9.319	9.316	0.003	86	63821	4.00	3.32	
96 2,3,4,6-Tetrachlorophenol	232	9.357	9.358	-0.001	74	68129	4.00	3.74	
97 2-Naphthylamine	143	9.384	9.385	-0.001	75	71216	4.00	4.31	
98 Diethyl phthalate	149	9.410	9.412	-0.002	94	290903	4.00	3.97	
99 Hexadecane	57	9.416	9.417	-0.001	89	124625	4.00	3.50	
100 4-Chlorophenyl phenyl ethe	204	9.544	9.545	-0.001	92	146875	4.00	4.00	
101 4-Nitroaniline	138	9.554	9.556	-0.002	81	56288	4.00	3.60	
103 Fluorene	166	9.565	9.561	0.004	77	274564	4.00	3.97	
104 4,6-Dinitro-2-methylphenol	198	9.587	9.583	0.004	71	76115	8.00	6.02	
105 N-Nitrosodiphenylamine	169	9.645	9.647	-0.002	61	195905	4.00	4.05	
90 1,2-Diphenylhydrazine	77	9.688	9.690	-0.002	1	346283	4.00	4.29	
110 4-Bromophenyl phenyl ether	248	9.993	9.989	0.004	68	85403	4.00	3.93	
112 Hexachlorobenzene	284	10.078	10.074	0.004	86	91219	4.00	3.87	
113 Atrazine	200	10.105	10.101	0.004	69	28206	4.00	4.27	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
116 Pentachlorophenol	266	10.244	10.245	-0.001	78	77455	8.00	5.84	
115 n-Octadecane	57	10.244	10.245	-0.001	84	130983	4.00	3.35	
121 Phenanthrene	178	10.447	10.443	0.004	96	397424	4.00	3.89	
122 Anthracene	178	10.495	10.496	-0.001	97	406029	4.00	4.01	
124 Carbazole	167	10.634	10.630	0.004	83	359519	4.00	4.07	
126 Di-n-butyl phthalate	149	10.917	10.918	-0.001	99	439543	4.00	4.03	
131 Fluoranthene	202	11.713	11.714	-0.001	97	423132	4.00	3.97	
132 Benzidine	184	11.836	11.837	-0.001	48	28139	4.00	3.97	M
133 Pyrene	202	12.007	12.008	-0.002	98	436882	4.00	4.10	
138 Butyl benzyl phthalate	149	12.835	12.831	0.004	91	162011	4.00	3.77	
144 3,3'-Dichlorobenzidine	252	13.780	13.776	0.004	58	113407	4.00	3.49	
145 Bis(2-ethylhexyl) phthalat	149	13.812	13.814	-0.002	94	213167	4.00	3.57	
146 Benzo[a]anthracene	228	13.855	13.856	-0.001	94	402966	4.00	3.99	
147 Chrysene	228	13.924	13.926	-0.002	91	376371	4.00	3.99	
150 Di-n-octyl phthalate	149	15.100	15.096	0.004	98	308753	4.00	3.33	
151 7,12-Dimethylbenz(a)anthra	256	15.954	15.956	-0.002	71	175150	4.00	3.97	
152 Benzo[b]fluoranthene	252	15.970	15.972	-0.002	93	379552	4.00	3.95	
153 Benzo[k]fluoranthene	252	16.024	16.031	-0.007	97	377053	4.00	4.01	
154 Benzo[a]pyrene	252	16.643	16.650	-0.007	67	314704	4.00	3.86	
157 Indeno[1,2,3-cd]pyrene	276	18.951	18.947	0.004	97	330177	4.00	3.91	
158 Dibenz(a,h)anthracene	278	18.973	18.979	-0.006	59	272673	4.00	3.69	
159 Benzo[g,h,i]perylene	276	19.523	19.530	-0.007	91	272330	4.00	3.68	
S 197 Methyl Phenols,Total	108				0		8.00	7.10	
S 199 Total Cresols	108				0		8.00	7.10	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Review Flags
M - Manually Integrated

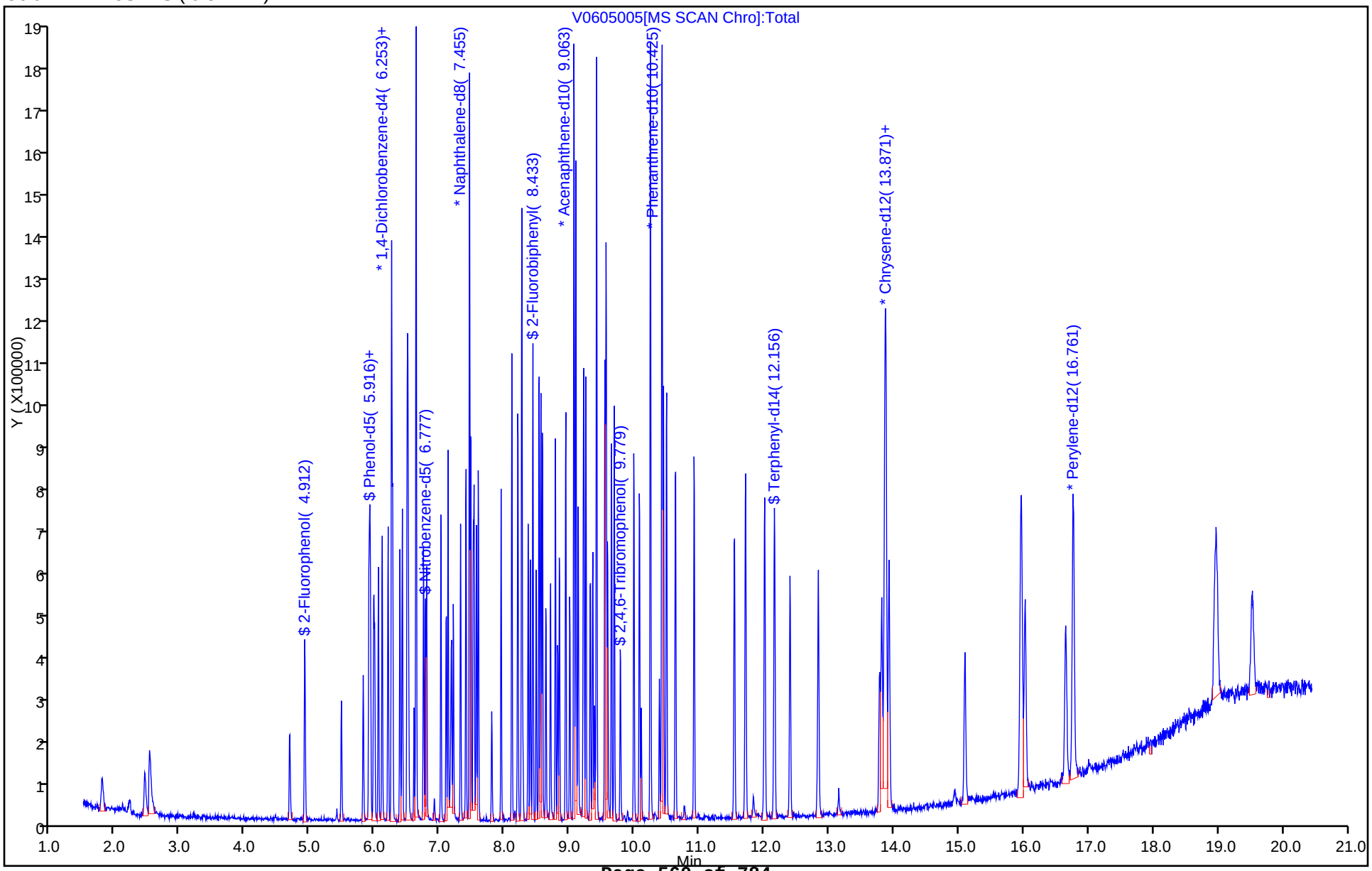
Report Date: 06-Jun-2014 06:48:32 Chrom Revision: 2.2 16-May-2014 10:46:48

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605005.D

Injection Date:	05-Jun-2014 09:23:30	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

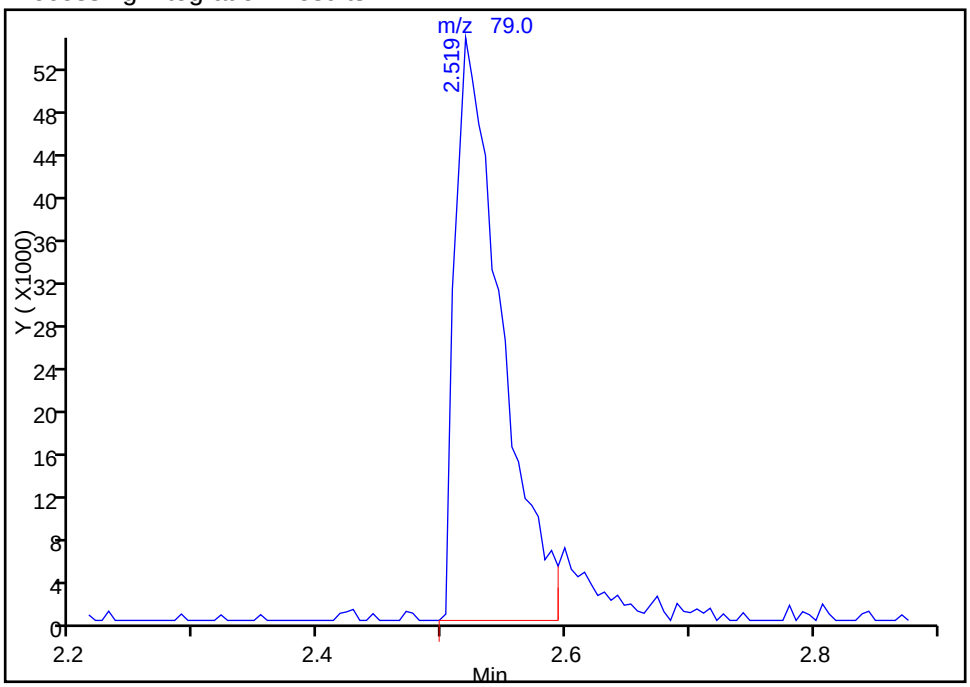
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140604-1566.b\V0605005.D				
Injection Date:	05-Jun-2014 09:23:30	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

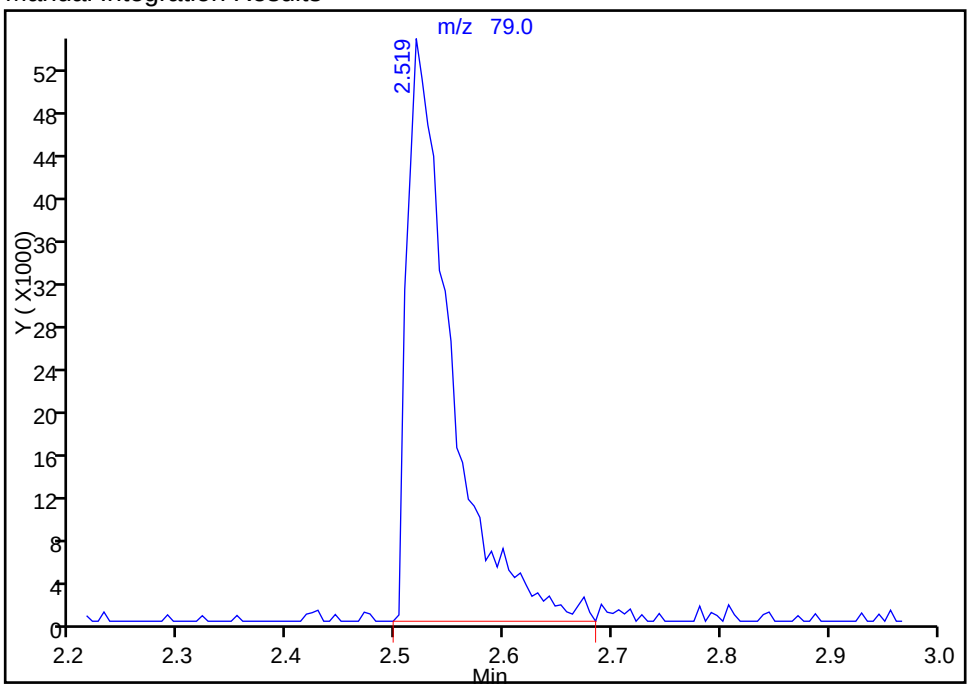
Processing Integration Results

RT: 2.52
Response: 140070
Amount: 3.888028



Manual Integration Results

RT: 2.52
Response: 153428
Amount: 4.194307



Reviewer: piccolinov, 05-Jun-2014 12:01:20
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

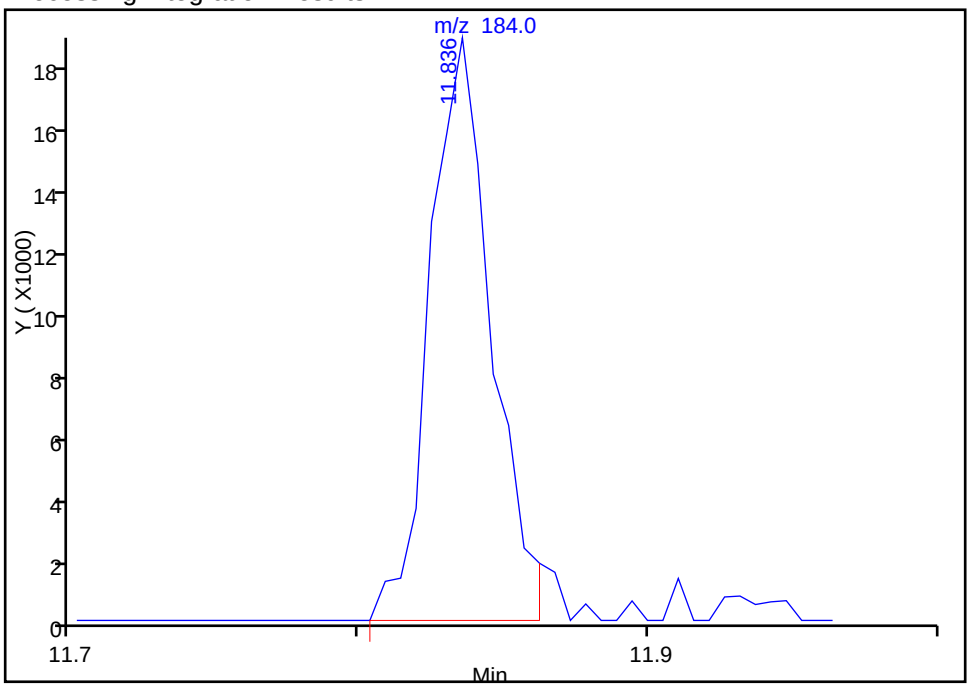
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140604-1566.b\V0605005.D				
Injection Date:	05-Jun-2014 09:23:30	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		

132 Benzidine, CAS: 92-87-5

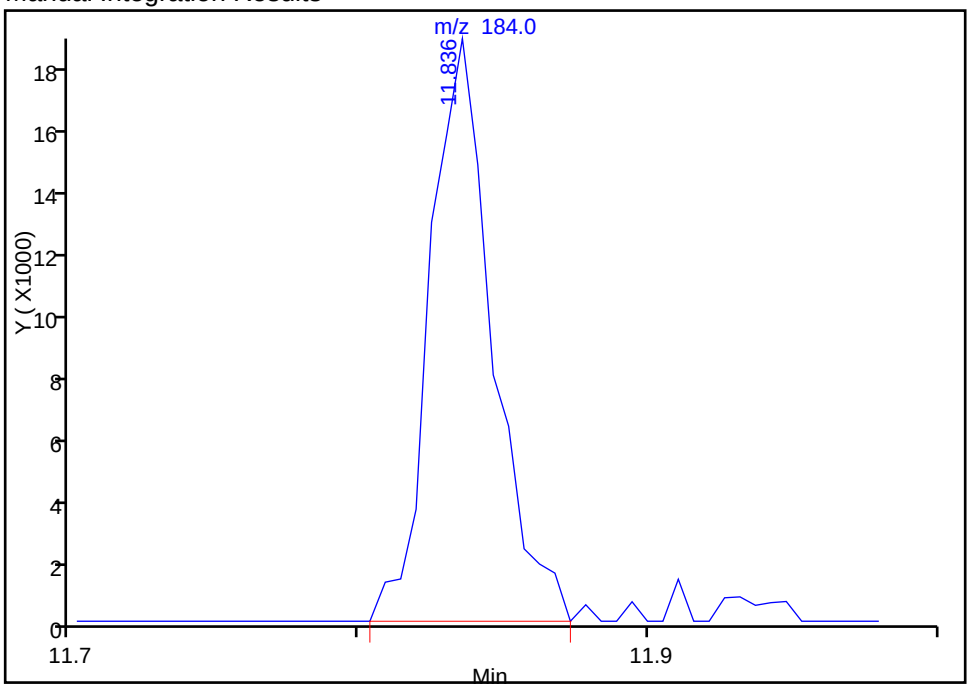
Processing Integration Results

RT: 11.84
Response: 27638
Amount: 3.595535



Manual Integration Results

RT: 11.84
Response: 28139
Amount: 3.970359



Reviewer: piccolinov, 05-Jun-2014 12:01:20
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605006.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 05-Jun-2014 09:51:30 ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0001566-006
Misc. Info.: IC
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub2

Method: \\PITCHROM\ChromData\CH731\20140604-1566.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 06-Jun-2014 06:48:34 Calib Date: 05-Jun-2014 11:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK053

First Level Reviewer: piccolinov Date: 05-Jun-2014 12:02:37

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	6.255	6.255	0.000	91	160380	8.00	8.00	
* 2 Naphthalene-d8	136	7.456	7.456	0.000	98	605688	8.00	8.00	
* 3 Acenaphthene-d10	164	9.064	9.064	0.000	86	374596	8.00	8.00	
* 4 Phenanthrene-d10	188	10.421	10.421	0.000	95	700528	8.00	8.00	
* 5 Chrysene-d12	240	13.878	13.878	0.000	77	687369	8.00	8.00	
* 6 Perylene-d12	264	16.762	16.762	0.000	87	532418	8.00	8.00	
$ 7 2-Fluorophenol	112	4.914	4.914	0.000	91	292974	10.0	9.92	
$ 8 Phenol-d5	99	5.902	5.902	0.000	90	351776	10.0	9.87	
$ 9 Nitrobenzene-d5	82	6.778	6.778	0.000	88	398903	10.0	10.1	
$ 10 2-Fluorobiphenyl	172	8.434	8.434	0.000	99	699532	10.0	10.2	
$ 11 2,4,6-Tribromophenol	330	9.780	9.780	0.000	81	84072	10.0	8.36	
$ 12 Terphenyl-d14	244	12.158	12.158	0.000	99	838748	10.0	10.0	
13 1,4-Dioxane	88	1.794	1.794	0.000	90	146931	10.0	9.97	
14 N-Nitrosodimethylamine	74	2.440	2.440	0.000	81	206028	10.0	9.95	
15 Pyridine	79	2.515	2.515	0.000	96	378460	10.0	10.5	M
21 Methyl methanesulfonate	80	4.679	4.679	0.000	89	210904	10.0	10.0	
25 Benzaldehyde	77	5.816	5.816	0.000	89	246710	10.0	11.6	
26 Phenol	94	5.918	5.918	0.000	92	402886	10.0	9.51	
27 Aniline	93	5.929	5.929	0.000	84	393715	10.0	9.73	
29 Bis(2-chloroethyl)ether	93	5.993	5.993	0.000	90	268584	10.0	9.66	
30 2-Chlorophenol	128	6.052	6.052	0.000	93	283926	10.0	9.91	
31 n-Decane	43	6.105	6.105	0.000	80	254546	10.0	9.39	
32 1,3-Dichlorobenzene	146	6.201	6.201	0.000	90	328837	10.0	9.72	
33 1,4-Dichlorobenzene	146	6.271	6.271	0.000	85	336100	10.0	9.93	
34 Benzyl alcohol	108	6.383	6.383	0.000	84	183984	10.0	10.1	
35 1,2-Dichlorobenzene	146	6.420	6.420	0.000	88	320492	10.0	10.0	
36 2-Methylphenol	108	6.495	6.495	0.000	91	287346	10.0	9.81	
37 Indene	116	6.506	6.506	0.000	82	524841	10.0	9.38	
38 2,2'-oxybis[1-chloropropan	45	6.516	6.516	0.000	75	268830	10.0	8.96	
39 N-Nitrosopyrrolidine	100	6.602	6.602	0.000	73	124795	10.0	9.96	

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	6.628	6.628	0.000	73	278170	10.0	9.69	
42 4-Methylphenol	108	6.634	6.634	0.000	83	298028	10.0	9.59	
40 Acetophenone	105	6.634	6.634	0.000	80	455205	10.0	9.19	
45 Hexachloroethane	117	6.746	6.746	0.000	91	159628	10.0	10.0	
46 Nitrobenzene	77	6.794	6.794	0.000	83	393466	10.0	9.67	
48 Isophorone	82	7.013	7.013	0.000	95	617698	10.0	10.0	
49 2-Nitrophenol	139	7.093	7.093	0.000	82	150974	10.0	10.0	
50 2,4-Dimethylphenol	107	7.125	7.125	0.000	96	349685	10.0	10.2	
52 Benzoic acid	122	7.195	7.195	0.000	81	264302	20.0	18.0	
53 Bis(2-chloroethoxy)methane	93	7.205	7.205	0.000	91	324255	10.0	9.78	
54 2,4-Dichlorophenol	162	7.318	7.318	0.000	96	244249	10.0	10.0	
56 1,2,4-Trichlorobenzene	180	7.403	7.403	0.000	87	291675	10.0	10.1	
57 Azobenzene	77		7.408					ND	
58 Naphthalene	128	7.473	7.473	0.000	98	844109	10.0	9.70	
59 4-Chloroaniline	127	7.515	7.515	0.000	82	341552	10.0	10.0	
60 2,6-Dichlorophenol	162	7.526	7.526	0.000	89	258134	10.0	10.4	
62 Hexachlorobutadiene	225	7.590	7.590	0.000	92	195449	10.0	9.74	
64 Caprolactam	113	7.809	7.809	0.000	76	75707	10.0	10.1	
67 4-Chloro-3-methylphenol	107	7.943	7.943	0.000	87	294618	10.0	9.98	
69 2-Methylnaphthalene	142	8.108	8.108	0.000	84	602710	10.0	9.71	
71 1-Methylnaphthalene	142	8.199	8.199	0.000	81	576340	10.0	10.0	
72 Hexachlorocyclopentadiene	237	8.258	8.258	0.000	94	237709	10.0	10.8	
73 1,2,4,5-Tetrachlorobenzene	216	8.263	8.263	0.000	92	313201	10.0	10.6	
74 2,4,6-Trichlorophenol	196	8.359	8.359	0.000	94	192551	10.0	10.3	
75 2,4,5-Trichlorophenol	196	8.397	8.397	0.000	90	200100	10.0	10.1	
76 1,1'-Biphenyl	154	8.530	8.530	0.000	96	728950	10.0	9.86	
77 2-Chloronaphthalene	162	8.557	8.557	0.000	98	608099	10.0	9.96	
79 2-Nitroaniline	65	8.632	8.632	0.000	72	210552	10.0	10.7	
82 Dimethyl phthalate	163	8.781	8.781	0.000	95	664468	10.0	10.1	
83 1,3-Dinitrobenzene	168	8.813	8.813	0.000	81	109129	10.0	10.6	
84 2,6-Dinitrotoluene	165	8.840	8.840	0.000	78	152179	10.0	10.6	
85 Acenaphthylene	152	8.942	8.942	0.000	87	949855	10.0	10.2	
86 3-Nitroaniline	138	9.000	9.000	0.000	87	149732	10.0	10.4	
87 2,4-Dinitrophenol	184	9.097	9.097	0.000	65	167603	20.0	19.3	
88 Acenaphthene	153	9.097	9.097	0.000	87	599696	10.0	9.96	
89 4-Nitrophenol	109	9.134	9.134	0.000	87	273563	20.0	21.6	
91 2,4-Dinitrotoluene	165	9.209	9.209	0.000	78	204567	10.0	10.6	
93 Dibenzofuran	168	9.251	9.251	0.000	83	872922	10.0	10.0	
95 2,3,5,6-Tetrachlorophenol	232	9.316	9.316	0.000	87	185361	10.0	9.83	
96 2,3,4,6-Tetrachlorophenol	232	9.358	9.358	0.000	72	184240	10.0	10.3	
97 2-Naphthylamine	143	9.385	9.385	0.000	79	186756	10.0	11.5	
98 Diethyl phthalate	149	9.412	9.412	0.000	95	738358	10.0	10.3	
99 Hexadecane	57	9.417	9.417	0.000	87	320883	10.0	9.19	
100 4-Chlorophenyl phenyl ethe	204	9.545	9.545	0.000	93	380957	10.0	10.6	
101 4-Nitroaniline	138	9.556	9.556	0.000	77	153972	10.0	10.0	
103 Fluorene	166	9.561	9.561	0.000	76	685183	10.0	10.1	
104 4,6-Dinitro-2-methylphenol	198	9.583	9.583	0.000	78	247435	20.0	18.9	
105 N-Nitrosodiphenylamine	169	9.647	9.647	0.000	62	506495	10.0	10.2	
90 1,2-Diphenylhydrazine	77	9.690	9.690	0.000	8	878883	10.0	10.6	
110 4-Bromophenyl phenyl ether	248	9.989	9.989	0.000	69	217271	10.0	9.67	
112 Hexachlorobenzene	284	10.074	10.074	0.000	91	227773	10.0	9.36	
113 Atrazine	200	10.101	10.101	0.000	82	77042	10.0	11.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
116 Pentachlorophenol	266	10.245	10.245	0.000	82	246409	20.0	17.7	
115 n-Octadecane	57	10.245	10.245	0.000	86	344880	10.0	8.93	
121 Phenanthrene	178	10.443	10.443	0.000	97	1025191	10.0	9.73	
122 Anthracene	178	10.496	10.496	0.000	98	1033097	10.0	9.89	
124 Carbazole	167	10.630	10.630	0.000	83	903549	10.0	9.91	
126 Di-n-butyl phthalate	149	10.918	10.918	0.000	99	1150643	10.0	10.2	
131 Fluoranthene	202	11.714	11.714	0.000	97	1093373	10.0	9.94	
132 Benzidine	184	11.837	11.837	0.000	93	132970	10.0	10.6	
133 Pyrene	202	12.008	12.008	0.000	97	1098497	10.0	10.2	
138 Butyl benzyl phthalate	149	12.831	12.831	0.000	96	441679	10.0	10.2	
144 3,3'-Dichlorobenzidine	252	13.776	13.776	0.000	73	326004	10.0	9.91	
145 Bis(2-ethylhexyl) phthalat	149	13.814	13.814	0.000	94	610907	10.0	10.1	
146 Benzo[a]anthracene	228	13.856	13.856	0.000	94	1043550	10.0	10.2	
147 Chrysene	228	13.926	13.926	0.000	93	976061	10.0	10.2	
150 Di-n-octyl phthalate	149	15.096	15.096	0.000	99	905313	10.0	10.1	
151 7,12-Dimethylbenz(a)anthra	256	15.956	15.956	0.000	84	462623	10.0	10.8	
152 Benzo[b]fluoranthene	252	15.972	15.972	0.000	92	970398	10.0	10.4	
153 Benzo[k]fluoranthene	252	16.031	16.031	0.000	98	962921	10.0	10.6	
154 Benzo[a]pyrene	252	16.650	16.650	0.000	73	830273	10.0	10.5	
157 Indeno[1,2,3-cd]pyrene	276	18.947	18.947	0.000	87	838731	10.0	10.2	
158 Dibenz(a,h)anthracene	278	18.979	18.979	0.000	60	729631	10.0	10.2	
159 Benzo[g,h,i]perylene	276	19.530	19.530	0.000	93	709204	10.0	9.87	
S 197 Methyl Phenols,Total	108				0		20.0	19.4	
S 199 Total Cresols	108				0		20.0	19.4	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Review Flags
M - Manually Integrated

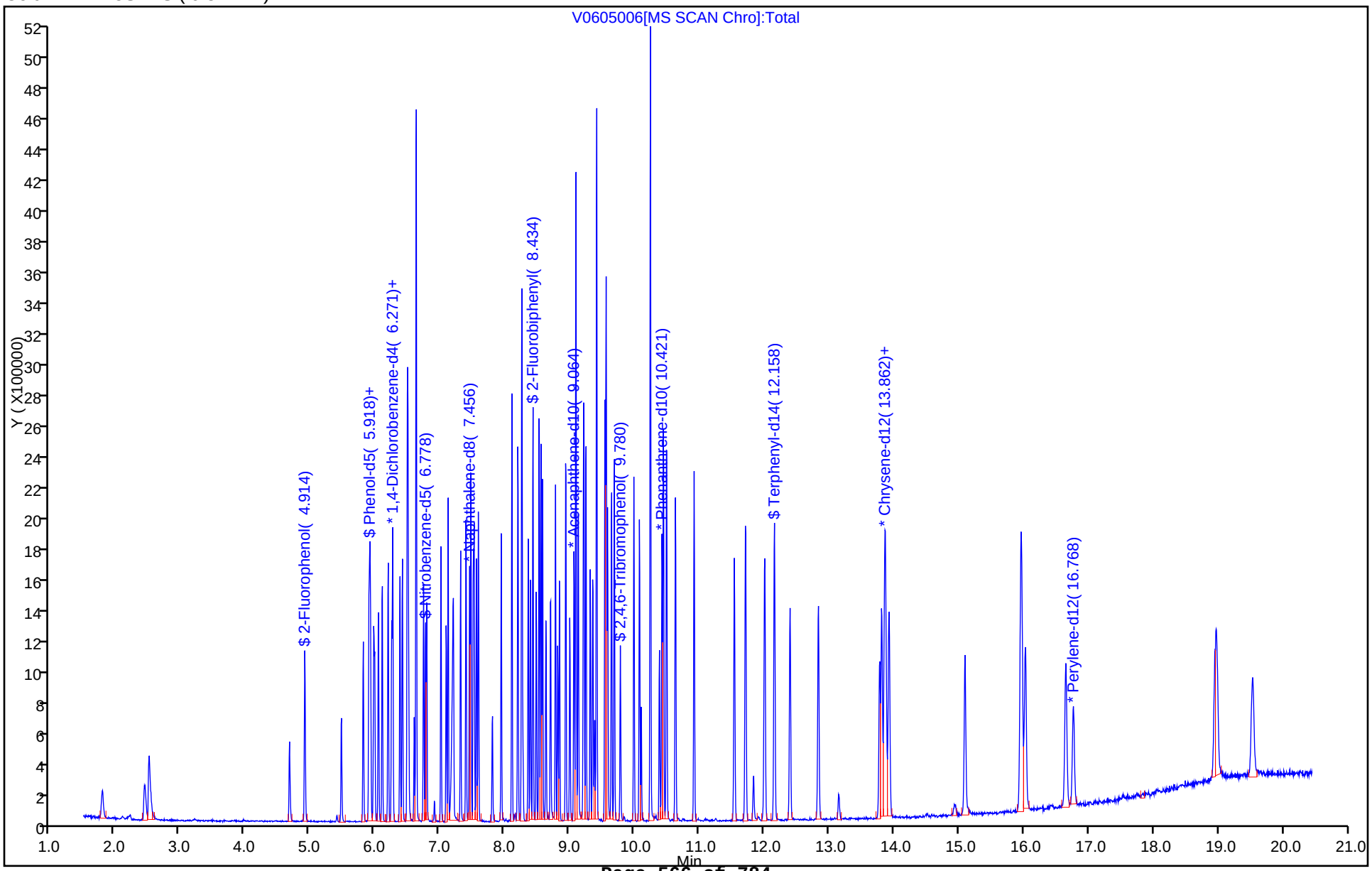
Report Date: 06-Jun-2014 06:48:36 Chrom Revision: 2.2 16-May-2014 10:46:48

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605006.D

Injection Date:	05-Jun-2014 09:51:30	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)



Manual Integration/User Assign Peak Report

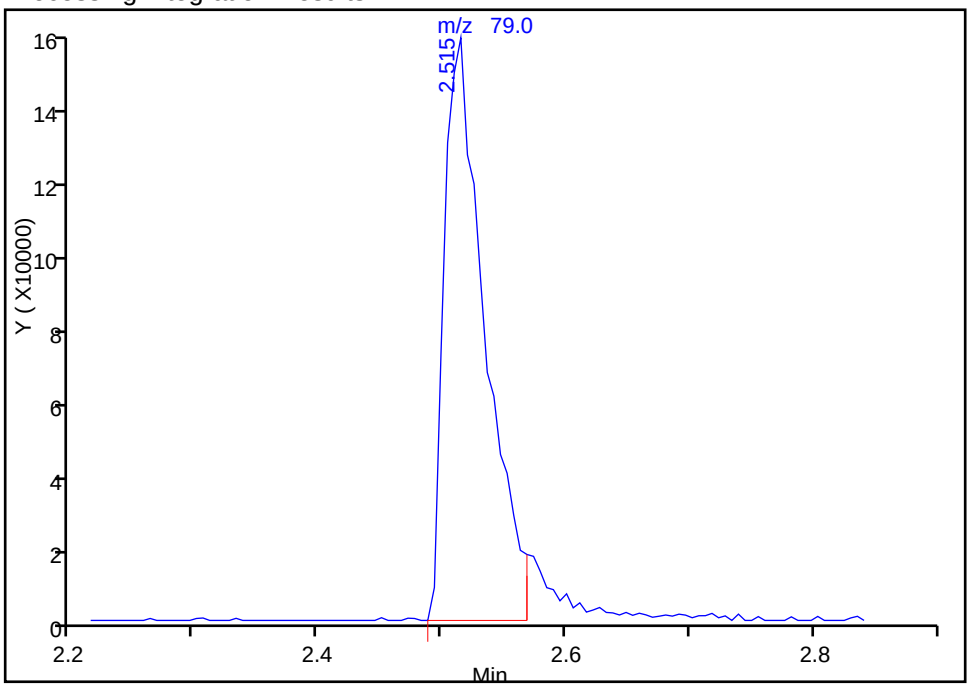
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140604-1566.b\V0605006.D				
Injection Date:	05-Jun-2014 09:51:30	Instrument ID:	CH731		
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_CH731	Limit Group:	BNA 8270D ICAL		
Column:	Rxi-5SilMS (0.32 mm)	Detector	MS SCAN		

15 Pyridine, CAS: 110-86-1

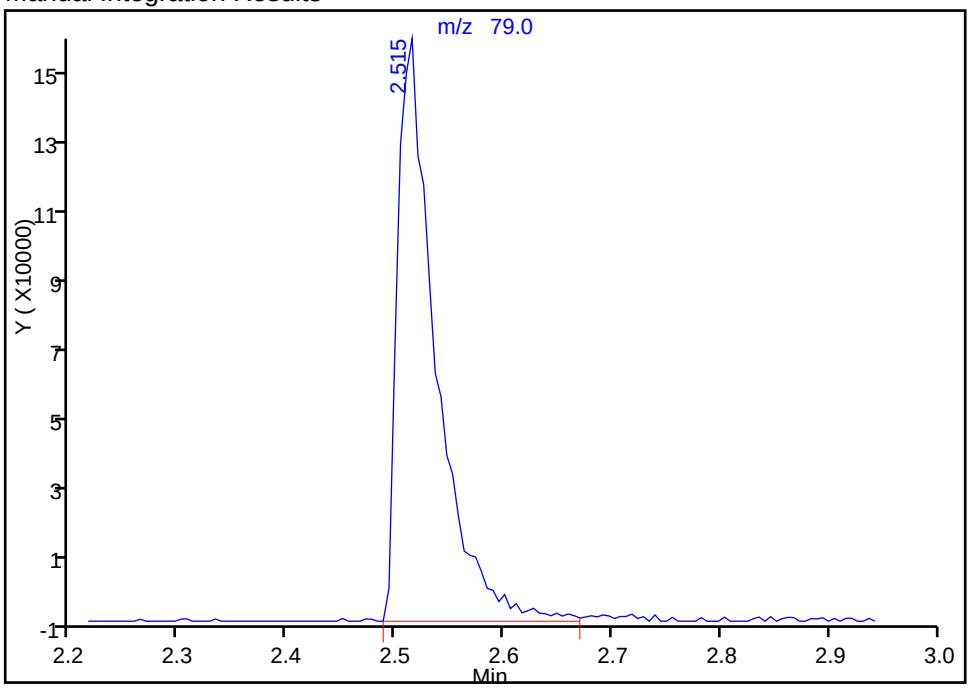
Processing Integration Results

RT: 2.52
Response: 350232
Amount: 9.615565



Manual Integration Results

RT: 2.52
Response: 378460
Amount: 10.470319



Reviewer: piccolinov, 05-Jun-2014 12:02:37
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Report Date: 06-Jun-2014 06:48:38 Chrom Revision: 2.2 16-May-2014 10:46:48

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605007.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 05-Jun-2014 10:19:30 ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0001566-007
Misc. Info.: IC
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub2

Method: \\PITCHROM\ChromData\CH731\20140604-1566.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 06-Jun-2014 06:48:36 Calib Date: 05-Jun-2014 11:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK053

First Level Reviewer: piccolinov Date: 05-Jun-2014 12:03:45

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	6.253	6.255	-0.001	88	178570	8.00	8.00	
* 2 Naphthalene-d8	136	7.455	7.456	-0.001	99	708152	8.00	8.00	
* 3 Acenaphthene-d10	164	9.063	9.064	-0.001	93	449122	8.00	8.00	
* 4 Phenanthrene-d10	188	10.420	10.421	-0.001	88	872238	8.00	8.00	
* 5 Chrysene-d12	240	13.876	13.878	-0.002	74	883192	8.00	8.00	
* 6 Perylene-d12	264	16.767	16.762	0.004	87	715379	8.00	8.00	
$ 7 2-Fluorophenol	112	4.912	4.914	-0.002	92	705989	20.0	21.5	
$ 8 Phenol-d5	99	5.901	5.902	-0.001	90	831008	20.0	20.9	
$ 9 Nitrobenzene-d5	82	6.777	6.778	-0.001	88	943571	20.0	20.4	
$ 10 2-Fluorobiphenyl	172	8.433	8.434	-0.001	99	1639465	20.0	19.9	
$ 11 2,4,6-Tribromophenol	330	9.779	9.780	-0.001	84	249771	20.0	19.9	
$ 12 Terphenyl-d14	244	12.156	12.158	-0.002	98	2210124	20.0	20.5	
13 1,4-Dioxane	88	1.782	1.794	-0.012	90	318559	20.0	19.4	
14 N-Nitrosodimethylamine	74	2.434	2.440	-0.006	89	498476	20.0	21.6	
15 Pyridine	79	2.492	2.515	-0.023	96	824653	20.0	20.5	
21 Methyl methanesulfonate	80	4.677	4.679	-0.002	90	478414	20.0	20.5	
25 Benzaldehyde	77	5.815	5.816	-0.001	87	576090	20.0	24.4	
26 Phenol	94	5.917	5.918	-0.001	91	955863	20.0	20.3	
27 Aniline	93	5.927	5.929	-0.002	85	932304	20.0	20.7	
29 Bis(2-chloroethyl)ether	93	5.991	5.993	-0.002	93	625082	20.0	20.2	
30 2-Chlorophenol	128	6.050	6.052	-0.002	93	676562	20.0	21.2	
31 n-Decane	43	6.104	6.105	-0.001	81	596313	20.0	19.8	
32 1,3-Dichlorobenzene	146	6.200	6.201	-0.001	91	760680	20.0	20.2	
33 1,4-Dichlorobenzene	146	6.269	6.271	-0.002	86	752002	20.0	20.0	
34 Benzyl alcohol	108	6.381	6.383	-0.002	83	438488	20.0	21.7	
35 1,2-Dichlorobenzene	146	6.419	6.420	-0.001	89	715251	20.0	20.1	
36 2-Methylphenol	108	6.494	6.495	-0.001	92	660554	20.0	20.3	
37 Indene	116	6.499	6.506	-0.007	80	1261763	20.0	20.3	
38 2,2'-oxybis[1-chloropropan	45	6.510	6.516	-0.006	79	649327	20.0	19.4	
39 N-Nitrosopyrrolidine	100	6.600	6.602	-0.002	77	295998	20.0	21.2	

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	6.627	6.628	-0.001	83	657802	20.0	20.6	
42 4-Methylphenol	108	6.632	6.634	-0.002	66	722981	20.0	20.9	
40 Acetophenone	105	6.632	6.634	-0.002	75	1112015	20.0	20.2	
45 Hexachloroethane	117	6.745	6.746	-0.001	87	361374	20.0	20.4	
46 Nitrobenzene	77	6.793	6.794	-0.001	84	946602	20.0	19.9	
48 Isophorone	82	7.012	7.013	-0.001	95	1462423	20.0	20.3	
49 2-Nitrophenol	139	7.092	7.093	-0.001	80	343710	20.0	19.5	
50 2,4-Dimethylphenol	107	7.124	7.125	-0.001	97	816147	20.0	20.3	
52 Benzoic acid	122	7.215	7.195	0.020	85	685183	40.0	40.0	
53 Bis(2-chloroethoxy)methane	93	7.204	7.205	-0.001	96	782624	20.0	20.2	
54 2,4-Dichlorophenol	162	7.316	7.318	-0.002	95	574748	20.0	20.2	
56 1,2,4-Trichlorobenzene	180	7.396	7.403	-0.007	91	661650	20.0	19.6	
57 Azobenzene	77		7.408					ND	
58 Naphthalene	128	7.471	7.473	-0.002	98	2012618	20.0	19.8	
59 4-Chloroaniline	127	7.509	7.515	-0.006	80	799719	20.0	20.1	
60 2,6-Dichlorophenol	162	7.525	7.526	-0.001	88	564548	20.0	19.5	
62 Hexachlorobutadiene	225	7.589	7.590	-0.001	90	450425	20.0	19.2	
64 Caprolactam	113	7.818	7.809	0.009	75	186605	20.0	21.3	
67 4-Chloro-3-methylphenol	107	7.941	7.943	-0.002	87	691354	20.0	20.0	
69 2-Methylnaphthalene	142	8.107	8.108	-0.001	83	1455837	20.0	20.1	
71 1-Methylnaphthalene	142	8.198	8.199	-0.001	79	1353337	20.0	20.1	
72 Hexachlorocyclopentadiene	237	8.256	8.258	-0.002	96	545651	20.0	20.8	
73 1,2,4,5-Tetrachlorobenzene	216	8.262	8.263	-0.001	95	722134	20.0	20.3	
74 2,4,6-Trichlorophenol	196	8.358	8.359	-0.001	95	478919	20.0	21.3	
75 2,4,5-Trichlorophenol	196	8.395	8.397	-0.002	91	484316	20.0	20.4	
76 1,1'-Biphenyl	154	8.524	8.530	-0.006	95	1757514	20.0	19.8	
77 2-Chloronaphthalene	162	8.556	8.557	-0.001	98	1495121	20.0	20.4	
79 2-Nitroaniline	65	8.630	8.632	-0.002	73	496435	20.0	21.0	
82 Dimethyl phthalate	163	8.780	8.781	-0.001	95	1638057	20.0	20.7	
83 1,3-Dinitrobenzene	168	8.812	8.813	-0.001	82	263204	20.0	21.4	
84 2,6-Dinitrotoluene	165	8.839	8.840	-0.001	79	359049	20.0	20.8	
85 Acenaphthylene	152	8.935	8.942	-0.007	93	2292689	20.0	20.6	
86 3-Nitroaniline	138	8.999	9.000	-0.001	86	368947	20.0	21.4	
87 2,4-Dinitrophenol	184	9.095	9.097	-0.002	77	475344	40.0	40.0	
88 Acenaphthene	153	9.095	9.097	-0.002	89	1453220	20.0	20.1	
89 4-Nitrophenol	109	9.133	9.134	-0.001	89	665802	40.0	43.9	
91 2,4-Dinitrotoluene	165	9.207	9.209	-0.002	83	506728	20.0	22.0	
93 Dibenzofuran	168	9.250	9.251	-0.001	84	2100889	20.0	20.1	
95 2,3,5,6-Tetrachlorophenol	232	9.314	9.316	-0.002	89	482921	20.0	21.4	
96 2,3,4,6-Tetrachlorophenol	232	9.357	9.358	-0.001	73	464492	20.0	21.7	
97 2-Naphthylamine	143	9.384	9.385	-0.001	77	449069	20.0	23.1	
98 Diethyl phthalate	149	9.410	9.412	-0.002	94	1815207	20.0	21.1	
99 Hexadecane	57	9.416	9.417	-0.001	90	814297	20.0	19.9	
100 4-Chlorophenyl phenyl ethe	204	9.544	9.545	-0.001	93	904191	20.0	21.0	
101 4-Nitroaniline	138	9.560	9.556	0.004	71	398324	20.0	21.7	
103 Fluorene	166	9.560	9.561	-0.001	82	1699727	20.0	20.9	
104 4,6-Dinitro-2-methylphenol	198	9.587	9.583	0.004	80	681816	40.0	41.9	
105 N-Nitrosodiphenylamine	169	9.645	9.647	-0.002	60	1245988	20.0	20.1	
90 1,2-Diphenylhydrazine	77	9.683	9.690	-0.007	9	2026115	20.0	19.5	
110 4-Bromophenyl phenyl ether	248	9.987	9.989	-0.002	65	555138	20.0	19.9	
112 Hexachlorobenzene	284	10.073	10.074	-0.001	92	610803	20.0	20.2	
113 Atrazine	200	10.100	10.101	-0.001	88	201608	20.0	23.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
116 Pentachlorophenol	266	10.244	10.245	-0.001	85	720983	40.0	41.5	
115 n-Octadecane	57	10.244	10.245	-0.001	89	858587	20.0	20.0	
121 Phenanthrene	178	10.441	10.443	-0.002	97	2621094	20.0	20.0	
122 Anthracene	178	10.490	10.496	-0.006	97	2661198	20.0	20.5	
124 Carbazole	167	10.628	10.630	-0.002	83	2355711	20.0	20.7	
126 Di-n-butyl phthalate	149	10.917	10.918	-0.001	100	2977280	20.0	21.3	
131 Fluoranthene	202	11.708	11.714	-0.006	97	2767966	20.0	20.2	
132 Benzidine	184	11.830	11.837	-0.007	96	338982	20.0	18.9	
133 Pyrene	202	12.007	12.008	-0.001	98	2782392	20.0	20.1	
138 Butyl benzyl phthalate	149	12.829	12.831	-0.002	97	1161340	20.0	20.8	
144 3,3'-Dichlorobenzidine	252	13.780	13.776	0.004	74	924260	20.0	21.9	
145 Bis(2-ethylhexyl) phthalat	149	13.807	13.814	-0.007	94	1610595	20.0	20.7	
146 Benzo[a]anthracene	228	13.855	13.856	-0.001	94	2682276	20.0	20.4	
147 Chrysene	228	13.924	13.926	-0.002	95	2400416	20.0	19.6	
150 Di-n-octyl phthalate	149	15.089	15.096	-0.007	99	2623733	20.0	21.7	
151 7,12-Dimethylbenz(a)anthra	256	15.960	15.956	0.004	73	1204581	20.0	21.0	
152 Benzo[b]fluoranthene	252	15.971	15.972	-0.001	94	2507784	20.0	20.0	
153 Benzo[k]fluoranthene	252	16.024	16.031	-0.007	94	2545386	20.0	20.8	
154 Benzo[a]pyrene	252	16.649	16.650	-0.001	74	2156223	20.0	20.3	
157 Indeno[1,2,3-cd]pyrene	276	18.946	18.947	-0.001	98	2192898	20.0	19.9	
158 Dibenz(a,h)anthracene	278	18.983	18.979	0.004	61	1892437	20.0	19.6	
159 Benzo[g,h,i]perylene	276	19.528	19.530	-0.002	92	1837569	20.0	19.0	
S 197 Methyl Phenols,Total	108				0		40.0	41.1	
S 199 Total Cresols	108				0		40.0	41.1	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

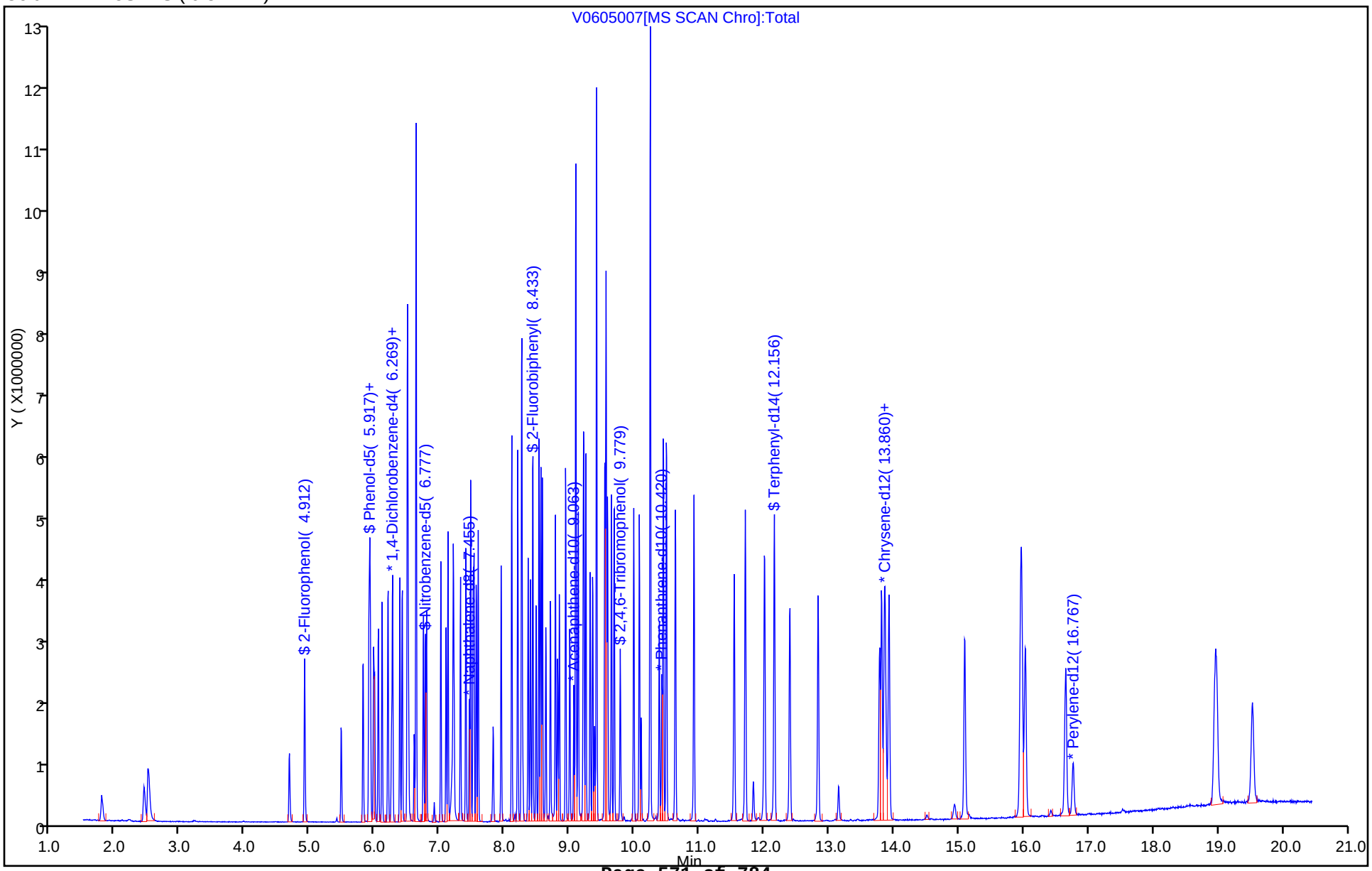
Report Date: 06-Jun-2014 06:48:38 Chrom Revision: 2.2 16-May-2014 10:46:48

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605007.D

Injection Date:	05-Jun-2014 10:19:30	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\20140604-1566.b\V0605008.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 05-Jun-2014 10:48:30 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0001566-008
Misc. Info.: IC
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub2

Method: \\PITCHROM\ChromData\CH731\20140604-1566.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 06-Jun-2014 06:48:38 Calib Date: 05-Jun-2014 11:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK053

First Level Reviewer: piccolinov Date: 05-Jun-2014 12:41:01

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	6.248	6.255	-0.006	90	166788	8.00	8.00	
* 2 Naphthalene-d8	136	7.450	7.456	-0.006	98	635893	8.00	8.00	
* 3 Acenaphthene-d10	164	9.063	9.064	-0.001	92	412067	8.00	8.00	
* 4 Phenanthrene-d10	188	10.420	10.421	-0.001	95	804141	8.00	8.00	
* 5 Chrysene-d12	240	13.882	13.878	0.004	94	831594	8.00	8.00	
* 6 Perylene-d12	264	16.766	16.762	0.004	98	643647	8.00	8.00	
$ 7 2-Fluorophenol	112	4.907	4.914	-0.007	92	1256622	40.0	40.9	
$ 8 Phenol-d5	99	5.901	5.902	-0.001	90	1528903	40.0	41.2	
$ 9 Nitrobenzene-d5	82	6.777	6.778	-0.001	88	1652880	40.0	39.8	
$ 10 2-Fluorobiphenyl	172	8.433	8.434	-0.001	99	3000858	40.0	39.7	
$ 11 2,4,6-Tribromophenol	330	9.784	9.780	0.004	93	513493	40.0	44.5	
$ 12 Terphenyl-d14	244	12.156	12.158	-0.002	98	4152763	40.0	40.9	
13 1,4-Dioxane	88	1.771	1.794	-0.023	90	580983	40.0	37.9	
14 N-Nitrosodimethylamine	74	2.423	2.440	-0.017	88	873555	40.0	40.6	
15 Pyridine	79	2.487	2.515	-0.028	94	1491259	40.0	39.7	
21 Methyl methanesulfonate	80	4.672	4.679	-0.007	89	843582	40.0	38.6	
25 Benzaldehyde	77	5.810	5.816	-0.006	86	972133	40.0	44.0	
26 Phenol	94	5.917	5.918	-0.001	91	1762830	40.0	40.0	
27 Aniline	93	5.927	5.929	-0.002	94	1745816	40.0	41.5	
29 Bis(2-chloroethyl)ether	93	5.991	5.993	-0.002	92	1154924	40.0	39.9	
30 2-Chlorophenol	128	6.045	6.052	-0.007	94	1188204	40.0	39.9	
31 n-Decane	43	6.104	6.105	-0.001	82	1137262	40.0	40.4	
32 1,3-Dichlorobenzene	146	6.194	6.201	-0.007	91	1374093	40.0	39.1	
33 1,4-Dichlorobenzene	146	6.269	6.271	-0.002	87	1372351	40.0	39.0	
34 Benzyl alcohol	108	6.381	6.383	-0.002	85	789124	40.0	41.7	
35 1,2-Dichlorobenzene	146	6.413	6.420	-0.007	88	1310185	40.0	39.4	
36 2-Methylphenol	108	6.494	6.495	-0.001	90	1276560	40.0	41.9	
37 Indene	116	6.499	6.506	-0.007	74	2365469	40.0	40.7	
38 2,2'-oxybis[1-chloropropan	45	6.510	6.516	-0.006	81	1259576	40.0	40.4	
39 N-Nitrosopyrrolidine	100	6.606	6.602	0.004	76	533098	40.0	40.9	

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	6.632	6.628	0.004	66	1234007	40.0	41.3	
42 4-Methylphenol	108	6.632	6.634	-0.002	62	1350248	40.0	41.8	
40 Acetophenone	105	6.632	6.634	-0.002	75	2069827	40.0	40.2	
45 Hexachloroethane	117	6.745	6.746	-0.001	89	660741	40.0	40.0	
46 Nitrobenzene	77	6.793	6.794	-0.001	85	1697756	40.0	39.8	
48 Isophorone	82	7.012	7.013	-0.001	96	2682444	40.0	41.5	
49 2-Nitrophenol	139	7.092	7.093	-0.001	87	664055	40.0	41.9	
50 2,4-Dimethylphenol	107	7.124	7.125	-0.001	98	1469784	40.0	40.7	
52 Benzoic acid	122	7.236	7.195	0.041	85	1338614	80.0	87.0	
53 Bis(2-chloroethoxy)methane	93	7.204	7.205	-0.001	97	1427009	40.0	41.0	
54 2,4-Dichlorophenol	162	7.316	7.318	-0.002	95	1056291	40.0	41.3	
56 1,2,4-Trichlorobenzene	180	7.396	7.403	-0.007	90	1192146	40.0	39.2	
57 Azobenzene	77		7.408					ND	
58 Naphthalene	128	7.471	7.473	-0.002	99	3752263	40.0	41.1	
59 4-Chloroaniline	127	7.514	7.515	-0.001	91	1472612	40.0	41.2	
60 2,6-Dichlorophenol	162	7.525	7.526	-0.001	88	1036214	40.0	39.8	
62 Hexachlorobutadiene	225	7.589	7.590	-0.001	92	832620	40.0	39.5	
64 Caprolactam	113	7.834	7.809	0.025	78	340121	40.0	43.3	
67 4-Chloro-3-methylphenol	107	7.941	7.943	-0.002	88	1271736	40.0	41.1	
69 2-Methylnaphthalene	142	8.107	8.108	-0.001	83	2656453	40.0	40.7	
71 1-Methylnaphthalene	142	8.198	8.199	-0.001	79	2460105	40.0	40.7	
72 Hexachlorocyclopentadiene	237	8.256	8.258	-0.002	92	1039310	40.0	43.1	
73 1,2,4,5-Tetrachlorobenzene	216	8.262	8.263	-0.001	92	1325804	40.0	40.7	
74 2,4,6-Trichlorophenol	196	8.358	8.359	-0.001	91	854189	40.0	41.4	
75 2,4,5-Trichlorophenol	196	8.395	8.397	-0.002	92	894117	40.0	41.1	
76 1,1'-Biphenyl	154	8.529	8.530	-0.001	92	3244233	40.0	39.9	
77 2-Chloronaphthalene	162	8.556	8.557	-0.001	98	2715681	40.0	40.4	
79 2-Nitroaniline	65	8.630	8.632	-0.002	73	918830	40.0	42.5	
82 Dimethyl phthalate	163	8.780	8.781	-0.001	95	2973340	40.0	41.0	
83 1,3-Dinitrobenzene	168	8.817	8.813	0.004	83	503273	40.0	44.6	
84 2,6-Dinitrotoluene	165	8.844	8.840	0.004	84	660434	40.0	41.8	
85 Acenaphthylene	152	8.935	8.942	-0.007	92	4299999	40.0	42.1	
86 3-Nitroaniline	138	9.004	9.000	0.004	88	675519	40.0	42.7	
87 2,4-Dinitrophenol	184	9.095	9.097	-0.002	71	968102	80.0	83.8	
88 Acenaphthene	153	9.095	9.097	-0.002	87	2719537	40.0	41.0	
89 4-Nitrophenol	109	9.138	9.134	0.004	89	1227007	80.0	88.2	
91 2,4-Dinitrotoluene	165	9.213	9.209	0.004	84	943333	40.0	44.6	
93 Dibenzofuran	168	9.250	9.251	-0.001	84	3992133	40.0	41.7	
95 2,3,5,6-Tetrachlorophenol	232	9.314	9.316	-0.002	88	915418	40.0	44.1	
96 2,3,4,6-Tetrachlorophenol	232	9.357	9.358	-0.001	74	871584	40.0	44.3	
97 2-Naphthylamine	143	9.384	9.385	-0.001	72	712138	40.0	40.0	
98 Diethyl phthalate	149	9.416	9.412	0.004	94	3271831	40.0	41.4	
99 Hexadecane	57	9.416	9.417	-0.001	79	1637359	40.0	44.7	
100 4-Chlorophenyl phenyl ethe	204	9.544	9.545	-0.001	93	1630020	40.0	41.2	
101 4-Nitroaniline	138	9.560	9.556	0.004	71	758034	40.0	44.9	
103 Fluorene	166	9.560	9.561	-0.001	82	3160710	40.0	42.4	
104 4,6-Dinitro-2-methylphenol	198	9.587	9.583	0.004	81	1277970	80.0	85.3	
105 N-Nitrosodiphenylamine	169	9.645	9.647	-0.002	61	2300632	40.0	40.2	
90 1,2-Diphenylhydrazine	77	9.688	9.690	-0.002	1	3700202	40.0	38.7	
110 4-Bromophenyl phenyl ether	248	9.987	9.989	-0.002	67	1032089	40.0	40.0	
112 Hexachlorobenzene	284	10.073	10.074	-0.001	93	1177193	40.0	42.1	
113 Atrazine	200	10.105	10.101	0.004	88	303450	40.0	38.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
116 Pentachlorophenol	266	10.244	10.245	-0.001	84	1403152	80.0	87.4	
115 n-Octadecane	57	10.244	10.245	-0.001	90	1697263	40.0	42.3	
121 Phenanthrene	178	10.447	10.443	0.004	97	4981937	40.0	41.2	
122 Anthracene	178	10.495	10.496	-0.001	97	4917873	40.0	41.0	
124 Carbazole	167	10.628	10.630	-0.002	83	4356998	40.0	41.6	
126 Di-n-butyl phthalate	149	10.917	10.918	-0.001	100	5469338	40.0	42.3	
131 Fluoranthene	202	11.713	11.714	-0.001	96	5210003	40.0	41.3	
132 Benzidine	184	11.836	11.837	-0.001	97	643569	40.0	35.8	
133 Pyrene	202	12.007	12.008	-0.001	99	5176902	40.0	39.7	
138 Butyl benzyl phthalate	149	12.835	12.831	0.004	95	2197384	40.0	41.8	
144 3,3'-Dichlorobenzidine	252	13.780	13.776	0.004	70	1751600	40.0	44.0	
145 Bis(2-ethylhexyl) phthalat	149	13.812	13.814	-0.002	95	3121939	40.0	42.7	
146 Benzo[a]anthracene	228	13.860	13.856	0.004	96	5095699	40.0	41.2	
147 Chrysene	228	13.930	13.926	0.004	94	4497150	40.0	38.9	
150 Di-n-octyl phthalate	149	15.094	15.096	-0.002	100	5039481	40.0	46.3	
151 7,12-Dimethylbenz(a)anthra	256	15.965	15.956	0.009	80	2206304	40.0	42.7	
152 Benzo[b]fluoranthene	252	15.987	15.972	0.015	94	4824218	40.0	42.8	
153 Benzo[k]fluoranthene	252	16.029	16.031	-0.002	98	4572696	40.0	41.4	
154 Benzo[a]pyrene	252	16.654	16.650	0.004	72	4086943	40.0	42.7	
157 Indeno[1,2,3-cd]pyrene	276	18.951	18.947	0.004	94	4070677	40.0	41.1	
158 Dibenz(a,h)anthracene	278	18.983	18.979	0.004	77	3622705	40.0	41.8	
159 Benzo[g,h,i]perylene	276	19.539	19.530	0.009	93	3454309	40.0	39.8	
S 197 Methyl Phenols,Total	108				0		80.0	83.7	
S 199 Total Cresols	108				0		80.0	83.7	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

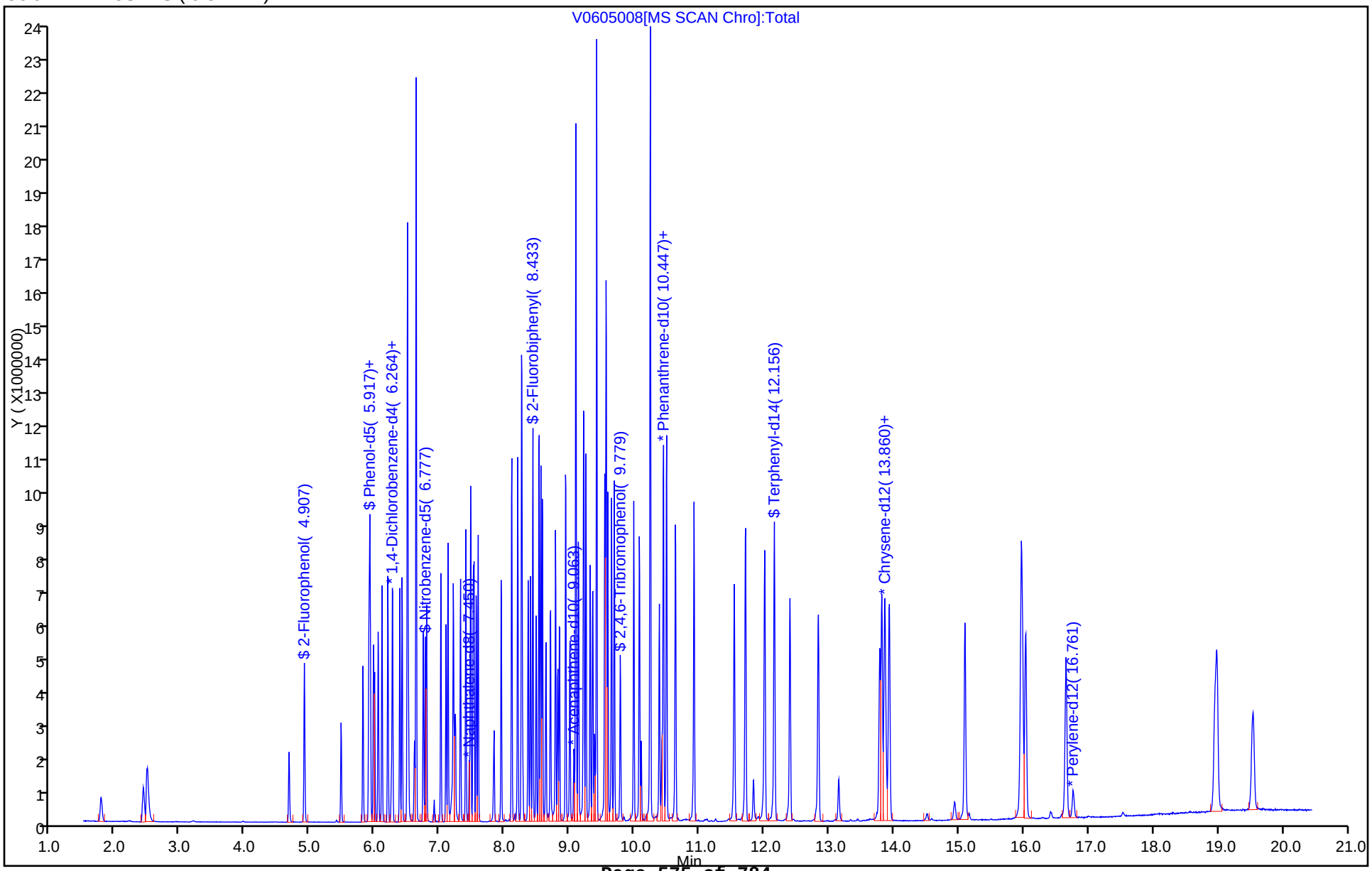
Report Date: 06-Jun-2014 06:48:40 Chrom Revision: 2.2 16-May-2014 10:46:48

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605008.D

Injection Date:	05-Jun-2014 10:48:30	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\20140604-1566.b\V0605009.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 05-Jun-2014 11:17:30 ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0001566-009
Misc. Info.: IC
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub2

Method: \\PITCHROM\ChromData\CH731\20140604-1566.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 06-Jun-2014 06:48:41 Calib Date: 05-Jun-2014 11:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK053

First Level Reviewer: piccolinov Date: 05-Jun-2014 12:58:19

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	6.254	6.255	0.000	86	168402	8.00	8.00	
* 2 Naphthalene-d8	136	7.455	7.456	-0.001	99	631241	8.00	8.00	
* 3 Acenaphthene-d10	164	9.069	9.064	0.005	87	436372	8.00	8.00	
* 4 Phenanthrene-d10	188	10.426	10.421	0.005	96	796857	8.00	8.00	
* 5 Chrysene-d12	240	13.882	13.878	0.004	71	748645	8.00	8.00	
* 6 Perylene-d12	264	16.772	16.762	0.010	99	604562	8.00	8.00	
$ 7 2-Fluorophenol	112	4.907	4.914	-0.007	93	1896008	60.0	61.2	
$ 8 Phenol-d5	99	5.906	5.902	0.004	90	2349465	60.0	62.7	
$ 9 Nitrobenzene-d5	82	6.777	6.778	-0.001	89	2561460	60.0	62.2	
$ 10 2-Fluorobiphenyl	172	8.433	8.434	-0.001	100	4715053	60.0	58.9	
$ 11 2,4,6-Tribromophenol	330	9.785	9.780	0.005	93	848546	60.0	74.2	
$ 12 Terphenyl-d14	244	12.162	12.158	0.004	98	5969087	60.0	65.3	
13 1,4-Dioxane	88	1.766	1.794	-0.028	91	823905	60.0	53.2	
14 N-Nitrosodimethylamine	74	2.429	2.440	-0.011	88	1287851	60.0	59.2	
15 Pyridine	79	2.482	2.515	-0.033	94	2163223	60.0	57.0	
21 Methyl methanesulfonate	80	4.672	4.679	-0.007	86	1255323	60.0	56.9	
25 Benzaldehyde	77	5.815	5.816	-0.001	88	1342379	60.0	60.2	
26 Phenol	94	5.917	5.918	-0.001	87	2774038	60.0	62.3	
27 Aniline	93	5.928	5.929	-0.001	84	2618514	60.0	61.7	
29 Bis(2-chloroethyl)ether	93	5.992	5.993	-0.001	92	1750792	60.0	60.0	
30 2-Chlorophenol	128	6.051	6.052	-0.002	94	1847521	60.0	61.4	
31 n-Decane	43	6.104	6.105	-0.001	84	1827009	60.0	64.2	
32 1,3-Dichlorobenzene	146	6.200	6.201	-0.001	91	2071235	60.0	58.3	
33 1,4-Dichlorobenzene	146	6.270	6.271	-0.001	87	2142481	60.0	60.3	
34 Benzyl alcohol	108	6.382	6.383	-0.001	84	1225463	60.0	64.2	
35 1,2-Dichlorobenzene	146	6.419	6.420	-0.001	88	2018236	60.0	60.1	
36 2-Methylphenol	108	6.499	6.495	0.004	94	2005962	60.0	65.2	
37 Indene	116	6.505	6.506	-0.001	79	3757530	60.0	64.0	
38 2,2'-oxybis[1-chloropropan	45	6.510	6.516	-0.006	84	2069403	60.0	65.7	
39 N-Nitrosopyrrolidine	100	6.611	6.602	0.009	76	832483	60.0	63.3	

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	6.633	6.628	0.005	68	1898437	60.0	63.0	
42 4-Methylphenol	108	6.638	6.634	0.004	68	2181055	60.0	66.8	
40 Acetophenone	105	6.633	6.634	-0.001	74	3169309	60.0	60.9	
45 Hexachloroethane	117	6.745	6.746	-0.001	94	1003783	60.0	60.1	
46 Nitrobenzene	77	6.798	6.794	0.004	80	2565184	60.0	60.5	
48 Isophorone	82	7.017	7.013	0.004	96	4124861	60.0	64.3	
49 2-Nitrophenol	139	7.098	7.093	0.005	92	1026967	60.0	65.3	
50 2,4-Dimethylphenol	107	7.124	7.125	-0.001	98	2221538	60.0	61.9	
52 Benzoic acid	122	7.258	7.195	0.063	81	2097306	120.0	137.3	M
53 Bis(2-chloroethoxy)methane	93	7.210	7.205	0.005	98	2221305	60.0	64.3	
54 2,4-Dichlorophenol	162	7.322	7.318	0.004	95	1607962	60.0	63.3	
56 1,2,4-Trichlorobenzene	180	7.402	7.403	-0.001	90	1869723	60.0	62.0	
57 Azobenzene	77	7.402	7.408	-0.006	9	13165	60.0	60.0	
58 Naphthalene	128	7.477	7.473	0.004	98	5885289	60.0	64.9	
59 4-Chloroaniline	127	7.514	7.515	-0.001	81	2296948	60.0	64.8	
60 2,6-Dichlorophenol	162	7.525	7.526	-0.001	89	1586033	60.0	61.4	
62 Hexachlorobutadiene	225	7.589	7.590	-0.001	89	1234537	60.0	59.0	
64 Caprolactam	113	7.851	7.809	0.042	77	494722	60.0	63.5	
67 4-Chloro-3-methylphenol	107	7.947	7.943	0.004	88	1929623	60.0	62.7	
69 2-Methylnaphthalene	142	8.107	8.108	-0.001	84	4119481	60.0	63.7	
71 1-Methylnaphthalene	142	8.203	8.199	0.004	79	3830898	60.0	63.9	
72 Hexachlorocyclopentadiene	237	8.257	8.258	-0.001	97	1564073	60.0	61.2	
73 1,2,4,5-Tetrachlorobenzene	216	8.267	8.263	0.004	95	1982226	60.0	57.5	
74 2,4,6-Trichlorophenol	196	8.364	8.359	0.005	95	1338762	60.0	61.2	
75 2,4,5-Trichlorophenol	196	8.401	8.397	0.004	92	1381011	60.0	60.0	
76 1,1'-Biphenyl	154	8.529	8.530	-0.001	96	5169163	60.0	60.0	
77 2-Chloronaphthalene	162	8.561	8.557	0.004	98	4309958	60.0	60.6	
79 2-Nitroaniline	65	8.636	8.632	0.004	74	1338581	60.0	58.4	
82 Dimethyl phthalate	163	8.786	8.781	0.005	96	4550807	60.0	59.2	
83 1,3-Dinitrobenzene	168	8.823	8.813	0.010	85	758942	60.0	63.5	
84 2,6-Dinitrotoluene	165	8.844	8.840	0.004	83	1014045	60.0	60.5	
85 Acenaphthylene	152	8.941	8.942	-0.001	98	6655570	60.0	61.5	
86 3-Nitroaniline	138	9.010	9.000	0.010	87	990686	60.0	59.2	
87 2,4-Dinitrophenol	184	9.101	9.097	0.004	70	1462583	120.0	117.8	
88 Acenaphthene	153	9.101	9.097	0.004	86	4138437	60.0	59.0	
89 4-Nitrophenol	109	9.144	9.134	0.010	90	1752899	120.0	119.0	
91 2,4-Dinitrotoluene	165	9.218	9.209	0.009	85	1363381	60.0	60.9	
93 Dibenzofuran	168	9.256	9.251	0.005	81	5891147	60.0	58.0	
95 2,3,5,6-Tetrachlorophenol	232	9.320	9.316	0.004	91	1427873	60.0	65.0	
96 2,3,4,6-Tetrachlorophenol	232	9.357	9.358	-0.001	76	1317104	60.0	63.3	
97 2-Naphthylamine	143	9.389	9.385	0.004	74	980725	60.0	52.0	
98 Diethyl phthalate	149	9.421	9.412	0.009	94	5009323	60.0	59.8	
99 Hexadecane	57	9.421	9.417	0.004	83	2684349	60.0	73.8	
100 4-Chlorophenyl phenyl ethe	204	9.544	9.545	-0.001	97	2569404	60.0	61.3	
101 4-Nitroaniline	138	9.566	9.556	0.010	58	1084684	60.0	60.7	
103 Fluorene	166	9.566	9.561	0.005	82	4858093	60.0	61.5	
104 4,6-Dinitro-2-methylphenol	198	9.592	9.583	0.009	82	1962885	120.0	132.1	
105 N-Nitrosodiphenylamine	169	9.651	9.647	0.004	60	3515866	60.0	62.0	
90 1,2-Diphenylhydrazine	77	9.689	9.690	-0.002	6	5582995	60.0	59.0	
110 4-Bromophenyl phenyl ether	248	9.993	9.989	0.004	65	1614568	60.0	63.2	
112 Hexachlorobenzene	284	10.078	10.074	0.004	91	1820044	60.0	65.7	
113 Atrazine	200	10.105	10.101	0.004	88	439026	60.0	56.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
116 Pentachlorophenol	266	10.244	10.245	-0.001	85	1933208	120.0	121.5	
115 n-Octadecane	57	10.244	10.245	-0.001	94	2880777	60.0	71.1	
121 Phenanthrene	178	10.447	10.443	0.004	97	7523824	60.0	62.8	
122 Anthracene	178	10.501	10.496	0.004	97	7334870	60.0	61.8	
124 Carbazole	167	10.634	10.630	0.004	83	6435874	60.0	62.1	
126 Di-n-butyl phthalate	149	10.923	10.918	0.005	100	7989596	60.0	62.4	
131 Fluoranthene	202	11.713	11.714	-0.001	97	7348892	60.0	58.7	
132 Benzidine	184	11.841	11.837	0.004	98	1024612	60.0	61.7	
133 Pyrene	202	12.012	12.008	0.004	99	7390038	60.0	62.9	
138 Butyl benzyl phthalate	149	12.840	12.831	0.009	96	2994620	60.0	63.2	
144 3,3'-Dichlorobenzidine	252	13.791	13.776	0.015	71	2324667	60.0	64.9	
145 Bis(2-ethylhexyl) phthalat	149	13.818	13.814	0.004	94	4200396	60.0	63.8	
146 Benzo[a]anthracene	228	13.866	13.856	0.010	96	6829441	60.0	61.3	
147 Chrysene	228	13.936	13.926	0.010	94	6260675	60.0	60.2	
150 Di-n-octyl phthalate	149	15.100	15.096	0.004	100	6734100	60.0	65.9	
151 7,12-Dimethylbenz(a)anthra	256	15.976	15.956	0.020	81	3072560	60.0	63.3	
152 Benzo[b]fluoranthene	252	15.992	15.972	0.020	94	6368454	60.0	60.2	
153 Benzo[k]fluoranthene	252	16.040	16.031	0.009	98	6544993	60.0	63.2	
154 Benzo[a]pyrene	252	16.665	16.650	0.015	72	5595924	60.0	62.2	
157 Indeno[1,2,3-cd]pyrene	276	18.973	18.947	0.026	97	6120959	60.0	65.8	
158 Dibenz(a,h)anthracene	278	18.995	18.979	0.015	74	5460456	60.0	67.0	
159 Benzo[g,h,i]perylene	276	19.550	19.530	0.020	93	5291168	60.0	64.8	
S 197 Methyl Phenols,Total	108				0		120.0	132.1	
S 199 Total Cresols	108				0		120.0	132.1	

QC Flag Legend

Review Flags
M - Manually Integrated

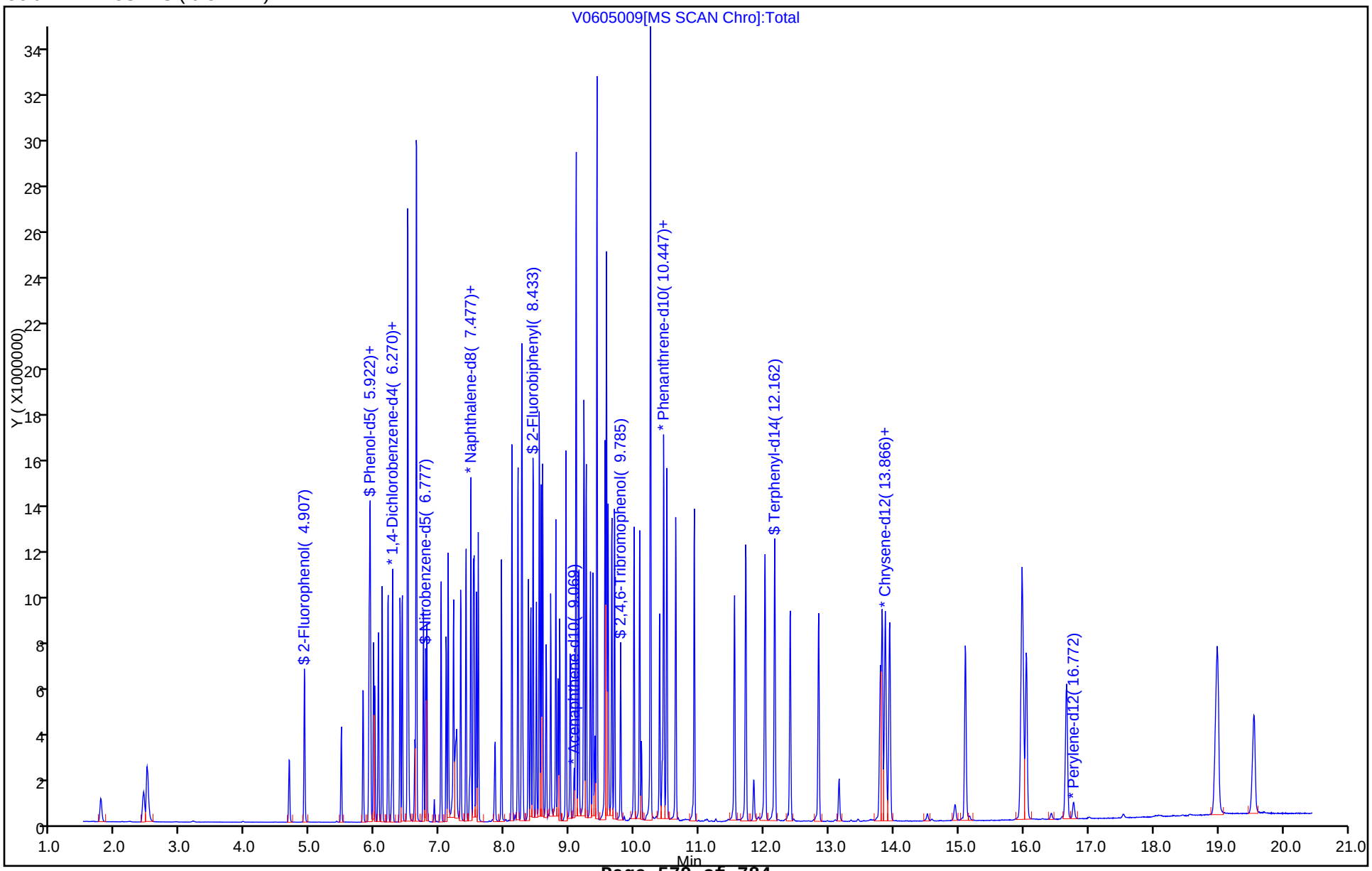
Report Date: 06-Jun-2014 06:48:42 Chrom Revision: 2.2 16-May-2014 10:46:48

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605009.D

Injection Date:	05-Jun-2014 11:17:30	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)



Manual Integration/User Assign Peak Report

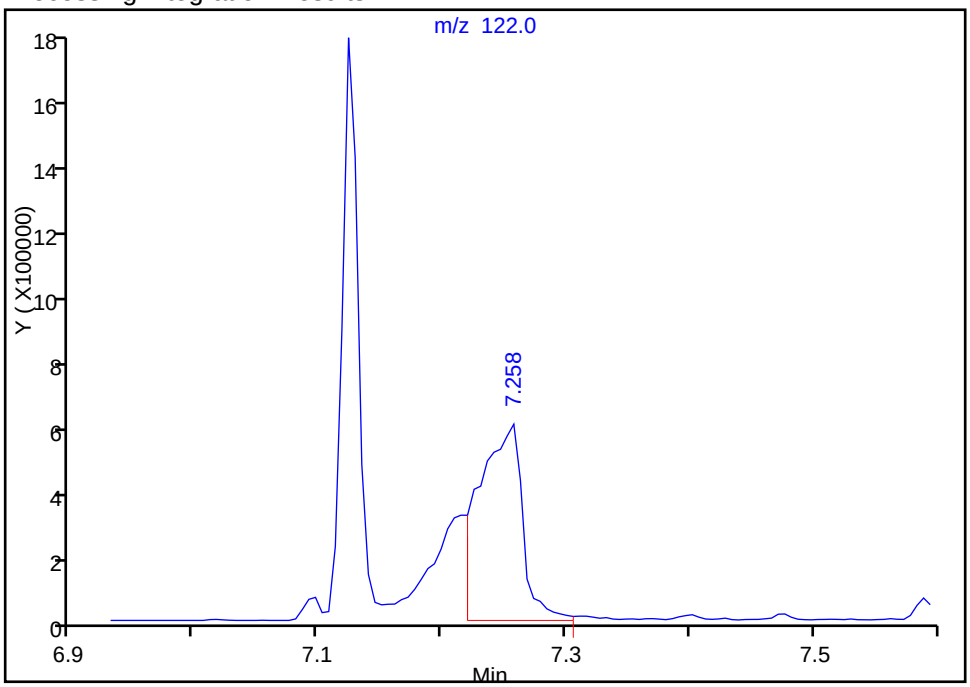
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140604-1566.b\V0605009.D				
Injection Date:	05-Jun-2014 11:17:30	Instrument ID:	CH731		
Lims ID:	IC				
Client ID:					
Operator ID:	003200	ALS Bottle#:	8	Worklist Smp#:	9
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		

52 Benzoic acid, CAS: 65-85-0

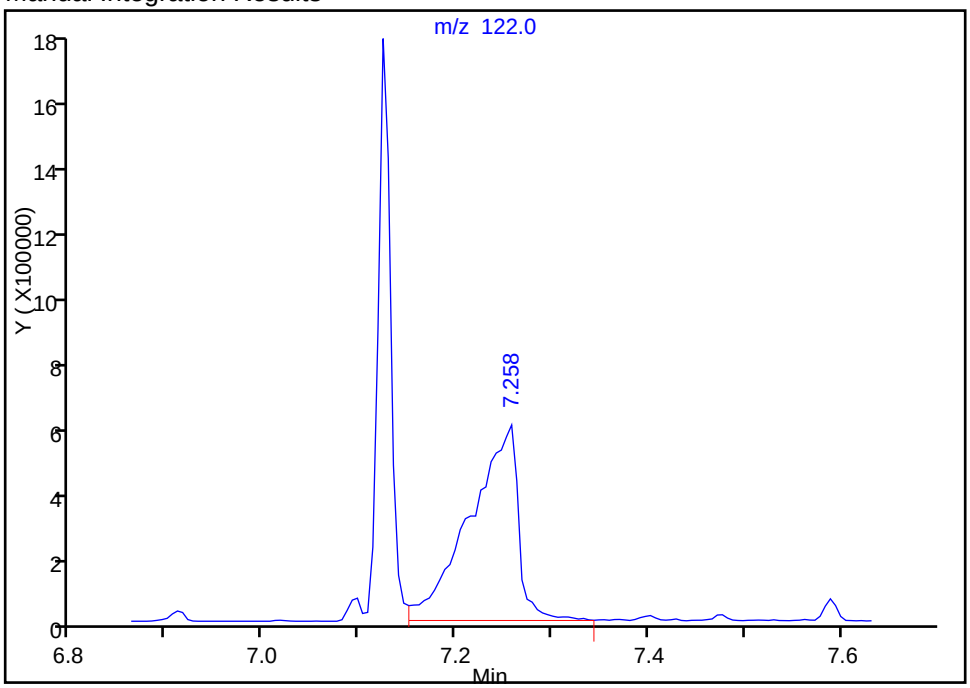
Processing Integration Results

RT: 7.26
Response: 1476562
Amount: 114.4293



Manual Integration Results

RT: 7.26
Response: 2097306
Amount: 137.2898



Reviewer: piccolinov, 05-Jun-2014 12:58:19
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605010.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 05-Jun-2014 11:45:30 ALS Bottle#: 9 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0001566-010
Misc. Info.: IC
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub2

Method: \\PITCHROM\ChromData\CH731\20140604-1566.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 06-Jun-2014 06:48:43 Calib Date: 05-Jun-2014 11:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK053

First Level Reviewer: piccolinov Date: 06-Jun-2014 06:30:35

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	6.249	6.255	-0.005	88	164500	8.00	8.00	
* 2 Naphthalene-d8	136	7.457	7.456	0.001	98	659327	8.00	8.00	
* 3 Acenaphthene-d10	164	9.065	9.064	0.001	92	439263	8.00	8.00	
* 4 Phenanthrene-d10	188	10.421	10.421	0.000	94	815914	8.00	8.00	
* 5 Chrysene-d12	240	13.883	13.878	0.005	91	740398	8.00	8.00	
* 6 Perylene-d12	264	16.768	16.762	0.006	97	624833	8.00	8.00	
$ 7 2-Fluorophenol	112	4.914	4.914	0.000	92	2614483	80.0	86.3	
$ 8 Phenol-d5	99	5.907	5.902	0.005	92	3280404	80.0	89.7	
$ 9 Nitrobenzene-d5	82	6.778	6.778	0.000	88	3451586	80.0	80.2	
$ 10 2-Fluorobiphenyl	172	8.434	8.434	0.000	99	6476034	80.0	80.4	
$ 11 2,4,6-Tribromophenol	330	9.786	9.780	0.006	94	1149770	80.0	98.2	
$ 12 Terphenyl-d14	244	12.158	12.158	0.000	98	7709428	80.0	85.3	
13 1,4-Dioxane	88	1.783	1.794	-0.011	92	1096150	80.0	72.5	
14 N-Nitrosodimethylamine	74	2.451	2.440	0.011	86	1756989	80.0	82.7	
15 Pyridine	79	2.499	2.515	-0.016	93	2885670	80.0	77.8	
21 Methyl methanesulfonate	80	4.679	4.679	0.000	89	1638628	80.0	76.1	
25 Benzaldehyde	77	5.811	5.816	-0.005	88	1673715	80.0	76.9	
26 Phenol	94	5.923	5.918	0.005	92	3895931	80.0	89.6	
27 Aniline	93	5.929	5.929	0.000	83	3605615	80.0	86.9	
29 Bis(2-chloroethyl)ether	93	5.998	5.993	0.005	91	2391839	80.0	83.9	
30 2-Chlorophenol	128	6.052	6.052	0.000	95	2519935	80.0	85.7	
31 n-Decane	43	6.105	6.105	0.000	85	2558299	80.0	92.0	
32 1,3-Dichlorobenzene	146	6.196	6.201	-0.005	91	2897708	80.0	83.5	
33 1,4-Dichlorobenzene	146	6.271	6.271	0.000	89	2901626	80.0	83.6	
34 Benzyl alcohol	108	6.383	6.383	0.000	83	1688333	80.0	90.5	
35 1,2-Dichlorobenzene	146	6.415	6.420	-0.005	89	2761496	80.0	84.1	
36 2-Methylphenol	108	6.506	6.495	0.011	84	2729222	80.0	90.8	
37 Indene	116	6.500	6.506	-0.006	81	5285589	80.0	92.1	
38 2,2'-oxybis[1-chloropropan	45	6.511	6.516	-0.005	84	2990195	80.0	97.2	
39 N-Nitrosopyrrolidine	100	6.618	6.602	0.016	79	1129165	80.0	87.9	

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	6.639	6.628	0.011	70	2546108	80.0	86.5	
42 4-Methylphenol	108	6.639	6.634	0.005	68	2984867	80.0	93.6	
40 Acetophenone	105	6.634	6.634	0.000	75	4376876	80.0	86.1	
45 Hexachloroethane	117	6.746	6.746	0.000	90	1356431	80.0	83.2	
46 Nitrobenzene	77	6.800	6.794	0.006	82	3529890	80.0	79.7	
48 Isophorone	82	7.019	7.013	0.006	96	5671369	80.0	84.6	
49 2-Nitrophenol	139	7.093	7.093	0.000	87	1409659	80.0	85.8	
50 2,4-Dimethylphenol	107	7.125	7.125	0.000	98	3044155	80.0	81.2	
52 Benzoic acid	122	7.270	7.195	0.075	86	2826502	160.0	177.1	M
53 Bis(2-chloroethoxy)methane	93	7.206	7.205	0.001	97	3075746	80.0	85.2	
54 2,4-Dichlorophenol	162	7.318	7.318	0.000	96	2208916	80.0	83.3	
56 1,2,4-Trichlorobenzene	180	7.398	7.403	-0.005	88	2545721	80.0	80.8	
57 Azobenzene	77		7.408					ND	
58 Naphthalene	128	7.473	7.473	0.000	99	8105619	80.0	85.5	
59 4-Chloroaniline	127	7.515	7.515	0.000	84	3164409	80.0	85.5	
60 2,6-Dichlorophenol	162	7.526	7.526	0.000	89	2191038	80.0	81.3	
62 Hexachlorobutadiene	225	7.590	7.590	0.000	93	1683692	80.0	77.1	
64 Caprolactam	113	7.857	7.809	0.048	78	650551	80.0	79.9	
67 4-Chloro-3-methylphenol	107	7.948	7.943	0.005	89	2706161	80.0	84.2	
69 2-Methylnaphthalene	142	8.108	8.108	0.000	84	5770551	80.0	85.4	
71 1-Methylnaphthalene	142	8.199	8.199	0.000	80	5359788	80.0	85.6	
72 Hexachlorocyclopentadiene	237	8.258	8.258	0.000	93	2095970	80.0	81.5	
73 1,2,4,5-Tetrachlorobenzene	216	8.263	8.263	0.000	94	2600260	80.0	74.9	
74 2,4,6-Trichlorophenol	196	8.359	8.359	0.000	93	1883378	80.0	85.6	
75 2,4,5-Trichlorophenol	196	8.397	8.397	0.000	92	1875939	80.0	81.0	
76 1,1'-Biphenyl	154	8.530	8.530	0.000	96	7179848	80.0	82.8	
77 2-Chloronaphthalene	162	8.557	8.557	0.000	99	6366944	80.0	88.9	
79 2-Nitroaniline	65	8.637	8.632	0.005	76	1792249	80.0	77.7	
82 Dimethyl phthalate	163	8.787	8.781	0.006	96	6141800	80.0	79.4	
83 1,3-Dinitrobenzene	168	8.819	8.813	0.006	83	1032639	80.0	85.8	
84 2,6-Dinitrotoluene	165	8.846	8.840	0.006	83	1381892	80.0	82.0	
85 Acenaphthylene	152	8.942	8.942	0.000	91	8715068	80.0	80.0	
86 3-Nitroaniline	138	9.006	9.000	0.006	88	1412213	80.0	83.8	
87 2,4-Dinitrophenol	184	9.102	9.097	0.005	71	2009765	160.0	159.4	
88 Acenaphthene	153	9.097	9.097	0.000	93	5668477	80.0	80.3	
89 4-Nitrophenol	109	9.145	9.134	0.011	89	2312015	160.0	156.0	
91 2,4-Dinitrotoluene	165	9.214	9.209	0.005	84	1845503	80.0	81.9	
93 Dibenzofuran	168	9.252	9.251	0.001	85	8248009	80.0	80.7	
95 2,3,5,6-Tetrachlorophenol	232	9.321	9.316	0.005	91	1900027	80.0	85.9	
96 2,3,4,6-Tetrachlorophenol	232	9.358	9.358	0.000	75	1789830	80.0	85.4	
97 2-Naphthylamine	143	9.385	9.385	0.000	70	1236702	80.0	65.1	
98 Diethyl phthalate	149	9.423	9.412	0.010	95	6690900	80.0	79.4	
99 Hexadecane	57	9.417	9.417	0.000	88	3919304	80.0	103.1	
100 4-Chlorophenyl phenyl ethe	204	9.545	9.545	0.000	97	3428115	80.0	81.2	
101 4-Nitroaniline	138	9.567	9.556	0.011	57	1492119	80.0	83.0	
103 Fluorene	166	9.567	9.561	0.006	82	6465444	80.0	81.3	
104 4,6-Dinitro-2-methylphenol	198	9.593	9.583	0.010	86	2641673	160.0	173.7	
105 N-Nitrosodiphenylamine	169	9.647	9.647	0.000	59	4741201	80.0	81.6	
90 1,2-Diphenylhydrazine	77	9.690	9.690	0.000	2	7463694	80.0	77.0	
110 4-Bromophenyl phenyl ether	248	9.994	9.989	0.005	65	2111586	80.0	80.7	
112 Hexachlorobenzene	284	10.080	10.074	0.006	91	2392847	80.0	84.4	
113 Atrazine	200	10.106	10.101	0.005	92	476849	80.0	60.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
116 Pentachlorophenol	266	10.245	10.245	0.000	85	2530021	160.0	155.2	
115 n-Octadecane	57	10.245	10.245	0.000	96	4065990	80.0	102.7	
121 Phenanthrene	178	10.448	10.443	0.005	97	9962250	80.0	81.2	
122 Anthracene	178	10.496	10.496	0.000	98	9645656	80.0	79.3	
124 Carbazole	167	10.635	10.630	0.005	82	8662051	80.0	81.6	
126 Di-n-butyl phthalate	149	10.918	10.918	0.000	100	10216086	80.0	78.0	
131 Fluoranthene	202	11.714	11.714	0.000	96	9827023	80.0	76.7	
132 Benzidine	184	11.837	11.837	0.000	98	1437687	80.0	86.6	
133 Pyrene	202	12.008	12.008	0.000	99	9862636	80.0	84.9	
138 Butyl benzyl phthalate	149	12.836	12.831	0.005	97	4026875	80.0	86.0	
144 3,3'-Dichlorobenzidine	252	13.782	13.776	0.006	71	3066829	80.0	86.5	
145 Bis(2-ethylhexyl) phthalat	149	13.814	13.814	0.000	95	5667796	80.0	87.0	
146 Benzo[a]anthracene	228	13.862	13.856	0.006	93	9099955	80.0	82.7	
147 Chrysene	228	13.931	13.926	0.005	94	8380802	80.0	81.5	
150 Di-n-octyl phthalate	149	15.101	15.096	0.005	99	9089752	80.0	86.1	
151 7,12-Dimethylbenz(a)anthra	256	15.972	15.956	0.016	81	4094114	80.0	81.6	
152 Benzo[b]fluoranthene	252	15.993	15.972	0.021	95	8936771	80.0	81.8	
153 Benzo[k]fluoranthene	252	16.041	16.031	0.010	98	8948419	80.0	83.5	
154 Benzo[a]pyrene	252	16.661	16.650	0.011	72	7899067	80.0	85.0	
157 Indeno[1,2,3-cd]pyrene	276	18.969	18.947	0.022	97	8749573	80.0	91.0	
158 Dibenz(a,h)anthracene	278	18.996	18.979	0.017	76	7879895	80.0	93.6	
159 Benzo[g,h,i]perylene	276	19.551	19.530	0.021	93	7591259	80.0	90.0	
S 197 Methyl Phenols,Total	108				0		160.0	184.5	
S 199 Total Cresols	108				0		160.0	184.5	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Review Flags
M - Manually Integrated

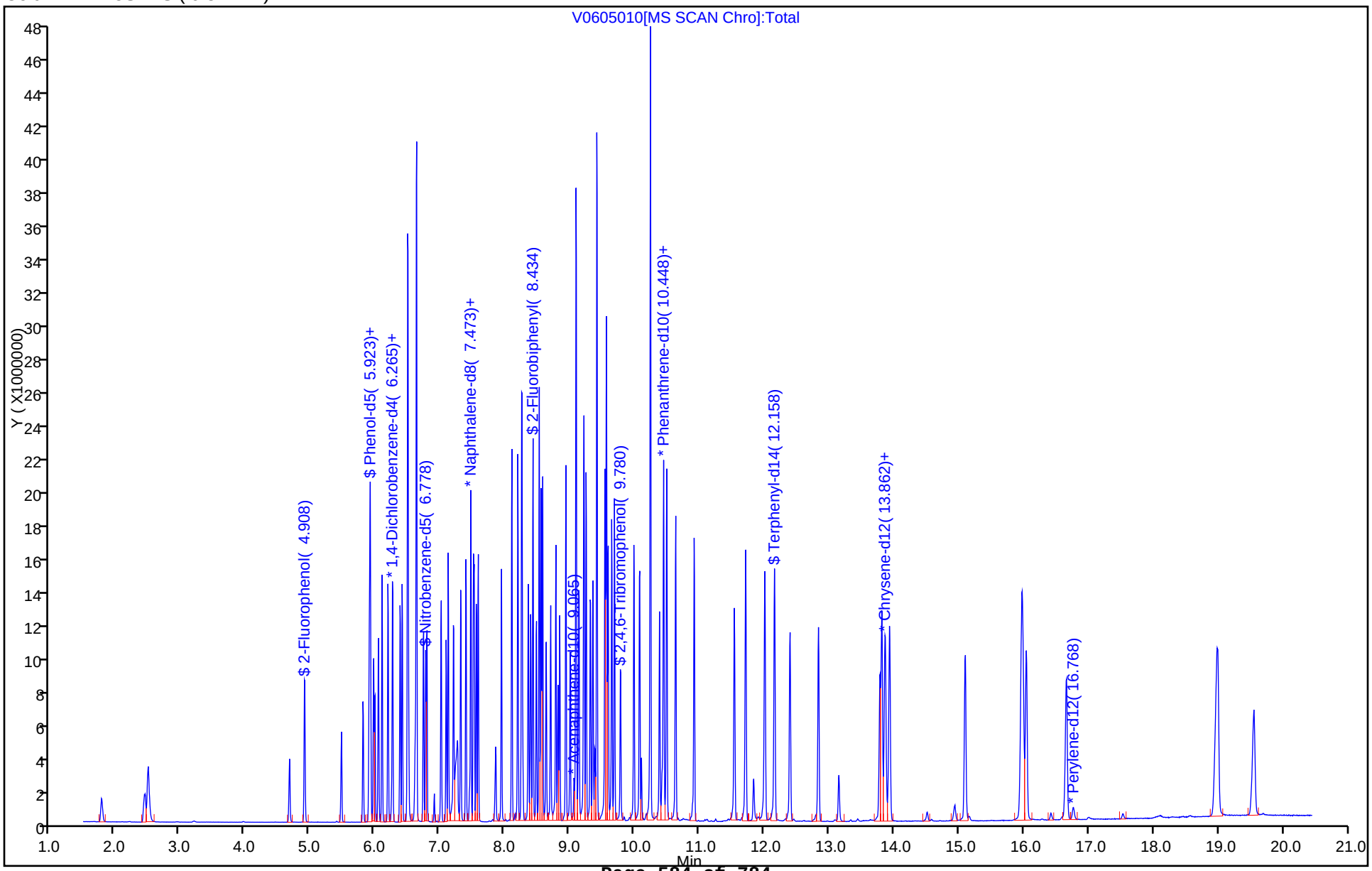
Report Date: 06-Jun-2014 06:48:44 Chrom Revision: 2.2 16-May-2014 10:46:48

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605010.D

Injection Date:	05-Jun-2014 11:45:30	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

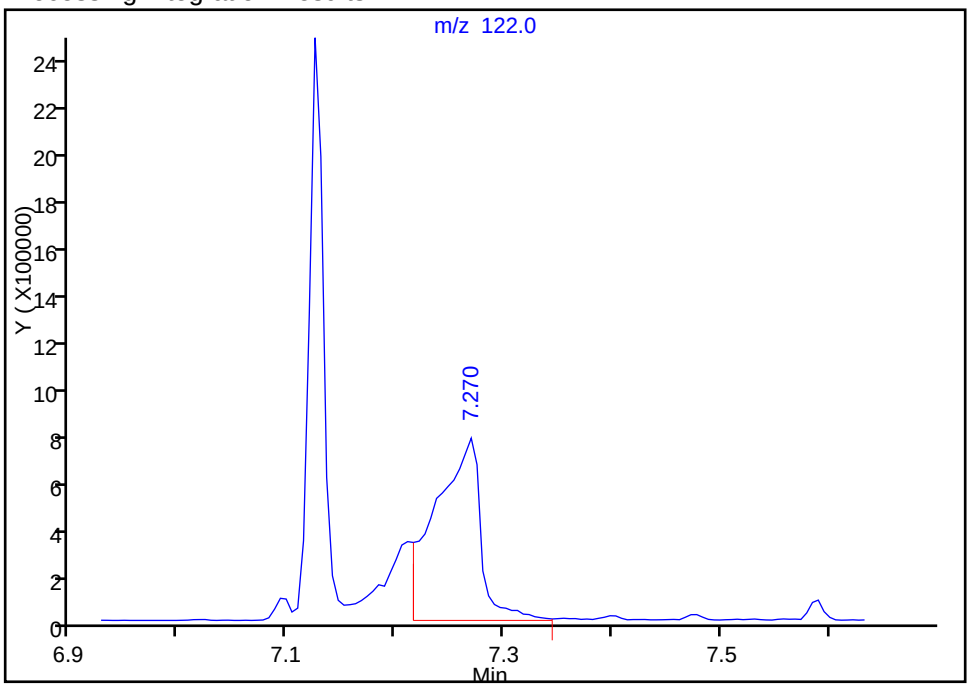
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140604-1566.b\V0605010.D				
Injection Date:	05-Jun-2014 11:45:30	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		

52 Benzoic acid, CAS: 65-85-0

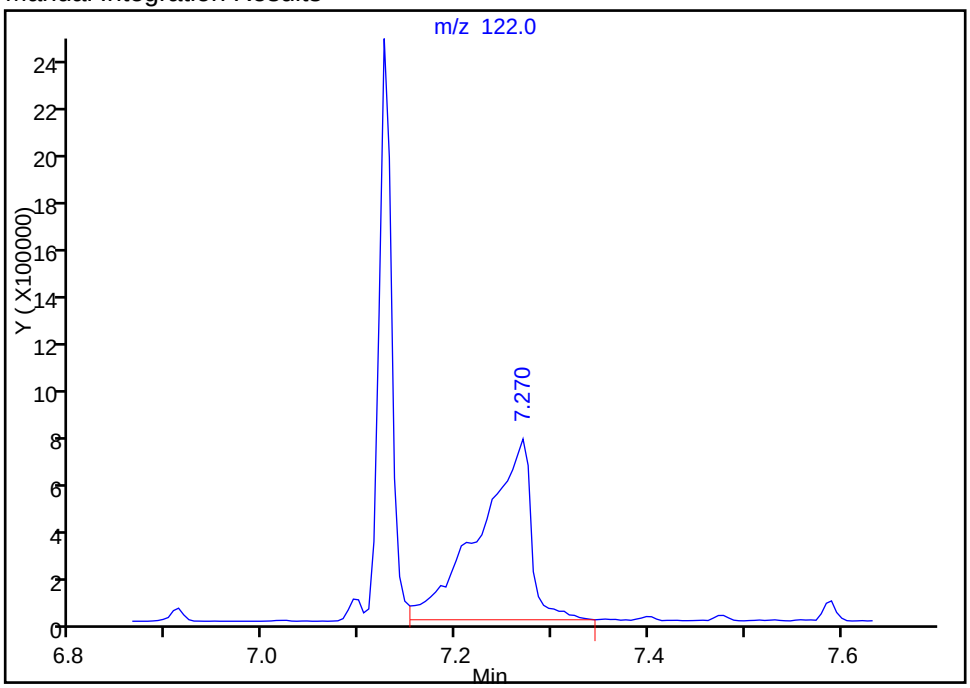
Processing Integration Results

RT: 7.27
Response: 2284194
Amount: 160.2604



Manual Integration Results

RT: 7.27
Response: 2826502
Amount: 177.1414



Reviewer: piccolinov, 06-Jun-2014 06:30:35
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Lab Sample ID: CCVIS 180-110717/3 Calibration Date: 07/08/2014 14:00

Instrument ID: CH731 Calib Start Date: 06/05/2014 08:25

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 06/05/2014 11:45

Lab File ID: V0708003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.7353	0.9167	0.0100	6.23	5.00	24.7*	20.0
N-Nitrosodimethylamine	Ave	1.033	1.261	0.0100	6.10	5.00	22.1*	20.0
Pyridine	Ave	1.803	2.125	0.0100	5.89	5.00	17.9	20.0
Methyl methanesulfonate	Ave	1.048	1.279	0.0100	6.11	5.00	22.1*	20.0
Benzaldehyde	Ave	1.059	1.327	0.0100	6.26	5.00	25.3*	20.0
Phenol	Ave	2.114	1.930	0.8000	4.56	5.00	-8.7	20.0
Aniline	Ave	2.017	1.969	0.0100	4.88	5.00	-2.4	20.0
Bis(2-chloroethyl)ether	Ave	1.387	1.283	0.7000	4.62	5.00	-7.5	20.0
2-Chlorophenol	Ave	1.429	1.464	0.8000	5.12	5.00	2.4	20.0
n-Decane	Ave	1.352	1.257		4.65	5.00	-7.0	20.0
1,3-Dichlorobenzene	Ave	1.688	1.734	0.0100	5.14	5.00	2.7	20.0
1,4-Dichlorobenzene	Ave	1.688	1.656	0.0100	4.91	5.00	-1.9	20.0
Benzyl alcohol	Ave	0.9071	0.7101	0.0100	3.91	5.00	-21.7*	20.0
1,2-Dichlorobenzene	Ave	1.596	1.677	0.0100	5.25	5.00	5.1	20.0
2-Methylphenol	Ave	1.461	1.318	0.7000	4.51	5.00	-9.8	20.0
Indene	Ave	2.790	2.600	0.0100	4.66	5.00	-6.8	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.496	1.180	0.0100	3.94	5.00	-21.2*	20.0
N-Nitrosopyrrolidine	Ave	0.6249	0.5467	0.0100	4.37	5.00	-12.5	20.0
Acetophenone	Ave	2.472	2.341	0.0100	4.74	5.00	-5.3	20.0
Methylphenol, 3 & 4	Ave	1.550	1.392	0.6000	4.49	5.00	-10.2	20.0
N-Nitrosodi-n-propylamine	Ave	1.432	1.342	0.5000	4.69	5.00	-6.3	20.0
Hexachloroethane	Ave	0.7929	0.8636	0.3000	5.45	5.00	8.9	20.0
Nitrobenzene	Ave	0.5372	0.5693	0.2000	5.30	5.00	6.0	20.0
Isophorone	Ave	0.8134	0.8157	0.4000	5.01	5.00	0.3	20.0
2-Nitrophenol	Ave	0.1994	0.2037	0.1000	5.11	5.00	2.2	20.0
2,4-Dimethylphenol	Ave	0.4548	0.4723	0.2000	5.19	5.00	3.8	20.0
Benzoic acid	Ave	0.1936	0.1460	0.0100	7.54	10.0	-24.6*	20.0
Bis(2-chloroethoxy)methane	Ave	0.4379	0.4061	0.3000	4.64	5.00	-7.3	20.0
2,4-Dichlorophenol	Ave	0.3218	0.3387	0.2000	5.26	5.00	5.2	20.0
1,2,4-Trichlorobenzene	Ave	0.3822	0.4133	0.0100	5.41	5.00	8.1	20.0
Naphthalene	Ave	1.150	1.096	0.7000	4.76	5.00	-4.7	20.0
4-Chloroaniline	Ave	0.4493	0.4363	0.0100	4.85	5.00	-2.9	20.0
2,6-Dichlorophenol	Ave	0.3272	0.3209	0.0100	4.90	5.00	-1.9	20.0
Hexachlorobutadiene	Ave	0.2650	0.3063	0.0100	5.78	5.00	15.6	20.0
Caprolactam	Ave	0.0987	0.0811	0.0100	4.11	5.00	-17.8	20.0
4-Chloro-3-methylphenol	Ave	0.3897	0.3816	0.2000	4.90	5.00	-2.1	20.0
2-Methylnaphthalene	Ave	0.8202	0.8039	0.4000	4.90	5.00	-2.0	20.0
1-Methylnaphthalene	Ave	0.7598	0.7143	0.0100	4.70	5.00	-6.0	20.0
Hexachlorocyclopentadiene	Ave	0.4683	0.6027	0.0500	6.43	5.00	28.7*	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.6322	0.7906	0.0100	6.25	5.00	25.1*	20.0
2,4,6-Trichlorophenol	Ave	0.4008	0.4711	0.2000	5.88	5.00	17.5	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Lab Sample ID: CCVIS 180-110717/3 Calibration Date: 07/08/2014 14:00

Instrument ID: CH731 Calib Start Date: 06/05/2014 08:25

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 06/05/2014 11:45

Lab File ID: V0708003.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	0.4220	0.4703	0.2000	5.57	5.00	11.5	20.0
1,1'-Biphenyl	Ave	1.579	1.670	0.0100	5.29	5.00	5.7	20.0
2-Chloronaphthalene	Ave	1.305	1.369	0.8000	5.25	5.00	5.0	20.0
2-Nitroaniline	Ave	0.4202	0.4985	0.0100	5.93	5.00	18.6	20.0
Dimethyl phthalate	Ave	1.409	1.485	0.0100	5.27	5.00	5.4	20.0
1,3-Dinitrobenzene	Ave	0.2192	0.2270	0.0100	5.18	5.00	3.6	20.0
2,6-Dinitrotoluene	Ave	0.3071	0.3457	0.2000	5.63	5.00	12.6	20.0
Acenaphthylene	Ave	1.984	1.988	0.9000	5.01	5.00	0.2	20.0
3-Nitroaniline	Ave	0.3068	0.3137	0.0100	5.11	5.00	2.2	20.0
2,4-Dinitrophenol	Lin2		0.1904	0.0100	10.1	10.0	1.2	20.0
Acenaphthene	Ave	1.286	1.303	0.9000	5.07	5.00	1.3	20.0
4-Nitrophenol	Ave	0.2699	0.3546	0.0100	13.1	10.0	31.4*	20.0
2,4-Dinitrotoluene	Ave	0.4103	0.4327	0.2000	5.27	5.00	5.5	20.0
Dibenzofuran	Ave	1.861	1.882	0.8000	5.06	5.00	1.1	20.0
2,3,5,6-Tetrachlorophenol	Ave	0.4027	0.4125	0.0100	5.12	5.00	2.4	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3817	0.4339	0.0100	5.68	5.00	13.7	20.0
2-Naphthylamine	Ave	0.3458	0.3820	0.0100	5.52	5.00	10.5	20.0
Diethyl phthalate	Ave	1.535	1.658	0.0100	5.40	5.00	8.0	20.0
Hexadecane	Ave	0.4612	0.3572		3.87	5.00	-22.6*	20.0
4-Chlorophenyl phenyl ether	Ave	0.7686	0.8537	0.4000	5.55	5.00	11.1	20.0
4-Nitroaniline	Ave	0.3275	0.3192	0.0100	4.87	5.00	-2.5	20.0
Fluorene	Ave	1.448	1.507	0.9000	5.20	5.00	4.1	20.0
4,6-Dinitro-2-methylphenol	Ave	0.1491	0.1440	0.0100	9.65	10.0	-3.5	20.0
N-Nitrosodiphenylamine	Ave	0.5696	0.5774	0.0100	5.07	5.00	1.4	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.9507	1.061	0.0100	5.58	5.00	11.6	20.0
4-Bromophenyl phenyl ether	Ave	0.2565	0.2832	0.1000	5.52	5.00	10.4	20.0
Hexachlorobenzene	Ave	0.2780	0.2978	0.1000	5.36	5.00	7.2	20.0
Atrazine	Ave	0.0779	0.0955	0.0100	6.13	5.00	22.6*	20.0
n-Octadecane	Ave	1.926	1.379		3.58	5.00	-28.4*	20.0
Pentachlorophenol	Lin		0.1546	0.0500	9.74	10.0	-2.6	20.0
Phenanthrene	Ave	1.203	1.174	0.7000	4.88	5.00	-2.4	20.0
Anthracene	Ave	1.192	1.215	0.7000	5.09	5.00	1.9	20.0
Carbazole	Ave	1.041	1.037	0.0100	4.98	5.00	-0.4	20.0
Di-n-butyl phthalate	Ave	1.285	1.329	0.0100	5.17	5.00	3.4	20.0
Fluoranthene	Ave	1.256	1.350	0.6000	5.38	5.00	7.5	20.0
Benzidine	Lin2		0.1795	0.0100	5.96	5.00	19.3	20.0
Pyrene	Ave	1.255	1.176	0.6000	4.68	5.00	-6.3	20.0
Butyl benzyl phthalate	Ave	0.5061	0.4689	0.0100	4.63	5.00	-7.3	20.0
3,3'-Dichlorobenzidine	Ave	0.3830	0.4202	0.0100	5.48	5.00	9.7	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.7036	0.6498	0.0100	4.62	5.00	-7.6	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Lab Sample ID: CCVIS 180-110717/3 Calibration Date: 07/08/2014 14:00

Instrument ID: CH731 Calib Start Date: 06/05/2014 08:25

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 06/05/2014 11:45

Lab File ID: V0708003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[a]anthracene	Ave	1.190	1.170	0.8000	4.92	5.00	-1.7	20.0
Chrysene	Ave	1.112	1.085	0.7000	4.88	5.00	-2.4	20.0
Di-n-octyl phthalate	Ave	1.352	1.268	0.0100	4.69	5.00	-6.2	20.0
7,12-Dimethylbenz(a)anthrace ne	Ave	0.6424	0.6068	0.0100	4.72	5.00	-5.5	20.0
Benzo[b]fluoranthene	Ave	1.399	1.408	0.7000	5.03	5.00	0.6	20.0
Benzo[k]fluoranthene	Ave	1.371	1.370	0.7000	4.99	5.00	-0.1	20.0
Benzo[a]pyrene	Ave	1.190	1.246	0.7000	5.23	5.00	4.7	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.231	1.338	0.5000	5.43	5.00	8.7	20.0
Dibenz(a,h)anthracene	Ave	1.078	1.186	0.4000	5.50	5.00	10.0	20.0
Benzo[g,h,i]perylene	Ave	1.080	1.140	0.5000	5.28	5.00	5.6	20.0
2-Fluorophenol (Surr)	Ave	1.473	1.492		5.07	5.00	1.3	20.0
Phenol-d5 (Surr)	Ave	1.779	1.683		4.73	5.00	-5.4	20.0
Nitrobenzene-d5 (Surr)	Ave	0.5221	0.5886		5.64	5.00	12.7	20.0
2-Fluorobiphenyl	Ave	1.467	1.608		5.48	5.00	9.6	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1149	0.1189	0.0100	5.18	5.00	3.5	20.0
Terphenyl-d14 (Surr)	Ave	0.9770	0.9489		4.86	5.00	-2.9	20.0

Report Date: 09-Jul-2014 03:31:40 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708003.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 08-Jul-2014 14:00:30 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0002096-003
Misc. Info.: CCVIS
Operator ID: 003200 Instrument ID: CH731
Sublist: chrom-BNA_CH731*sub2

Method: \\PITCHROM\ChromData\CH731\20140708-2096.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 09-Jul-2014 03:31:39 Calib Date: 27-Jun-2014 09:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20140626-1923.b\V0627010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: piccolinov Date: 09-Jul-2014 02:48:32

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	6.237	6.237	0.000	82	121636	8.00	8.00	
* 2 Naphthalene-d8	136	7.444	7.444	0.000	96	433656	8.00	8.00	
* 3 Acenaphthene-d10	164	9.063	9.063	0.000	91	247506	8.00	8.00	
* 4 Phenanthrene-d10	188	10.430	10.430	0.000	91	461674	8.00	8.00	
* 5 Chrysene-d12	240	13.903	13.903	0.000	80	547261	8.00	8.00	
* 6 Perylene-d12	264	16.809	16.809	0.000	84	489119	8.00	8.00	
$ 7 2-Fluorophenol	112	4.896	4.896	0.000	88	226874	10.0	10.1	
$ 8 Phenol-d5	99	5.895	5.895	0.000	80	255884	10.0	9.46	
$ 9 Nitrobenzene-d5	82	6.766	6.766	0.000	91	319034	10.0	11.3	
$ 10 2-Fluorobiphenyl	172	8.427	8.427	0.000	97	497574	10.0	11.0	
$ 11 2,4,6-Tribromophenol	330	9.784	9.784	0.000	82	68612	10.0	10.4	
$ 12 Terphenyl-d14	244	12.172	12.172	0.000	97	649095	10.0	9.71	
13 1,4-Dioxane	88	1.723	1.723	0.000	90	139382	10.0	12.5	
14 N-Nitrosodimethylamine	74	2.374	2.374	0.000	88	191729	10.0	12.2	
15 Pyridine	79	2.433	2.433	0.000	94	323097	10.0	11.8	
21 Methyl methanesulfonate	80	4.656	4.656	0.000	92	194525	10.0	12.2	
25 Benzaldehyde	77	5.799	5.799	0.000	83	201705	10.0	12.5	
26 Phenol	94	5.906	5.906	0.000	77	293481	10.0	9.13	
27 Aniline	93	5.916	5.916	0.000	77	299335	10.0	9.76	
29 Bis(2-chloroethyl)ether	93	5.980	5.980	0.000	89	195008	10.0	9.25	
30 2-Chlorophenol	128	6.039	6.039	0.000	88	222540	10.0	10.2	
31 n-Decane	43	6.093	6.093	0.000	76	191063	10.0	9.30	
32 1,3-Dichlorobenzene	146	6.183	6.183	0.000	84	263635	10.0	10.3	
33 1,4-Dichlorobenzene	146	6.258	6.258	0.000	72	251848	10.0	9.81	
34 Benzyl alcohol	108	6.370	6.370	0.000	77	107967	10.0	7.83	M
35 1,2-Dichlorobenzene	146	6.408	6.408	0.000	84	255007	10.0	10.5	
36 2-Methylphenol	108	6.488	6.488	0.000	79	200435	10.0	9.02	
37 Indene	116	6.488	6.488	0.000	73	395251	10.0	9.32	
38 2,2'-oxybis[1-chloropropan	45	6.499	6.499	0.000	66	179352	10.0	7.88	M
39 N-Nitrosopyrrolidine	100	6.589	6.589	0.000	66	83115	10.0	8.75	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 4-Methylphenol	108	6.621	6.621	0.000	81	211570	10.0	8.98	
41 N-Nitrosodi-n-propylamine	70	6.621	6.621	0.000	71	203994	10.0	9.37	
40 Acetophenone	105	6.621	6.621	0.000	76	355973	10.0	9.47	
45 Hexachloroethane	117	6.734	6.734	0.000	83	131307	10.0	10.9	
46 Nitrobenzene	77	6.782	6.782	0.000	87	308600	10.0	10.6	
48 Isophorone	82	7.006	7.006	0.000	95	442161	10.0	10.0	
49 2-Nitrophenol	139	7.086	7.086	0.000	71	110403	10.0	10.2	
50 2,4-Dimethylphenol	107	7.118	7.118	0.000	92	256004	10.0	10.4	
52 Benzoic acid	122	7.182	7.182	0.000	86	158288	20.0	15.1	M
53 Bis(2-chloroethoxy)methane	93	7.198	7.198	0.000	88	220128	10.0	9.27	
54 2,4-Dichlorophenol	162	7.311	7.311	0.000	90	183590	10.0	10.5	
57 Azobenzene	77		7.385					ND	
56 1,2,4-Trichlorobenzene	180	7.391	7.391	0.000	86	224015	10.0	10.8	
58 Naphthalene	128	7.466	7.466	0.000	95	593909	10.0	9.53	
59 4-Chloroaniline	127	7.503	7.503	0.000	86	236478	10.0	9.71	
60 2,6-Dichlorophenol	162	7.519	7.519	0.000	83	173945	10.0	9.81	
62 Hexachlorobutadiene	225	7.583	7.583	0.000	88	166045	10.0	11.6	
64 Caprolactam	113	7.797	7.797	0.000	67	43983	10.0	8.22	
67 4-Chloro-3-methylphenol	107	7.936	7.936	0.000	85	206853	10.0	9.79	
69 2-Methylnaphthalene	142	8.101	8.101	0.000	80	435760	10.0	9.80	
71 1-Methylnaphthalene	142	8.192	8.192	0.000	76	387222	10.0	9.40	
72 Hexachlorocyclopentadiene	237	8.251	8.251	0.000	90	186467	10.0	12.9	
73 1,2,4,5-Tetrachlorobenzene	216	8.256	8.256	0.000	93	244606	10.0	12.5	
74 2,4,6-Trichlorophenol	196	8.352	8.352	0.000	90	145762	10.0	11.8	
75 2,4,5-Trichlorophenol	196	8.390	8.390	0.000	88	145510	10.0	11.1	
76 1,1'-Biphenyl	154	8.523	8.523	0.000	94	516757	10.0	10.6	
77 2-Chloronaphthalene	162	8.550	8.550	0.000	97	423668	10.0	10.5	
79 2-Nitroaniline	65	8.630	8.630	0.000	59	154222	10.0	11.9	
82 Dimethyl phthalate	163	8.780	8.780	0.000	92	459364	10.0	10.5	
83 1,3-Dinitrobenzene	168	8.817	8.817	0.000	74	70232	10.0	10.4	
84 2,6-Dinitrotoluene	165	8.844	8.844	0.000	72	106963	10.0	11.3	
85 Acenaphthylene	152	8.935	8.935	0.000	91	615100	10.0	10.0	
86 3-Nitroaniline	138	9.004	9.004	0.000	77	97045	10.0	10.2	
87 2,4-Dinitrophenol	184	9.095	9.095	0.000	68	117828	20.0	20.2	
88 Acenaphthene	153	9.095	9.095	0.000	84	403214	10.0	10.1	
89 4-Nitrophenol	109	9.138	9.138	0.000	83	219398	20.0	26.3	
91 2,4-Dinitrotoluene	165	9.212	9.212	0.000	77	133868	10.0	10.5	
93 Dibenzofuran	168	9.250	9.250	0.000	80	582204	10.0	10.1	
95 2,3,5,6-Tetrachlorophenol	232	9.319	9.319	0.000	90	127627	10.0	10.2	
96 2,3,4,6-Tetrachlorophenol	232	9.357	9.357	0.000	78	134235	10.0	11.4	
97 2-Naphthylamine	143	9.389	9.389	0.000	81	118178	10.0	11.0	
98 Diethyl phthalate	149	9.415	9.415	0.000	93	513062	10.0	10.8	
99 Hexadecane	57	9.415	9.415	0.000	83	193631	10.0	7.74	
100 4-Chlorophenyl phenyl ethe	204	9.544	9.544	0.000	95	264109	10.0	11.1	
101 4-Nitroaniline	138	9.560	9.560	0.000	64	98748	10.0	9.75	
103 Fluorene	166	9.565	9.565	0.000	86	466191	10.0	10.4	
104 4,6-Dinitro-2-methylphenol	198	9.586	9.586	0.000	70	166185	20.0	19.3	
105 N-Nitrosodiphenylamine	169	9.645	9.645	0.000	62	333226	10.0	10.1	
90 1,2-Diphenylhydrazine	77	9.688	9.688	0.000	1	612209	10.0	11.2	
110 4-Bromophenyl phenyl ether	248	9.992	9.992	0.000	74	163436	10.0	11.0	
112 Hexachlorobenzene	284	10.078	10.078	0.000	84	171879	10.0	10.7	
113 Atrazine	200	10.110	10.110	0.000	72	55122	10.0	12.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.249	10.249	0.000	83	209629	10.0	7.16	
116 Pentachlorophenol	266	10.249	10.249	0.000	76	178475	20.0	19.5	
121 Phenanthrene	178	10.452	10.452	0.000	97	677747	10.0	9.76	
122 Anthracene	178	10.500	10.500	0.000	97	701110	10.0	10.2	
124 Carbazole	167	10.639	10.639	0.000	85	598563	10.0	9.96	
126 Di-n-butyl phthalate	149	10.927	10.927	0.000	98	766985	10.0	10.3	
131 Fluoranthene	202	11.723	11.723	0.000	95	779292	10.0	10.8	
132 Benzidine	184	11.851	11.851	0.000	90	122819	10.0	11.9	
133 Pyrene	202	12.022	12.022	0.000	98	804488	10.0	9.37	
138 Butyl benzyl phthalate	149	12.850	12.850	0.000	92	320765	10.0	9.27	
144 3,3'-Dichlorobenzidine	252	13.807	13.807	0.000	64	287419	10.0	11.0	
145 Bis(2-ethylhexyl) phthalat	149	13.839	13.839	0.000	95	444542	10.0	9.24	
146 Benzo[a]anthracene	228	13.881	13.881	0.000	93	800177	10.0	9.83	
147 Chrysene	228	13.951	13.951	0.000	91	742400	10.0	9.76	
150 Di-n-octyl phthalate	149	15.126	15.126	0.000	99	775084	10.0	9.38	
151 7,12-Dimethylbenz(a)anthra	256	15.986	15.986	0.000	86	371005	10.0	9.45	
152 Benzo[b]fluoranthene	252	16.013	16.013	0.000	92	861101	10.0	10.1	
153 Benzo[k]fluoranthene	252	16.066	16.066	0.000	96	837393	10.0	9.99	
154 Benzo[a]pyrene	252	16.691	16.691	0.000	68	761622	10.0	10.5	
157 Indeno[1,2,3-cd]pyrene	276	19.005	19.005	0.000	96	817898	10.0	10.9	
158 Dibenz(a,h)anthracene	278	19.037	19.037	0.000	73	725268	10.0	11.0	
159 Benzo[g,h,i]perylene	276	19.597	19.597	0.000	89	697227	10.0	10.6	
S 199 Total Cresols	108				0		20.0	18.0	
S 197 Methyl Phenols,Total	108				0		20.0	18.0	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Review Flags
M - Manually Integrated

Reagents:

SVTAPSTD10i_00060 Amount Added: 1.00 Units: mL

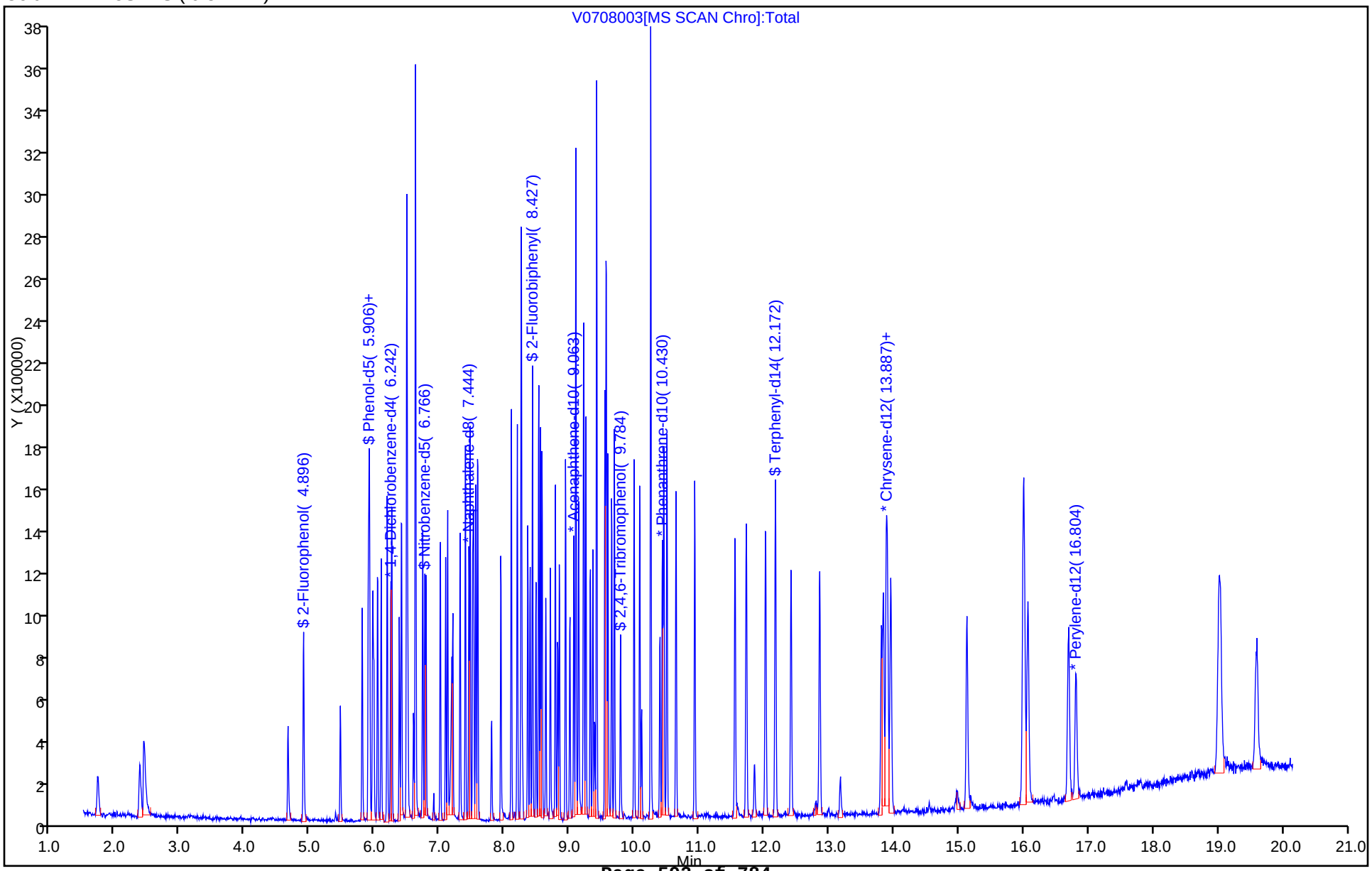
Report Date: 09-Jul-2014 03:31:40 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708003.D

Injection Date:	08-Jul-2014 14:00:30	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

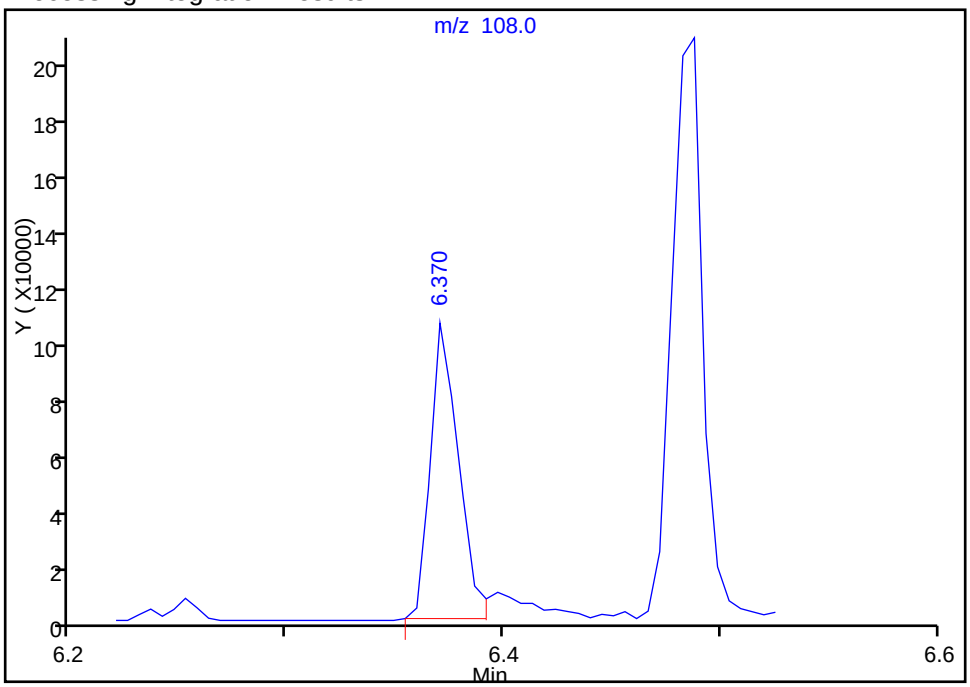
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708003.D
Injection Date: 08-Jul-2014 14:00:30 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

34 Benzyl alcohol, CAS: 100-51-6

Processing Integration Results

RT: 6.37
Response: 91933
Amount: 6.665808



Manual Integration Results

RT: 6.37
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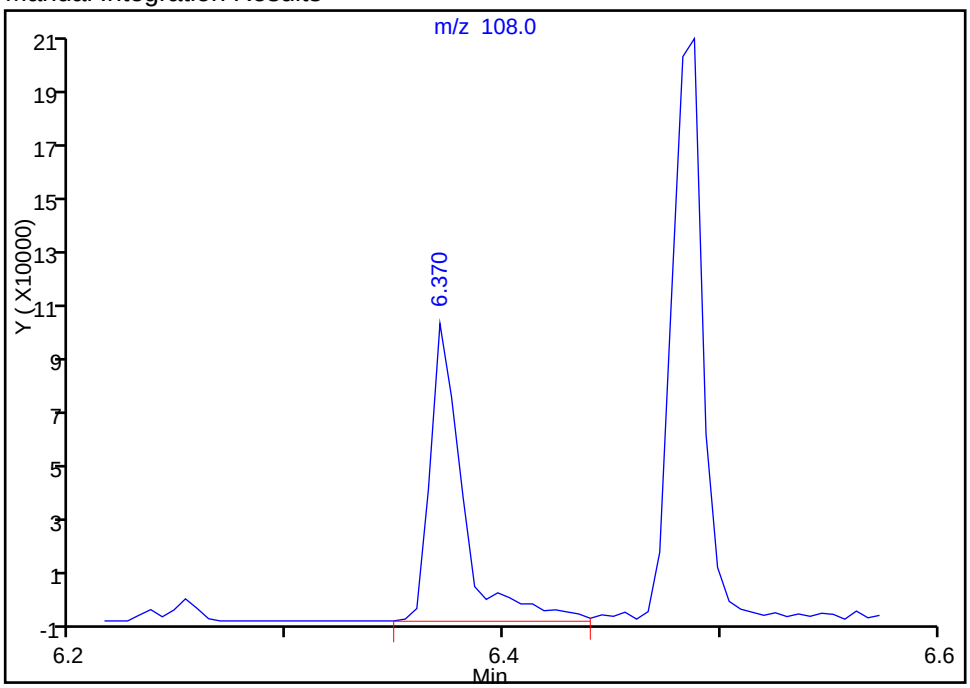
Amount: 7.828389



Reviewer: piccolinov, 09-Jul-2014 02:48:32
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

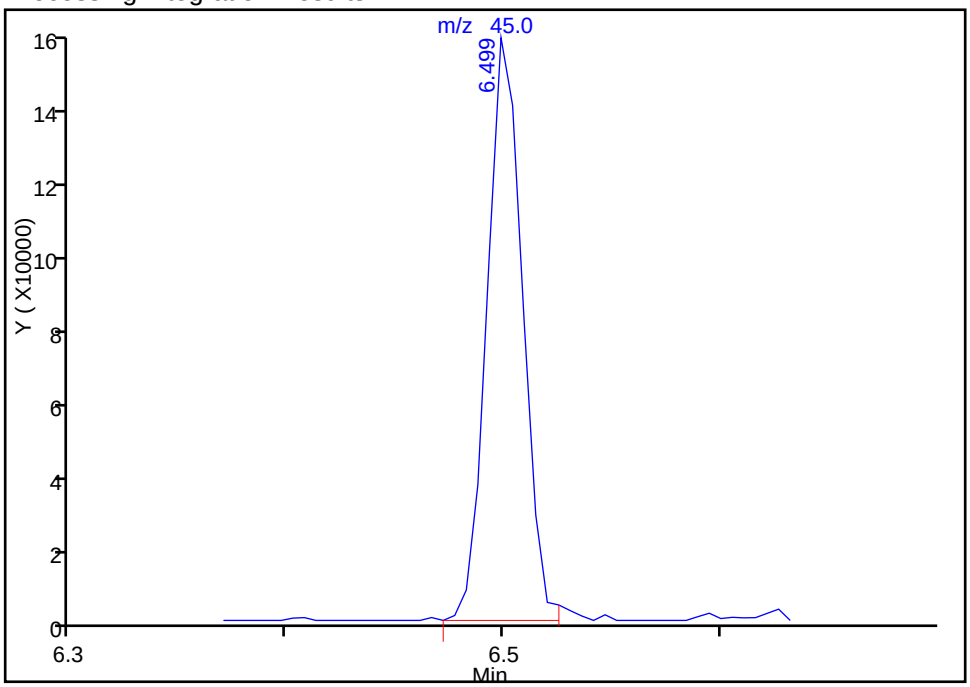
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140708-2096.b\V0708003.D				
Injection Date:	08-Jul-2014 14:00:30	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		

38 2,2'-oxybis[1-chloropropane], CAS: 108-60-1

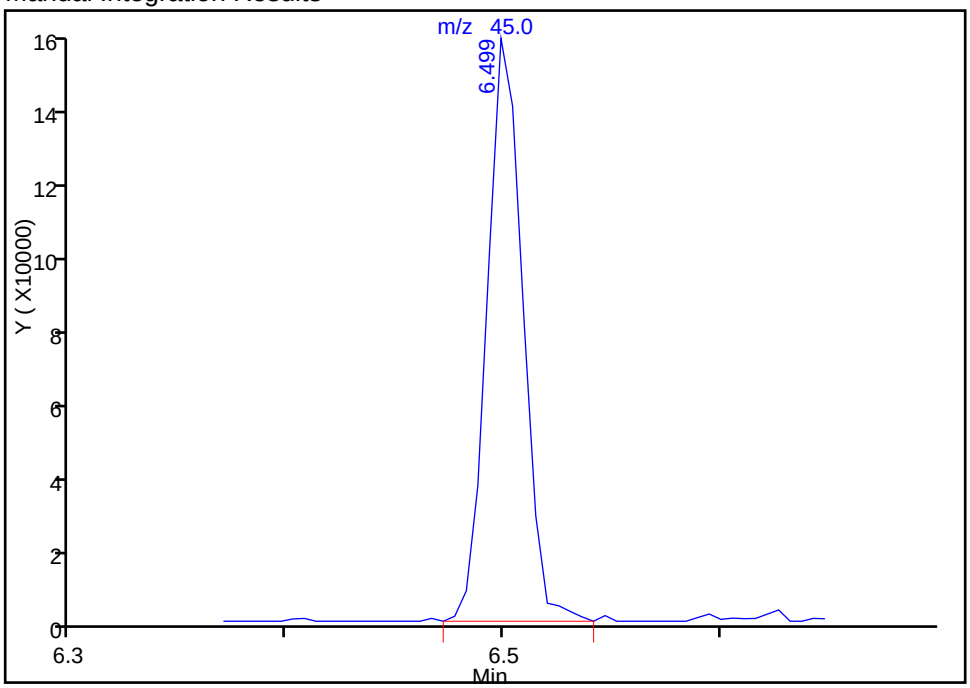
Processing Integration Results

RT: 6.50
Response: 178124
Amount: 7.830140



Manual Integration Results

RT: 6.50
Response: 179352
Amount: 7.884121



Reviewer: piccolinov, 09-Jul-2014 02:48:32
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

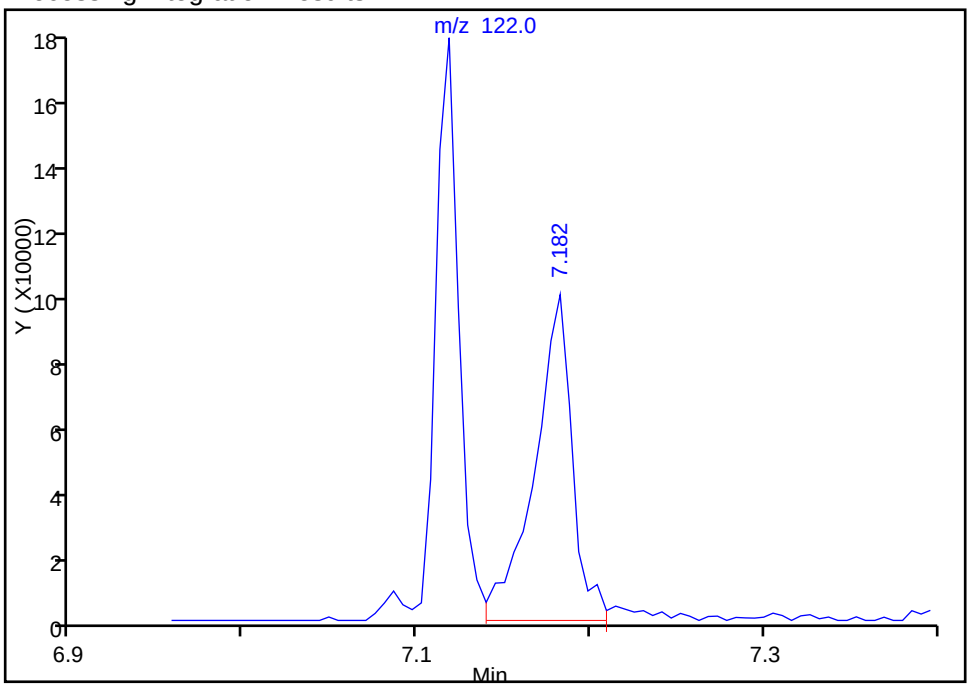
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140708-2096.b\V0708003.D				
Injection Date:	08-Jul-2014 14:00:30	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		

52 Benzoic acid, CAS: 65-85-0

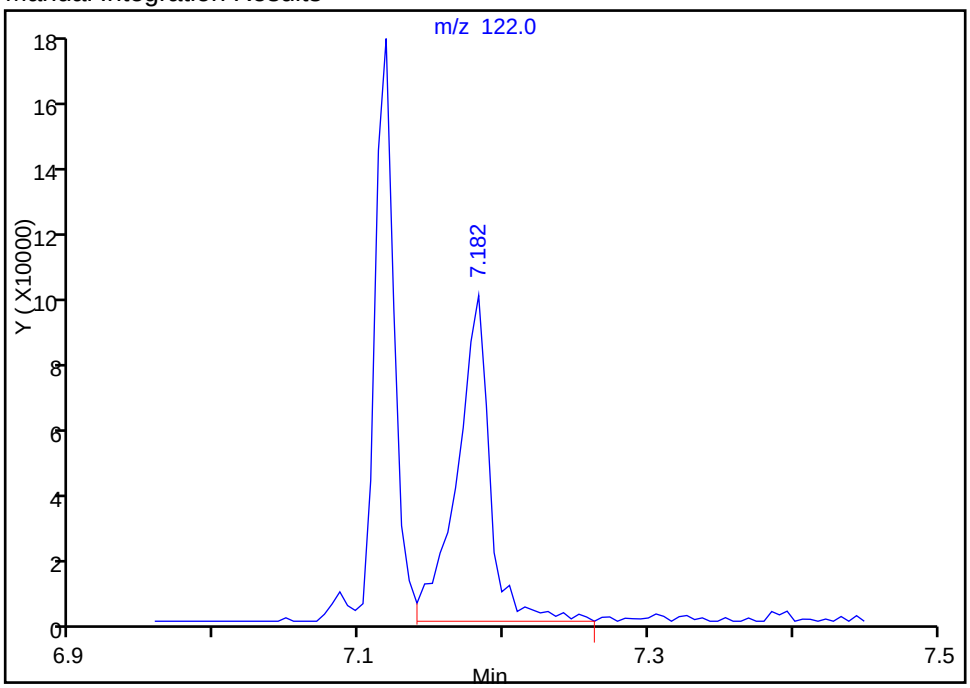
Processing Integration Results

RT: 7.18
Response: 151353
Amount: 14.421728



Manual Integration Results

RT: 7.18
Response: 158288
Amount: 15.082532



Reviewer: piccolinov, 09-Jul-2014 02:48:32
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605002.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 05-Jun-2014 08:07:30 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0001566-002
Misc. Info.: ,dftpp
Operator ID: 003200 Instrument ID: CH731

Method: \\PITCHROM\ChromData\CH731\20140604-1566.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 06-Jun-2014 06:48:18 Calib Date: 05-Jun-2014 11:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK053

First Level Reviewer: piccolinov Date: 05-Jun-2014 09:47:32

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
189 Pentachlorophenol_T	266	5.357	5.357	0.000	80	297159	NR	NR	
190 DFTPP									
191 Benzidine_T	184	7.932	7.932	0.000	98	2001832	NR	NR	
192 4,4'-DDE	246		8.245					ND	
193 4,4'-DDD	235	9.433	8.907	0.526	95	1016690		NR	
194 4,4'-DDT	235	9.433	9.433	0.000	96	1016690	NR	NR	

QC Flag Legend

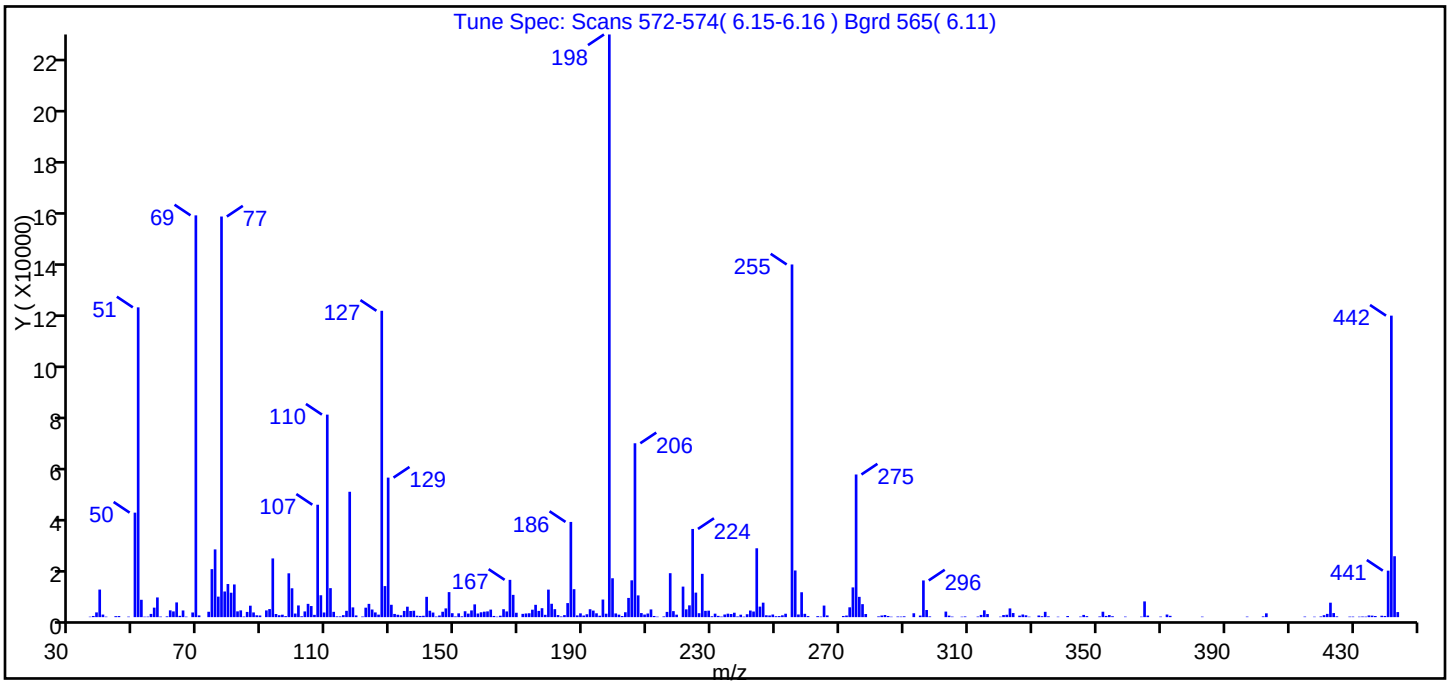
Processing Flags
NR - Missing Quant Standard
ND - Not Detected or Marked ND

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605002.D
Injection Date: 05-Jun-2014 08:07:30 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

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	53.20
68	Less than 2.00% of mass 69	0.80 (1.20)
69	Present	69.00
70	Less than 2.00% of mass 69	0.30 (0.40)
127	40.00 - 60.00% of mass 198	52.60
197	Less than 1.00% of mass 198	0.60
199	5.00 - 9.00% of mass 198	6.70
275	10.00 - 30.00% of mass 198	24.50
365	Greater than 1.00% of mass 198	2.70
441	Present, but less than mass 443	8.00 (76.30)
442	Greater than 40.00% of mass 198	51.70
443	17.00 - 23.00% of mass 442	10.50 (20.20)

Report Date: 06-Jun-2014 06:48:19 Chrom Revision: 2.2 16-May-2014 10:46:48

Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605002.D\BNA_CH731.rslt\spectra.d
Injection Date: 05-Jun-2014 08:07:30
Spectrum: Tune Spec: Scans 572-574(6.15-6.16) Bgrd 565(6.11)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 300

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	172	122.00	3665	198.00	225536	285.00	447
37.00	457	123.00	5141	199.00	15049	286.00	170
38.00	1840	124.00	2952	200.00	1435	288.00	244
39.00	10674	125.00	1829	201.00	961	289.00	209
40.00	1000	126.00	969	202.00	435	290.00	322
41.00	188	127.00	118584	203.00	1890	293.00	1505
44.00	381	128.00	12020	204.00	7437	295.00	606
45.00	427	129.00	54008	205.00	14254	296.00	14208
48.00	201	130.00	4783	206.00	67304	297.00	2761
50.00	40448	131.00	1240	207.00	8423	298.00	279
51.00	119912	132.00	928	208.00	1573	303.00	2155
52.00	6718	133.00	720	209.00	1001	304.00	578
53.00	180	134.00	2406	210.00	1404	305.00	208
54.00	208	135.00	4044	211.00	2989	308.00	174
55.00	1251	136.00	2393	212.00	450	309.00	266
56.00	3676	137.00	2482	213.00	186	313.00	231
57.00	7629	138.00	561	215.00	290	314.00	859
58.00	217	139.00	465	216.00	2032	315.00	2640
60.00	293	140.00	531	217.00	17016	316.00	1199
61.00	2632	141.00	7862	218.00	2326	320.00	179
62.00	2226	142.00	2487	219.00	958	321.00	812
63.00	5703	143.00	1778	221.00	11819	322.00	924
64.00	508	144.00	229	222.00	3019	323.00	3379
65.00	2589	145.00	637	223.00	4571	324.00	1589
66.00	193	146.00	2085	224.00	34136	326.00	578
68.00	1806	147.00	3389	225.00	9495	327.00	1021
69.00	155520	148.00	9686	226.00	1527	328.00	706
70.00	671	149.00	1528	227.00	16760	329.00	180
73.00	2082	150.00	266	228.00	2443	332.00	629
74.00	18584	151.00	1469	229.00	2510	333.00	351
75.00	26224	152.00	318	230.00	343	334.00	2055
76.00	7936	153.00	2283	231.00	1346	335.00	317
77.00	155072	154.00	1366	232.00	488	338.00	174

Report Date: 06-Jun-2014 06:48:19 Chrom Revision: 2.2 16-May-2014 10:46:48
Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605002.D\BNA_CH731.rslt\spectra.d
Injection Date: 05-Jun-2014 08:07:30
Spectrum: Tune Spec: Scans 572-574(6.15-6.16) Bgrd 565(6.11)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 300

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.00	9929	155.00	2607	233.00	222	341.00	433
79.00	12820	156.00	4947	234.00	1018	345.00	213
80.00	9452	157.00	1406	235.00	1341	346.00	862
81.00	12656	158.00	1881	236.00	1206	347.00	387
82.00	2240	159.00	2115	237.00	1711	351.00	258
83.00	2620	160.00	2231	238.00	264	352.00	2098
84.00	241	161.00	2919	239.00	946	353.00	469
85.00	2020	162.00	464	240.00	197	354.00	805
86.00	4432	163.00	183	241.00	1123	355.00	357
87.00	1827	164.00	552	242.00	2556	359.00	212
88.00	721	165.00	3070	243.00	2181	364.00	188
89.00	642	166.00	2214	244.00	26656	365.00	6090
91.00	2607	167.00	14438	245.00	4077	366.00	595
92.00	3126	168.00	8625	246.00	5603	370.00	214
93.00	22728	169.00	1696	247.00	724	372.00	1014
94.00	1214	171.00	1271	248.00	647	373.00	509
95.00	745	172.00	1415	249.00	1018	383.00	197
96.00	943	173.00	1503	250.00	350	397.00	212
97.00	391	174.00	2882	251.00	414	402.00	291
98.00	16968	175.00	4769	252.00	707	403.00	1481
99.00	11170	176.00	2415	253.00	1319	415.00	222
100.00	1386	177.00	3462	255.00	136512	418.00	175
101.00	4529	178.00	896	256.00	18064	420.00	263
102.00	339	179.00	10655	257.00	1032	421.00	760
103.00	2215	180.00	5176	258.00	9639	422.00	1264
104.00	5147	181.00	3083	259.00	1284	423.00	5595
105.00	4295	182.00	810	260.00	418	424.00	1576
106.00	882	183.00	264	263.00	380	425.00	300
107.00	43512	184.00	786	264.00	210	429.00	204
108.00	8473	185.00	5443	265.00	4482	430.00	209
109.00	1805	186.00	36856	266.00	657	432.00	185
110.00	78392	187.00	10825	271.00	453	433.00	240
111.00	11225	188.00	673	272.00	618	434.00	198
112.00	2055	189.00	1467	273.00	3807	435.00	674

Report Date: 06-Jun-2014 06:48:19 Chrom Revision: 2.2 16-May-2014 10:46:48
Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605002.D\BNA_CH731.rslt\spectra.d
Injection Date: 05-Jun-2014 08:07:30
Spectrum: Tune Spec: Scans 572-574(6.15-6.16) Bgrd 565(6.11)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 300

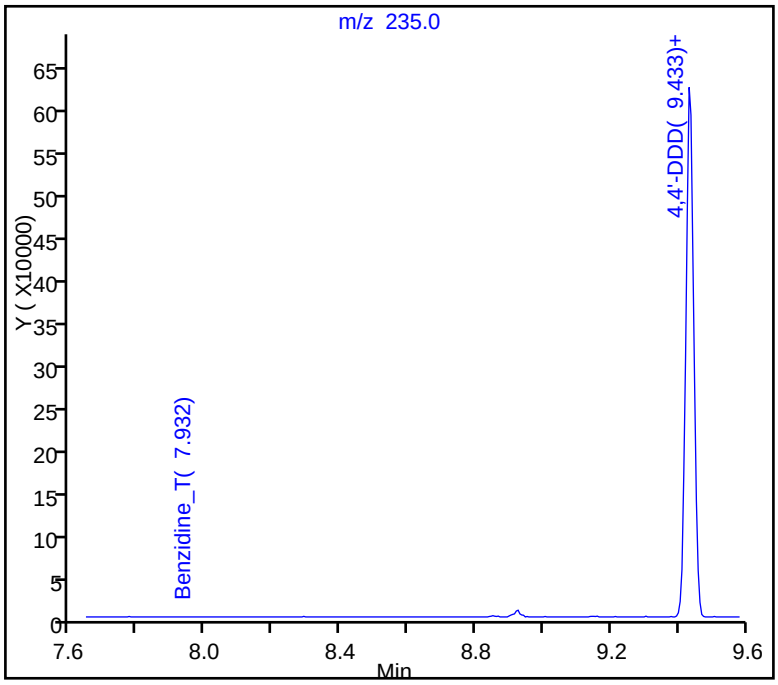
m/z	Y	m/z	Y	m/z	Y	m/z	Y
113.00	299	190.00	619	274.00	11512	436.00	586
114.00	280	191.00	1116	275.00	55216	437.00	444
115.00	769	192.00	3063	276.00	7854	439.00	544
116.00	2452	193.00	2535	277.00	5028	440.00	458
117.00	48528	194.00	1484	278.00	1208	441.00	17992
118.00	3778	195.00	554	282.00	289	442.00	116704
119.00	661	196.00	6812	283.00	636	443.00	23576
121.00	244	197.00	1332	284.00	828	444.00	1959

Breakdown Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605002.D
Injection Date: 05-Jun-2014 08:07:30 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

194 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

194 4,4'-DDT, Area = 1016690
192 4,4'-DDE, Area = 0
193 4,4'-DDD, Area = 1016690

%Breakdown:* 50.00%, Max Limit: 20.00%
Failed

Peak Tailing Report

TestAmerica Pittsburgh

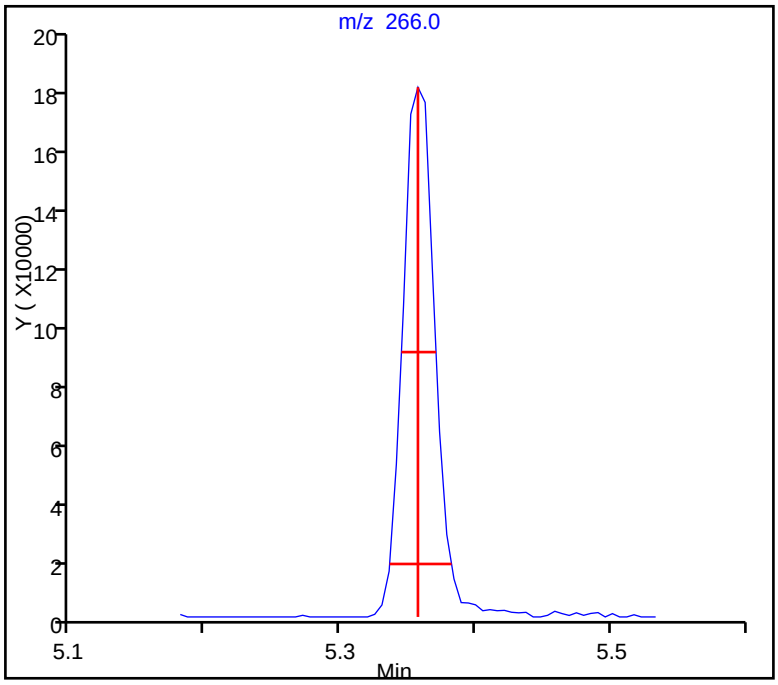
Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605002.D
Injection Date: 05-Jun-2014 08:07:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL

189 Pentachlorophenol_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



Report Date: 06-Jun-2014 06:48:19 Chrom Revision: 2.2 16-May-2014 10:46:48

Peak Tailing Report

TestAmerica Pittsburgh

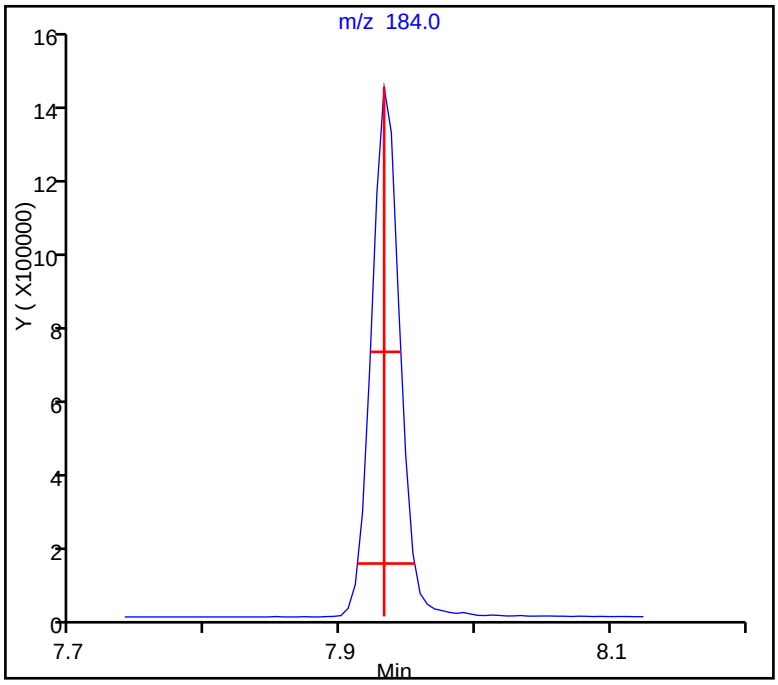
Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605002.D
Injection Date: 05-Jun-2014 08:07:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL

191 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.023 (min.)
Front Width = 0.020 (min.)

Tailing Factor = 1.1, Max. Tailing < 2.00
Passed



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708002.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 08-Jul-2014 13:42:30 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0002096-002
Misc. Info.: ,dftpp
Operator ID: 003200 Instrument ID: CH731

Method: \\PITCHROM\ChromData\CH731\20140708-2096.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 09-Jul-2014 03:31:37 Calib Date: 27-Jun-2014 09:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20140626-1923.b\V0627010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: piccolinov Date: 08-Jul-2014 15:08:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
189 Pentachlorophenol_T	266	5.305	5.305	0.000	83	241923	NR	NR	
190 DFTPP									
191 Benzidine_T	184	7.907	7.907	0.000	98	1507517	NR	NR	
192 4,4'-DDE	246		8.292					ND	
193 4,4'-DDD	235	8.906	8.906	0.000	1	6165		NR	
194 4,4'-DDT	235	9.413	9.413	0.000	92	883355	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
ND - Not Detected or Marked ND

Reagents:

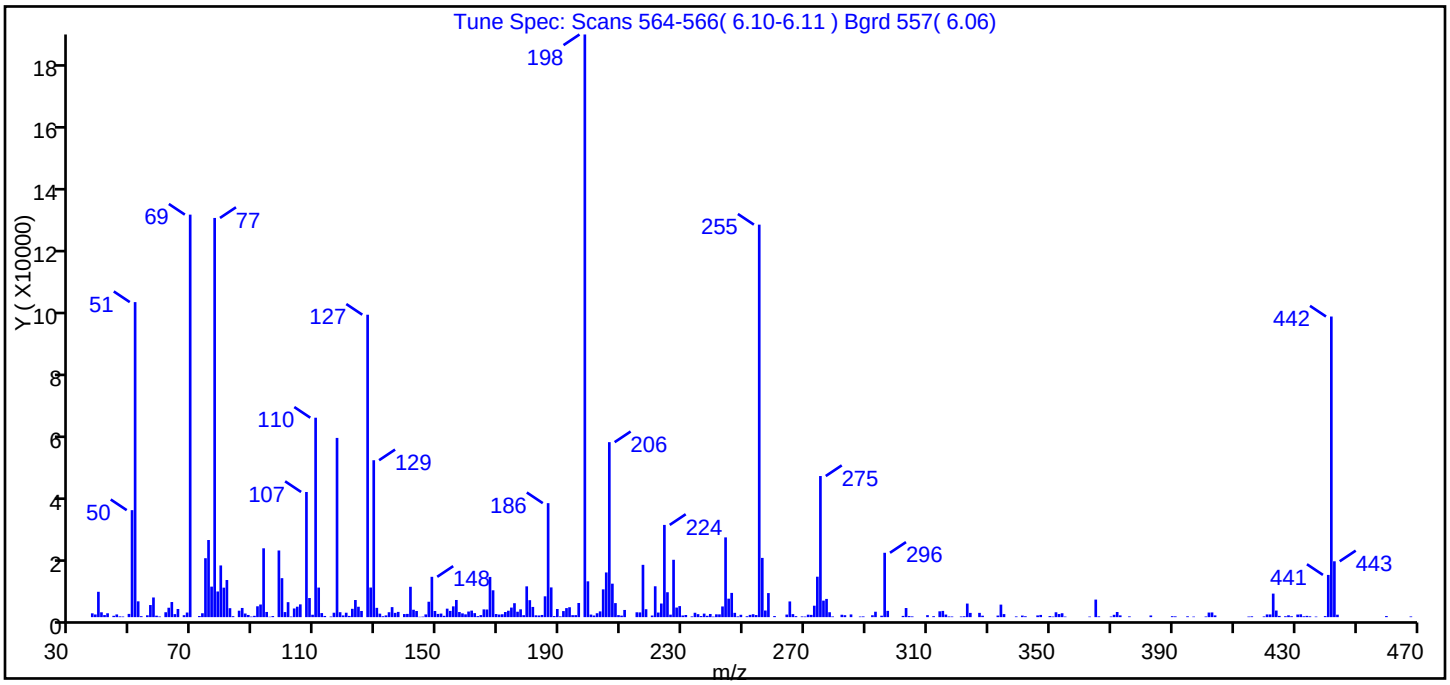
SVDFTPP50i_00018 Amount Added: 1.00 Units: mL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708002.D
Injection Date: 08-Jul-2014 13:42:30 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

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	54.10
68	Less than 2.00% of mass 69	0.80 (1.10)
69	Present	69.10
70	Less than 2.00% of mass 69	0.00 (0.00)
127	40.00 - 60.00% of mass 198	51.90
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.10
275	10.00 - 30.00% of mass 198	24.20
365	Greater than 1.00% of mass 198	3.00
441	Present, but less than mass 443	7.20 (75.60)
442	Greater than 40.00% of mass 198	51.60
443	17.00 - 23.00% of mass 442	9.60 (18.60)

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708002.D\BNA_CH731.rslt\spectra.d
Injection Date: 08-Jul-2014 13:42:30
Spectrum: Tune Spec: Scans 564-566(6.10-6.11) Bgrd 557(6.06)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 300

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	1184	123.00	5323	201.00	503	295.00	446
38.00	831	124.00	3232	202.00	1214	296.00	20008
39.00	7879	125.00	1921	203.00	1787	297.00	1956
40.00	1511	127.00	94008	204.00	8639	302.00	384
41.00	646	128.00	9204	205.00	13893	303.00	2832
42.00	1201	129.00	48776	206.00	54392	304.00	322
44.00	415	130.00	2888	207.00	10406	305.00	226
45.00	841	131.00	1082	208.00	4364	310.00	619
46.00	229	132.00	284	209.00	629	312.00	296
47.00	195	133.00	540	210.00	475	314.00	1816
49.00	1006	134.00	1523	211.00	2235	315.00	1939
50.00	33256	135.00	3115	215.00	1510	316.00	803
51.00	97928	136.00	1329	216.00	1475	317.00	209
52.00	4913	137.00	1629	217.00	16261	318.00	198
53.00	302	139.00	963	218.00	2462	321.00	206
55.00	572	140.00	1009	220.00	501	322.00	271
56.00	3763	141.00	9435	221.00	9596	323.00	4223
57.00	6113	142.00	2301	222.00	1426	324.00	1322
58.00	455	143.00	1904	223.00	4237	327.00	1329
59.00	203	144.00	106	224.00	28672	328.00	446
61.00	1524	145.00	171	225.00	7746	333.00	492
62.00	2924	146.00	851	226.00	771	334.00	3895
63.00	4699	147.00	4788	227.00	17832	335.00	949
64.00	940	148.00	12538	228.00	2984	339.00	228
65.00	2534	149.00	1914	229.00	3431	341.00	484
67.00	603	150.00	1000	230.00	516	342.00	278
68.00	1434	151.00	1114	231.00	666	346.00	534
69.00	125120	152.00	414	233.00	234	347.00	689
72.00	352	153.00	2636	234.00	1364	350.00	323
73.00	1211	154.00	1940	235.00	931	351.00	181
74.00	18320	155.00	3352	236.00	342	352.00	1521
75.00	23976	156.00	5335	237.00	1097	353.00	963
76.00	9485	157.00	1589	238.00	417	354.00	1217

Report Date: 09-Jul-2014 03:31:38 Chrom Revision: 2.2 24-Jun-2014 07:21:42
Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708002.D\BNA_CH731.rslt\spectra.d
Injection Date: 08-Jul-2014 13:42:30
Spectrum: Tune Spec: Scans 564-566(6.10-6.11) Bgrd 557(6.06)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 300

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	124088	158.00	1172	239.00	983	355.00	179
78.00	7979	159.00	873	240.00	173	363.00	178
79.00	16070	160.00	1745	241.00	880	365.00	5457
80.00	9167	161.00	2032	242.00	865	366.00	235
81.00	11540	162.00	1245	243.00	3325	370.00	185
82.00	2784	163.00	322	244.00	24792	371.00	727
83.00	297	164.00	637	245.00	5744	372.00	1600
85.00	2003	165.00	2411	246.00	7538	373.00	553
86.00	2857	166.00	2376	247.00	1341	376.00	233
87.00	1125	167.00	12498	248.00	237	383.00	520
88.00	677	168.00	8344	249.00	735	390.00	298
89.00	177	169.00	968	251.00	278	391.00	242
90.00	407	170.00	809	252.00	705	395.00	270
91.00	3375	171.00	897	253.00	907	397.00	174
92.00	3928	172.00	1592	254.00	646	401.00	207
93.00	21400	173.00	1994	255.00	122008	402.00	1425
94.00	1612	174.00	2972	256.00	18416	403.00	1462
95.00	118	175.00	4334	257.00	2061	404.00	537
96.00	331	176.00	1685	258.00	7479	415.00	186
98.00	20720	177.00	2434	260.00	336	416.00	252
99.00	12113	178.00	612	264.00	799	420.00	226
100.00	1577	179.00	9574	265.00	4881	421.00	843
101.00	4657	180.00	5271	266.00	941	422.00	841
102.00	184	181.00	3174	267.00	309	423.00	7319
103.00	2699	182.00	567	269.00	220	424.00	2050
104.00	3247	183.00	519	270.00	185	425.00	384
105.00	3974	184.00	677	271.00	767	427.00	280
107.00	38904	185.00	6475	272.00	703	428.00	567
108.00	5941	186.00	35432	273.00	3554	429.00	281
109.00	746	187.00	9243	274.00	12569	431.00	809
110.00	61992	188.00	332	275.00	43864	432.00	883
111.00	9189	189.00	2531	276.00	5137	433.00	261
112.00	1265	190.00	235	277.00	5663	434.00	398
113.00	366	191.00	1885	278.00	1526	435.00	252

Report Date: 09-Jul-2014 03:31:38 Chrom Revision: 2.2 24-Jun-2014 07:21:42
Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708002.D\BNA_CH731.rslt\spectra.d
Injection Date: 08-Jul-2014 13:42:30
Spectrum: Tune Spec: Scans 564-566(6.10-6.11) Bgrd 557(6.06)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 300

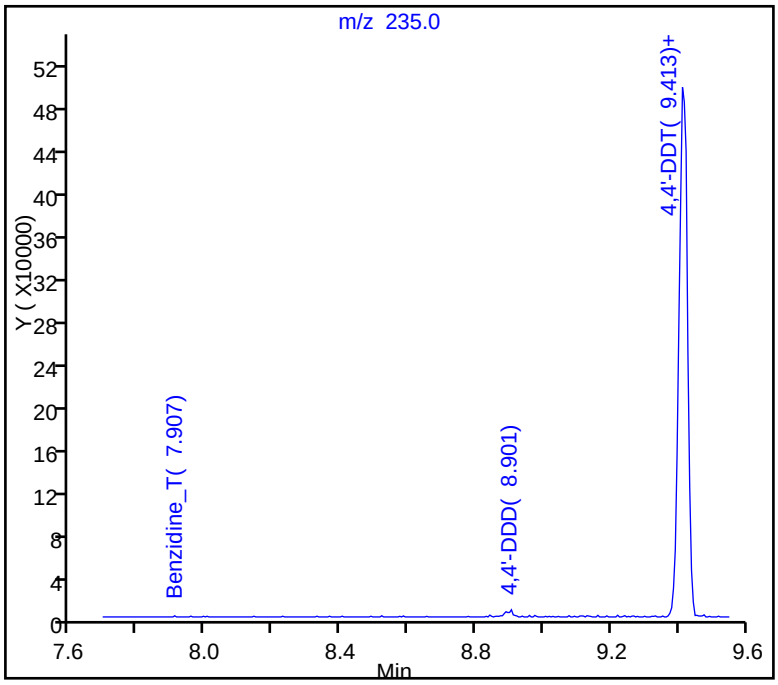
m/z	Y	m/z	Y	m/z	Y	m/z	Y
115.00	189	192.00	2811	279.00	221	437.00	180
116.00	1371	193.00	3076	282.00	746	440.00	324
117.00	55712	194.00	613	283.00	605	441.00	13127
118.00	1536	195.00	621	285.00	840	442.00	93448
119.00	529	196.00	4399	288.00	187	443.00	17360
120.00	1376	198.00	181120	289.00	222	444.00	762
121.00	383	199.00	11135	292.00	587	460.00	341
122.00	2590	200.00	798	293.00	1685	468.00	216

Breakdown Report

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140708-2096.b\V0708002.D				
Injection Date:	08-Jul-2014 13:42:30	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		

194 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

194 4,4'-DDT, Area = 883355
192 4,4'-DDE, Area = 0
193 4,4'-DDD, Area = 6165

%Breakdown: 0.69%, Max Limit: 20.00%
Passed

Report Date: 09-Jul-2014 03:31:38 Chrom Revision: 2.2 24-Jun-2014 07:21:42

Peak Tailing Report

TestAmerica Pittsburgh

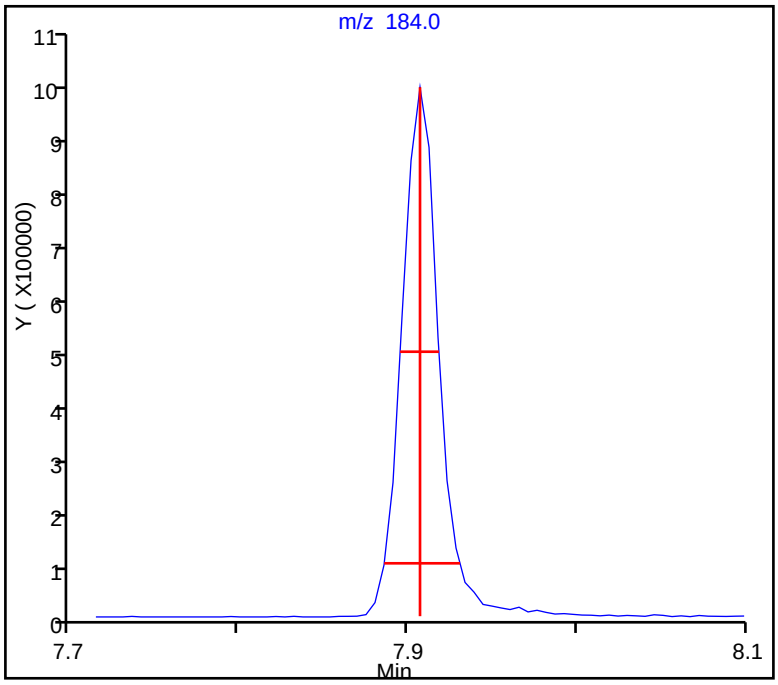
Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708002.D
Injection Date: 08-Jul-2014 13:42:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL

191 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.024 (min.)
Front Width = 0.021 (min.)

Tailing Factor = 1.1, Max. Tailing < 2.00
Passed



Report Date: 09-Jul-2014 03:31:37 Chrom Revision: 2.2 24-Jun-2014 07:21:42

Peak Tailing Report

TestAmerica Pittsburgh

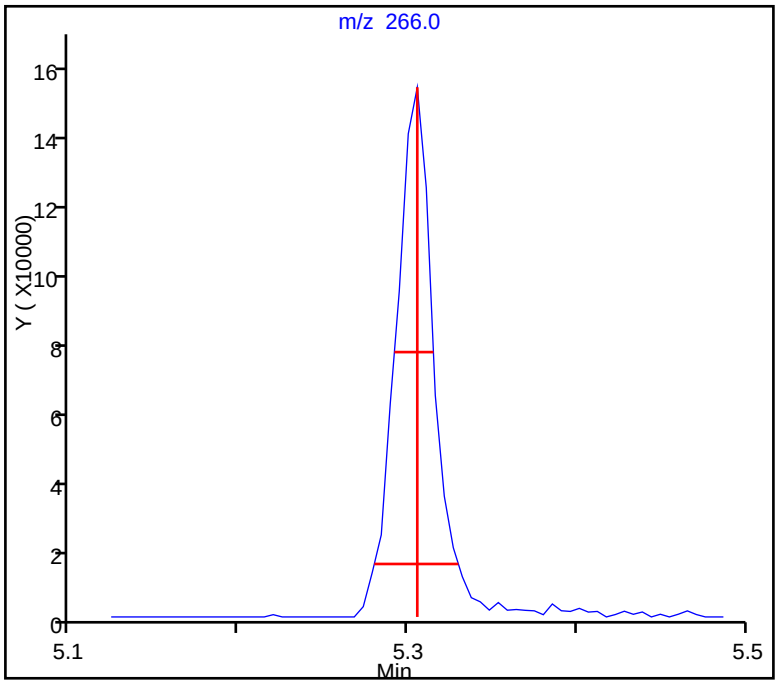
Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708002.D
Injection Date: 08-Jul-2014 13:42:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL

189 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.024 (min.)
Front Width = 0.026 (min.)

Tailing Factor = 1.0, Max. Tailing < 2.00
Passed



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-34362-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-110402/1-A

Matrix: Water | Lab File ID: V0708005.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 07/03/2014 07:30

Sample wt/vol: 250(mL) | Date Analyzed: 07/08/2014 14:57

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.: 110717 | 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.: 180-34362-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-110402/1-A

Matrix: Water | Lab File ID: V0708005.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 07/03/2014 07:30

Sample wt/vol: 250(mL) | Date Analyzed: 07/08/2014 14:57

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.: 110717 | 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)	68		30-150
321-60-8	2-Fluorobiphenyl	77		30-150
367-12-4	2-Fluorophenol (Surr)	84		30-150
4165-60-0	Nitrobenzene-d5 (Surr)	81		30-150
4165-62-2	Phenol-d5 (Surr)	73		30-150
1718-51-0	Terphenyl-d14 (Surr)	79		10-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708005.D
Lims ID: MB 180-110402/1-A
Client ID:
Sample Type: MB
Inject. Date: 08-Jul-2014 14:57:30 ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0002096-005
Misc. Info.: MB 180-110402/1-A
Operator ID: 003200 Instrument ID: CH731

Method: \\PITCHROM\ChromData\CH731\20140708-2096.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 09-Jul-2014 03:31:39 Calib Date: 27-Jun-2014 09:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20140626-1923.b\V0627010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: piccolinov Date: 09-Jul-2014 02:50:29

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	6.245	6.237	0.008	80	125905	8.00	8.00	
* 2 Naphthalene-d8	136	7.447	7.444	0.003	96	447268	8.00	8.00	
* 3 Acenaphthene-d10	164	9.061	9.063	-0.002	91	259480	8.00	8.00	
* 4 Phenanthrene-d10	188	10.423	10.430	-0.007	96	470885	8.00	8.00	
* 5 Chrysene-d12	240	13.885	13.903	-0.018	81	518026	8.00	8.00	
* 6 Perylene-d12	264	16.786	16.809	-0.023	93	461202	8.00	8.00	
$ 7 2-Fluorophenol	112	4.899	4.896	0.003	90	777447	40.0	33.5	
$ 8 Phenol-d5	99	5.898	5.895	0.003	86	814497	40.0	29.1	
$ 9 Nitrobenzene-d5	82	6.769	6.766	0.003	92	950347	40.0	32.6	
$ 10 2-Fluorobiphenyl	172	8.430	8.427	0.003	98	1466176	40.0	30.8	
$ 11 2,4,6-Tribromophenol	330	9.782	9.784	-0.002	79	185083	40.0	27.4	
$ 12 Terphenyl-d14	244	12.165	12.172	-0.007	98	1993792	40.0	31.5	
13 1,4-Dioxane	88		1.723					ND	
14 N-Nitrosodimethylamine	74		2.374					ND	
15 Pyridine	79		2.433					ND	
176 Dimethylformamide	73		3.427					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	
20 Acrylamide	71		4.597					ND	
21 Methyl methanesulfonate	80		4.656					ND	
22 Phenylmercaptan	110		5.000					ND	
23 N-Nitrosodiethylamine	102		5.115					ND	
24 Ethyl methanesulfonate	79		5.517					ND	
25 Benzaldehyde	77		5.799					ND	
26 Phenol	94		5.906					ND	
27 Aniline	93		5.916					ND	
29 Bis(2-chloroethyl)ether	93		5.980					ND	
28 Pentachloroethane	167		6.025					ND	
30 2-Chlorophenol	128		6.039					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
31 n-Decane	43		6.093					ND	
32 1,3-Dichlorobenzene	146		6.183					ND	
33 1,4-Dichlorobenzene	146		6.258					ND	
175 1,2,3-Trimethylbenzene	105		6.311					ND	
34 Benzyl alcohol	108		6.370					ND	
35 1,2-Dichlorobenzene	146		6.408					ND	
36 2-Methylphenol	108		6.488					ND	
37 Indene	116		6.488					ND	
38 2,2'-oxybis[1-chloropropan	45		6.499					ND	
39 N-Nitrosopyrrolidine	100		6.589					ND	
42 4-Methylphenol	108		6.621					ND	
41 N-Nitrosodi-n-propylamine	70		6.621					ND	
40 Acetophenone	105		6.621					ND	
43 N-Nitrosomorpholine	116		6.632					ND	
44 2-Toluidine	106		6.664					ND	
45 Hexachloroethane	117		6.734					ND	
46 Nitrobenzene	77		6.782					ND	
47 N-Nitrosopiperidine	114		6.926					ND	
48 Isophorone	82		7.006					ND	
49 2-Nitrophenol	139		7.086					ND	
50 2,4-Dimethylphenol	107		7.118					ND	
166 4-Chloro-3-nitro-alpha,alp	179		7.172					ND	
51 o,o',o''-Triethylphosphoro	198		7.182					ND	
52 Benzoic acid	122		7.182					ND	
53 Bis(2-chloroethoxy)methane	93		7.198					ND	
54 2,4-Dichlorophenol	162		7.311					ND	
55 alpha,alpha-Dimethyl phene	58		7.353					ND	
57 Azobenzene	77		7.385					ND	
56 1,2,4-Trichlorobenzene	180		7.391					ND	
58 Naphthalene	128		7.466					ND	
59 4-Chloroaniline	127		7.503					ND	
60 2,6-Dichlorophenol	162		7.519					ND	
62 Hexachlorobutadiene	225		7.583					ND	
61 Hexachloropropene	213		7.627					ND	
63 Quinoline	129		7.786					ND	
64 Caprolactam	113		7.797					ND	
65 N-Nitrosodi-n-butylamine	84		7.818					ND	
66 p-Phenylene diamine	108		7.834					ND	
67 4-Chloro-3-methylphenol	107		7.936					ND	
68 Safrole, Total	162		8.026					ND	
69 2-Methylnaphthalene	142		8.101					ND	
167 Phthalic anhydride	104		8.144					ND	
71 1-Methylnaphthalene	142		8.192					ND	
70 Diphenamid	168		8.200					ND	
72 Hexachlorocyclopentadiene	237		8.251					ND	
73 1,2,4,5-Tetrachlorobenzene	216		8.256					ND	
74 2,4,6-Trichlorophenol	196		8.352					ND	
75 2,4,5-Trichlorophenol	196		8.390					ND	
76 1,1'-Biphenyl	154		8.523					ND	
77 2-Chloronaphthalene	162		8.550					ND	
79 2-Nitroaniline	65		8.630					ND	
78 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
81 1,4-Dinitrobenzene	168		8.769					ND	
80 1,4-Naphthoquinone	158		8.771					ND	
82 Dimethyl phthalate	163		8.780					ND	
83 1,3-Dinitrobenzene	168		8.817					ND	
84 2,6-Dinitrotoluene	165		8.844					ND	
85 Acenaphthylene	152		8.935					ND	
86 3-Nitroaniline	138		9.004					ND	
87 2,4-Dinitrophenol	184		9.095					ND	
88 Acenaphthene	153		9.095					ND	
89 4-Nitrophenol	109		9.138					ND	
91 2,4-Dinitrotoluene	165		9.212					ND	
93 Dibenzofuran	168		9.250					ND	
92 Pentachlorobenzene	250		9.299					ND	
95 2,3,5,6-Tetrachlorophenol	232		9.319					ND	
94 1-Naphthylamine	143		9.340					ND	
96 2,3,4,6-Tetrachlorophenol	232		9.357					ND	
97 2-Naphthylamine	143		9.389					ND	
98 Diethyl phthalate	149		9.415					ND	
99 Hexadecane	57		9.415					ND	
170 4-tert-Octylphenol	135		9.522					ND	
100 4-Chlorophenyl phenyl ethe	204		9.544					ND	
101 4-Nitroaniline	138		9.560					ND	
103 Fluorene	166		9.565					ND	
102 N-Nitro-o-toluidine	152		9.586					ND	
104 4,6-Dinitro-2-methylphenol	198		9.586					ND	
105 N-Nitrosodiphenylamine	169		9.645					ND	
106 Diphenylamine	169		9.677					ND	
90 1,2-Diphenylhydrazine	77		9.688					ND	
107 1,3,5-Trinitrobenzene	213		9.896					ND	
108 Phenacetin	108		9.939					ND	
109 Phorate	121		9.944					ND	
110 4-Bromophenyl phenyl ether	248		9.992					ND	
212 2,3,7,8-TCDD TIC	322		10.000					ND	
112 Hexachlorobenzene	284		10.078					ND	
111 Dimethoate	87		10.099					ND	
113 Atrazine	200		10.110					ND	
115 n-Octadecane	57		10.249					ND	
116 Pentachlorophenol	266		10.249					ND	
114 4-Aminobiphenyl	169		10.265					ND	
117 Pronamide	173		10.297					ND	
118 Pentachloronitrobenzene	237		10.302					ND	
119 Disulfoton	88		10.419					ND	
121 Phenanthrene	178		10.452					ND	
120 Dinoseb	211		10.475					ND	
122 Anthracene	178		10.500					ND	
123 Hexachlorophene TIC	198		10.600					ND	
124 Carbazole	167		10.639					ND	
125 Methyl parathion	109		10.793					ND	
126 Di-n-butyl phthalate	149		10.927					ND	
127 Ethyl Parathion	109		11.189					ND	
128 4-Nitroquinoline-1-oxide	190		11.263					ND	
129 Methapyrilene	58		11.317					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
130 Isodrin	193		11.661					ND	
131 Fluoranthene	202		11.723					ND	
132 Benzidine	184		11.851					ND	
133 Pyrene	202		12.022					ND	
134 1,2,3,4 -Tetrachlorobenzen	216		12.215					ND	
135 p-Dimethylamino azobenzene	225		12.428					ND	
136 Chlorobenzilate	139		12.542					ND	
137 Famphur	218		12.850					ND	
138 Butyl benzyl phthalate	149		12.850					ND	
139 3,3'-Dimethylbenzidine	212		12.936					ND	
140 Kepone	272		13.030					ND	
141 2-Acetylaminofluorene	181		13.363					ND	
142 Thionazin	97		13.789					ND	
144 3,3'-Dichlorobenzidine	252		13.807					ND	
145 Bis(2-ethylhexyl) phthalat	149		13.839					ND	
143 4,4'-Methylene bis(2-chlor	231		13.881					ND	
146 Benzo[a]anthracene	228		13.881					ND	
147 Chrysene	228		13.951					ND	
148 Sulfotepp	97		14.530					ND	
149 6-Methylchrysene	242		14.907					ND	
150 Di-n-octyl phthalate	149		15.126					ND	
151 7,12-Dimethylbenz(a)anthra	256		15.986					ND	
152 Benzo[b]fluoranthene	252		16.013					ND	
153 Benzo[k]fluoranthene	252		16.066					ND	
154 Benzo[a]pyrene	252		16.691					ND	
155 3-Methylcholanthrene	268		17.524					ND	
156 Dibenz[a,h]acridine	279		18.636					ND	
157 Indeno[1,2,3-cd]pyrene	276		19.005					ND	
158 Dibenz(a,h)anthracene	278		19.037					ND	
159 Benzo[g,h,i]perylene	276		19.597					ND	
181 4-Chlorobenzoic Acid	139		0.000					ND	
213 3-Methylphenol	1		0.000					ND	
169 Octachlorostyrene	308		0.000					ND	
165 Benzotrichloride	159		0.000					ND	
164 Aramite Peak 2	185		0.000					ND	
172 Carbaryl	144		0.000					ND	
168 Aramite Peak 1	185		0.000					ND	
171 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
177 1,2,3,4-Tetrahydronaphthal	104		0.000					ND	
161 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
214 1-Phenyl-1-(4-methylphenyl	1		0.000					ND	
215 1-Phenyl-1-(2,4-dimethylph	1		0.000					ND	
178 Trifluralin	306		0.000					ND	
182 4-Chlorophenol	128		0.000					ND	
188 2-Bromonaphthalene	127		0.000					ND	
163 Diallate Peak 2	86		0.000					ND	
185 4-Nitrobiphenyl	199		0.000					ND	
160 n,n'-Dimethylaniline	120		0.000					ND	
186 o-Phenylphenol	1		0.000					ND	
184 Diallate Peak 1	86		0.000					ND	
179 2,5-Dichlorophenol	162		0.000					ND	
174 2-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
183 2,3-Dichlorophenol	162		0.000					ND	
162 3-Chlorobenzoic Acid	139		0.000					ND	
187 1,2-Dibromo-3-Chloropropan	157		0.000					ND	
173 Octachlorocyclopentene	307		0.000					ND	
180 Isosafrole	162		0.000					ND	
216 1-Phenyl-1-(2,4-dimethylph	1		0.000					ND	
217 1-Phenyl-1-(4-methylphenyl	1		0.000					ND	
218 Benzotrichloride TIC	1		0.000					ND	
189 Pentachlorophenol_T	266		5.305					ND	
191 Benzidine_T	184		7.907					ND	
192 4,4'-DDE	246		8.292					ND	
193 4,4'-DDD	235		8.906					ND	
194 4,4'-DDT	235		9.413					ND	
S 195 Aramite, Total	185		1.000					0	
S 198 Diallate	86		0.000					0	
S 199 Total Cresols	108		0.000					0	
S 196 4-Methyl-1-cyclohexanemeth	97		0.000					0	
S 197 Methyl Phenols,Total	108		0.000					0	
T 200 Quinoline TIC	129		0.000					0	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

SVTAPITINTRNi_00005 Amount Added: 1.00 Units: uL Run Reagent

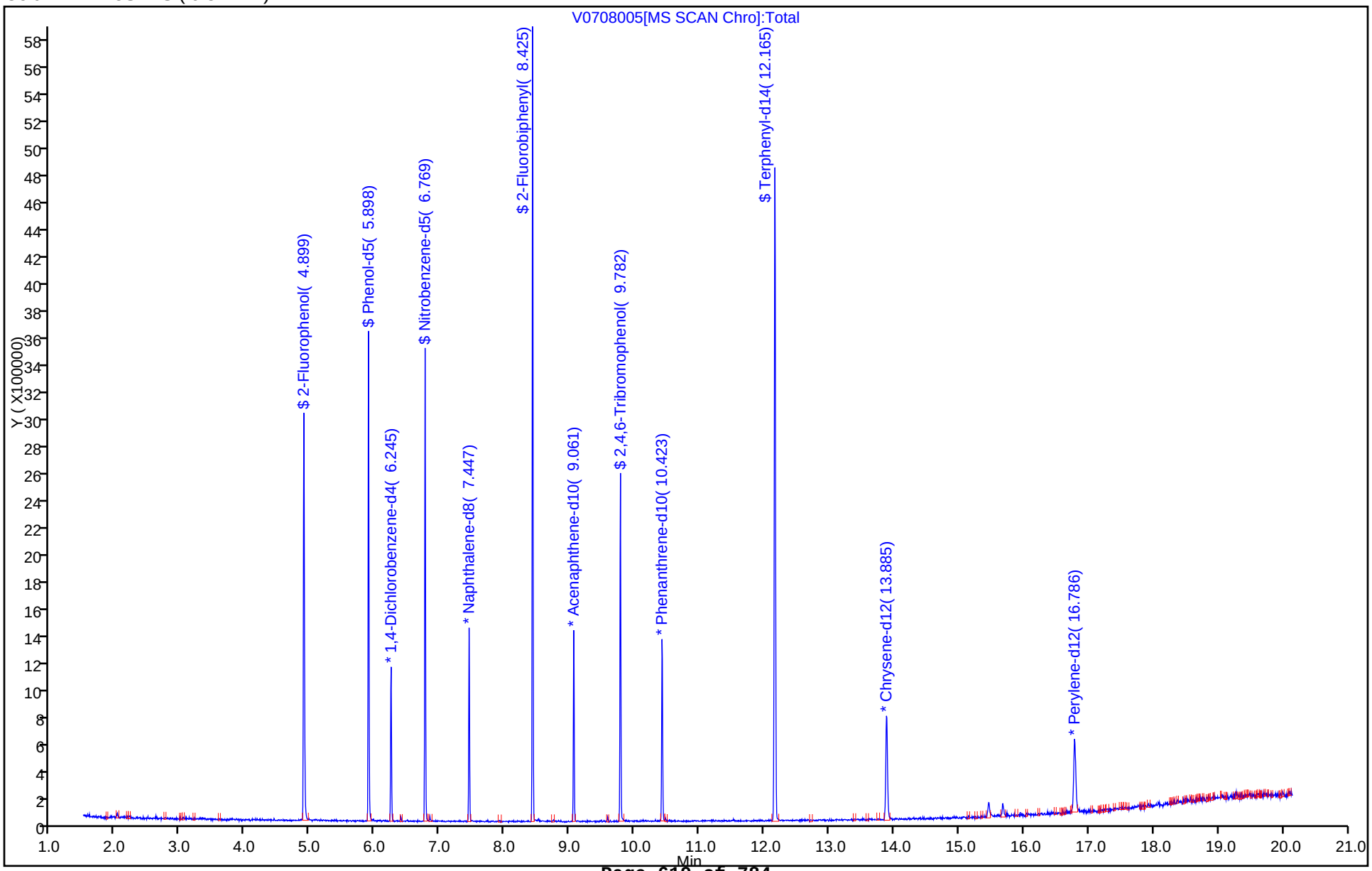
Report Date: 09-Jul-2014 03:31:42 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708005.D

Injection Date:	08-Jul-2014 14:57:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	MB 180-110402/1-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.: 180-34362-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-110402/2-A

Matrix: Water | Lab File ID: V0708009.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 07/03/2014 07:30

Sample wt/vol: 250(mL) | Date Analyzed: 07/08/2014 16:51

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.: 110717 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	13.2		0.20	0.029
208-96-8	Acenaphthylene	12.7		0.20	0.022
120-12-7	Anthracene	13.0		0.20	0.019
92-87-5	Benzidine	11.4	J	20	4.7
56-55-3	Benzo[a]anthracene	12.7		0.20	0.037
205-99-2	Benzo[b]fluoranthene	12.9		0.20	0.049
207-08-9	Benzo[k]fluoranthene	13.3		0.20	0.030
65-85-0	Benzoic acid	8.93		5.0	1.6
191-24-2	Benzo[g,h,i]perylene	14.5		0.20	0.029
50-32-8	Benzo[a]pyrene	13.9		0.20	0.028
111-91-1	Bis(2-chloroethoxy)methane	11.1		1.0	0.13
111-44-4	Bis(2-chloroethyl)ether	9.53		1.0	0.032
117-81-7	Bis(2-ethylhexyl) phthalate	11.6		2.0	0.44
108-60-1	2,2'-oxybis[1-chloropropane]	8.29		1.0	0.024
101-55-3	4-Bromophenyl phenyl ether	14.4		1.0	0.12
7005-72-3	4-Chlorophenyl phenyl ether	14.1		1.0	0.080
91-58-7	2-Chloronaphthalene	12.3		0.20	0.031
85-68-7	Butyl benzyl phthalate	11.5		1.0	0.21
218-01-9	Chrysene	13.4		0.20	0.031
53-70-3	Dibenz(a,h)anthracene	14.7		0.20	0.027
84-74-2	Di-n-butyl phthalate	13.0		1.0	0.24
117-84-0	Di-n-octyl phthalate	11.2		1.0	0.20
84-66-2	Diethyl phthalate	14.7		1.0	0.30
131-11-3	Dimethyl phthalate	13.8		1.0	0.18
91-94-1	3,3'-Dichlorobenzidine	12.7		1.0	0.15
121-14-2	2,4-Dinitrotoluene	14.1		1.0	0.21
606-20-2	2,6-Dinitrotoluene	13.4		1.0	0.14
95-57-8	2-Chlorophenol	10.7		1.0	0.23
120-83-2	2,4-Dichlorophenol	12.9		1.0	0.067
105-67-9	2,4-Dimethylphenol	13.4		1.0	0.17
51-28-5	2,4-Dinitrophenol	23.0		5.0	2.5
88-75-5	2-Nitrophenol	12.1		1.0	0.11
88-06-2	2,4,6-Trichlorophenol	14.8		1.0	0.30
122-66-7	1,2-Diphenylhydrazine(as Azobenzene)	13.5		1.0	0.12

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-34362-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-110402/2-A

Matrix: Water | Lab File ID: V0708009.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 07/03/2014 07:30

Sample wt/vol: 250(mL) | Date Analyzed: 07/08/2014 16:51

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.: 110717 | 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	12.2		1.0	0.17
100-02-7	4-Nitrophenol	38.2		5.0	0.80
534-52-1	4,6-Dinitro-2-methylphenol	26.9		5.0	1.6
206-44-0	Fluoranthene	14.1		0.20	0.021
86-73-7	Fluorene	13.2		0.20	0.024
118-74-1	Hexachlorobenzene	14.1		1.0	0.061
87-68-3	Hexachlorobutadiene	14.1		1.0	0.094
77-47-4	Hexachlorocyclopentadiene	16.1		1.0	0.14
67-72-1	Hexachloroethane	11.1		1.0	0.14
193-39-5	Indeno[1,2,3-cd]pyrene	15.0		0.20	0.043
78-59-1	Isophorone	12.8		1.0	0.074
91-20-3	Naphthalene	11.5		0.20	0.023
98-95-3	Nitrobenzene	12.9		2.0	0.15
621-64-7	N-Nitrosodi-n-propylamine	10.2		1.0	0.050
62-75-9	N-Nitrosodimethylamine	13.6		1.0	0.12
86-30-6	N-Nitrosodiphenylamine	12.6		1.0	0.12
85-01-8	Phenanthrene	12.5		0.20	0.042
129-00-0	Pyrene	11.9		0.20	0.023
87-86-5	Pentachlorophenol	28.7		1.0	0.50
108-95-2	Phenol	10.5		1.0	0.055

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	62		30-150
321-60-8	2-Fluorobiphenyl	66		30-150
367-12-4	2-Fluorophenol (Surr)	55		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)	62		10-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708009.D
Lims ID: LCS 180-110402/2-A
Client ID:
Sample Type: LCS
Inject. Date: 08-Jul-2014 16:51:30 ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0002096-009
Misc. Info.: LCS 180-110402/2-A
Operator ID: 003200 Instrument ID: CH731

Method: \\PITCHROM\ChromData\CH731\20140708-2096.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 09-Jul-2014 03:31:39 Calib Date: 27-Jun-2014 09:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20140626-1923.b\V0627010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: piccolinov Date: 09-Jul-2014 02:56:14

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	6.253	6.237	0.016	88	130670	8.00	8.00	
* 2 Naphthalene-d8	136	7.455	7.444	0.011	97	426518	8.00	8.00	
* 3 Acenaphthene-d10	164	9.069	9.063	0.006	93	254372	8.00	8.00	
* 4 Phenanthrene-d10	188	10.436	10.430	0.006	97	498301	8.00	8.00	
* 5 Chrysene-d12	240	13.909	13.903	0.006	96	609026	8.00	8.00	
* 6 Perylene-d12	264	16.815	16.809	0.006	98	505262	8.00	8.00	
$ 7 2-Fluorophenol	112	4.907	4.896	0.011	90	532071	40.0	22.1	
$ 8 Phenol-d5	99	5.906	5.895	0.011	85	612063	40.0	21.1	
$ 9 Nitrobenzene-d5	82	6.777	6.766	0.011	92	738781	40.0	26.5	
$ 10 2-Fluorobiphenyl	172	8.438	8.427	0.011	98	1226115	40.0	26.3	
$ 11 2,4,6-Tribromophenol	330	9.790	9.784	0.006	81	177356	40.0	24.8	
$ 12 Terphenyl-d14	244	12.178	12.172	0.006	98	1858296	40.0	25.0	
13 1,4-Dioxane	88	1.734	1.723	0.011	91	314214	40.0	26.2	
14 N-Nitrosodimethylamine	74	2.386	2.374	0.012	86	458370	40.0	27.2	
15 Pyridine	79	2.450	2.433	0.017	94	836354	40.0	28.4	
25 Benzaldehyde	77	5.810	5.799	0.011	83	439127	40.0	25.4	
26 Phenol	94	5.917	5.906	0.011	75	722607	40.0	20.9	
27 Aniline	93	5.927	5.916	0.011	87	817665	40.0	24.8	
29 Bis(2-chloroethyl)ether	93	5.992	5.980	0.012	91	431887	40.0	19.1	
30 2-Chlorophenol	128	6.050	6.039	0.011	89	499815	40.0	21.4	
31 n-Decane	43	6.104	6.093	0.011	77	388095	40.0	17.6	
32 1,3-Dichlorobenzene	146	6.195	6.183	0.012	87	578880	40.0	21.0	
33 1,4-Dichlorobenzene	146	6.269	6.258	0.011	83	587416	40.0	21.3	
34 Benzyl alcohol	108	6.382	6.370	0.012	82	278374	40.0	18.8	
35 1,2-Dichlorobenzene	146	6.419	6.408	0.011	84	552420	40.0	21.2	
36 2-Methylphenol	108	6.494	6.488	0.006	91	488641	40.0	20.5	
37 Indene	116	6.499	6.488	0.011	88	949426	40.0	20.8	
38 2,2'-oxybis[1-chloropropan	45	6.510	6.499	0.011	67	404998	40.0	16.6	
42 4-Methylphenol	108	6.638	6.621	0.017	84	534294	40.0	21.1	
41 N-Nitrosodi-n-propylamine	70	6.633	6.621	0.012	88	475001	40.0	20.3	
40 Acetophenone	105	6.633	6.621	0.012	81	810780	40.0	20.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
45 Hexachloroethane	117	6.745	6.734	0.011	87	287478	40.0	22.2	
46 Nitrobenzene	77	6.798	6.782	0.016	87	736031	40.0	25.7	
48 Isophorone	82	7.017	7.006	0.011	95	1111205	40.0	25.6	
49 2-Nitrophenol	139	7.097	7.086	0.011	68	257200	40.0	24.2	
50 2,4-Dimethylphenol	107	7.129	7.118	0.011	93	647941	40.0	26.7	
52 Benzoic acid	122	7.199	7.182	0.017	87	184435	40.0	17.9	
53 Bis(2-chloroethoxy)methane	93	7.210	7.198	0.012	94	520150	40.0	22.3	
54 2,4-Dichlorophenol	162	7.322	7.311	0.011	91	444377	40.0	25.9	
57 Azobenzene	77		7.385					ND	
56 1,2,4-Trichlorobenzene	180	7.402	7.391	0.011	88	544038	40.0	26.7	
58 Naphthalene	128	7.477	7.466	0.011	97	1413050	40.0	23.0	
59 4-Chloroaniline	127	7.514	7.503	0.011	87	565883	40.0	23.6	
62 Hexachlorobutadiene	225	7.589	7.583	0.006	93	398954	40.0	28.2	
64 Caprolactam	113	7.813	7.797	0.016	76	125286	40.0	23.8	
67 4-Chloro-3-methylphenol	107	7.947	7.936	0.011	88	507031	40.0	24.4	
69 2-Methylnaphthalene	142	8.107	8.101	0.006	87	1034206	40.0	23.7	
71 1-Methylnaphthalene	142	8.203	8.192	0.011	88	964501	40.0	23.8	
72 Hexachlorocyclopentadiene	237	8.262	8.251	0.011	94	478915	40.0	32.2	
73 1,2,4,5-Tetrachlorobenzene	216	8.267	8.256	0.011	93	587261	40.0	29.2	
74 2,4,6-Trichlorophenol	196	8.363	8.352	0.011	92	377265	40.0	29.6	
75 2,4,5-Trichlorophenol	196	8.401	8.390	0.011	88	403739	40.0	30.1	
76 1,1'-Biphenyl	154	8.529	8.523	0.006	97	1297406	40.0	25.8	
77 2-Chloronaphthalene	162	8.561	8.550	0.011	98	1020556	40.0	24.6	
79 2-Nitroaniline	65	8.641	8.630	0.011	71	394556	40.0	29.5	
82 Dimethyl phthalate	163	8.786	8.780	0.006	93	1233680	40.0	27.5	
83 1,3-Dinitrobenzene	168	8.823	8.817	0.006	80	190345	40.0	27.3	
84 2,6-Dinitrotoluene	165	8.850	8.844	0.006	79	261819	40.0	26.8	
85 Acenaphthylene	152	8.946	8.935	0.011	97	1608470	40.0	25.5	
86 3-Nitroaniline	138	9.010	9.004	0.006	83	253567	40.0	26.0	
87 2,4-Dinitrophenol	184	9.101	9.095	0.006	72	314531	80.0	46.0	
88 Acenaphthene	153	9.101	9.095	0.006	86	1076132	40.0	26.3	
89 4-Nitrophenol	109	9.143	9.138	0.005	80	655441	80.0	76.4	
91 2,4-Dinitrotoluene	165	9.218	9.212	0.006	80	368005	40.0	28.2	
93 Dibenzofuran	168	9.256	9.250	0.006	93	1486570	40.0	25.1	
96 2,3,4,6-Tetrachlorophenol	232	9.362	9.357	0.005	77	356793	40.0	29.4	
98 Diethyl phthalate	149	9.421	9.415	0.006	95	1439004	40.0	29.5	
99 Hexadecane	57	9.421	9.415	0.006	70	510274	40.0	20.8	
100 4-Chlorophenyl phenyl ethe	204	9.549	9.544	0.005	96	688159	40.0	28.2	
101 4-Nitroaniline	138	9.571	9.560	0.011	63	280031	40.0	26.9	
103 Fluorene	166	9.571	9.565	0.006	93	1211110	40.0	26.3	
104 4,6-Dinitro-2-methylphenol	198	9.598	9.586	0.012	75	500227	80.0	53.8	
105 N-Nitrosodiphenylamine	169	9.651	9.645	0.006	67	892689	40.0	25.2	
90 1,2-Diphenylhydrazine	77	9.694	9.688	0.006	41	1592954	40.0	26.9	
110 4-Bromophenyl phenyl ether	248	9.998	9.992	0.006	72	460813	40.0	28.8	
112 Hexachlorobenzene	284	10.084	10.078	0.006	93	486651	40.0	28.1	
113 Atrazine	200	10.116	10.110	0.006	90	356525	40.0	73.5	
115 n-Octadecane	57	10.255	10.249	0.006	84	587476	40.0	18.7	
116 Pentachlorophenol	266	10.255	10.249	0.006	82	570312	80.0	57.4	
121 Phenanthrene	178	10.458	10.452	0.006	98	1876035	40.0	25.0	
122 Anthracene	178	10.506	10.500	0.006	97	1936921	40.0	26.1	
124 Carbazole	167	10.645	10.639	0.006	97	1697262	40.0	26.2	
126 Di-n-butyl phthalate	149	10.928	10.927	0.001	99	2080470	40.0	26.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
131 Fluoranthene	202	11.729	11.723	0.006	96	2199703	40.0	28.1	
132 Benzidine	184	11.857	11.851	0.006	98	288256	40.0	22.8	
133 Pyrene	202	12.028	12.022	0.006	98	2265402	40.0	23.7	
138 Butyl benzyl phthalate	149	12.856	12.850	0.006	93	888683	40.0	23.1	
144 3,3'-Dichlorobenzidine	252	13.812	13.807	0.005	74	743121	40.0	25.5	
145 Bis(2-ethylhexyl) phthalat	149	13.839	13.839	0.000	95	1247531	40.0	23.3	
146 Benzo[a]anthracene	228	13.893	13.881	0.012	97	2307540	40.0	25.5	
147 Chrysene	228	13.957	13.951	0.006	95	2265700	40.0	26.8	
150 Di-n-octyl phthalate	149	15.127	15.126	0.001	99	1916280	40.0	22.4	
152 Benzo[b]fluoranthene	252	16.013	16.013	0.000	94	2272190	40.0	25.7	
153 Benzo[k]fluoranthene	252	16.072	16.066	0.006	96	2296902	40.0	26.5	
154 Benzo[a]pyrene	252	16.697	16.691	0.006	74	2083199	40.0	27.7	
157 Indeno[1,2,3-cd]pyrene	276	19.010	19.005	0.005	97	2326896	40.0	29.9	
158 Dibenz(a,h)anthracene	278	19.042	19.037	0.005	87	1995250	40.0	29.3	
159 Benzo[g,h,i]perylene	276	19.598	19.597	0.001	95	1979884	40.0	29.0	
S 199 Total Cresols	108				0		80.0	41.6	
S 197 Methyl Phenols,Total	108				0		80.0	41.6	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

SVTAPITINTRNi_00005 Amount Added: 1.00 Units: uL Run Reagent

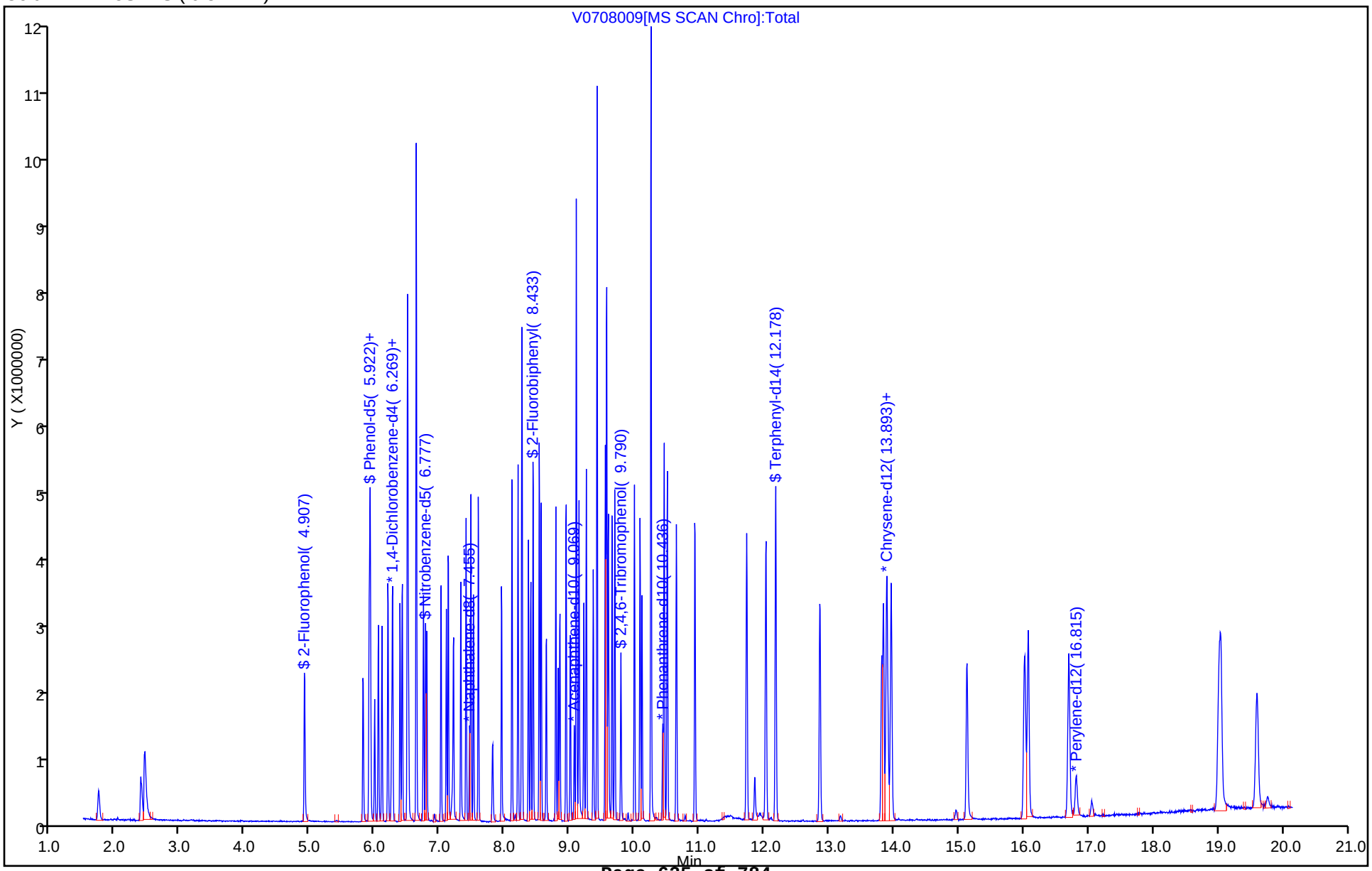
Report Date: 09-Jul-2014 03:31:47 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708009.D

Injection Date:	08-Jul-2014 16:51:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	LCS 180-110402/2-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.: 180-34362-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 180-110402/3-A

Matrix: Water | Lab File ID: V0708010.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 07/03/2014 07:30

Sample wt/vol: 250(mL) | Date Analyzed: 07/08/2014 17:20

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.: 110717 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	14.1		0.20	0.029
208-96-8	Acenaphthylene	13.8		0.20	0.022
120-12-7	Anthracene	13.9		0.20	0.019
92-87-5	Benzidine	10.5	J	20	4.7
56-55-3	Benzo[a]anthracene	13.2		0.20	0.037
205-99-2	Benzo[b]fluoranthene	13.8		0.20	0.049
207-08-9	Benzo[k]fluoranthene	13.6		0.20	0.030
65-85-0	Benzoic acid	9.45		5.0	1.6
191-24-2	Benzo[g,h,i]perylene	15.2		0.20	0.029
50-32-8	Benzo[a]pyrene	14.9		0.20	0.028
111-91-1	Bis(2-chloroethoxy)methane	12.1		1.0	0.13
111-44-4	Bis(2-chloroethyl)ether	10.4		1.0	0.032
117-81-7	Bis(2-ethylhexyl) phthalate	11.8		2.0	0.44
108-60-1	2,2'-oxybis[1-chloropropane]	8.52		1.0	0.024
101-55-3	4-Bromophenyl phenyl ether	14.8		1.0	0.12
7005-72-3	4-Chlorophenyl phenyl ether	15.1		1.0	0.080
91-58-7	2-Chloronaphthalene	12.9		0.20	0.031
85-68-7	Butyl benzyl phthalate	11.9		1.0	0.21
218-01-9	Chrysene	13.4		0.20	0.031
53-70-3	Dibenz(a,h)anthracene	15.5		0.20	0.027
84-74-2	Di-n-butyl phthalate	13.8		1.0	0.24
117-84-0	Di-n-octyl phthalate	11.8		1.0	0.20
84-66-2	Diethyl phthalate	15.4		1.0	0.30
131-11-3	Dimethyl phthalate	14.8		1.0	0.18
91-94-1	3,3'-Dichlorobenzidine	13.0		1.0	0.15
121-14-2	2,4-Dinitrotoluene	14.6		1.0	0.21
606-20-2	2,6-Dinitrotoluene	14.4		1.0	0.14
95-57-8	2-Chlorophenol	11.6		1.0	0.23
120-83-2	2,4-Dichlorophenol	13.8		1.0	0.067
105-67-9	2,4-Dimethylphenol	14.0		1.0	0.17
51-28-5	2,4-Dinitrophenol	24.8		5.0	2.5
88-75-5	2-Nitrophenol	13.2		1.0	0.11
88-06-2	2,4,6-Trichlorophenol	15.7		1.0	0.30
122-66-7	1,2-Diphenylhydrazine(as Azobenzene)	13.9		1.0	0.12

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-34362-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 180-110402/3-A

Matrix: Water | Lab File ID: V0708010.D

Analysis Method: 8270D LL | Date Collected:

Extract. Method: 3520C | Date Extracted: 07/03/2014 07:30

Sample wt/vol: 250(mL) | Date Analyzed: 07/08/2014 17:20

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.: 110717 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-82-1	1,2,4-Trichlorobenzene	14.5		1.0	0.085
59-50-7	4-Chloro-3-methylphenol	12.6		1.0	0.17
100-02-7	4-Nitrophenol	40.4		5.0	0.80
534-52-1	4,6-Dinitro-2-methylphenol	27.8		5.0	1.6
206-44-0	Fluoranthene	14.9		0.20	0.021
86-73-7	Fluorene	14.4		0.20	0.024
118-74-1	Hexachlorobenzene	14.6		1.0	0.061
87-68-3	Hexachlorobutadiene	14.7		1.0	0.094
77-47-4	Hexachlorocyclopentadiene	17.1		1.0	0.14
67-72-1	Hexachloroethane	12.0		1.0	0.14
193-39-5	Indeno[1,2,3-cd]pyrene	15.5		0.20	0.043
78-59-1	Isophorone	13.7		1.0	0.074
91-20-3	Naphthalene	12.8		0.20	0.023
98-95-3	Nitrobenzene	14.1		2.0	0.15
621-64-7	N-Nitrosodi-n-propylamine	10.8		1.0	0.050
62-75-9	N-Nitrosodimethylamine	14.6		1.0	0.12
86-30-6	N-Nitrosodiphenylamine	13.8		1.0	0.12
85-01-8	Phenanthrene	13.4		0.20	0.042
129-00-0	Pyrene	11.9		0.20	0.023
87-86-5	Pentachlorophenol	29.6		1.0	0.50
108-95-2	Phenol	11.0		1.0	0.055

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	64		30-150
321-60-8	2-Fluorobiphenyl	71		30-150
367-12-4	2-Fluorophenol (Surr)	60		30-150
4165-60-0	Nitrobenzene-d5 (Surr)	68		30-150
4165-62-2	Phenol-d5 (Surr)	57		30-150
1718-51-0	Terphenyl-d14 (Surr)	62		10-150

Report Date: 09-Jul-2014 03:31:47 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708010.D
Lims ID: LCSD 180-110402/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 08-Jul-2014 17:20:30 ALS Bottle#: 9 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 180-0002096-010
Misc. Info.: LCSD 180-110402/3-A
Operator ID: 003200 Instrument ID: CH731

Method: \\PITCHROM\ChromData\CH731\20140708-2096.b\BNA_CH731.m
Limit Group: BNA 8270D ICAL
Last Update: 09-Jul-2014 03:31:39 Calib Date: 27-Jun-2014 09:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CH731\20140626-1923.b\V0627010.D

Column 1 : Rxi-5SilMS (0.32 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: piccolinov Date: 09-Jul-2014 02:57:11

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	6.245	6.237	0.008	87	121681	8.00	8.00	
* 2 Naphthalene-d8	136	7.447	7.444	0.003	98	391892	8.00	8.00	
* 3 Acenaphthene-d10	164	9.060	9.063	-0.003	92	232538	8.00	8.00	
* 4 Phenanthrene-d10	188	10.423	10.430	-0.007	97	465088	8.00	8.00	
* 5 Chrysene-d12	240	13.895	13.903	-0.008	96	595299	8.00	8.00	
* 6 Perylene-d12	264	16.790	16.809	-0.019	96	479914	8.00	8.00	
$ 7 2-Fluorophenol	112	4.899	4.896	0.003	89	537173	40.0	24.0	
$ 8 Phenol-d5	99	5.898	5.895	0.003	85	613910	40.0	22.7	
$ 9 Nitrobenzene-d5	82	6.769	6.766	0.003	92	696690	40.0	27.2	
$ 10 2-Fluorobiphenyl	172	8.430	8.427	0.003	99	1205487	40.0	28.3	
$ 11 2,4,6-Tribromophenol	330	9.782	9.784	-0.002	80	169958	40.0	25.5	
$ 12 Terphenyl-d14	244	12.164	12.172	-0.008	98	1813743	40.0	24.9	
13 1,4-Dioxane	88	1.726	1.723	0.003	94	311911	40.0	27.9	
14 N-Nitrosodimethylamine	74	2.388	2.374	0.014	83	457255	40.0	29.1	M
15 Pyridine	79	2.436	2.433	0.003	95	815949	40.0	29.8	
25 Benzaldehyde	77	5.802	5.799	0.003	86	421675	40.0	26.2	
26 Phenol	94	5.908	5.906	0.002	83	705511	40.0	21.9	
27 Aniline	93	5.919	5.916	0.003	93	777122	40.0	25.3	
29 Bis(2-chloroethyl)ether	93	5.983	5.980	0.003	92	437755	40.0	20.7	
30 2-Chlorophenol	128	6.042	6.039	0.003	89	502327	40.0	23.1	
31 n-Decane	43	6.095	6.093	0.002	78	396124	40.0	19.3	
32 1,3-Dichlorobenzene	146	6.192	6.183	0.009	88	574388	40.0	22.4	
33 1,4-Dichlorobenzene	146	6.261	6.258	0.003	82	572461	40.0	22.3	
34 Benzyl alcohol	108	6.373	6.370	0.003	81	276967	40.0	20.1	
35 1,2-Dichlorobenzene	146	6.411	6.408	0.003	84	542057	40.0	22.3	
36 2-Methylphenol	108	6.485	6.488	-0.003	92	516416	40.0	23.2	
37 Indene	116	6.491	6.488	0.003	90	954123	40.0	22.5	
38 2,2'-oxybis[1-chloropropan	45	6.501	6.499	0.002	66	388005	40.0	17.0	
42 4-Methylphenol	108	6.630	6.621	0.009	93	524692	40.0	22.3	
41 N-Nitrosodi-n-propylamine	70	6.624	6.621	0.003	89	472380	40.0	21.7	
40 Acetophenone	105	6.624	6.621	0.003	81	817460	40.0	21.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
45 Hexachloroethane	117	6.737	6.734	0.002	86	290038	40.0	24.0	
46 Nitrobenzene	77	6.785	6.782	0.003	88	741921	40.0	28.2	
48 Isophorone	82	7.009	7.006	0.003	95	1090452	40.0	27.4	
49 2-Nitrophenol	139	7.089	7.086	0.003	69	257086	40.0	26.3	
50 2,4-Dimethylphenol	107	7.121	7.118	0.003	94	621812	40.0	27.9	
52 Benzoic acid	122	7.196	7.182	0.014	87	179236	40.0	18.9	
53 Bis(2-chloroethoxy)methane	93	7.201	7.198	0.003	95	520433	40.0	24.3	
54 2,4-Dichlorophenol	162	7.313	7.311	0.002	92	435073	40.0	27.6	
57 Azobenzene	77		7.385					ND	
56 1,2,4-Trichlorobenzene	180	7.394	7.391	0.003	89	542560	40.0	29.0	
58 Naphthalene	128	7.468	7.466	0.002	97	1441879	40.0	25.6	
59 4-Chloroaniline	127	7.506	7.503	0.003	89	569089	40.0	25.9	
62 Hexachlorobutadiene	225	7.581	7.583	-0.002	93	381679	40.0	29.4	
64 Caprolactam	113	7.800	7.797	0.003	76	128467	40.0	26.6	
67 4-Chloro-3-methylphenol	107	7.938	7.936	0.002	89	481566	40.0	25.2	
69 2-Methylnaphthalene	142	8.099	8.101	-0.002	87	1001202	40.0	24.9	
71 1-Methylnaphthalene	142	8.195	8.192	0.003	88	937383	40.0	25.2	
72 Hexachlorocyclopentadiene	237	8.254	8.251	0.003	94	465310	40.0	34.2	
73 1,2,4,5-Tetrachlorobenzene	216	8.259	8.256	0.003	93	581759	40.0	31.7	
74 2,4,6-Trichlorophenol	196	8.355	8.352	0.003	92	365789	40.0	31.4	
75 2,4,5-Trichlorophenol	196	8.393	8.390	0.003	87	360296	40.0	29.4	
76 1,1'-Biphenyl	154	8.521	8.523	-0.002	97	1273171	40.0	27.7	
77 2-Chloronaphthalene	162	8.553	8.550	0.003	98	977899	40.0	25.8	
79 2-Nitroaniline	65	8.633	8.630	0.003	70	385765	40.0	31.6	
82 Dimethyl phthalate	163	8.777	8.780	-0.003	93	1211623	40.0	29.6	
83 1,3-Dinitrobenzene	168	8.815	8.817	-0.002	80	184953	40.0	29.0	
84 2,6-Dinitrotoluene	165	8.841	8.844	-0.003	78	256304	40.0	28.7	
85 Acenaphthylene	152	8.937	8.935	0.002	97	1586615	40.0	27.5	
86 3-Nitroaniline	138	9.002	9.004	-0.002	82	231497	40.0	26.0	
87 2,4-Dinitrophenol	184	9.092	9.095	-0.003	75	312131	80.0	49.6	
88 Acenaphthene	153	9.092	9.095	-0.003	88	1051919	40.0	28.1	
89 4-Nitrophenol	109	9.135	9.138	-0.003	80	634737	80.0	80.9	
91 2,4-Dinitrotoluene	165	9.210	9.212	-0.002	79	349412	40.0	29.3	
93 Dibenzofuran	168	9.247	9.250	-0.003	93	1476212	40.0	27.3	
96 2,3,4,6-Tetrachlorophenol	232	9.354	9.357	-0.003	77	341484	40.0	30.8	
98 Diethyl phthalate	149	9.413	9.415	-0.002	94	1373547	40.0	30.8	
99 Hexadecane	57	9.413	9.415	-0.002	71	506935	40.0	22.4	
100 4-Chlorophenyl phenyl ethe	204	9.541	9.544	-0.003	94	676156	40.0	30.3	
101 4-Nitroaniline	138	9.562	9.560	0.002	64	268925	40.0	28.3	
103 Fluorene	166	9.562	9.565	-0.003	91	1214651	40.0	28.9	
104 4,6-Dinitro-2-methylphenol	198	9.589	9.586	0.003	75	482215	80.0	55.6	
105 N-Nitrosodiphenylamine	169	9.643	9.645	-0.002	66	913112	40.0	27.6	
90 1,2-Diphenylhydrazine	77	9.685	9.688	-0.003	41	1534788	40.0	27.8	
110 4-Bromophenyl phenyl ether	248	9.990	9.992	-0.002	72	442782	40.0	29.7	
112 Hexachlorobenzene	284	10.075	10.078	-0.003	93	472020	40.0	29.2	
113 Atrazine	200	10.107	10.110	-0.003	90	351053	40.0	77.5	
115 n-Octadecane	57	10.246	10.249	-0.003	84	571921	40.0	19.5	
116 Pentachlorophenol	266	10.246	10.249	-0.003	82	549661	80.0	59.2	
121 Phenanthrene	178	10.449	10.452	-0.003	97	1874979	40.0	26.8	
122 Anthracene	178	10.497	10.500	-0.003	97	1927037	40.0	27.8	
124 Carbazole	167	10.636	10.639	-0.003	97	1619319	40.0	26.7	
126 Di-n-butyl phthalate	149	10.925	10.927	-0.002	99	2058847	40.0	27.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
131 Fluoranthene	202	11.721	11.723	-0.002	96	2175376	40.0	29.8	
132 Benzidine	184	11.844	11.851	-0.007	97	259005	40.0	21.1	
133 Pyrene	202	12.015	12.022	-0.007	98	2223182	40.0	23.8	
138 Butyl benzyl phthalate	149	12.843	12.850	-0.007	93	897186	40.0	23.8	
144 3,3'-Dichlorobenzidine	252	13.799	13.807	-0.008	74	741283	40.0	26.0	
145 Bis(2-ethylhexyl) phthalat	149	13.826	13.839	-0.013	95	1237480	40.0	23.6	
146 Benzo[a]anthracene	228	13.874	13.881	-0.007	96	2328724	40.0	26.3	
147 Chrysene	228	13.943	13.951	-0.008	95	2211697	40.0	26.7	
150 Di-n-octyl phthalate	149	15.108	15.126	-0.018	99	1919828	40.0	23.7	
152 Benzo[b]fluoranthene	252	16.000	16.013	-0.013	95	2322250	40.0	27.7	
153 Benzo[k]fluoranthene	252	16.053	16.066	-0.013	96	2241805	40.0	27.2	
154 Benzo[a]pyrene	252	16.678	16.691	-0.013	74	2125717	40.0	29.8	
157 Indeno[1,2,3-cd]pyrene	276	18.991	19.005	-0.014	95	2287290	40.0	31.0	
158 Dibenz(a,h)anthracene	278	19.018	19.037	-0.019	87	1999943	40.0	30.9	
159 Benzo[g,h,i]perylene	276	19.574	19.597	-0.023	95	1969200	40.0	30.4	
S 199 Total Cresols	108				0		80.0	45.5	
S 197 Methyl Phenols,Total	108				0		80.0	45.5	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Review Flags
M - Manually Integrated

Reagents:

SVTAPITINTRNi_00005 Amount Added: 1.00 Units: uL Run Reagent

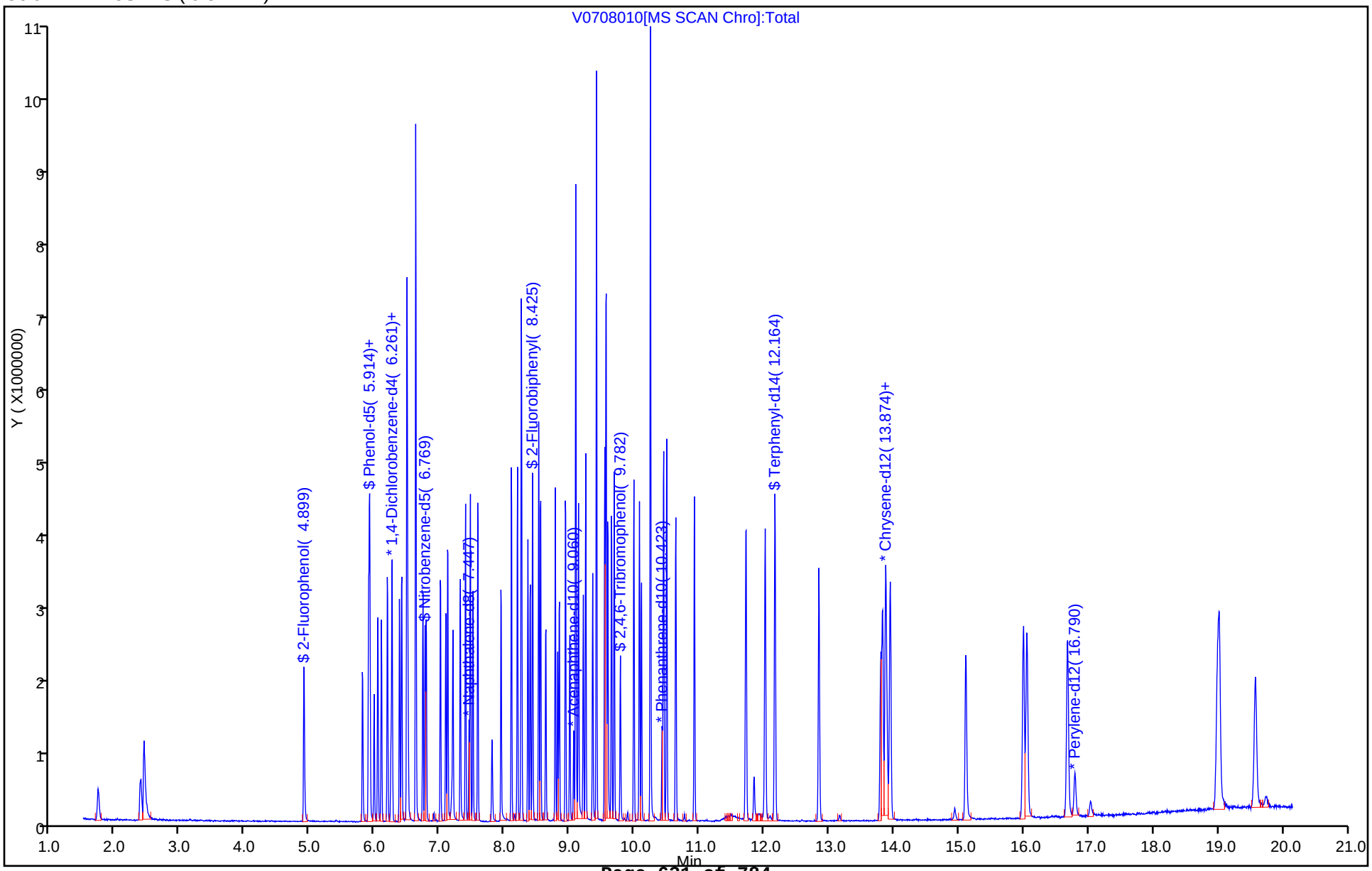
Report Date: 09-Jul-2014 03:31:47 Chrom Revision: 2.2 24-Jun-2014 07:21:42

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708010.D

Injection Date:	08-Jul-2014 17:20:30	Instrument ID:	CH731	Operator ID:	003200
Lims ID:	LCSD 180-110402/3-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

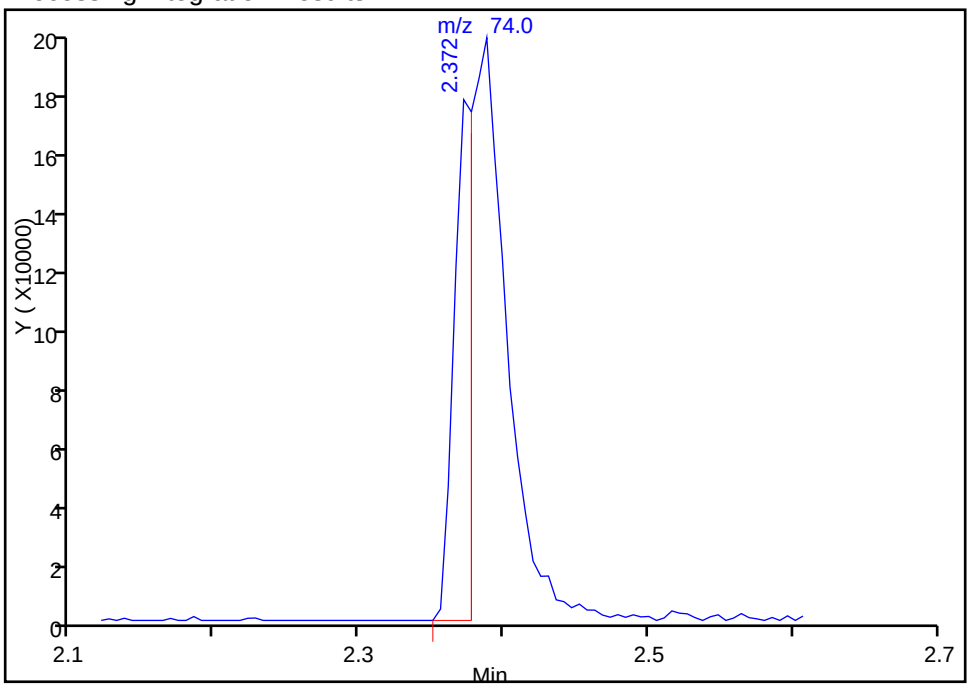
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CH731\20140708-2096.b\V0708010.D				
Injection Date:	08-Jul-2014 17:20:30	Instrument ID:	CH731		
Lims ID:	LCSD 180-110402/3-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		

14 N-Nitrosodimethylamine, CAS: 62-75-9

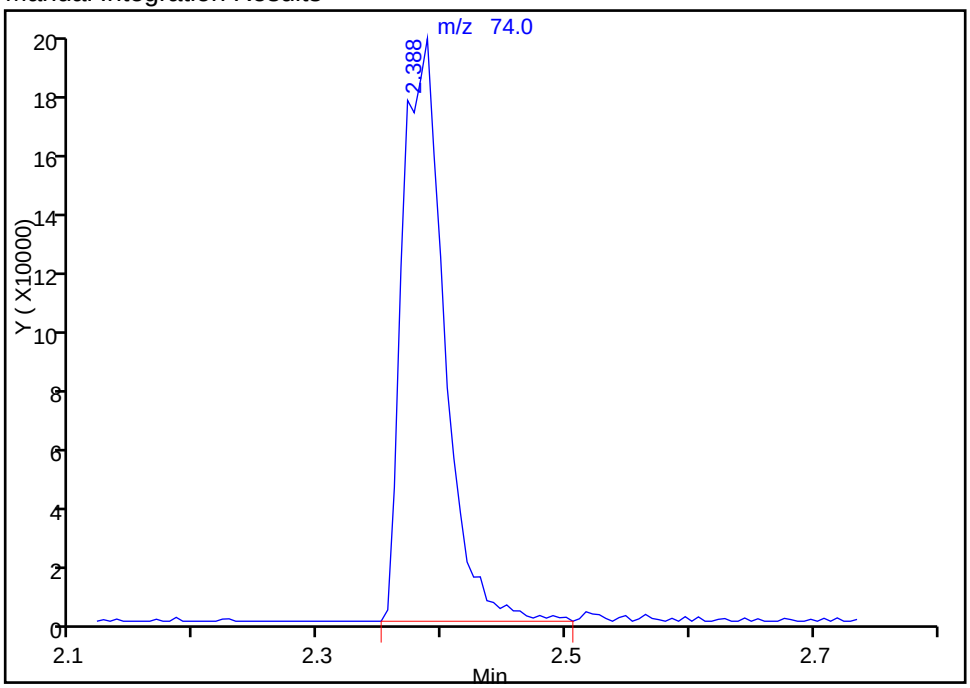
Processing Integration Results

RT: 2.37
Response: 164081
Amount: 10.444330



Manual Integration Results

RT: 2.39
Response: 457255
Amount: 29.105881



Reviewer: piccolinov, 09-Jul-2014 02:57:11
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Instrument ID: CH731 Start Date: 06/05/2014 08:07

Analysis Batch Number: 107633 End Date: 06/05/2014 13:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-107633/2		06/05/2014 08:07	1	V0605002.D	Rxi-5SilMS 0.32(mm)
IC 180-107633/3		06/05/2014 08:25	1	V0605003.D	Rxi-5SilMS 0.32(mm)
IC 180-107633/4		06/05/2014 08:54	1	V0605004.D	Rxi-5SilMS 0.32(mm)
IC 180-107633/5		06/05/2014 09:23	1	V0605005.D	Rxi-5SilMS 0.32(mm)
ICIS 180-107633/6		06/05/2014 09:51	1	V0605006.D	Rxi-5SilMS 0.32(mm)
IC 180-107633/7		06/05/2014 10:19	1	V0605007.D	Rxi-5SilMS 0.32(mm)
IC 180-107633/8		06/05/2014 10:48	1	V0605008.D	Rxi-5SilMS 0.32(mm)
IC 180-107633/9		06/05/2014 11:17	1	V0605009.D	Rxi-5SilMS 0.32(mm)
IC 180-107633/10		06/05/2014 11:45	1	V0605010.D	Rxi-5SilMS 0.32(mm)
ICV 180-107633/11		06/05/2014 12:13	1		Rxi-5SilMS 0.32(mm)
ICV 180-107633/12		06/05/2014 12:42	1		Rxi-5SilMS 0.32(mm)
ICV 180-107633/13		06/05/2014 13:11	1		Rxi-5SilMS 0.32(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Instrument ID: CH731 Start Date: 07/08/2014 13:42

Analysis Batch Number: 110717 End Date: 07/09/2014 00:27

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-110717/2		07/08/2014 13:42	1	V0708002.D	Rxi-5SilMS 0.32(mm)
CCVIS 180-110717/3		07/08/2014 14:00	1	V0708003.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		07/08/2014 14:29	1		Rxi-5SilMS 0.32(mm)
MB 180-110402/1-A		07/08/2014 14:57	1	V0708005.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		07/08/2014 15:54	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		07/08/2014 16:23	1		Rxi-5SilMS 0.32(mm)
LCS 180-110402/2-A		07/08/2014 16:51	1	V0708009.D	Rxi-5SilMS 0.32(mm)
LCSD 180-110402/3-A		07/08/2014 17:20	1	V0708010.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		07/08/2014 18:18	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		07/08/2014 18:46	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		07/08/2014 19:15	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		07/08/2014 19:43	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		07/08/2014 20:12	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		07/08/2014 20:40	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		07/08/2014 21:08	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		07/08/2014 21:37	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		07/08/2014 22:05	1		Rxi-5SilMS 0.32(mm)
180-34362-1	H108-PZM003	07/08/2014 22:34	1	V0708021.D	Rxi-5SilMS 0.32(mm)
180-34362-2	RW19-PZP000	07/08/2014 23:02	1	V0708022.D	Rxi-5SilMS 0.32(mm)
180-34362-3	RW19-PZM050	07/08/2014 23:30	1	V0708023.D	Rxi-5SilMS 0.32(mm)
180-34362-4	H108-PZM060	07/08/2014 23:59	1	V0708024.D	Rxi-5SilMS 0.32(mm)
180-34362-5	RW19-PZM020	07/09/2014 00:27	1	V0708025.D	Rxi-5SilMS 0.32(mm)

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Batch Number: 110402 Batch Start Date: 07/03/14 12:45 Batch Analyst: Trout, Bill

Batch Method: 3520C Batch End Date: 07/08/14 03:25

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	FirstAdjustpH	SecondAdjustpH	OPLVISPKMIX1i 00027
MB 180-110402/1		3520C, 8270D LL		5 SU	250 mL	0.25 mL	2	11	
LCS 180-110402/2		3520C, 8270D LL		5 SU	250 mL	0.25 mL	2	11	25 uL
LCSD 180-110402/3		3520C, 8270D LL		5 SU	250 mL	0.25 mL	2	11	25 uL
180-34362-A-1	H108-PZM003	3520C, 8270D LL	T	7 SU	220 mL	0.25 mL	2	11	
180-34362-A-2	RW19-PZP000	3520C, 8270D LL	T	9 SU	260 mL	0.25 mL	2	11	
180-34362-A-3	RW19-PZM050	3520C, 8270D LL	T	7 SU	250 mL	0.25 mL	2	11	
180-34362-B-4	H108-PZM060	3520C, 8270D LL	T	7 SU	250 mL	0.25 mL	2	11	
180-34362-A-5	RW19-PZM020	3520C, 8270D LL	T	7 SU	260 mL	0.25 mL	2	11	

Lab Sample ID	Client Sample ID	Method Chain	Basis	OPQL8270SURi 00019					
MB 180-110402/1		3520C, 8270D LL		25 uL					
LCS 180-110402/2		3520C, 8270D LL		25 uL					
LCSD 180-110402/3		3520C, 8270D LL		25 uL					
180-34362-A-1	H108-PZM003	3520C, 8270D LL	T	25 uL					
180-34362-A-2	RW19-PZP000	3520C, 8270D LL	T	25 uL					
180-34362-A-3	RW19-PZM050	3520C, 8270D LL	T	25 uL					
180-34362-B-4	H108-PZM060	3520C, 8270D LL	T	25 uL					
180-34362-A-5	RW19-PZM020	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.: 180-34362-1

SDG No.:

Batch Number: 110402 Batch Start Date: 07/03/14 12:45 Batch Analyst: Trout, Bill

Batch Method: 3520C Batch End Date: 07/08/14 03:25

Batch Notes	
Acid used for pH adjustment	1:1 Sulfuric acid
Acid used for pH adjust Lot #	1237759
Person's name who did the concentration	cdm
Time the first extraction ended 24hr	0725
Time the first extraction started 24 hr	1245
N-evap #	1
Na2SO4 Lot Number	1173928
pH Paper Lot Number	Ph paper HC412469
Prep Solvent Lot #	1237758
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	0325
Time the second extraction started 24hr	0910
Uncorrected N-evap Temperature	26 Degrees C
Uncorrected Temperature	75 Degrees C

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: 180-34362-1

SDG No.:

Project: Sparrows Point Trust Offshore Investigat

Client Sample ID	Lab Sample ID
H108-PZM003	180-34362-1
RW19-PZP000	180-34362-2
RW19-PZM050	180-34362-3
H108-PZM060	180-34362-4
RW19-PZM020	180-34362-5

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: H108-PZM003 Lab Sample ID: 180-34362-1

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG ID.:

Matrix: Water Date Sampled: 06/26/2014 09:55

Reporting Basis: WET Date Received: 06/27/2014 08:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.057	0.20	0.038	ug/L	J	B	1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: H108-PZM003 Lab Sample ID: 180-34362-1

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG ID.:

Matrix: Water Date Sampled: 06/26/2014 09:55

Reporting Basis: WET Date Received: 06/27/2014 08:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	14	5.0	1.5	ug/L			5	6020A
7440-43-9	Cadmium	0.86	5.0	0.57	ug/L	J		5	6020A
7440-47-3	Chromium	52	10	2.7	ug/L			5	6020A
7439-92-1	Lead	92	5.0	0.096	ug/L			5	6020A
7782-49-2	Selenium	ND	25	2.1	ug/L			5	6020A
7440-22-4	Silver	ND	5.0	0.18	ug/L			5	6020A
7440-41-7	Beryllium	2.2	5.0	0.18	ug/L	J		5	6020A
7440-28-0	Thallium	0.32	5.0	0.076	ug/L	J		5	6020A
7440-36-0	Antimony	0.96	10	0.094	ug/L	J	B	5	6020A
7440-02-0	Nickel	16	5.0	0.87	ug/L			5	6020A
7440-66-6	Zinc	210	25	4.8	ug/L			5	6020A
7440-50-8	Copper	35	10	1.2	ug/L			5	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: RW19-PZP000 Lab Sample ID: 180-34362-2

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG ID.:

Matrix: Water Date Sampled: 06/26/2014 10:10

Reporting Basis: WET Date Received: 06/27/2014 08:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.050	0.20	0.038	ug/L	J	B	1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: RW19-PZP000 Lab Sample ID: 180-34362-2

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG ID.:

Matrix: Water Date Sampled: 06/26/2014 10:10

Reporting Basis: WET Date Received: 06/27/2014 08:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	18	5.0	1.5	ug/L			5	6020A
7440-43-9	Cadmium	ND	5.0	0.57	ug/L			5	6020A
7440-47-3	Chromium	35	10	2.7	ug/L			5	6020A
7439-92-1	Lead	2.2	5.0	0.096	ug/L	J		5	6020A
7782-49-2	Selenium	ND	25	2.1	ug/L			5	6020A
7440-22-4	Silver	ND	5.0	0.18	ug/L			5	6020A
7440-41-7	Beryllium	ND	5.0	0.18	ug/L			5	6020A
7440-28-0	Thallium	0.11	5.0	0.076	ug/L	J		5	6020A
7440-36-0	Antimony	1.7	10	0.094	ug/L	J	B	5	6020A
7440-02-0	Nickel	1.6	5.0	0.87	ug/L	J		5	6020A
7440-66-6	Zinc	11	25	4.8	ug/L	J		5	6020A
7440-50-8	Copper	2.4	10	1.2	ug/L	J		5	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: RW19-PZM050 Lab Sample ID: 180-34362-3

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG ID.:

Matrix: Water Date Sampled: 06/26/2014 11:05

Reporting Basis: WET Date Received: 06/27/2014 08:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.055	0.20	0.038	ug/L	J	B	1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: RW19-PZM050 Lab Sample ID: 180-34362-3

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG ID.:

Matrix: Water Date Sampled: 06/26/2014 11:05

Reporting Basis: WET Date Received: 06/27/2014 08:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	ND	5.0	1.5	ug/L			5	6020A
7440-43-9	Cadmium	0.87	5.0	0.57	ug/L	J		5	6020A
7440-47-3	Chromium	19	10	2.7	ug/L			5	6020A
7439-92-1	Lead	1.5	5.0	0.096	ug/L	J		5	6020A
7782-49-2	Selenium	ND	25	2.1	ug/L			5	6020A
7440-22-4	Silver	ND	5.0	0.18	ug/L			5	6020A
7440-41-7	Beryllium	ND	5.0	0.18	ug/L			5	6020A
7440-28-0	Thallium	ND	5.0	0.076	ug/L			5	6020A
7440-36-0	Antimony	2.0	10	0.094	ug/L	J	B	5	6020A
7440-02-0	Nickel	11	5.0	0.87	ug/L			5	6020A
7440-66-6	Zinc	170	25	4.8	ug/L			5	6020A
7440-50-8	Copper	2.6	10	1.2	ug/L	J		5	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: H108-PZM060 Lab Sample ID: 180-34362-4

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG ID.:

Matrix: Water Date Sampled: 06/26/2014 11:30

Reporting Basis: WET Date Received: 06/27/2014 08:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.053	0.20	0.038	ug/L	J	B	1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: H108-PZM060 Lab Sample ID: 180-34362-4

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG ID.:

Matrix: Water Date Sampled: 06/26/2014 11:30

Reporting Basis: WET Date Received: 06/27/2014 08:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	26	5.0	1.5	ug/L			5	6020A
7440-43-9	Cadmium	ND	5.0	0.57	ug/L			5	6020A
7440-47-3	Chromium	ND	10	2.7	ug/L			5	6020A
7439-92-1	Lead	0.14	5.0	0.096	ug/L	J		5	6020A
7782-49-2	Selenium	ND	25	2.1	ug/L			5	6020A
7440-22-4	Silver	ND	5.0	0.18	ug/L			5	6020A
7440-41-7	Beryllium	ND	5.0	0.18	ug/L			5	6020A
7440-28-0	Thallium	ND	5.0	0.076	ug/L			5	6020A
7440-36-0	Antimony	ND	10	0.094	ug/L			5	6020A
7440-02-0	Nickel	ND	5.0	0.87	ug/L			5	6020A
7440-66-6	Zinc	ND	25	4.8	ug/L			5	6020A
7440-50-8	Copper	ND	10	1.2	ug/L			5	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: RW19-PZM020 Lab Sample ID: 180-34362-5

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG ID.:

Matrix: Water Date Sampled: 06/26/2014 11:55

Reporting Basis: WET Date Received: 06/27/2014 08:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.058	0.20	0.038	ug/L	J	B	1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: RW19-PZM020 Lab Sample ID: 180-34362-5

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG ID.:

Matrix: Water Date Sampled: 06/26/2014 11:55

Reporting Basis: WET Date Received: 06/27/2014 08:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	65	5.0	1.5	ug/L			5	6020A
7440-43-9	Cadmium	38	5.0	0.57	ug/L			5	6020A
7440-47-3	Chromium	3.6	10	2.7	ug/L	J		5	6020A
7439-92-1	Lead	0.50	5.0	0.096	ug/L	J		5	6020A
7782-49-2	Selenium	3.5	25	2.1	ug/L	J		5	6020A
7440-22-4	Silver	ND	5.0	0.18	ug/L			5	6020A
7440-41-7	Beryllium	ND	5.0	0.18	ug/L			5	6020A
7440-28-0	Thallium	ND	5.0	0.076	ug/L			5	6020A
7440-36-0	Antimony	ND	10	0.094	ug/L			5	6020A
7440-02-0	Nickel	13	5.0	0.87	ug/L			5	6020A
7440-66-6	Zinc	5800	25	4.8	ug/L			5	6020A
7440-50-8	Copper	5.4	10	1.2	ug/L	J		5	6020A

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

ICV Source: MICVX_00020 Concentration Units: ug/L

CCV Source: MCCV1X_00064

Analyte	ICV 180-111971/5 07/18/2014 10:30				CCV 180-111971/10 07/18/2014 10:47				CCV 180-111971/34 07/18/2014 12:24			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	78.1		80.0	98	99.1		100	99	96.5		100	97
Arsenic	79.0		80.0	99	98.7		100	99	99.7		100	100
Beryllium	76.0		80.0	95	98.7		100	99	96.2		100	96
Cadmium	76.8		80.0	96	99.4		100	99	99.1		100	99
Chromium	77.9		80.0	97	102		100	102	103		100	103
Copper	79.3		80.0	99	101		100	101	99.1		100	99
Lead	75.1		80.0	94	102		100	102	99.8		100	100
Nickel	78.1		80.0	98	100		100	100	100		100	100
Selenium	79.8		80.0	100	97.7		100	98	99.1		100	99
Silver	77.5		80.0	97	98.5		100	99	98.3		100	98
Thallium	80.6		80.0	101	106		100	106	104		100	104
Zinc	79.0		80.0	99	100		100	100	100		100	100

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.: 180-34362-1

SDG No.:

ICV Source: MICVX_00020 Concentration Units: ug/L

CCV Source: MCCV1X_00064

Analyte	CCV 180-111971/46 07/18/2014 13:16				CCV 180-111971/58 07/18/2014 14:03							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	96.9		100	97	95.9		100	96				
Arsenic	99.7		100	100	102		100	102				
Beryllium	96.9		100	97	95.9		100	96				
Cadmium	98.9		100	99	97.7		100	98				
Chromium	102		100	102	103		100	103				
Copper	100		100	100	102		100	102				
Lead	98.5		100	99	98.5		100	99				
Nickel	102		100	102	104		100	104				
Selenium	99.4		100	99	100		100	100				
Silver	98.1		100	98	97.0		100	97				
Thallium	103		100	103	103		100	103				
Zinc	100		100	100	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.: 180-34362-1

SDG No.:

ICV Source: MHgWorkingicv_00824 Concentration Units: ug/L

CCV Source: MHgworkingCal_00843

Analyte	ICV 180-111613/7-A 07/16/2014 12:26				CCV 180-111613/10-A 07/16/2014 12:31				CCV 180-111613/10-A 07/16/2014 12:52			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.49		2.50	100	5.03		5.00	101	5.12		5.00	102

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.: 180-34362-1

SDG No.:

Method: 6020A Instrument ID: M

Lab Sample ID: CRI 180-111971/7 Concentration Units: ug/L

CRQL Check Standard Source: MCRIX_00052

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Arsenic	1.00	1.26		126	70-130
Cadmium	1.00	1.08		108	70-130
Chromium	2.00	2.21		110	70-130
Lead	1.00	1.06		106	70-130
Selenium	5.00	6.14		123	70-130
Silver	1.00	1.11		111	70-130
Beryllium	1.00	1.03		103	70-130
Thallium	1.00	1.09		109	70-130
Antimony	2.00	2.19		110	70-130
Nickel	1.00	1.12		112	70-130
Zinc	5.00	5.83		117	70-130
Copper	2.00	2.29		115	70-130

Lab Sample ID: CRI 180-111971/64 Concentration Units: ug/L

CRQL Check Standard Source: MCRIX_00052

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Arsenic	1.00	1.03		103	70-130
Cadmium	1.00	1.04		104	70-130
Chromium	2.00	2.27		114	70-130
Lead	1.00	1.07		107	70-130
Selenium	5.00	5.92		118	70-130
Silver	1.00	0.955	J	95	70-130
Beryllium	1.00	0.804	J	80	70-130
Thallium	1.00	1.06		106	70-130
Antimony	2.00	2.10		105	70-130
Nickel	1.00	1.10		110	70-130
Zinc	5.00	5.79		116	70-130
Copper	2.00	1.72	J	86	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.: 180-34362-1

SDG No.:

Method: 7470A Instrument ID: K

Lab Sample ID: CRA 180-111613/9-A Concentration Units: ug/L

CRQL Check Standard Source: MHgworkingCal_00843

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.256		128	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.: 180-34362-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 180-111971/6 07/18/2014 10:33		CCB1 180-111971/11 07/18/2014 10:53		CCB3 180-111971/35 07/18/2014 12:30		CCB4 180-111971/47 07/18/2014 13:22	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.0350	J	0.0730	J	0.0920	J	0.0900	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	ND		ND		0.0190	J	ND	
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.: 180-34362-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB5 180-111971/59 07/18/2014 14:09							
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.0790	J						
Arsenic	1.0	ND							
Beryllium	1.0	ND							
Cadmium	1.0	ND							
Chromium	2.0	ND							
Copper	2.0	ND							
Lead	1.0	ND							
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.: 180-34362-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 180-111613/8-A 07/16/2014 12:27		CCB 180-111613/11-A 07/16/2014 12:33		CCB 180-111613/11-A 07/16/2014 12:54			
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	ND		ND		ND			

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 180-111726/1-A

Instrument Code: M Batch No.: 111971

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	ND			6020A
7782-49-2	Selenium	ND			6020A
7440-22-4	Silver	ND			6020A
7440-41-7	Beryllium	ND			6020A
7440-28-0	Thallium	ND			6020A
7440-36-0	Antimony	0.0330	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.: 180-34362-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 180-111612/1-A

Instrument Code: K Batch No.: 111657

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.0504	J		7470A

FORM III-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Lab Sample ID: ICSA 180-111971/8 Instrument ID: M

Lab File ID: M40718A.xml ICS Source: MICSAX_00052

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.0750**	
Arsenic		**-0.0480**	
Beryllium		**-0.0530**	
Cadmium		**0.659**	
Chromium		**0.475**	
Copper		**1.45**	
Lead		**0.212**	
Nickel		**-0.488**	
Selenium		**-0.788**	
Silver		**2.56**	
Thallium		**0.0070**	
Zinc		**2.56**	
Aluminum	*100000*	*104500*	*105*
Barium		*0.152*	
Boron		*0.942*	
Calcium	*100000*	*100900*	*101*
Cobalt		*0.0500*	
Iron	*100000*	*102000*	*102*
Magnesium	*100000*	*103500*	*104*
Manganese		*0.779*	
Molybdenum	*2000*	*2158*	*108*
Potassium	*100000*	*100200*	*100*
Silicon		*19.7*	
Sodium	*100000*	*100800*	*101*
Strontium		*0.690*	
Tin		*0.167*	
Titanium	*2000*	*2126*	*106*
Vanadium		*-0.389*	

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.: 180-34362-1

SDG No.:

Lab Sample ID: ICSAB 180-111971/9 Instrument ID: M

Lab File ID: M40718A.xml ICS Source: MICSABX_00057

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**20.0**	**22.0**	**110**
Arsenic	**20.0**	**22.1**	**110**
Beryllium	**20.0**	**21.1**	**106**
Cadmium	**20.0**	**22.0**	**110**
Chromium	**20.0**	**21.9**	**110**
Copper	**20.0**	**21.5**	**108**
Lead	**20.0**	**21.8**	**109**
Nickel	**20.0**	**19.9**	**99**
Selenium	**50.0**	**55.4**	**111**
Silver	**20.0**	**22.6**	**113**
Thallium	**20.0**	**22.1**	**110**
Zinc	**25.0**	**22.6**	**90**
Aluminum	*100000*	*112833*	*113*
Barium	*20.0*	*21.3*	*106*
Boron	*50.0*	*54.4*	*109*
Calcium	*100000*	*105567*	*106*
Cobalt	*20.0*	*20.8*	*104*
Iron	*100000*	*107967*	*108*
Magnesium	*100000*	*111267*	*111*
Manganese	*22.5*	*21.7*	*97*
Molybdenum	*2000*	*2323*	*116*
Potassium	*100000*	*104633*	*105*
Silicon	*500*	*595*	*119*
Sodium	*100000*	*104300*	*104*
Strontium	*25.0*	*21.9*	*88*
Tin	*100*	*110*	*110*
Titanium	*2000*	*2226*	*111*
Vanadium	*20.0*	*20.5*	*103*

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 180-111726/2-A

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

Sample Matrix: Water LCS Source: MTAPITTICPMS_00017

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Arsenic	40.0	35.3		88	80	120		6020A
Cadmium	50.0	47.5		95	80	120		6020A
Chromium	200	195		98	80	120		6020A
Lead	20.0	18.8		94	80	120		6020A
Selenium	10.0	9.21		92	80	120		6020A
Silver	50.0	45.9		92	80	120		6020A
Beryllium	50.0	44.7		89	80	120		6020A
Thallium	50.0	47.3		95	80	120		6020A
Antimony	500	481		96	80	120		6020A
Nickel	500	455		91	80	120		6020A
Zinc	500	454		91	80	120		6020A
Copper	250	224		90	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 180-111612/2-A

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

Sample Matrix: Water LCS Source: MHgworkingCal_00843

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	2.50	2.62		105	80	120		7470A

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

FORM VIIA - IN

7D-IN
LAB CONTROL SAMPLE DUPLICATE
METALS

Lab ID: LCSD 180-111612/3-A

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

Sample Matrix: Water LCS Source: MHgworkingCal_00843

Analyte	(SDR)	C	Spike Added	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	2.59		2.50	104	80-120	1	20		7470A

SDR = Spike Duplicate Results
Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIID - IN

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Pittsburgh Job Number: 180-34362-1

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: 180-34362-1

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: 180-34362-1

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: 180-34362-1

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: 180-34362-1

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.: 180-34362-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 180-111726/1-A	07/17/2014 07:50	111726		50	50
LCS 180-111726/2-A	07/17/2014 07:50	111726		50	50
180-34362-1	07/17/2014 07:50	111726		50	50
180-34362-2	07/17/2014 07:50	111726		50	50
180-34362-3	07/17/2014 07:50	111726		50	50
180-34362-4	07/17/2014 07:50	111726		50	50
180-34362-5	07/17/2014 07:50	111726		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 180-111612/1-A	07/16/2014 10:18	111612		50	50
LCS 180-111612/2-A	07/16/2014 10:18	111612		50	50
LCSD 180-111612/3-A	07/16/2014 10:18	111612		50	50
180-34362-1	07/16/2014 10:18	111612		50	50
180-34362-2	07/16/2014 10:18	111612		50	50
180-34362-3	07/16/2014 10:18	111612		50	50
180-34362-4	07/16/2014 10:18	111612		50	50
180-34362-5	07/16/2014 10:18	111612		50	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Instrument ID: M Method: 6020A

Start Date: 07/18/2014 09:01 End Date: 07/18/2014 14:45

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Be	Cd	Cr	Cu	Ni	Pb	Sb	Se	Tl	Zn								
ITUNE 180-111971/1			09:01																				
STD1 180-111971/2 IC	1		10:19	X	X	X	X	X	X	X	X	X	X	X	X								
STD2 180-111971/3 IC	1		10:23	X	X	X	X	X	X	X	X	X	X	X	X								
STD3 180-111971/4 IC	1		10:26	X	X	X	X	X	X	X	X	X	X	X	X								
ICV 180-111971/5	1		10:30	X	X	X	X	X	X	X	X	X	X	X	X								
ICB 180-111971/6	1		10:33	X	X	X	X	X	X	X	X	X	X	X	X								
CRI 180-111971/7	1		10:36	X	X	X	X	X	X	X	X	X	X	X	X								
ICSA 180-111971/8	1		10:40	X	X	X	X	X	X	X	X	X	X	X	X								
ICSAB 180-111971/9	1		10:43	X	X	X	X	X	X	X	X	X	X	X	X								
CCV 180-111971/10	1		10:47	X	X	X	X	X	X	X	X	X	X	X	X								
CCB1 180-111971/11	1		10:53	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			10:56																				
ZZZZZZ			11:00																				
ZZZZZZ			11:04																				
ZZZZZZ			11:10																				
ZZZZZZ			11:14																				
ZZZZZZ			11:18																				
ZZZZZZ			11:21																				
ZZZZZZ			11:25																				
ZZZZZZ			11:29																				
ZZZZZZ			11:33																				
CCV 180-111971/22			11:36																				
CCB2 180-111971/23			11:43																				
ZZZZZZ			11:46																				
ZZZZZZ			11:50																				
ZZZZZZ			11:54																				
ZZZZZZ			11:58																				
ZZZZZZ			12:01																				
ZZZZZZ			12:05																				
ZZZZZZ			12:09																				
ZZZZZZ			12:12																				
ZZZZZZ			12:17																				
ZZZZZZ			12:20																				
CCV 180-111971/34	1		12:24	X	X	X	X	X	X	X	X	X	X	X	X								
CCB3 180-111971/35	1		12:30	X	X	X	X	X	X	X	X	X	X	X	X								
MB 180-111726/1-A	1	R	12:34	X	X	X	X	X	X	X	X	X	X	X	X								
LCS 180-111726/2-A	1	R	12:38	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			12:44																				
ZZZZZZ			12:48																				
ZZZZZZ			12:51																				
ZZZZZZ			12:55																				
ZZZZZZ			12:59																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Instrument ID: M Method: 6020A

Start Date: 07/18/2014 09:01 End Date: 07/18/2014 14:45

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	As	Be	Cd	Cr	Cu	Ni	Pb	Sb	Se	Tl	Zn								
ZZZZZZ			13:05																				
180-34362-1	5	R	13:09	X	X	X	X	X	X	X	X	X	X	X	X								
180-34362-2	5	R	13:13	X	X	X	X	X	X	X	X	X	X	X	X								
CCV 180-111971/46	1		13:16	X	X	X	X	X	X	X	X	X	X	X	X								
CCB4 180-111971/47	1		13:22	X	X	X	X	X	X	X	X	X	X	X	X								
180-34362-3	5	R	13:26	X	X	X	X	X	X	X	X	X	X	X	X								
180-34362-4	5	R	13:30	X	X	X	X	X	X	X	X	X	X	X	X								
180-34362-5	5	R	13:34	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			13:37																				
ZZZZZZ			13:41																				
ZZZZZZ			13:45																				
ZZZZZZ			13:48																				
ZZZZZZ			13:52																				
ZZZZZZ			13:56																				
ZZZZZZ			13:59																				
CCV 180-111971/58	1		14:03	X	X	X	X	X	X	X	X	X	X	X	X								
CCB5 180-111971/59	1		14:09	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			14:13																				
ZZZZZZ			14:17																				
ZZZZZZ			14:20																				
ZZZZZZ			14:24																				
CRI 180-111971/64	1		14:35	X	X	X	X	X	X	X	X	X	X	X	X								
CCV 180-111971/65			14:39																				
CCB6 180-111971/66			14:45																				

Prep Types

R = Total Recoverable

T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Instrument ID: K Method: 7470A

Start Date: 07/16/2014 12:10 End Date: 07/16/2014 14:45

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
IC 180-111613/1-A			12:10	X																			
IC 180-111613/2-A			12:11	X																			
IC 180-111613/3-A			12:13	X																			
IC 180-111613/4-A			12:15	X																			
IC 180-111613/5-A			12:16	X																			
IC 180-111613/6-A			12:18	X																			
ICV 180-111613/7-A	1		12:26	X																			
ICB 180-111613/8-A	1		12:27	X																			
CRA 180-111613/9-A	1		12:29	X																			
CCV 180-111613/10-A	1		12:31	X																			
CCB 180-111613/11-A	1		12:33	X																			
MB 180-111612/1-A	1	T	12:35	X																			
LCS 180-111612/2-A	1	T	12:37	X																			
LCSD 180-111612/3-A	1	T	12:38	X																			
180-34362-1	1	T	12:40	X																			
180-34362-2	1	T	12:42	X																			
180-34362-3	1	T	12:44	X																			
180-34362-4	1	T	12:45	X																			
180-34362-5	1	T	12:47	X																			
ZZZZZZ			12:49																				
ZZZZZZ			12:50																				
CCV 180-111613/10-A	1		12:52	X																			
CCB 180-111613/11-A	1		12:54	X																			
ZZZZZZ			12:56																				
ZZZZZZ			12:58																				
ZZZZZZ			12:59																				
ZZZZZZ			13:01																				
ZZZZZZ			13:03																				
ZZZZZZ			13:04																				
ZZZZZZ			13:06																				
ZZZZZZ			13:08																				
ZZZZZZ			13:10																				
ZZZZZZ			13:11																				
CCV 180-111613/10-A			13:13																				
CCB 180-111613/11-A			13:15																				
ZZZZZZ			13:17																				
ZZZZZZ			13:18																				
ZZZZZZ			13:20																				
ZZZZZZ			13:22																				
ZZZZZZ			13:23																				
ZZZZZZ			13:25																				
ZZZZZZ			13:27																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Instrument ID: K Method: 7470A

Start Date: 07/16/2014 12:10 End Date: 07/16/2014 14:45

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
ZZZZZZ			13:29																				
ZZZZZZ			13:31																				
ZZZZZZ			13:33																				
CCV 180-111613/10-A			13:35																				
CCB 180-111613/11-A			13:37																				
ZZZZZZ			13:39																				
ZZZZZZ			13:41																				
ZZZZZZ			13:42																				
ZZZZZZ			13:44																				
ZZZZZZ			13:46																				
ZZZZZZ			13:47																				
ZZZZZZ			13:49																				
ZZZZZZ			13:51																				
ZZZZZZ			13:52																				
ZZZZZZ			13:54																				
CCV 180-111613/10-A			13:56																				
CCB 180-111613/11-A			13:58																				
ZZZZZZ			14:00																				
ZZZZZZ			14:02																				
ZZZZZZ			14:03																				
ZZZZZZ			14:05																				
ZZZZZZ			14:07																				
ZZZZZZ			14:08																				
ZZZZZZ			14:10																				
ZZZZZZ			14:12																				
ZZZZZZ			14:14																				
ZZZZZZ			14:15																				
CCV 180-111613/10-A			14:17																				
CCB 180-111613/11-A			14:19																				
ZZZZZZ			14:21																				
ZZZZZZ			14:22																				
ZZZZZZ			14:24																				
ZZZZZZ			14:26																				
ZZZZZZ			14:29																				
ZZZZZZ			14:31																				
ZZZZZZ			14:33																				
CCV 180-111613/10-A			14:35																				
CCV 180-111613/10-A			14:37																				
CCB 180-111613/11-A			14:39																				
ZZZZZZ			14:41																				
CCV 180-111613/10-A			14:43																				
CCB 180-111613/11-A			14:45																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Instrument ID: K Method: 7470A

Start Date: 07/16/2014 12:10 End Date: 07/16/2014 14:45

Prep Types
T = Total/NA

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

ICP-MS Instrument ID: M Start Date: 07/18/2014 End Date: 07/18/2014

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 180-111971/2 IC	10:19	100		100		100		100		100	
STD2 180-111971/3 IC	10:23	91		95		92		87		91	
STD3 180-111971/4 IC	10:26	94		95		95		95		96	
ICV 180-111971/5	10:30	95		96		95		92		95	
ICB 180-111971/6	10:33	99		100		98		99		99	
CRI 180-111971/7	10:36	100		104		107		102		102	
ICSA 180-111971/8	10:40	84		92		93		88		91	
ICSAB 180-111971/9	10:43	86		95		97		92		95	
CCV 180-111971/10	10:47	96		102		110		103		103	
CCB1 180-111971/11	10:53	105		112		112		113		112	
CCV 180-111971/34	12:24	93		95		100		98		98	
CCB3 180-111971/35	12:30	107		109		111		114		110	
MB 180-111726/1-A	12:34	106		108		113		114		111	
LCS 180-111726/2-A	12:38	110		108		113		109		107	
180-34362-1	13:09	107		109		118		113		110	
180-34362-2	13:13	100		103		110		110		107	
CCV 180-111971/46	13:16	102		107		106		105		104	
CCB4 180-111971/47	13:22	114		118		115		119		119	
180-34362-3	13:26	116		120		116		120		119	
180-34362-4	13:30	100		102		108		106		105	
180-34362-5	13:34	95		99		104		100		99	
CCV 180-111971/58	14:03	102		106		104		104		103	
CCB5 180-111971/59	14:09	113		118		117		118		115	
CRI 180-111971/64	14:35	103		105		113		111		107	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

ICP-MS Instrument ID: M Start Date: 07/18/2014 End Date: 07/18/2014

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 180-111971/2 IC	10:19	100		100		100					
STD2 180-111971/3 IC	10:23	94		94		90					
STD3 180-111971/4 IC	10:26	96		96		98					
ICV 180-111971/5	10:30	96		96		95					
ICB 180-111971/6	10:33	98		98		100					
CRI 180-111971/7	10:36	101		101		104					
ICSA 180-111971/8	10:40	96		96		96					
ICSAB 180-111971/9	10:43	100		100		96					
CCV 180-111971/10	10:47	105		105		100					
CCB1 180-111971/11	10:53	110		110		109					
CCV 180-111971/34	12:24	101		101		98					
CCB3 180-111971/35	12:30	109		109		107					
MB 180-111726/1-A	12:34	111		111		108					
LCS 180-111726/2-A	12:38	111		112		105					
180-34362-1	13:09	111		111		105					
180-34362-2	13:13	108		109		108					
CCV 180-111971/46	13:16	104		105		99					
CCB4 180-111971/47	13:22	115		115		113					
180-34362-3	13:26	116		116		111					
180-34362-4	13:30	107		108		103					
180-34362-5	13:34	102		104		95					
CCV 180-111971/58	14:03	102		103		97					
CCB5 180-111971/59	14:09	111		111		110					
CRI 180-111971/64	14:35	107		107		108					

Dilution Corrected Concentrations

STD1 1241003 NT STD 7/18/2014 10:19:27 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	10:19:46	99.791%	-0.070	0.045	0.013	0.000	-1.921	0.192	-0.066
2	10:20:05	99.044%	-0.046	-0.428	-0.172	0.000	3.582	-0.061	-0.014
3	10:20:24	101.165%	0.116	0.384	0.159	0.000	-1.661	-0.132	0.080
x		100.000%	0.000	0.000	-0.000	0.000	0.000	0.000	-0.000
σ		1.076%	0.101	0.408	0.166	0.000	3.105	0.170	0.074
%RSD		1.076	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	10:19:46	-0.035	-0.049	0.000	0.159	-6.685	-0.456	99.676%	0.000
2	10:20:05	-0.092	0.103	0.000	-0.286	7.431	-2.839	99.821%	0.045
3	10:20:24	0.127	-0.054	0.000	0.128	-0.746	3.295	100.504%	-0.045
x		-0.000	0.000	0.000	-0.000	-0.000	0.000	100.000%	-0.000
σ		0.113	0.090	0.000	0.249	7.088	3.092	0.442%	0.045
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.442	0.000

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:19:46	0.091	-0.009	0.004	0.052	-0.631	0.001	-0.078	0.016
2	10:20:05	0.017	0.005	-0.008	-0.163	1.054	-0.006	0.008	-0.000
3	10:20:24	-0.109	0.004	0.004	0.111	-0.423	0.004	0.070	-0.016
x		-0.000	0.000	0.000	-0.000	-0.000	0.000	0.000	-0.000
σ		0.101	0.008	0.007	0.144	0.918	0.005	0.074	0.016
%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	10:19:46	0.050	0.082	-0.066	0.017	-0.255	-0.259	0.000	0.000
2	10:20:05	-0.093	-0.053	0.040	0.033	0.080	0.374	0.000	0.002
3	10:20:24	0.043	-0.030	0.026	-0.051	0.175	-0.115	0.000	-0.002
x		-0.000	-0.000	0.000	-0.000	0.000	0.000	0.000	0.000
σ		0.081	0.072	0.057	0.045	0.226	0.331	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	10:19:46	98.946%	0.002	-0.009	99.597%	-0.006	0.002	0.010	0.010
2	10:20:05	99.854%	-0.009	-0.001	100.029%	0.001	-0.003	-0.000	0.005
3	10:20:24	101.200%	0.008	0.011	100.374%	0.005	0.000	-0.009	-0.014
x		100.000%	0.000	-0.000	100.000%	0.000	-0.000	-0.000	-0.000
σ		1.134%	0.009	0.010	0.389%	0.005	0.003	0.010	0.013
%RSD		1.134	0.000	0.000	0.389	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	10:19:46	99.014%	0.001	0.005	-0.007	0.000	0.001	99.056%	98.740%
2	10:20:05	99.719%	-0.013	-0.005	-0.013	-0.000	0.001	100.383%	99.871%
3	10:20:24	101.267%	0.012	-0.000	0.019	-0.000	-0.002	100.561%	101.389%
x		100.000%	-0.000	0.000	-0.000	0.000	-0.000	100.000%	100.000%
σ		1.152%	0.013	0.005	0.017	0.000	0.002	0.822%	1.329%
%RSD		1.152	0.000	0.000	0.000	0.000	0.000	0.822	1.329

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:19:46	0.000	-0.001	0.002	-0.000	-0.001	100.318%
2	10:20:05	-0.001	0.000	-0.001	-0.002	-0.001	99.388%
3	10:20:24	0.001	0.001	-0.000	0.002	0.002	100.294%
x		0.000	0.000	-0.000	0.000	0.000	100.000%
σ		0.001	0.001	0.001	0.002	0.002	0.530%
%RSD		0.000	0.000	0.000	0.000	0.000	0.530

STD2 1252631 7/18/2014 10:23:17 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	10:23:17	91.178%	197.400	0.272	0.084	0.000	98980.000	98730.000	98720.000
2	10:23:36	91.588%	200.800	1.174	0.024	0.000	99820.000	100100.000	99700.000
3	10:23:56	91.126%	201.800	1.962	-0.023	0.000	101200.000	101200.000	101600.000
x		91.297%	200.000	1.136	0.028	0.000	100000.000	100000.000	100000.000
σ		0.253%	2.277	0.846	0.053	0.000	1119.000	1218.000	1458.000
%RSD		0.277	1.138	74.460	188.300	0.000	1.119	1.218	1.458
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:23:17	987.200	13.720	0.000	99030.000	98970.000	99170.000	94.325%	0.055
2	10:23:36	997.200	14.390	0.000	99850.000	99700.000	100200.000	94.303%	0.221
3	10:23:56	1016.000	14.380	0.000	101100.000	101300.000	100600.000	94.995%	0.452
x		1000.000	14.160	0.000	100000.000	100000.000	100000.000	94.541%	0.243
σ		14.420	0.381	0.000	1049.000	1207.000	750.000	0.393%	0.199
%RSD		1.442	2.689	0.000	1.049	1.207	0.750	0.416	82.140
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:23:17	198.700	199.200	990.500	49460.000	49580.000	198.700	197.800	197.700
2	10:23:36	200.000	199.500	997.800	50060.000	50020.000	200.600	198.200	200.200
3	10:23:56	201.300	201.300	1012.000	50480.000	50410.000	200.700	204.000	202.100
x		200.000	200.000	1000.000	50000.000	50000.000	200.000	200.000	200.000
σ		1.347	1.141	10.760	510.800	414.400	1.114	3.505	2.183
%RSD		0.674	0.571	1.076	1.022	0.829	0.557	1.753	1.091
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:23:17	198.600	197.200	197.300	199.900	199.500	203.300	0.000	199.500
2	10:23:36	199.300	200.700	200.800	197.900	196.000	196.000	0.000	199.500
3	10:23:56	202.100	202.100	201.800	202.200	204.500	200.700	0.000	201.000
x		200.000	200.000	200.000	200.000	200.000	200.000	0.000	200.000
σ		1.847	2.515	2.368	2.180	4.259	3.695	0.000	0.856
%RSD		0.924	1.257	1.184	1.090	2.129	1.847	0.000	0.428
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:23:17	91.165%	0.169	0.084	86.018%	198.500	198.500	199.400	198.700
2	10:23:36	92.593%	0.131	0.078	86.702%	200.900	199.900	198.600	198.900
3	10:23:56	93.342%	0.152	0.079	88.583%	200.600	201.600	202.100	202.300
x		92.367%	0.151	0.080	87.101%	200.000	200.000	200.000	200.000
σ		1.106%	0.019	0.003	1.328%	1.342	1.579	1.830	2.034
%RSD		1.198	12.570	4.168	1.525	0.671	0.790	0.915	1.017
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:23:17	90.569%	0.080	0.182	0.158	198.100	198.300	92.675%	93.077%
2	10:23:36	91.151%	0.115	0.233	0.212	199.900	201.100	93.614%	93.352%
3	10:23:56	91.532%	0.064	0.198	0.213	202.000	200.600	94.969%	94.531%
x		91.084%	0.086	0.204	0.194	200.000	200.000	93.753%	93.653%
σ		0.485%	0.026	0.026	0.031	1.973	1.515	1.153%	0.773%
%RSD		0.532	30.550	12.870	16.160	0.986	0.757	1.230	0.825
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	10:23:17	194.900	195.900	194.400	194.900	195.500	91.174%		
2	10:23:36	201.300	202.000	202.100	201.500	201.500	89.806%		
3	10:23:56	203.800	202.100	203.500	203.500	203.000	90.366%		
x		200.000	200.000	200.000	200.000	200.000	90.449%		
σ		4.554	3.571	4.869	4.484	3.973	0.688%		
%RSD		2.277	1.786	2.434	2.242	1.986	0.761		

STD3 1252632 7/18/2014 10:26:39 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	10:26:39	92.495%	0.126	199.100	198.200	0.000	45.580	22.250	22.100
2	10:26:59	93.819%	0.140	200.200	198.500	0.000	48.520	21.210	21.910
3	10:27:18	94.580%	0.112	200.700	203.300	0.000	48.390	21.660	21.150
x		93.631%	0.126	200.000	200.000	0.000	47.500	21.710	21.720
σ		1.055%	0.014	0.816	2.833	0.000	1.661	0.519	0.502
%RSD		1.127	10.930	0.408	1.416	0.000	3.496	2.394	2.313
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:26:39	2.611	9932.000	0.000	24.960	19.200	72.520	94.981%	198.200
2	10:26:59	2.772	10010.000	0.000	23.540	31.640	69.810	95.535%	203.000
3	10:27:18	3.114	10060.000	0.000	23.600	50.620	73.170	95.506%	198.900
x		2.832	10000.000	0.000	24.030	33.820	71.830	95.341%	200.000
σ		0.257	63.400	0.000	0.800	15.820	1.780	0.312%	2.578
%RSD		9.071	0.634	0.000	3.330	46.790	2.479	0.327	1.289
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:26:39	-0.097	-0.000	0.181	54.710	57.970	0.047	0.125	0.377
2	10:26:59	0.068	0.048	0.218	36.430	35.750	0.039	0.009	0.344
3	10:27:18	-0.060	0.054	0.237	27.280	22.600	0.029	0.014	0.310
x		-0.030	0.034	0.212	39.470	38.770	0.039	0.049	0.344
σ		0.087	0.030	0.029	13.960	17.880	0.009	0.066	0.034
%RSD		291.900	88.260	13.600	35.380	46.110	23.120	133.100	9.829
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:26:39	0.305	0.405	0.238	-0.075	0.337	-0.281	0.000	0.059
2	10:26:59	0.217	0.470	0.394	0.221	0.560	0.559	0.000	0.045
3	10:27:18	0.286	0.391	0.321	0.230	0.584	1.418	0.000	0.053
x		0.269	0.422	0.318	0.125	0.494	0.565	0.000	0.052
σ		0.047	0.042	0.078	0.173	0.136	0.850	0.000	0.007
%RSD		17.280	10.020	24.450	138.200	27.580	150.300	0.000	12.730
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:26:39	92.298%	197.400	197.000	93.031%	0.134	0.080	0.130	-0.604
2	10:26:59	94.704%	200.200	201.800	95.340%	0.093	0.070	0.096	-0.417
3	10:27:18	96.502%	202.500	201.200	96.502%	0.093	0.075	-0.000	-0.534
x		94.501%	200.000	200.000	94.958%	0.107	0.075	0.075	-0.518
σ		2.109%	2.568	2.603	1.767%	0.024	0.005	0.068	0.095
%RSD		2.232	1.284	1.301	1.860	22.490	7.336	89.660	18.270
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:26:39	93.755%	200.100	198.800	198.000	0.097	0.279	93.724%	94.343%
2	10:26:59	96.559%	199.100	199.400	200.300	0.083	0.292	97.000%	96.727%
3	10:27:18	96.911%	200.800	201.800	201.700	0.049	0.286	98.196%	98.192%
x		95.741%	200.000	200.000	200.000	0.076	0.285	96.307%	96.421%
σ		1.730%	0.861	1.618	1.881	0.024	0.007	2.315%	1.943%
%RSD		1.806	0.431	0.809	0.940	32.080	2.277	2.404	2.015
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	10:26:39	0.039	0.048	0.058	0.049	0.054	97.525%		
2	10:26:59	0.051	0.045	0.047	0.065	0.051	98.639%		
3	10:27:18	0.044	0.055	0.051	0.065	0.061	98.693%		
x		0.045	0.049	0.052	0.059	0.055	98.286%		
σ		0.006	0.005	0.005	0.009	0.005	0.659%		
%RSD		13.590	9.955	10.160	15.900	9.080	0.670		

ICV 1240999 7/18/2014 10:30:02 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	10:30:02	94.893%	74.740	77.420	76.270	0.000	38230.000	37170.000	37130.000
2	10:30:21	96.223%	74.720	76.670	77.370	0.000	37670.000	37210.000	37250.000
3	10:30:40	94.414%	78.580	81.150	81.160	0.000	38200.000	37850.000	38070.000
x		95.176%	95.018%	98.017%	97.832%	0.000	95.081%	93.535%	93.712%
σ		0.937%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.985	2.924	3.056	3.281	0.000	0.834	1.019	1.363

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:30:02	376.500	3755.000	0.000	38730.000	38010.000	37990.000	95.740%	76.950
2	10:30:21	375.500	3790.000	0.000	38700.000	38250.000	38240.000	96.018%	77.020
3	10:30:40	381.500	3886.000	0.000	38890.000	37730.000	38310.000	96.110%	80.090
x		94.459%	95.263%	0.000	96.934%	94.989%	95.446%	95.956%	97.524%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.193%	n/a
%RSD		0.841	1.780	0.000	0.272	0.696	0.439	0.201	2.298

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:30:02	75.220	77.130	374.900	19120.000	19370.000	77.800	78.390	78.430
2	10:30:21	75.520	78.230	384.500	19160.000	19410.000	78.170	78.300	79.120
3	10:30:40	75.420	78.310	379.700	19260.000	19480.000	77.640	77.690	79.680
x		94.234%	97.361%	94.922%	95.907%	97.103%	97.339%	97.660%	98.845%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.203	0.849	1.257	0.385	0.271	0.346	0.485	0.794

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:30:02	78.920	78.370	80.440	79.870	80.540	79.170	0.000	75.380
2	10:30:21	79.320	78.820	79.380	80.420	79.850	81.930	0.000	76.050
3	10:30:40	79.510	79.730	79.010	76.820	78.340	78.190	0.000	75.660
x		99.063%	98.715%	99.512%	98.797%	99.471%	99.704%	0.000	94.623%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.382	0.883	0.934	2.456	1.416	2.436	0.000	0.448

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:30:02	93.547%	76.790	76.720	91.202%	77.340	76.840	76.900	76.140
2	10:30:21	94.765%	77.290	78.650	91.904%	77.530	77.190	75.810	76.090
3	10:30:40	95.648%	78.990	78.470	92.954%	77.540	77.480	77.830	76.820
x		94.653%	97.112%	97.429%	92.020%	96.838%	96.462%	96.059%	95.439%
σ		1.055%	n/a	n/a	0.882%	n/a	n/a	n/a	n/a
%RSD		1.115	1.481	1.369	0.958	0.142	0.417	1.320	0.529

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:30:02	93.891%	76.020	77.930	77.980	76.680	76.190	95.741%	95.034%
2	10:30:21	94.963%	76.610	77.970	78.160	75.660	77.150	96.170%	96.647%
3	10:30:40	95.299%	77.220	78.490	77.720	76.350	76.060	97.436%	97.621%
x		94.718%	95.771%	97.661%	97.440%	95.289%	95.583%	96.449%	96.434%
σ		0.735%	n/a	n/a	n/a	n/a	n/a	0.881%	1.307%
%RSD		0.776	0.780	0.399	0.283	0.688	0.775	0.914	1.355

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:30:02	76.810	78.560	76.320	72.120	73.350	95.628%
2	10:30:21	78.890	81.150	78.500	74.380	75.620	94.032%
3	10:30:40	79.410	82.080	79.290	74.840	76.380	94.135%
x		97.961%	100.744%	97.548%	92.229%	93.892%	94.598%
σ		n/a	n/a	n/a	n/a	n/a	0.893%
%RSD		1.755	2.259	1.971	1.972	2.098	0.944

ICB 7/18/2014 10:33:27 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	10:33:27	97.481%	-0.303	2.139	0.717	0.000	7.248	0.396	0.817
2	10:33:46	98.781%	-0.066	1.137	0.688	0.000	6.998	0.450	0.498
3	10:34:06	99.643%	-0.027	1.237	0.424	0.000	5.301	0.818	0.462
x		98.635%	-0.132	1.504	0.610	0.000	6.515	0.555	0.592
σ		1.089%	0.149	0.552	0.161	0.000	1.059	0.230	0.195
%RSD		1.104	113.100	36.680	26.440	0.000	16.260	41.470	32.990

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:33:27	-0.068	3.362	0.000	4.555	-0.596	-6.457	99.578%	0.202
2	10:33:46	-0.177	2.747	0.000	4.513	-2.687	-3.289	100.092%	0.133
3	10:34:06	-0.097	2.674	0.000	3.392	-2.816	-2.895	101.185%	0.086
x		-0.114	2.928	0.000	4.153	-2.033	-4.214	100.285%	0.141
σ		0.056	0.378	0.000	0.660	1.246	1.953	0.820%	0.058
%RSD		49.550	12.900	0.000	15.890	61.320	46.340	0.818	41.340

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:33:27	-0.036	-0.031	0.010	21.550	21.830	-0.015	0.031	-0.110
2	10:33:46	0.165	-0.008	0.026	15.580	17.730	-0.011	-0.056	0.012
3	10:34:06	-0.016	-0.018	0.013	10.930	13.650	-0.008	-0.036	-0.009
x		0.038	-0.019	0.016	16.020	17.740	-0.011	-0.020	-0.036
σ		0.111	0.012	0.008	5.327	4.086	0.003	0.046	0.065
%RSD		295.000	61.040	49.290	33.250	23.040	29.220	226.600	182.900

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:33:27	0.006	0.077	0.031	-0.190	0.264	-0.806	0.000	0.000
2	10:33:46	-0.172	0.009	0.027	0.096	0.696	0.388	0.000	0.002
3	10:34:06	-0.041	0.024	0.102	-0.289	0.322	-0.578	0.000	0.001
x		-0.069	0.037	0.053	-0.128	0.427	-0.332	0.000	0.001
σ		0.092	0.036	0.042	0.200	0.234	0.633	0.000	0.001
%RSD		133.000	97.050	79.690	156.800	54.830	190.900	0.000	100.600

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:33:27	96.615%	0.608	0.650	97.038%	0.047	0.024	0.013	0.007
2	10:33:46	97.729%	0.603	0.538	98.615%	0.027	0.033	-0.014	-0.014
3	10:34:06	99.811%	0.484	0.437	100.806%	0.025	0.036	0.033	0.024
x		98.051%	0.565	0.542	98.819%	0.033	0.031	0.011	0.006
σ		1.622%	0.070	0.106	1.892%	0.012	0.006	0.023	0.019
%RSD		1.654	12.460	19.640	1.915	36.350	19.030	216.700	333.800

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:33:27	97.263%	-0.000	0.037	0.014	0.011	0.004	96.318%	96.661%
2	10:33:46	98.989%	0.055	0.030	0.041	0.027	0.032	98.650%	98.030%
3	10:34:06	100.499%	-0.027	0.037	0.054	0.016	0.004	99.710%	100.283%
x		98.917%	0.009	0.035	0.036	0.018	0.013	98.226%	98.324%
σ		1.619%	0.042	0.004	0.021	0.008	0.016	1.736%	1.829%
%RSD		1.637	464.200	11.280	56.890	44.610	119.100	1.767	1.860

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:33:27	0.006	0.005	0.014	0.006	0.007	98.453%
2	10:33:46	0.003	0.001	0.011	0.009	0.006	99.686%
3	10:34:06	0.005	0.000	0.003	0.001	0.003	100.626%
x		0.005	0.002	0.009	0.005	0.005	99.588%
σ		0.001	0.003	0.006	0.004	0.002	1.090%
%RSD		31.420	128.700	61.380	72.370	35.550	1.094

CRI 1228099 7/18/2014 10:36:52 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	10:36:52	97.679%	1.122	6.483	6.684	0.000	114.500	111.600	111.400
2	10:37:11	98.524%	1.153	5.823	5.912	0.000	120.300	113.700	112.100
3	10:37:30	102.223%	0.823	6.060	5.572	0.000	111.900	109.800	114.300
x		99.476%	103.295%	122.435%	121.117%	0.000	115.565%	111.696%	112.595%
σ		2.417%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.430	17.630	5.460	9.414	0.000	3.723	1.766	1.351

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:36:52	32.480	554.600	0.000	113.100	125.900	98.930	103.394%	5.414
2	10:37:11	32.430	562.100	0.000	114.900	94.430	107.900	103.519%	5.658
3	10:37:30	33.230	555.200	0.000	110.500	103.400	105.000	104.075%	5.518
x		109.046%	111.463%	0.000	112.846%	107.881%	103.948%	103.663%	110.603%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.362%	n/a
%RSD		1.357	0.747	0.000	1.931	15.010	4.408	0.349	2.207

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:36:52	1.057	2.211	5.229	59.210	58.230	0.546	1.231	2.318
2	10:37:11	1.108	2.175	5.425	59.590	62.620	0.522	1.047	2.219
3	10:37:30	1.143	2.239	5.488	58.720	59.420	0.563	1.089	2.313
x		110.263%	110.406%	107.617%	118.351%	120.175%	108.737%	112.248%	114.162%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		3.931	1.448	2.506	0.736	3.782	3.825	8.593	2.449

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:36:52	2.290	5.820	5.881	1.085	6.918	6.444	0.000	4.974
2	10:37:11	2.337	5.830	5.803	1.347	6.319	6.239	0.000	5.041
3	10:37:30	2.250	5.826	5.757	1.339	6.770	5.722	0.000	5.087
x		114.614%	116.505%	116.271%	125.681%	133.381%	122.695%	0.000	100.683%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.903	0.089	1.082	11.840	4.682	6.062	0.000	1.128

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:36:52	103.938%	5.199	5.284	100.159%	1.080	1.074	1.040	1.152
2	10:37:11	107.246%	5.193	5.311	102.661%	1.121	1.103	1.177	1.067
3	10:37:30	108.565%	5.160	5.345	103.004%	1.130	1.125	1.031	1.074
x		106.583%	103.683%	106.264%	101.941%	111.036%	110.081%	108.300%	109.768%
σ		2.384%	n/a	n/a	1.553%	n/a	n/a	n/a	n/a
%RSD		2.236	0.406	0.576	1.523	2.422	2.355	7.535	4.300

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:36:52	100.171%	5.523	2.193	2.284	10.330	10.930	99.268%	99.665%
2	10:37:11	102.793%	5.487	2.214	2.216	10.130	10.620	101.343%	101.770%
3	10:37:30	102.691%	5.508	2.177	2.196	10.780	10.920	103.196%	102.316%
x		101.885%	110.116%	109.723%	111.598%	104.153%	108.266%	101.269%	101.250%
σ		1.485%	n/a	n/a	n/a	n/a	n/a	1.965%	1.400%
%RSD		1.458	0.331	0.863	2.075	3.173	1.614	1.940	1.383

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:36:52	1.069	1.094	1.034	1.085	1.046	103.245%
2	10:37:11	1.059	1.079	1.029	1.067	1.046	103.387%
3	10:37:30	1.083	1.107	1.121	1.124	1.085	104.156%
x		106.999%	109.328%	106.124%	109.177%	105.900%	103.596%
σ		n/a	n/a	n/a	n/a	n/a	0.490%
%RSD		1.113	1.243	4.861	2.672	2.150	0.473

ICSA 1251045 7/18/2014 10:40:16 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	10:40:16	83.586%	0.010	0.948	1.090	0.000	101500.000	101100.000	102000.000
2	10:40:35	84.375%	0.006	1.770	0.697	0.000	100900.000	102600.000	104100.000
3	10:40:54	85.300%	-0.175	1.187	1.038	0.000	99860.000	102200.000	104400.000
x		84.420%	-0.053	1.302	0.942	0.000	100800.000	102000.000	103500.000
σ		0.858%	0.106	0.423	0.213	0.000	824.400	740.400	1303.000
%RSD		1.016	198.800	32.510	22.660	0.000	0.818	0.726	1.258
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:40:16	102600.000	19.090	0.000	100000.000	99160.000	100500.000	91.160%	2121.000
2	10:40:35	104800.000	20.490	0.000	100700.000	100100.000	101100.000	91.341%	2127.000
3	10:40:54	106200.000	19.510	0.000	100000.000	99290.000	101000.000	92.005%	2130.000
x		104500.000	19.700	0.000	100200.000	99500.000	100900.000	91.502%	2126.000
σ		1833.000	0.719	0.000	366.100	486.400	308.700	0.445%	4.805
%RSD		1.754	3.649	0.000	0.365	0.489	0.306	0.487	0.226
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:40:16	-0.391	0.462	0.760	101100.000	101500.000	0.050	-0.441	1.631
2	10:40:35	-0.444	0.423	0.790	102100.000	102200.000	0.047	-0.490	1.492
3	10:40:54	-0.332	0.538	0.786	102900.000	102700.000	0.053	-0.533	1.830
x		-0.389	0.475	0.779	102000.000	102100.000	0.050	-0.488	1.651
σ		0.056	0.058	0.017	910.700	614.800	0.003	0.046	0.170
%RSD		14.430	12.320	2.121	0.893	0.602	6.776	9.417	10.290
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:40:16	1.393	2.539	1.413	0.019	1.058	-0.105	0.000	0.651
2	10:40:35	1.346	2.634	1.755	-0.167	1.774	-1.158	0.000	0.715
3	10:40:54	1.611	2.502	1.765	0.005	2.283	-1.102	0.000	0.705
x		1.450	2.558	1.645	-0.048	1.705	-0.788	0.000	0.690
σ		0.141	0.068	0.200	0.103	0.616	0.593	0.000	0.035
%RSD		9.752	2.665	12.180	217.400	36.110	75.140	0.000	5.003
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:40:16	90.377%	2115.000	2137.000	86.222%	2.521	2.417	0.736	0.470
2	10:40:35	93.333%	2141.000	2160.000	88.707%	2.735	2.542	0.814	0.480
3	10:40:54	94.541%	2150.000	2177.000	90.148%	2.409	2.398	0.429	0.379
x		92.751%	2135.000	2158.000	88.359%	2.555	2.452	0.659	0.443
σ		2.142%	18.490	19.870	1.986%	0.166	0.078	0.203	0.055
%RSD		2.310	0.866	0.921	2.248	6.481	3.185	30.850	12.500
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:40:16	90.111%	0.148	0.086	0.060	0.100	0.176	93.268%	94.313%
2	10:40:35	91.384%	0.212	0.072	0.085	0.138	0.124	95.547%	96.322%
3	10:40:54	92.785%	0.140	0.065	0.084	0.135	0.154	97.595%	98.501%
x		91.427%	0.167	0.075	0.076	0.124	0.152	95.470%	96.379%
σ		1.338%	0.039	0.011	0.014	0.021	0.026	2.165%	2.095%
%RSD		1.463	23.590	14.270	18.400	17.050	17.190	2.267	2.173
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	10:40:16	0.010	0.010	0.196	0.212	0.193	99.740%		
2	10:40:35	0.013	0.005	0.232	0.228	0.217	95.208%		
3	10:40:54	0.008	0.006	0.244	0.223	0.227	94.164%		
x		0.010	0.007	0.224	0.221	0.212	96.371%		
σ		0.003	0.003	0.025	0.008	0.017	2.964%		
%RSD		24.730	36.430	11.040	3.561	8.086	3.076		

ICSAB 1251078 7/18/2014 10:43:41 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	10:43:41	84.039%	21.190	56.350	55.080	0.000	105500.000	107600.000	110300.000
2	10:44:00	87.146%	20.460	53.930	52.860	0.000	103500.000	107300.000	110700.000
3	10:44:20	86.379%	21.770	52.160	55.390	0.000	103900.000	108800.000	112800.000
x		85.854%	105.691%	108.297%	108.889%	0.000	104.295%	107.884%	111.270%
σ		1.618%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.885	3.088	3.878	2.530	0.000	0.995	0.713	1.238

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:43:41	111800.000	591.700	0.000	105100.000	101900.000	105300.000	95.073%	2214.000
2	10:44:00	112300.000	593.100	0.000	104400.000	103000.000	105500.000	95.323%	2224.000
3	10:44:20	114400.000	600.200	0.000	104400.000	102500.000	105900.000	95.877%	2240.000
x		112.835%	118.995%	0.000	104.631%	102.455%	105.571%	95.424%	111.290%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.411%	n/a
%RSD		1.232	0.765	0.000	0.399	0.535	0.271	0.431	0.599

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:43:41	21.120	21.990	21.590	106900.000	107500.000	20.720	20.120	22.240
2	10:44:00	19.780	21.780	21.810	108300.000	108500.000	20.770	20.040	22.290
3	10:44:20	20.610	21.980	21.830	108700.000	108400.000	20.900	19.490	22.660
x		102.527%	109.597%	94.550%	107.987%	108.121%	103.974%	99.411%	111.977%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		3.305	0.539	0.612	0.878	0.530	0.442	1.733	1.016

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:43:41	21.360	22.620	22.130	22.370	57.340	53.390	0.000	21.820
2	10:44:00	21.740	22.590	21.870	22.170	58.180	56.590	0.000	22.030
3	10:44:20	21.440	22.520	21.540	21.670	55.830	56.330	0.000	21.810
x		107.563%	90.309%	87.396%	110.354%	114.234%	110.868%	0.000	109.440%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.942	0.228	1.365	1.628	2.078	3.205	0.000	0.551

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:43:41	94.829%	2276.000	2302.000	90.115%	22.650	22.190	22.040	21.030
2	10:44:00	96.631%	2310.000	2321.000	92.165%	22.900	22.160	21.780	21.560
3	10:44:20	99.228%	2325.000	2346.000	93.770%	22.140	22.050	22.180	21.060
x		96.896%	115.181%	116.157%	92.017%	112.820%	110.660%	110.010%	106.090%
σ		2.211%	n/a	n/a	1.832%	n/a	n/a	n/a	n/a
%RSD		2.282	1.096	0.953	1.991	1.719	0.347	0.919	1.388

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:43:41	93.565%	109.500	21.980	22.030	20.770	21.260	97.189%	97.751%
2	10:44:00	95.209%	110.300	22.310	21.850	21.070	21.400	100.187%	100.120%
3	10:44:20	97.387%	110.600	21.820	22.220	21.160	21.220	101.791%	102.330%
x		95.387%	110.119%	110.163%	110.160%	104.999%	106.462%	99.722%	100.067%
σ		1.917%	n/a	n/a	n/a	n/a	n/a	2.336%	2.290%
%RSD		2.010	0.528	1.138	0.836	0.972	0.442	2.342	2.288

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:43:41	20.550	21.300	21.210	21.300	21.140	95.478%
2	10:44:00	21.580	22.250	22.360	22.200	22.010	94.985%
3	10:44:20	21.680	22.650	22.580	22.350	22.300	95.939%
x		106.348%	110.346%	110.247%	109.742%	109.095%	95.468%
σ		n/a	n/a	n/a	n/a	n/a	0.477%
%RSD		2.944	3.136	3.323	2.588	2.770	0.500

CCV 1241000 7/18/2014 10:47:06 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	10:47:06	95.824%	98.600	93.750	98.490	0.000	50430.000	51820.000	52520.000
2	10:47:25	95.071%	101.300	99.280	100.000	0.000	50830.000	51960.000	53100.000
3	10:47:44	97.103%	96.220	97.730	106.100	0.000	50160.000	51950.000	53100.000
x		95.999%	98.718%	96.919%	101.555%	0.000	100.949%	103.821%	105.817%
σ		1.027%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.070	2.590	2.941	3.988	0.000	0.672	0.155	0.634
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:47:06	522.100	5284.000	0.000	51540.000	50670.000	50790.000	102.297%	104.000
2	10:47:25	530.400	5343.000	0.000	51350.000	49960.000	50810.000	102.320%	104.400
3	10:47:44	530.000	5329.000	0.000	51550.000	49460.000	50890.000	102.479%	103.200
x		105.494%	106.370%	0.000	102.955%	100.063%	101.659%	102.365%	103.852%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.099%	n/a
%RSD		0.889	0.579	0.000	0.213	1.222	0.101	0.097	0.558
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:47:06	100.200	102.300	511.700	25690.000	25580.000	100.700	100.100	101.100
2	10:47:25	101.300	102.600	517.200	25930.000	25650.000	100.900	102.200	101.800
3	10:47:44	100.200	102.500	516.900	25910.000	25680.000	101.600	99.010	102.400
x		100.560%	102.494%	103.059%	103.385%	102.537%	101.054%	100.457%	101.762%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.611	0.158	0.602	0.510	0.203	0.494	1.626	0.604
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:47:06	100.400	100.100	98.780	99.110	100.300	97.260	0.000	95.880
2	10:47:25	101.200	100.300	99.110	99.410	97.070	99.010	0.000	95.920
3	10:47:44	101.500	100.900	100.600	97.590	97.840	96.720	0.000	95.160
x		101.026%	100.444%	99.488%	98.705%	98.399%	97.660%	0.000	95.651%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.576	0.449	0.957	0.992	1.708	1.225	0.000	0.447
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:47:06	107.972%	108.900	111.400	102.360%	98.000	97.640	99.510	99.660
2	10:47:25	109.645%	109.100	108.800	103.329%	99.120	98.990	99.080	100.300
3	10:47:44	111.526%	106.600	106.400	103.867%	98.450	98.820	99.690	100.200
x		109.714%	108.179%	108.882%	103.186%	98.527%	98.484%	99.427%	100.057%
σ		1.778%	n/a	n/a	0.764%	n/a	n/a	n/a	n/a
%RSD		1.620	1.298	2.287	0.740	0.572	0.747	0.314	0.347
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:47:06	102.475%	98.850	98.220	98.470	98.440	100.100	104.247%	104.147%
2	10:47:25	103.703%	99.100	99.260	98.450	102.000	102.300	104.472%	105.215%
3	10:47:44	103.873%	100.400	99.720	99.510	99.090	99.960	106.658%	105.723%
x		103.350%	99.447%	99.066%	98.806%	99.827%	100.805%	105.126%	105.029%
σ		0.763%	n/a	n/a	n/a	n/a	n/a	1.331%	0.804%
%RSD		0.738	0.829	0.775	0.614	1.870	1.299	1.266	0.766
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	10:47:06	101.500	104.400	101.600	100.700	100.300	100.162%		
2	10:47:25	102.500	106.600	103.500	103.000	102.000	100.499%		
3	10:47:44	102.800	106.800	104.000	103.800	102.700	100.362%		
x		102.294%	105.924%	103.036%	102.463%	101.660%	100.341%		
σ		n/a	n/a	n/a	n/a	n/a	0.169%		
%RSD		0.692	1.271	1.269	1.577	1.195	0.169		

CCB1 7/18/2014 10:53:15 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	10:53:34	102.724%	-0.147	0.236	0.019	0.000	3.178	0.556	0.998
2	10:53:53	103.827%	-0.110	-0.346	-0.298	0.000	4.796	1.783	1.007
3	10:54:12	106.924%	-0.161	0.633	-0.086	0.000	1.072	0.526	1.169
x		104.492%	-0.139	0.174	-0.122	0.000	3.015	0.955	1.058
σ		2.177%	0.026	0.492	0.162	0.000	1.867	0.717	0.096
%RSD		2.084	18.880	282.600	133.200	0.000	61.930	75.130	9.110
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:53:34	-0.054	1.924	0.000	4.299	1.637	-4.625	110.935%	0.047
2	10:53:53	0.085	1.839	0.000	2.853	-7.534	-3.433	111.825%	0.105
3	10:54:12	0.075	1.572	0.000	3.046	-11.160	-4.926	111.969%	0.224
x		0.035	1.778	0.000	3.399	-5.685	-4.328	111.576%	0.125
σ		0.078	0.184	0.000	0.785	6.595	0.790	0.560%	0.090
%RSD		218.800	10.350	0.000	23.090	116.000	18.250	0.502	71.900
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:53:34	-0.023	-0.009	0.017	12.040	7.640	0.003	-0.036	-0.223
2	10:53:53	0.070	-0.015	0.004	10.730	5.696	-0.002	-0.052	-0.208
3	10:54:12	0.060	-0.055	0.009	9.374	3.752	-0.003	-0.019	-0.246
x		0.035	-0.027	0.010	10.720	5.696	-0.001	-0.036	-0.226
σ		0.051	0.025	0.007	1.334	1.944	0.003	0.016	0.019
%RSD		144.600	94.320	65.850	12.450	34.130	404.500	45.520	8.426
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:53:34	-0.220	0.043	0.057	0.148	0.880	0.593	0.000	0.001
2	10:53:53	-0.137	-0.053	0.017	-0.071	1.054	0.598	0.000	0.001
3	10:54:12	-0.108	-0.037	0.013	-0.150	0.690	-0.479	0.000	-0.001
x		-0.155	-0.016	0.029	-0.025	0.875	0.237	0.000	0.000
σ		0.058	0.052	0.025	0.154	0.182	0.620	0.000	0.001
%RSD		37.550	331.100	84.970	626.200	20.830	261.200	0.000	338.300
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:53:34	109.562%	0.765	0.769	111.517%	-0.075	-0.113	-0.013	-0.006
2	10:53:53	111.859%	0.766	0.665	113.425%	-0.101	-0.108	0.005	0.007
3	10:54:12	113.873%	0.631	0.651	114.374%	-0.089	-0.103	-0.023	-0.006
x		111.765%	0.721	0.695	113.105%	-0.088	-0.108	-0.010	-0.002
σ		2.157%	0.078	0.065	1.455%	0.013	0.005	0.014	0.008
%RSD		1.930	10.780	9.335	1.286	14.290	4.349	138.100	499.100
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:53:34	110.264%	-0.065	0.073	0.119	-0.006	0.006	107.883%	107.639%
2	10:53:53	111.711%	-0.043	0.093	0.068	-0.001	0.011	110.259%	109.872%
3	10:54:12	113.369%	-0.109	0.053	0.084	0.004	0.006	111.796%	111.256%
x		111.781%	-0.073	0.073	0.090	-0.001	0.008	109.979%	109.589%
σ		1.554%	0.033	0.020	0.026	0.005	0.003	1.972%	1.825%
%RSD		1.390	45.980	27.960	28.460	422.600	40.900	1.793	1.665
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	10:53:34	0.005	0.005	0.004	0.004	0.004	108.372%		
2	10:53:53	0.007	0.005	0.005	0.009	0.004	108.774%		
3	10:54:12	0.008	0.004	0.010	0.004	0.007	110.339%		
x		0.007	0.005	0.006	0.006	0.005	109.162%		
σ		0.001	0.001	0.003	0.002	0.002	1.040%		
%RSD		17.920	12.330	51.080	42.350	33.930	0.952		

MB 7/18/2014 10:56:58 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	10:57:17	109.238%	0.087	0.272	-0.142	0.000	-13.840	-0.182	0.198
2	10:57:37	108.581%	-0.008	-0.375	-0.112	0.000	-9.695	-0.010	0.336
3	10:57:56	109.749%	-0.092	0.696	-0.567	0.000	-10.970	0.152	0.237
x		109.189%	-0.004	0.198	-0.274	0.000	-11.500	-0.013	0.257
σ		0.585%	0.089	0.539	0.254	0.000	2.121	0.167	0.071
%RSD		0.536	2133.000	273.000	92.880	0.000	18.440	1263.000	27.690
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:57:17	-0.004	0.937	0.000	-1.623	-5.990	-9.350	115.041%	0.021
2	10:57:37	-0.032	0.594	0.000	-0.793	-0.744	-8.320	115.241%	0.002
3	10:57:56	0.060	0.889	0.000	-2.422	0.863	-7.184	116.305%	0.039
x		0.008	0.807	0.000	-1.613	-1.957	-8.285	115.529%	0.020
σ		0.047	0.186	0.000	0.814	3.584	1.084	0.679%	0.019
%RSD		590.400	23.080	0.000	50.500	183.200	13.080	0.588	90.410
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:57:17	-0.029	-0.024	-0.013	7.109	0.765	-0.010	-0.026	-0.265
2	10:57:37	0.021	-0.020	-0.032	6.654	1.322	-0.001	-0.022	-0.208
3	10:57:56	-0.013	-0.012	-0.027	5.797	-1.015	-0.011	-0.032	-0.288
x		-0.007	-0.019	-0.024	6.520	0.357	-0.007	-0.027	-0.254
σ		0.026	0.006	0.010	0.666	1.221	0.005	0.005	0.041
%RSD		363.900	33.930	40.850	10.220	341.900	76.960	19.630	16.250
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:57:17	-0.281	-0.115	-0.030	-0.134	0.581	-0.607	0.000	-0.001
2	10:57:37	-0.251	-0.117	-0.001	0.127	0.444	0.066	0.000	0.002
3	10:57:56	-0.120	0.044	-0.030	-0.073	0.879	-0.087	0.000	0.001
x		-0.218	-0.063	-0.020	-0.026	0.634	-0.209	0.000	0.001
σ		0.086	0.093	0.017	0.136	0.222	0.353	0.000	0.002
%RSD		39.390	148.000	83.920	517.000	35.060	168.600	0.000	197.400
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:57:17	112.451%	0.419	0.402	113.416%	-0.102	-0.104	0.000	-0.004
2	10:57:37	114.430%	0.331	0.347	115.540%	-0.080	-0.082	0.019	0.022
3	10:57:56	115.417%	0.396	0.380	116.327%	-0.091	-0.105	-0.011	-0.001
x		114.099%	0.382	0.377	115.094%	-0.091	-0.097	0.003	0.005
σ		1.510%	0.046	0.028	1.505%	0.011	0.013	0.015	0.014
%RSD		1.324	11.920	7.330	1.308	11.700	13.670	556.900	259.500
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:57:17	112.643%	-0.096	0.027	0.007	-0.001	-0.002	108.991%	109.138%
2	10:57:37	114.539%	-0.152	0.026	0.001	-0.001	0.006	111.161%	111.685%
3	10:57:56	115.919%	-0.146	0.031	0.012	0.003	0.003	112.991%	111.757%
x		114.367%	-0.132	0.028	0.007	0.000	0.002	111.048%	110.860%
σ		1.644%	0.031	0.003	0.005	0.003	0.004	2.003%	1.491%
%RSD		1.438	23.300	10.300	83.670	755.500	195.300	1.803	1.345
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	10:57:17	0.002	0.001	-0.001	0.007	0.002	109.151%		
2	10:57:37	0.006	0.002	0.003	0.006	0.003	109.707%		
3	10:57:56	0.001	0.002	0.004	0.000	0.000	109.992%		
x		0.003	0.002	0.002	0.005	0.002	109.617%		
σ		0.002	0.001	0.003	0.004	0.001	0.428%		
%RSD		76.780	43.650	120.700	84.050	71.600	0.390		

LCS 7/18/2014 11:00:39 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	11:00:58	95.745%	48.980	1007.000	981.900	0.000	48280.000	49300.000	50160.000
2	11:01:17	95.644%	49.760	974.000	988.600	0.000	47800.000	49200.000	50240.000
3	11:01:36	95.724%	49.180	976.900	994.900	0.000	47610.000	49270.000	50430.000
x		95.704%	49.300	986.000	988.500	0.000	47900.000	49260.000	50270.000
σ		0.054%	0.405	18.360	6.496	0.000	345.600	54.040	138.600
%RSD		0.056	0.822	1.862	0.657	0.000	0.722	0.110	0.276
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:58	2081.000	9819.000	0.000	49520.000	49010.000	49390.000	99.090%	1005.000
2	11:01:17	2091.000	9904.000	0.000	49090.000	48890.000	49010.000	99.376%	994.800
3	11:01:36	2102.000	9940.000	0.000	48900.000	48410.000	48900.000	99.501%	1002.000
x		2091.000	9888.000	0.000	49170.000	48770.000	49100.000	99.322%	1001.000
σ		10.100	62.020	0.000	313.600	319.800	257.600	0.211%	5.286
%RSD		0.483	0.627	0.000	0.638	0.656	0.525	0.212	0.528
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:58	516.400	205.900	514.800	1059.000	1128.000	516.400	517.000	258.300
2	11:01:17	517.000	206.600	511.900	1058.000	1137.000	520.300	510.600	257.700
3	11:01:36	515.700	206.100	513.300	1060.000	1138.000	520.200	519.200	256.900
x		516.400	206.200	513.300	1059.000	1134.000	519.000	515.600	257.600
σ		0.623	0.353	1.440	0.647	5.548	2.230	4.479	0.724
%RSD		0.121	0.171	0.280	0.061	0.489	0.430	0.869	0.281
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:58	256.700	515.000	517.200	40.830	10.990	10.080	0.000	1024.000
2	11:01:17	255.500	519.700	516.300	40.060	11.010	10.910	0.000	1014.000
3	11:01:36	256.700	513.600	515.000	39.610	11.730	9.940	0.000	1020.000
x		256.300	516.100	516.200	40.170	11.240	10.310	0.000	1019.000
σ		0.691	3.220	1.107	0.619	0.423	0.525	0.000	4.953
%RSD		0.270	0.624	0.214	1.540	3.760	5.089	0.000	0.486
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:58	99.935%	995.900	1026.000	96.513%	45.250	45.100	50.620	43.610
2	11:01:17	101.043%	1011.000	1036.000	97.729%	44.840	45.120	50.070	43.860
3	11:01:36	102.067%	1025.000	1053.000	98.583%	45.320	44.290	51.300	43.970
x		101.015%	1011.000	1038.000	97.608%	45.140	44.840	50.660	43.810
σ		1.067%	14.700	13.360	1.040%	0.259	0.475	0.618	0.184
%RSD		1.056	1.455	1.286	1.066	0.573	1.060	1.220	0.421
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:58	98.619%	2052.000	504.700	502.400	2014.000	2067.000	100.796%	101.215%
2	11:01:17	99.524%	2055.000	507.200	505.300	2021.000	2068.000	102.250%	102.678%
3	11:01:36	100.926%	2041.000	505.000	503.200	2004.000	2057.000	104.114%	103.482%
x		99.690%	2050.000	505.700	503.700	2013.000	2064.000	102.387%	102.459%
σ		1.162%	7.515	1.371	1.509	8.756	6.136	1.663%	1.149%
%RSD		1.166	0.367	0.271	0.300	0.435	0.297	1.624	1.122
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	11:00:58	50.560	52.020	20.210	20.330	20.060	97.354%		
2	11:01:17	51.160	52.610	20.470	20.250	20.200	98.246%		
3	11:01:36	50.870	52.610	20.740	20.500	20.380	98.893%		
x		50.860	52.410	20.480	20.360	20.210	98.164%		
σ		0.301	0.340	0.265	0.129	0.162	0.773%		
%RSD		0.591	0.648	1.294	0.634	0.802	0.787		

LCSD 7/18/2014 11:04:20 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	11:04:39	92.337%	51.160	1018.000	1014.000	0.000	48930.000	50540.000	51180.000
2	11:04:58	93.285%	50.320	1020.000	1015.000	0.000	48200.000	49870.000	51250.000
3	11:05:18	93.313%	47.720	1040.000	1025.000	0.000	48520.000	50090.000	51300.000
x		92.979%	49.730	1026.000	1018.000	0.000	48550.000	50170.000	51240.000
σ		0.556%	1.797	12.100	6.366	0.000	365.000	344.200	62.330
%RSD		0.598	3.613	1.180	0.625	0.000	0.752	0.686	0.122
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:04:39	2144.000	10060.000	0.000	49850.000	49650.000	49760.000	97.701%	1006.000
2	11:04:58	2150.000	10070.000	0.000	49310.000	48590.000	49170.000	99.244%	999.200
3	11:05:18	2156.000	10090.000	0.000	49260.000	48720.000	49570.000	98.337%	1010.000
x		2150.000	10070.000	0.000	49470.000	48980.000	49500.000	98.428%	1005.000
σ		6.020	13.900	0.000	328.800	580.000	301.300	0.775%	5.519
%RSD		0.280	0.138	0.000	0.665	1.184	0.609	0.788	0.549
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:04:39	522.900	209.700	526.600	1078.000	1146.000	520.600	521.900	262.300
2	11:04:58	520.100	208.100	521.000	1069.000	1160.000	522.300	518.500	260.900
3	11:05:18	523.700	210.000	528.100	1082.000	1157.000	523.400	526.000	259.400
x		522.200	209.300	525.200	1076.000	1154.000	522.100	522.100	260.900
σ		1.899	1.025	3.744	6.769	7.306	1.388	3.744	1.440
%RSD		0.364	0.490	0.713	0.629	0.633	0.266	0.717	0.552
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:04:39	257.900	521.900	523.700	41.090	11.560	10.890	0.000	1034.000
2	11:04:58	260.800	521.200	519.500	40.250	10.950	10.310	0.000	1035.000
3	11:05:18	261.000	520.300	528.500	40.270	12.130	10.500	0.000	1041.000
x		259.900	521.100	523.900	40.540	11.550	10.570	0.000	1036.000
σ		1.723	0.811	4.501	0.480	0.592	0.294	0.000	3.665
%RSD		0.663	0.156	0.859	1.183	5.124	2.785	0.000	0.354
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:04:39	99.813%	1007.000	1040.000	97.059%	45.290	45.170	51.690	44.720
2	11:04:58	100.947%	1032.000	1060.000	97.282%	45.630	45.060	52.000	43.900
3	11:05:18	101.149%	1034.000	1063.000	98.268%	45.790	45.230	51.380	44.570
x		100.636%	1024.000	1055.000	97.536%	45.570	45.150	51.690	44.390
σ		0.720%	14.870	12.720	0.643%	0.256	0.086	0.312	0.437
%RSD		0.715	1.452	1.206	0.660	0.561	0.191	0.604	0.985
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:04:39	98.487%	2073.000	508.300	505.900	2039.000	2091.000	102.222%	102.273%
2	11:04:58	100.196%	2047.000	507.000	505.000	2040.000	2094.000	103.279%	103.215%
3	11:05:18	100.465%	2061.000	510.700	506.100	2035.000	2088.000	103.499%	104.401%
x		99.716%	2060.000	508.700	505.700	2038.000	2091.000	103.000%	103.296%
σ		1.073%	13.150	1.899	0.608	2.930	2.994	0.683%	1.066%
%RSD		1.076	0.638	0.373	0.120	0.144	0.143	0.663	1.032
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	11:04:39	50.500	52.310	20.740	20.240	20.180	99.646%		
2	11:04:58	51.440	53.330	20.850	20.640	20.520	99.925%		
3	11:05:18	51.830	53.620	21.130	20.780	20.780	99.604%		
x		51.260	53.090	20.900	20.550	20.490	99.725%		
σ		0.681	0.689	0.200	0.278	0.301	0.174%		
%RSD		1.330	1.297	0.956	1.355	1.470	0.175		

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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	11:11:04	98.606%	-0.066	3.547	4.264	0.000	10460.000	4409.000	4521.000
2	11:11:23	99.518%	-0.178	4.339	3.457	0.000	10380.000	4432.000	4525.000
3	11:11:42	99.364%	0.190	4.222	3.239	0.000	10320.000	4469.000	4552.000
x		99.162%	-0.018	4.036	3.653	0.000	10390.000	4437.000	4533.000
σ		0.488%	0.188	0.428	0.540	0.000	70.440	30.140	16.570
%RSD		0.492	1046.000	10.590	14.790	0.000	0.678	0.679	0.366
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:11:04	2.431	7.627	0.000	8.956	10990.000	10580.000	100.961%	0.064
2	11:11:23	2.265	7.775	0.000	7.468	10670.000	10570.000	102.081%	0.301
3	11:11:42	2.316	8.024	0.000	7.773	10860.000	10500.000	103.121%	0.103
x		2.337	7.809	0.000	8.066	10840.000	10550.000	102.054%	0.157
σ		0.085	0.201	0.000	0.786	160.900	44.810	1.080%	0.127
%RSD		3.627	2.572	0.000	9.744	1.485	0.425	1.059	81.230
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:11:04	0.071	-0.078	0.117	11.730	31.610	0.002	0.094	-0.062
2	11:11:23	-0.007	-0.029	0.094	11.780	28.510	0.007	0.144	0.008
3	11:11:42	0.123	0.002	0.123	12.080	26.050	0.009	0.304	0.031
x		0.063	-0.035	0.111	11.860	28.730	0.006	0.181	-0.008
σ		0.066	0.040	0.015	0.188	2.784	0.004	0.110	0.048
%RSD		104.900	115.100	13.840	1.589	9.690	61.730	60.610	639.000
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:11:04	-0.013	0.876	0.871	-0.297	0.681	-1.146	0.000	2.510
2	11:11:23	0.009	1.110	0.891	-0.044	0.718	-0.207	0.000	2.416
3	11:11:42	0.017	0.889	0.946	-0.168	0.707	-0.255	0.000	2.449
x		0.004	0.958	0.903	-0.170	0.702	-0.536	0.000	2.458
σ		0.016	0.132	0.039	0.127	0.019	0.529	0.000	0.047
%RSD		361.200	13.750	4.312	74.590	2.708	98.590	0.000	1.928
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:11:04	103.488%	1.129	1.166	104.369%	-0.111	-0.119	0.000	0.009
2	11:11:23	105.746%	1.134	1.040	105.214%	-0.117	-0.124	0.069	0.042
3	11:11:42	105.862%	1.010	0.978	106.556%	-0.116	-0.124	-0.009	-0.000
x		105.032%	1.091	1.061	105.380%	-0.115	-0.122	0.020	0.017
σ		1.339%	0.070	0.096	1.103%	0.004	0.003	0.043	0.022
%RSD		1.275	6.405	9.020	1.046	3.134	2.280	213.900	130.800
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:11:04	103.231%	0.225	0.184	0.206	0.108	0.168	102.853%	102.788%
2	11:11:23	104.819%	0.292	0.182	0.164	0.136	0.133	104.713%	105.069%
3	11:11:42	106.384%	0.215	0.170	0.174	0.129	0.163	105.930%	105.939%
x		104.811%	0.244	0.179	0.181	0.125	0.155	104.499%	104.599%
σ		1.577%	0.042	0.008	0.022	0.015	0.019	1.550%	1.627%
%RSD		1.504	17.200	4.357	12.250	11.920	12.060	1.483	1.555
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	11:11:04	0.024	0.019	0.016	0.013	0.016	100.469%		
2	11:11:23	0.018	0.018	0.018	0.015	0.017	101.181%		
3	11:11:42	0.020	0.014	0.017	0.020	0.017	103.277%		
x		0.021	0.017	0.017	0.016	0.017	101.642%		
σ		0.003	0.003	0.001	0.004	0.001	1.460%		
%RSD		13.880	15.770	7.278	23.290	3.694	1.436		

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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	11:14:46	100.240%	-0.159	3.115	2.888	0.000	10230.000	4369.000	4441.000
2	11:15:12	99.149%	-0.091	4.349	3.221	0.000	10320.000	4399.000	4497.000
3	11:15:31	101.593%	0.006	3.527	2.662	0.000	10160.000	4355.000	4491.000
x		100.327%	-0.081	3.664	2.924	0.000	10240.000	4374.000	4477.000
σ		1.224%	0.083	0.629	0.281	0.000	78.630	22.180	30.860
%RSD		1.220	101.900	17.160	9.628	0.000	0.768	0.507	0.690
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:14:46	10.650	274.900	0.000	151.200	10540.000	10370.000	103.176%	0.125
2	11:15:12	9.911	276.500	0.000	153.100	10930.000	10330.000	103.532%	0.102
3	11:15:31	10.060	277.300	0.000	148.100	10900.000	10410.000	104.437%	0.143
x		10.210	276.300	0.000	150.800	10790.000	10370.000	103.715%	0.123
σ		0.388	1.199	0.000	2.482	219.600	36.290	0.650%	0.020
%RSD		3.805	0.434	0.000	1.646	2.036	0.350	0.627	16.440
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:14:46	0.668	-0.101	1.238	8.641	20.890	0.171	1.135	0.057
2	11:15:12	0.744	-0.112	1.223	8.446	21.850	0.198	0.983	0.272
3	11:15:31	0.721	-0.104	1.158	8.796	21.840	0.207	1.079	0.152
x		0.711	-0.106	1.206	8.628	21.530	0.192	1.066	0.160
σ		0.039	0.006	0.043	0.175	0.548	0.019	0.077	0.108
%RSD		5.488	5.613	3.524	2.032	2.546	9.752	7.241	67.430
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:14:46	0.172	1.424	1.309	6.824	0.659	-0.173	0.000	4.376
2	11:15:12	0.300	1.342	1.319	6.660	0.679	0.077	0.000	4.512
3	11:15:31	0.238	1.222	1.375	6.714	0.775	-0.108	0.000	4.455
x		0.237	1.329	1.334	6.733	0.704	-0.068	0.000	4.448
σ		0.065	0.102	0.036	0.084	0.062	0.130	0.000	0.068
%RSD		27.240	7.652	2.662	1.242	8.793	190.100	0.000	1.536
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:14:46	104.709%	4.664	4.759	105.688%	-0.121	-0.132	0.006	0.006
2	11:15:12	106.385%	4.915	4.786	106.499%	-0.115	-0.121	0.005	-0.002
3	11:15:31	107.274%	5.194	5.014	107.509%	-0.111	-0.135	-0.005	-0.004
x		106.122%	4.925	4.853	106.565%	-0.116	-0.129	0.002	0.000
σ		1.302%	0.265	0.140	0.912%	0.005	0.007	0.006	0.005
%RSD		1.227	5.386	2.886	0.856	4.351	5.788	325.300	5612.000
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:14:46	104.932%	-0.068	2.938	3.039	0.839	0.965	105.067%	105.220%
2	11:15:12	106.444%	-0.012	2.969	2.955	1.032	0.958	106.395%	106.151%
3	11:15:31	107.206%	-0.032	2.950	3.045	1.031	1.002	106.985%	107.586%
x		106.194%	-0.037	2.952	3.013	0.968	0.975	106.149%	106.319%
σ		1.158%	0.028	0.016	0.050	0.111	0.024	0.982%	1.192%
%RSD		1.090	76.020	0.538	1.665	11.480	2.462	0.925	1.121
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	11:14:46	0.013	0.009	0.011	0.024	0.013	102.336%		
2	11:15:12	0.002	0.006	0.013	0.014	0.015	102.978%		
3	11:15:31	0.007	0.004	0.016	0.010	0.014	103.154%		
x		0.007	0.006	0.013	0.016	0.014	102.823%		
σ		0.006	0.003	0.002	0.007	0.001	0.430%		
%RSD		77.930	45.720	16.630	43.170	7.246	0.419		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:18:35	99.685%	-0.157	1.474	1.878	0.000	10340.000	4269.000	4385.000
2	11:18:54	100.325%	-0.330	1.933	1.206	0.000	10150.000	4312.000	4406.000
3	11:19:13	100.439%	-0.309	2.048	1.468	0.000	10190.000	4303.000	4409.000
x		100.150%	-0.265	1.818	1.517	0.000	10220.000	4295.000	4400.000
σ		0.407%	0.095	0.303	0.339	0.000	98.370	22.860	12.890
%RSD		0.406	35.700	16.690	22.330	0.000	0.962	0.532	0.293

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:18:35	3.711	781.800	0.000	38.510	10510.000	10280.000	101.366%	0.108
2	11:18:54	3.811	794.000	0.000	38.530	10380.000	10250.000	101.733%	0.260
3	11:19:13	3.885	790.400	0.000	42.200	10410.000	10140.000	101.761%	0.107
x		3.802	788.700	0.000	39.750	10430.000	10220.000	101.620%	0.158
σ		0.088	6.237	0.000	2.122	70.130	71.970	0.220%	0.088
%RSD		2.307	0.791	0.000	5.340	0.672	0.704	0.217	55.730

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:18:35	0.165	0.015	0.107	7.565	22.820	0.002	0.093	-0.341
2	11:18:54	0.230	-0.006	0.107	7.656	23.840	0.001	0.275	-0.234
3	11:19:13	0.162	-0.007	0.072	7.959	23.060	0.011	0.191	-0.284
x		0.186	0.001	0.095	7.726	23.240	0.004	0.186	-0.287
σ		0.039	0.012	0.020	0.206	0.534	0.005	0.091	0.053
%RSD		20.810	1760.000	21.230	2.669	2.300	125.100	48.880	18.640

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:18:35	-0.260	0.815	0.672	1.773	0.686	0.020	0.000	5.760
2	11:18:54	-0.230	0.835	0.939	1.578	0.465	-0.392	0.000	5.970
3	11:19:13	-0.345	0.801	0.758	1.812	0.832	-0.139	0.000	5.801
x		-0.279	0.817	0.789	1.721	0.661	-0.170	0.000	5.844
σ		0.060	0.017	0.136	0.126	0.185	0.208	0.000	0.111
%RSD		21.420	2.074	17.250	7.296	27.940	122.200	0.000	1.905

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:18:35	102.857%	2.906	3.048	102.820%	-0.117	-0.136	0.010	0.015
2	11:18:54	104.313%	3.131	3.096	104.173%	-0.111	-0.131	0.012	0.006
3	11:19:13	104.804%	3.223	3.163	104.737%	-0.114	-0.136	0.037	0.033
x		103.991%	3.087	3.102	103.910%	-0.114	-0.134	0.020	0.018
σ		1.013%	0.163	0.058	0.985%	0.003	0.002	0.015	0.014
%RSD		0.974	5.276	1.875	0.948	2.581	1.803	77.540	79.580

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:18:35	102.258%	-0.073	1.733	1.808	0.943	1.006	101.600%	102.163%
2	11:18:54	103.327%	-0.095	1.818	1.751	0.975	0.970	103.658%	104.038%
3	11:19:13	104.832%	-0.049	1.788	1.781	0.849	1.056	105.397%	104.651%
x		103.473%	-0.073	1.780	1.780	0.922	1.011	103.551%	103.617%
σ		1.293%	0.023	0.043	0.028	0.066	0.043	1.901%	1.296%
%RSD		1.250	31.580	2.418	1.587	7.118	4.254	1.836	1.251

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	11:18:35	-0.004	-0.001	0.011	0.015	0.016	98.465%
2	11:18:54	-0.002	-0.001	0.022	0.021	0.016	100.186%
3	11:19:13	0.001	0.000	0.016	0.010	0.014	101.247%
x		-0.002	-0.000	0.017	0.015	0.015	99.966%
σ		0.003	0.000	0.006	0.005	0.001	1.404%
%RSD		130.800	133.300	33.430	35.040	9.719	1.405

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:22:17	99.903%	-0.136	1.827	0.565	0.000	10120.000	4288.000	4339.000
2	11:22:37	99.866%	-0.050	0.517	0.707	0.000	10090.000	4285.000	4395.000
3	11:22:56	98.229%	-0.087	1.987	0.741	0.000	10170.000	4350.000	4414.000
x		99.333%	-0.091	1.444	0.671	0.000	10130.000	4308.000	4383.000
σ		0.956%	0.043	0.807	0.093	0.000	40.410	36.720	38.820
%RSD		0.963	47.460	55.890	13.930	0.000	0.399	0.852	0.886

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:22:17	1.263	426.700	0.000	30.100	9951.000	9726.000	101.074%	0.130
2	11:22:37	1.417	437.000	0.000	28.550	9785.000	9778.000	102.356%	-0.003
3	11:22:56	1.238	436.100	0.000	28.450	9928.000	9833.000	102.547%	0.018
x		1.306	433.300	0.000	29.030	9888.000	9779.000	101.993%	0.048
σ		0.097	5.717	0.000	0.925	89.870	53.450	0.801%	0.072
%RSD		7.451	1.320	0.000	3.186	0.909	0.546	0.785	148.500

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:22:17	0.171	-0.029	0.317	7.728	21.620	0.070	1.423	-0.279
2	11:22:37	0.150	-0.080	0.283	7.336	24.010	0.081	1.386	-0.240
3	11:22:56	-0.073	-0.070	0.287	7.028	20.920	0.060	1.489	-0.325
x		0.083	-0.060	0.296	7.364	22.180	0.070	1.433	-0.281
σ		0.135	0.027	0.019	0.351	1.621	0.011	0.052	0.043
%RSD		163.500	45.760	6.311	4.764	7.308	15.060	3.642	15.140

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:22:17	-0.214	0.962	1.018	1.902	1.034	0.284	0.000	6.024
2	11:22:37	-0.188	1.023	1.129	1.917	0.509	0.193	0.000	5.876
3	11:22:56	-0.152	1.085	1.029	1.860	0.730	-0.575	0.000	6.102
x		-0.185	1.024	1.059	1.893	0.757	-0.033	0.000	6.001
σ		0.031	0.062	0.061	0.030	0.263	0.472	0.000	0.115
%RSD		16.920	6.014	5.781	1.563	34.770	1449.000	0.000	1.915

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:22:17	103.623%	0.779	0.718	103.916%	-0.112	-0.123	0.018	0.007
2	11:22:37	105.473%	0.669	0.744	105.326%	-0.111	-0.123	0.014	0.006
3	11:22:56	105.871%	0.786	0.800	106.024%	-0.116	-0.140	0.006	0.017
x		104.989%	0.745	0.754	105.089%	-0.113	-0.129	0.013	0.010
σ		1.200%	0.065	0.042	1.074%	0.003	0.010	0.006	0.006
%RSD		1.143	8.791	5.600	1.022	2.266	7.567	51.400	58.320

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:22:17	103.594%	-0.159	0.247	0.244	0.625	0.738	103.777%	103.960%
2	11:22:37	105.102%	-0.151	0.222	0.210	0.793	0.740	105.033%	105.309%
3	11:22:56	105.696%	-0.169	0.234	0.217	0.728	0.712	105.726%	106.411%
x		104.797%	-0.160	0.234	0.224	0.715	0.730	104.845%	105.227%
σ		1.084%	0.009	0.012	0.018	0.085	0.015	0.988%	1.228%
%RSD		1.034	5.602	5.317	8.062	11.880	2.102	0.942	1.167

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	11:22:17	0.001	-0.000	0.025	0.020	0.021	101.334%
2	11:22:37	-0.001	-0.001	0.017	0.014	0.016	102.532%
3	11:22:56	-0.001	-0.000	0.023	0.019	0.018	103.049%
x		-0.001	-0.001	0.022	0.018	0.018	102.305%
σ		0.001	0.001	0.004	0.003	0.002	0.880%
%RSD		222.400	102.300	18.540	17.190	12.780	0.860

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:26:00	99.766%	-0.221	1.357	0.255	0.000	10350.000	4243.000	4309.000
2	11:26:20	101.322%	-0.098	0.965	0.414	0.000	10130.000	4205.000	4358.000
3	11:26:39	101.695%	-0.206	1.076	0.241	0.000	10190.000	4244.000	4336.000
x		100.928%	-0.175	1.132	0.303	0.000	10220.000	4231.000	4334.000
σ		1.023%	0.067	0.202	0.096	0.000	115.000	22.020	24.130
%RSD		1.014	38.170	17.820	31.660	0.000	1.125	0.520	0.557

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:26:00	1.256	216.900	0.000	31.410	10160.000	9834.000	99.975%	0.067
2	11:26:20	1.203	218.500	0.000	28.890	10140.000	9759.000	102.752%	-0.025
3	11:26:39	1.187	220.900	0.000	28.340	10040.000	9759.000	102.740%	-0.004
x		1.215	218.800	0.000	29.550	10110.000	9784.000	101.822%	0.012
σ		0.036	2.051	0.000	1.638	64.130	43.370	1.599%	0.048
%RSD		2.938	0.937	0.000	5.543	0.634	0.443	1.571	385.300

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:26:00	-0.006	-0.041	0.150	8.956	23.390	0.056	0.923	-0.304
2	11:26:20	-0.058	-0.052	0.149	8.013	21.680	0.036	0.763	-0.340
3	11:26:39	0.092	-0.106	0.175	8.349	20.960	0.069	0.799	-0.283
x		0.009	-0.067	0.158	8.439	22.010	0.053	0.828	-0.309
σ		0.076	0.035	0.015	0.478	1.251	0.017	0.084	0.029
%RSD		811.600	52.020	9.298	5.666	5.683	31.100	10.130	9.273

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:26:00	-0.128	1.515	1.122	0.510	0.545	0.584	0.000	5.307
2	11:26:20	-0.215	1.175	1.239	0.172	0.706	-0.509	0.000	5.384
3	11:26:39	-0.233	1.488	1.203	0.396	0.292	-0.132	0.000	5.359
x		-0.192	1.393	1.188	0.359	0.514	-0.019	0.000	5.350
σ		0.056	0.189	0.060	0.172	0.208	0.555	0.000	0.039
%RSD		29.110	13.560	5.061	47.830	40.510	2940.000	0.000	0.734

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:26:00	101.352%	1.186	1.123	101.977%	-0.115	-0.119	0.073	0.053
2	11:26:20	103.687%	1.206	1.053	103.712%	-0.103	-0.129	0.003	0.002
3	11:26:39	104.229%	1.130	1.124	103.864%	-0.119	-0.117	0.004	0.011
x		103.089%	1.174	1.100	103.184%	-0.112	-0.122	0.027	0.022
σ		1.528%	0.039	0.041	1.048%	0.008	0.007	0.040	0.027
%RSD		1.483	3.348	3.695	1.016	7.414	5.583	150.600	124.200

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:26:00	101.704%	-0.092	0.204	0.173	0.499	0.539	100.516%	101.282%
2	11:26:20	103.333%	-0.106	0.180	0.177	0.504	0.527	103.186%	103.305%
3	11:26:39	104.499%	-0.151	0.208	0.186	0.488	0.484	104.249%	103.714%
x		103.179%	-0.117	0.198	0.179	0.497	0.517	102.650%	102.767%
σ		1.404%	0.031	0.015	0.007	0.008	0.029	1.923%	1.302%
%RSD		1.360	26.680	7.798	3.702	1.612	5.581	1.873	1.267

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	11:26:00	0.002	0.004	0.013	0.011	0.013	98.363%
2	11:26:20	0.007	0.006	0.017	0.013	0.017	99.785%
3	11:26:39	0.005	0.003	0.022	0.020	0.017	100.150%
x		0.004	0.005	0.017	0.015	0.016	99.433%
σ		0.003	0.001	0.005	0.005	0.002	0.944%
%RSD		61.160	30.870	26.210	31.850	14.460	0.950

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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	11:29:44	100.927%	-0.225	2.034	0.303	0.000	10200.000	4222.000	4323.000
2	11:30:03	101.239%	-0.204	0.966	0.272	0.000	10000.000	4244.000	4367.000
3	11:30:25	102.238%	-0.144	1.413	0.372	0.000	9974.000	4213.000	4373.000
x		101.468%	-0.191	1.471	0.316	0.000	10060.000	4226.000	4354.000
σ		0.685%	0.042	0.536	0.052	0.000	125.000	15.980	27.130
%RSD		0.675	21.950	36.460	16.350	0.000	1.242	0.378	0.623

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:29:44	0.128	72.110	0.000	28.560	10260.000	9825.000	101.918%	0.063
2	11:30:03	0.161	73.130	0.000	29.490	10020.000	9742.000	103.003%	0.017
3	11:30:25	0.226	73.810	0.000	28.070	9981.000	9785.000	103.354%	0.038
x		0.172	73.010	0.000	28.710	10090.000	9784.000	102.758%	0.040
σ		0.050	0.857	0.000	0.725	150.000	41.830	0.749%	0.023
%RSD		28.870	1.174	0.000	2.526	1.487	0.427	0.729	57.370

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:29:44	0.076	-0.073	0.111	8.641	23.300	0.291	2.540	-0.349
2	11:30:03	-0.009	-0.040	0.154	7.931	22.450	0.266	2.628	-0.358
3	11:30:25	0.061	-0.063	0.114	8.482	23.830	0.280	2.781	-0.246
x		0.043	-0.059	0.127	8.352	23.190	0.279	2.649	-0.318
σ		0.046	0.017	0.024	0.373	0.694	0.013	0.122	0.062
%RSD		107.000	28.760	19.100	4.460	2.992	4.511	4.595	19.510

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:29:44	-0.216	1.013	1.062	0.099	0.260	-0.237	0.000	4.176
2	11:30:03	-0.295	1.174	1.147	-0.114	0.561	0.018	0.000	4.203
3	11:30:25	-0.209	1.076	1.404	-0.027	0.203	0.184	0.000	4.138
x		-0.240	1.088	1.204	-0.014	0.341	-0.012	0.000	4.173
σ		0.047	0.081	0.178	0.107	0.192	0.212	0.000	0.033
%RSD		19.750	7.456	14.810	756.400	56.240	1783.000	0.000	0.782

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:29:44	103.531%	0.160	0.109	104.088%	-0.115	-0.131	0.013	0.008
2	11:30:03	105.673%	0.113	0.116	105.838%	-0.121	-0.130	0.034	0.017
3	11:30:25	106.290%	0.125	0.177	106.969%	-0.118	-0.128	-0.019	-0.014
x		105.165%	0.132	0.134	105.632%	-0.118	-0.130	0.009	0.004
σ		1.448%	0.024	0.037	1.451%	0.003	0.002	0.027	0.016
%RSD		1.377	18.480	27.850	1.374	2.695	1.245	293.700	413.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:29:44	103.038%	-0.164	-0.023	-0.022	0.959	1.089	104.049%	103.068%
2	11:30:03	105.111%	-0.186	-0.031	-0.018	1.077	1.080	105.958%	105.473%
3	11:30:25	106.415%	-0.121	-0.023	-0.013	1.080	1.063	106.890%	106.974%
x		104.855%	-0.157	-0.026	-0.018	1.039	1.078	105.632%	105.171%
σ		1.703%	0.033	0.005	0.004	0.069	0.013	1.448%	1.971%
%RSD		1.624	20.930	17.840	23.190	6.629	1.236	1.371	1.874

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	11:29:44	-0.003	-0.002	0.025	0.022	0.021	100.630%
2	11:30:03	-0.004	-0.004	0.025	0.016	0.024	101.355%
3	11:30:25	-0.001	-0.001	0.017	0.021	0.023	103.813%
x		-0.003	-0.002	0.023	0.020	0.023	101.933%
σ		0.001	0.001	0.005	0.003	0.001	1.668%
%RSD		45.360	50.450	20.020	16.850	6.494	1.637

180-34930-A-6 SD@5 7/18/2014 11:33:11 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	11:33:30	102.201%	0.004	2.462	0.279	0.000	2052.000	839.400	852.300
2	11:33:49	101.921%	-0.080	0.834	0.090	0.000	2056.000	841.300	874.200
3	11:34:09	100.929%	-0.119	1.556	0.297	0.000	2059.000	861.400	867.100
x		101.684%	-0.065	1.617	0.222	0.000	2056.000	847.400	864.500
σ		0.668%	0.063	0.816	0.115	0.000	3.123	12.190	11.160
%RSD		0.657	95.940	50.430	51.700	0.000	0.152	1.438	1.291

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:33:30	2.947	13.640	0.000	4.623	2045.000	1963.000	103.091%	0.017
2	11:33:49	3.162	14.600	0.000	3.131	2034.000	1943.000	104.971%	0.015
3	11:34:09	3.201	15.380	0.000	3.232	2103.000	1988.000	104.521%	-0.048
x		3.103	14.540	0.000	3.662	2061.000	1965.000	104.194%	-0.005
σ		0.136	0.869	0.000	0.834	37.100	22.470	0.982%	0.037
%RSD		4.396	5.975	0.000	22.770	1.800	1.144	0.942	686.100

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:33:30	0.084	-0.058	0.058	6.568	4.174	0.054	0.711	-0.340
2	11:33:49	-0.117	-0.042	0.073	5.950	2.662	0.041	0.667	-0.449
3	11:34:09	0.069	-0.073	0.088	6.001	4.041	0.057	0.754	-0.455
x		0.012	-0.058	0.073	6.173	3.626	0.051	0.711	-0.415
σ		0.112	0.015	0.015	0.343	0.837	0.008	0.043	0.065
%RSD		923.200	26.560	20.460	5.553	23.090	16.260	6.107	15.570

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:33:30	-0.330	0.420	0.391	-0.341	-0.018	-1.270	0.000	0.824
2	11:33:49	-0.265	0.414	0.412	0.042	0.408	-0.289	0.000	0.864
3	11:34:09	-0.315	0.428	0.463	-0.029	0.227	0.270	0.000	0.849
x		-0.303	0.421	0.422	-0.110	0.206	-0.430	0.000	0.846
σ		0.034	0.007	0.037	0.204	0.214	0.780	0.000	0.020
%RSD		11.260	1.745	8.820	186.200	104.000	181.200	0.000	2.395

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:33:30	104.064%	0.145	0.189	105.357%	-0.120	-0.122	0.005	0.013
2	11:33:49	104.894%	0.210	0.148	106.427%	-0.099	-0.116	-0.039	-0.017
3	11:34:09	105.530%	0.159	0.159	106.614%	-0.108	-0.123	0.057	0.044
x		104.829%	0.171	0.165	106.132%	-0.109	-0.120	0.008	0.013
σ		0.735%	0.034	0.021	0.678%	0.011	0.004	0.048	0.031
%RSD		0.701	20.060	12.960	0.639	9.630	2.922	612.200	231.700

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:33:30	104.558%	0.083	0.008	0.008	0.199	0.233	103.473%	103.746%
2	11:33:49	106.540%	0.085	0.002	0.028	0.195	0.252	105.261%	104.689%
3	11:34:09	106.649%	0.179	0.026	0.013	0.249	0.217	105.923%	105.087%
x		105.916%	0.116	0.012	0.016	0.214	0.234	104.886%	104.507%
σ		1.177%	0.055	0.013	0.010	0.030	0.018	1.267%	0.689%
%RSD		1.111	47.280	105.100	63.120	14.140	7.498	1.208	0.659

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	11:33:30	-0.002	-0.004	0.012	0.005	0.010	106.825%
2	11:33:49	-0.000	-0.003	0.008	0.009	0.009	106.267%
3	11:34:09	-0.001	-0.002	0.004	0.010	0.006	106.567%
x		-0.001	-0.003	0.008	0.008	0.009	106.553%
σ		0.001	0.001	0.004	0.003	0.002	0.279%
%RSD		107.900	40.490	48.690	36.740	23.210	0.262

CCV 1241000 7/18/2014 11:36:54 AM QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:36:54	92.851%	97.590	104.300	97.390	0.000	50190.000	50090.000	50550.000
2	11:37:13	94.444%	98.100	97.610	99.040	0.000	49770.000	50340.000	50810.000
3	11:37:34	93.755%	96.460	103.400	98.710	0.000	49720.000	50470.000	51670.000
x		93.683%	97.384%	101.762%	98.381%	0.000	99.790%	100.598%	102.025%
σ		0.799%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.853	0.859	3.557	0.887	0.000	0.523	0.378	1.147
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:36:54	501.300	5109.000	0.000	50050.000	49520.000	49820.000	99.403%	101.000
2	11:37:13	507.600	5116.000	0.000	50280.000	49330.000	50130.000	98.529%	101.700
3	11:37:34	516.200	5194.000	0.000	50700.000	49870.000	50220.000	97.778%	102.100
x		101.677%	102.794%	0.000	100.687%	99.151%	100.115%	98.570%	101.630%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.813%	n/a
%RSD		1.469	0.918	0.000	0.652	0.556	0.416	0.825	0.545
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:36:54	98.500	99.300	498.700	25220.000	25200.000	101.100	102.300	101.400
2	11:37:13	99.080	100.800	507.500	25510.000	25420.000	101.600	102.300	102.000
3	11:37:34	100.400	102.600	513.900	25730.000	25680.000	101.600	101.500	103.300
x		99.342%	100.918%	101.339%	101.943%	101.725%	101.425%	102.051%	102.248%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.004	1.640	1.504	1.003	0.938	0.255	0.439	0.926
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:36:54	103.000	100.500	101.500	101.500	101.800	102.000	0.000	98.880
2	11:37:13	102.500	102.800	100.000	100.500	99.200	101.700	0.000	99.190
3	11:37:34	102.100	102.700	102.600	101.800	99.680	101.500	0.000	98.630
x		102.516%	102.014%	101.386%	101.280%	100.221%	101.703%	0.000	98.901%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.418	1.280	1.293	0.695	1.369	0.266	0.000	0.285
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:36:54	96.272%	100.700	99.440	94.535%	98.530	98.520	97.400	100.100
2	11:37:13	98.602%	101.400	102.000	95.617%	98.930	98.960	99.620	98.950
3	11:37:34	99.664%	102.200	103.400	96.578%	99.360	98.800	99.930	100.500
x		98.179%	101.412%	101.609%	95.577%	98.941%	98.761%	98.983%	99.846%
σ		1.735%	n/a	n/a	1.022%	n/a	n/a	n/a	n/a
%RSD		1.767	0.715	1.971	1.069	0.421	0.226	1.397	0.814
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:36:54	95.716%	100.200	97.550	98.000	100.300	99.060	97.232%	97.792%
2	11:37:13	97.676%	100.100	98.510	98.300	99.770	100.200	99.546%	99.693%
3	11:37:34	98.296%	99.530	100.300	99.820	98.630	100.300	100.645%	101.104%
x		97.229%	99.959%	98.782%	98.703%	99.577%	99.874%	99.141%	99.529%
σ		1.347%	n/a	n/a	n/a	n/a	n/a	1.742%	1.662%
%RSD		1.385	0.370	1.399	0.989	0.868	0.704	1.758	1.670
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	11:36:54	93.200	95.320	92.040	92.320	91.000	101.813%		
2	11:37:13	96.310	99.570	96.380	95.940	94.870	100.252%		
3	11:37:34	98.610	101.500	98.020	97.810	97.210	99.075%		
x		96.042%	98.787%	95.481%	95.355%	94.360%	100.380%		
σ		n/a	n/a	n/a	n/a	n/a	1.374%		
%RSD		2.828	3.192	3.239	2.929	3.325	1.369		

CCB2 7/18/2014 11:43:13 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	11:43:33	100.923%	-0.268	0.146	0.368	0.000	1.369	1.217	0.834
2	11:43:52	100.738%	0.009	0.970	0.106	0.000	2.593	1.763	0.730
3	11:44:11	100.968%	-0.268	0.614	0.174	0.000	7.695	0.900	1.515
x		100.876%	-0.175	0.576	0.216	0.000	3.886	1.294	1.026
σ		0.122%	0.160	0.413	0.136	0.000	3.355	0.437	0.426
%RSD		0.121	91.190	71.670	62.930	0.000	86.350	33.750	41.550

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:43:33	-0.052	1.410	0.000	0.200	-10.910	-8.885	104.737%	0.036
2	11:43:52	-0.036	1.345	0.000	-2.010	8.129	-8.088	105.805%	0.056
3	11:44:11	-0.136	0.939	0.000	-0.376	-1.418	-9.731	105.860%	0.181
x		-0.075	1.232	0.000	-0.729	-1.400	-8.901	105.467%	0.091
σ		0.054	0.255	0.000	1.147	9.521	0.822	0.633%	0.079
%RSD		72.550	20.720	0.000	157.400	679.900	9.232	0.600	86.350

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:43:33	0.083	-0.031	0.013	8.535	3.012	0.001	-0.014	-0.436
2	11:43:52	0.123	-0.077	-0.012	6.988	5.973	-0.003	-0.001	-0.341
3	11:44:11	0.030	-0.071	0.006	6.182	3.863	0.002	-0.002	-0.465
x		0.079	-0.059	0.002	7.235	4.283	0.000	-0.005	-0.414
σ		0.046	0.025	0.013	1.196	1.525	0.003	0.007	0.065
%RSD		58.670	41.800	530.800	16.530	35.600	41010.000	136.700	15.730

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:43:33	-0.281	0.045	-0.059	-0.110	0.251	-0.337	0.000	0.007
2	11:43:52	-0.213	-0.046	0.014	0.124	0.442	0.630	0.000	0.002
3	11:44:11	-0.246	0.035	0.145	-0.200	0.368	-0.441	0.000	0.008
x		-0.247	0.012	0.033	-0.062	0.354	-0.049	0.000	0.006
σ		0.034	0.050	0.103	0.167	0.096	0.591	0.000	0.003
%RSD		13.810	436.100	309.500	269.100	27.130	1198.000	0.000	52.750

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:43:33	103.039%	0.254	0.241	105.581%	-0.081	-0.076	-0.005	0.001
2	11:43:52	104.998%	0.260	0.256	106.345%	-0.074	-0.062	0.057	0.033
3	11:44:11	106.749%	0.187	0.237	107.059%	-0.052	-0.093	0.039	0.030
x		104.929%	0.234	0.245	106.329%	-0.069	-0.077	0.030	0.021
σ		1.856%	0.041	0.010	0.739%	0.015	0.015	0.032	0.018
%RSD		1.769	17.350	3.984	0.695	21.730	19.980	105.000	83.870

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:43:33	103.902%	0.031	0.163	0.143	0.025	0.033	102.809%	102.184%
2	11:43:52	104.996%	0.038	0.136	0.139	0.010	0.015	104.665%	103.691%
3	11:44:11	107.268%	0.012	0.132	0.152	-0.006	0.012	105.275%	104.740%
x		105.389%	0.027	0.144	0.145	0.010	0.020	104.250%	103.538%
σ		1.717%	0.014	0.017	0.007	0.015	0.011	1.284%	1.285%
%RSD		1.630	50.590	11.820	4.762	158.300	56.410	1.232	1.241

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	11:43:33	0.002	-0.002	0.002	0.001	0.005	104.706%
2	11:43:52	-0.000	-0.000	0.004	0.001	0.003	104.295%
3	11:44:11	-0.001	-0.000	0.011	-0.001	0.003	104.512%
x		-0.000	-0.001	0.006	0.000	0.004	104.504%
σ		0.002	0.001	0.005	0.001	0.001	0.206%
%RSD		1550.000	157.100	92.140	565.300	31.200	0.197

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:47:18	100.882%	-0.289	1.206	0.419	0.000	10270.000	4265.000	4354.000
2	11:47:37	101.333%	-0.056	0.495	0.079	0.000	10150.000	4286.000	4373.000
3	11:47:56	100.892%	-0.161	1.559	0.108	0.000	10060.000	4192.000	4364.000
x		101.036%	-0.169	1.087	0.202	0.000	10160.000	4248.000	4364.000
σ		0.258%	0.117	0.542	0.189	0.000	104.600	49.100	9.270
%RSD		0.255	69.050	49.860	93.500	0.000	1.029	1.156	0.212
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:47:18	0.919	337.700	0.000	65.670	9875.000	9662.000	103.760%	0.167
2	11:47:37	0.888	339.300	0.000	65.370	10100.000	9795.000	103.233%	0.039
3	11:47:56	0.874	335.900	0.000	63.950	9801.000	9567.000	103.868%	0.187
x		0.894	337.600	0.000	64.990	9927.000	9674.000	103.620%	0.131
σ		0.023	1.731	0.000	0.920	158.400	114.300	0.340%	0.080
%RSD		2.582	0.513	0.000	1.415	1.596	1.182	0.328	61.530
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:47:18	0.249	-0.064	0.411	4.893	21.510	0.104	0.945	-0.358
2	11:47:37	0.000	-0.066	0.409	5.756	18.920	0.077	1.074	-0.385
3	11:47:56	0.020	-0.027	0.379	5.605	20.360	0.100	0.938	-0.425
x		0.090	-0.052	0.400	5.418	20.260	0.094	0.986	-0.389
σ		0.138	0.022	0.018	0.461	1.302	0.014	0.077	0.034
%RSD		153.600	42.460	4.533	8.510	6.424	15.390	7.804	8.730
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:47:18	-0.272	0.642	0.578	2.457	1.288	1.155	0.000	6.055
2	11:47:37	-0.232	0.607	0.668	2.415	0.568	0.952	0.000	5.970
3	11:47:56	-0.283	0.716	0.670	2.163	0.968	-0.439	0.000	6.066
x		-0.263	0.655	0.638	2.345	0.942	0.556	0.000	6.030
σ		0.027	0.056	0.053	0.159	0.360	0.868	0.000	0.052
%RSD		10.150	8.538	8.265	6.781	38.290	156.000	0.000	0.869
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:47:18	103.787%	0.566	0.570	104.809%	-0.126	-0.127	0.001	-0.000
2	11:47:37	105.435%	0.547	0.527	105.977%	-0.129	-0.120	0.015	0.023
3	11:47:56	107.118%	0.582	0.594	107.083%	-0.111	-0.132	-0.018	-0.004
x		105.447%	0.565	0.564	105.956%	-0.122	-0.126	-0.000	0.006
σ		1.666%	0.018	0.034	1.137%	0.010	0.006	0.017	0.014
%RSD		1.580	3.100	6.008	1.074	7.836	4.881	5235.000	228.600
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:47:18	104.092%	-0.244	0.467	0.442	0.696	0.823	103.277%	102.784%
2	11:47:37	106.277%	-0.260	0.474	0.505	0.693	0.756	104.967%	104.933%
3	11:47:56	106.443%	-0.254	0.499	0.427	0.677	0.730	106.628%	105.725%
x		105.604%	-0.253	0.480	0.458	0.689	0.769	104.957%	104.481%
σ		1.312%	0.008	0.017	0.041	0.010	0.048	1.676%	1.522%
%RSD		1.242	3.058	3.548	9.033	1.450	6.234	1.596	1.457
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	11:47:18	-0.001	-0.002	0.009	-0.001	0.003	99.183%		
2	11:47:37	-0.002	-0.003	0.006	0.009	0.005	100.167%		
3	11:47:56	0.000	-0.002	0.015	0.009	0.012	101.510%		
x		-0.001	-0.002	0.010	0.006	0.007	100.287%		
σ		0.001	0.001	0.005	0.006	0.005	1.168%		
%RSD		111.300	35.490	46.800	101.000	71.120	1.165		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:51:00	103.593%	-0.294	1.385	0.209	0.000	10100.000	4237.000	4307.000
2	11:51:19	103.454%	-0.190	0.351	0.468	0.000	10050.000	4301.000	4368.000
3	11:51:38	102.700%	-0.209	0.128	0.361	0.000	10020.000	4275.000	4383.000
x		103.249%	-0.231	0.621	0.346	0.000	10060.000	4271.000	4353.000
σ		0.480%	0.056	0.670	0.130	0.000	40.280	32.310	40.240
%RSD		0.465	24.060	107.900	37.560	0.000	0.400	0.756	0.924

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:51:00	0.121	154.400	0.000	64.220	10050.000	9733.000	103.194%	-0.090
2	11:51:19	0.220	155.400	0.000	63.200	10060.000	9811.000	103.590%	0.017
3	11:51:38	0.306	155.000	0.000	63.610	10090.000	9831.000	104.593%	-0.006
x		0.216	154.900	0.000	63.680	10070.000	9791.000	103.792%	-0.027
σ		0.093	0.494	0.000	0.516	19.450	51.970	0.721%	0.056
%RSD		42.880	0.319	0.000	0.810	0.193	0.531	0.695	212.100

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:51:00	-0.420	-1.501	0.445	7.094	18.930	0.112	0.874	-0.056
2	11:51:19	-0.388	-1.555	0.381	7.235	22.670	0.117	0.961	-0.074
3	11:51:38	-0.518	-1.557	0.420	6.766	21.840	0.129	0.994	0.016
x		-0.442	-1.538	0.415	7.032	21.150	0.119	0.943	-0.038
σ		0.068	0.031	0.033	0.241	1.961	0.009	0.062	0.047
%RSD		15.330	2.046	7.849	3.424	9.271	7.549	6.535	124.500

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:51:00	0.108	0.895	0.945	0.625	1.004	0.205	0.000	5.844
2	11:51:19	0.065	0.968	1.061	0.783	0.693	0.475	0.000	5.891
3	11:51:38	0.160	1.018	1.087	0.678	0.982	0.272	0.000	5.732
x		0.111	0.960	1.031	0.695	0.893	0.317	0.000	5.823
σ		0.048	0.062	0.076	0.080	0.173	0.141	0.000	0.082
%RSD		42.920	6.440	7.341	11.560	19.430	44.290	0.000	1.400

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:51:00	103.810%	0.148	0.215	105.235%	-0.134	-0.128	-0.006	-0.005
2	11:51:19	104.800%	0.215	0.189	105.230%	-0.122	-0.137	0.025	0.019
3	11:51:38	106.105%	0.191	0.220	106.979%	-0.113	-0.135	-0.024	-0.017
x		104.905%	0.185	0.208	105.814%	-0.123	-0.133	-0.002	-0.001
σ		1.151%	0.034	0.017	1.008%	0.011	0.004	0.025	0.019
%RSD		1.097	18.190	8.173	0.953	8.537	3.335	1309.000	1896.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:51:00	104.722%	-0.269	0.240	0.236	0.543	0.662	104.491%	103.932%
2	11:51:19	105.762%	-0.240	0.291	0.259	0.689	0.597	105.099%	105.223%
3	11:51:38	106.583%	-0.270	0.269	0.265	0.668	0.691	106.113%	106.726%
x		105.689%	-0.259	0.267	0.253	0.633	0.650	105.234%	105.293%
σ		0.933%	0.017	0.026	0.015	0.079	0.048	0.819%	1.399%
%RSD		0.883	6.582	9.682	6.077	12.520	7.429	0.778	1.328

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	11:51:00	-0.004	-0.004	0.005	0.009	0.009	100.817%
2	11:51:19	-0.001	-0.002	0.015	0.011	0.011	101.277%
3	11:51:38	-0.000	-0.002	0.010	0.011	0.012	102.330%
x		-0.002	-0.003	0.010	0.010	0.011	101.475%
σ		0.002	0.001	0.005	0.001	0.002	0.776%
%RSD		98.720	56.380	48.580	13.740	15.730	0.764

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:54:40	100.270%	-0.287	0.275	0.338	0.000	10390.000	4376.000	4414.000
2	11:54:59	102.430%	-0.250	0.596	-0.222	0.000	10170.000	4295.000	4374.000
3	11:55:18	103.193%	-0.189	0.700	0.401	0.000	10050.000	4301.000	4370.000
x		101.964%	-0.242	0.523	0.173	0.000	10200.000	4324.000	4386.000
σ		1.516%	0.050	0.222	0.343	0.000	172.000	45.100	24.340
%RSD		1.487	20.490	42.350	198.500	0.000	1.686	1.043	0.555
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:54:40	0.021	118.400	0.000	64.470	9848.000	9901.000	102.012%	-0.046
2	11:54:59	0.074	118.700	0.000	62.870	10430.000	9835.000	103.418%	0.060
3	11:55:18	0.013	118.100	0.000	62.060	10210.000	9739.000	104.172%	-0.027
x		0.036	118.400	0.000	63.130	10160.000	9825.000	103.201%	-0.004
σ		0.033	0.288	0.000	1.225	294.600	81.710	1.096%	0.057
%RSD		91.900	0.243	0.000	1.941	2.898	0.832	1.062	1283.000
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:54:40	-0.179	-1.155	0.065	7.962	23.080	0.087	1.211	-0.500
2	11:54:59	-0.391	-1.143	0.050	7.695	24.630	0.080	0.894	-0.444
3	11:55:18	-0.338	-1.177	0.037	6.934	23.400	0.068	0.995	-0.493
x		-0.303	-1.158	0.051	7.530	23.700	0.078	1.033	-0.479
σ		0.110	0.017	0.014	0.533	0.816	0.010	0.162	0.031
%RSD		36.420	1.496	28.300	7.082	3.441	12.200	15.680	6.379
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:54:40	-0.226	0.794	0.907	0.001	0.677	0.663	0.000	6.291
2	11:54:59	-0.263	0.796	1.001	-0.323	0.483	-0.895	0.000	6.134
3	11:55:18	-0.326	0.876	0.916	-0.021	0.309	-0.083	0.000	6.098
x		-0.272	0.822	0.941	-0.115	0.489	-0.105	0.000	6.174
σ		0.050	0.047	0.051	0.181	0.184	0.779	0.000	0.102
%RSD		18.440	5.716	5.467	158.100	37.640	741.100	0.000	1.659
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:54:40	102.172%	0.072	0.113	103.269%	-0.119	-0.143	0.033	0.026
2	11:54:59	103.911%	0.091	0.109	104.524%	-0.126	-0.132	-0.031	-0.015
3	11:55:18	105.040%	0.073	0.098	105.188%	-0.122	-0.135	-0.025	-0.015
x		103.708%	0.079	0.106	104.327%	-0.123	-0.137	-0.007	-0.001
σ		1.445%	0.011	0.008	0.975%	0.004	0.006	0.035	0.023
%RSD		1.393	13.410	7.355	0.934	2.870	4.416	473.500	1614.000
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:54:40	102.472%	-0.255	0.033	0.024	0.709	0.716	101.246%	101.658%
2	11:54:59	103.682%	-0.271	0.026	0.020	0.685	0.740	104.025%	103.499%
3	11:55:18	106.110%	-0.240	0.027	0.027	0.579	0.689	104.728%	104.179%
x		104.088%	-0.255	0.028	0.024	0.657	0.715	103.333%	103.112%
σ		1.853%	0.015	0.004	0.004	0.069	0.026	1.841%	1.304%
%RSD		1.780	5.984	12.750	15.340	10.540	3.582	1.782	1.265
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	11:54:40	-0.003	-0.003	0.011	0.005	0.007	98.057%		
2	11:54:59	0.001	-0.006	0.012	0.006	0.011	99.936%		
3	11:55:18	-0.000	-0.003	0.012	0.015	0.012	99.947%		
x		-0.001	-0.004	0.012	0.009	0.010	99.313%		
σ		0.002	0.002	0.000	0.006	0.003	1.088%		
%RSD		336.600	50.820	3.988	66.080	26.590	1.095		

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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	11:58:20	98.487%	-0.262	11.270	9.522	0.000	10160.000	3946.000	4015.000
2	11:58:39	99.919%	-0.351	7.893	8.648	0.000	10090.000	3910.000	3995.000
3	11:58:58	97.044%	-0.148	9.468	9.379	0.000	10100.000	3972.000	4085.000
x		98.483%	-0.254	9.544	9.183	0.000	10120.000	3942.000	4032.000
σ		1.438%	0.102	1.690	0.469	0.000	40.680	31.310	47.470
%RSD		1.460	40.120	17.710	5.107	0.000	0.402	0.794	1.177
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:58:20	5.619	255.200	0.000	248.900	8842.000	8403.000	100.631%	0.021
2	11:58:39	5.385	256.100	0.000	246.800	8510.000	8308.000	101.203%	-0.002
3	11:58:58	5.672	258.600	0.000	245.400	8434.000	8270.000	101.742%	0.019
x		5.559	256.600	0.000	247.000	8595.000	8327.000	101.192%	0.013
σ		0.153	1.755	0.000	1.761	216.700	68.260	0.556%	0.013
%RSD		2.747	0.684	0.000	0.713	2.521	0.820	0.549	99.560
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:58:20	0.124	-0.457	1.392	10.180	19.570	0.119	0.847	-0.463
2	11:58:39	0.134	-0.455	1.492	10.110	22.070	0.108	0.705	-0.428
3	11:58:58	0.163	-0.440	1.450	10.140	18.160	0.121	0.803	-0.446
x		0.140	-0.450	1.445	10.140	19.930	0.116	0.785	-0.446
σ		0.020	0.009	0.051	0.036	1.979	0.007	0.072	0.017
%RSD		14.140	2.014	3.502	0.351	9.927	6.195	9.229	3.904
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:58:20	-0.301	9.322	8.675	6.949	0.405	-0.297	0.000	5.581
2	11:58:39	-0.229	9.396	9.370	7.561	0.785	0.652	0.000	5.770
3	11:58:58	-0.250	9.110	9.336	7.225	0.878	0.276	0.000	5.766
x		-0.260	9.276	9.127	7.245	0.689	0.211	0.000	5.706
σ		0.037	0.148	0.392	0.307	0.251	0.478	0.000	0.108
%RSD		14.330	1.598	4.295	4.233	36.350	226.900	0.000	1.896
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:58:20	102.942%	5.162	5.035	103.093%	-0.116	-0.140	0.014	0.013
2	11:58:39	104.355%	5.344	5.260	104.722%	-0.135	-0.139	-0.012	-0.006
3	11:58:58	105.708%	5.521	5.339	105.862%	-0.141	-0.140	0.033	0.022
x		104.335%	5.342	5.212	104.559%	-0.131	-0.140	0.012	0.010
σ		1.383%	0.179	0.158	1.392%	0.013	0.000	0.023	0.014
%RSD		1.325	3.355	3.024	1.331	10.280	0.176	195.400	144.500
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:58:20	102.674%	-0.247	1.484	1.556	0.975	1.008	103.164%	102.976%
2	11:58:39	104.342%	-0.231	1.471	1.444	1.008	0.992	105.357%	104.676%
3	11:58:58	105.760%	-0.222	1.485	1.526	0.875	0.923	105.297%	105.546%
x		104.259%	-0.233	1.480	1.509	0.953	0.974	104.606%	104.400%
σ		1.545%	0.013	0.008	0.058	0.069	0.045	1.249%	1.307%
%RSD		1.482	5.435	0.548	3.855	7.274	4.652	1.194	1.252
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	11:58:20	-0.001	-0.002	0.013	0.015	0.015	100.312%		
2	11:58:39	-0.002	-0.003	0.009	0.017	0.014	101.831%		
3	11:58:58	-0.001	-0.004	0.019	0.016	0.012	103.404%		
x		-0.002	-0.003	0.014	0.016	0.014	101.849%		
σ		0.001	0.001	0.005	0.001	0.001	1.546%		
%RSD		35.780	33.650	39.800	5.656	10.350	1.518		

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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	12:02:01	98.711%	-0.284	7.033	6.831	0.000	10280.000	3910.000	4003.000
2	12:02:20	99.651%	-0.243	7.075	7.865	0.000	10170.000	3854.000	3961.000
3	12:02:40	100.744%	-0.224	8.177	8.111	0.000	10030.000	3880.000	3973.000
x		99.702%	-0.250	7.428	7.602	0.000	10160.000	3881.000	3979.000
σ		1.018%	0.031	0.648	0.679	0.000	127.400	27.920	22.020
%RSD		1.021	12.220	8.729	8.932	0.000	1.254	0.719	0.553
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:02:01	0.842	135.400	0.000	253.800	8343.000	8116.000	100.648%	-0.023
2	12:02:20	0.590	134.200	0.000	247.900	8529.000	8065.000	101.774%	-0.003
3	12:02:40	0.757	132.900	0.000	253.000	8124.000	8044.000	101.712%	0.085
x		0.730	134.200	0.000	251.600	8332.000	8075.000	101.378%	0.020
σ		0.129	1.264	0.000	3.197	202.800	37.090	0.633%	0.057
%RSD		17.610	0.942	0.000	1.271	2.434	0.459	0.624	290.500
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:02:01	0.036	-0.455	0.819	8.074	19.740	0.087	0.898	-0.449
2	12:02:20	-0.015	-0.452	0.800	7.370	18.870	0.102	0.835	-0.480
3	12:02:40	-0.013	-0.497	0.820	7.620	18.760	0.115	0.957	-0.430
x		0.003	-0.468	0.813	7.688	19.120	0.101	0.896	-0.453
σ		0.029	0.025	0.011	0.356	0.535	0.014	0.061	0.025
%RSD		1086.000	5.317	1.351	4.638	2.800	14.040	6.813	5.569
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:02:01	-0.377	1.708	2.050	0.284	0.359	-1.095	0.000	5.376
2	12:02:20	-0.322	1.864	1.896	0.144	0.517	-0.652	0.000	5.425
3	12:02:40	-0.378	1.733	1.654	0.274	0.356	-0.077	0.000	5.430
x		-0.359	1.769	1.867	0.234	0.411	-0.608	0.000	5.410
σ		0.032	0.084	0.199	0.078	0.092	0.510	0.000	0.030
%RSD		8.927	4.749	10.680	33.350	22.310	83.960	0.000	0.547
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:02:01	101.817%	5.263	5.564	102.695%	-0.114	-0.128	0.043	0.041
2	12:02:20	103.533%	5.966	5.573	104.065%	-0.128	-0.130	0.029	0.020
3	12:02:40	104.362%	5.551	5.876	104.097%	-0.128	-0.130	0.045	0.025
x		103.237%	5.593	5.671	103.619%	-0.123	-0.129	0.039	0.029
σ		1.298%	0.353	0.177	0.801%	0.008	0.001	0.008	0.011
%RSD		1.257	6.321	3.128	0.773	6.808	0.740	21.610	38.800
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:02:01	102.943%	-0.249	1.443	1.393	0.825	0.773	102.969%	102.084%
2	12:02:20	104.255%	-0.249	1.398	1.432	0.700	0.851	103.358%	103.271%
3	12:02:40	104.721%	-0.234	1.437	1.516	0.788	0.774	103.980%	104.612%
x		103.973%	-0.244	1.426	1.447	0.771	0.799	103.436%	103.322%
σ		0.922%	0.008	0.024	0.063	0.064	0.045	0.510%	1.265%
%RSD		0.887	3.457	1.696	4.351	8.314	5.597	0.493	1.224
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	12:02:01	0.000	-0.003	0.010	0.015	0.012	100.044%		
2	12:02:20	-0.001	-0.002	0.017	0.016	0.015	100.235%		
3	12:02:40	-0.002	-0.003	0.019	0.012	0.016	101.019%		
x		-0.001	-0.003	0.015	0.014	0.014	100.433%		
σ		0.001	0.001	0.005	0.002	0.002	0.517%		
%RSD		122.000	21.660	31.940	13.810	16.840	0.515		

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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	12:05:43	99.840%	-0.222	5.764	6.996	0.000	10290.000	3965.000	4016.000
2	12:06:02	98.859%	-0.197	6.179	6.255	0.000	10200.000	3947.000	4028.000
3	12:06:21	98.291%	-0.065	7.903	7.419	0.000	10050.000	3950.000	4044.000
x		98.997%	-0.161	6.615	6.890	0.000	10180.000	3954.000	4029.000
σ		0.784%	0.084	1.134	0.589	0.000	120.700	9.869	13.770
%RSD		0.792	52.360	17.140	8.554	0.000	1.186	0.250	0.342

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:05:43	8.409	82.830	0.000	319.000	8570.000	8334.000	100.037%	0.066
2	12:06:02	6.135	83.380	0.000	313.300	8417.000	8259.000	100.972%	0.086
3	12:06:21	6.123	84.620	0.000	313.300	8568.000	8223.000	101.473%	-0.024
x		6.889	83.610	0.000	315.200	8518.000	8272.000	100.827%	0.043
σ		1.316	0.917	0.000	3.271	87.660	56.780	0.728%	0.059
%RSD		19.110	1.097	0.000	1.038	1.029	0.686	0.722	137.300

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:05:43	-0.077	-0.614	0.298	8.840	20.920	0.117	0.747	-0.427
2	12:06:02	-0.042	-0.584	0.298	8.124	18.890	0.111	0.753	-0.415
3	12:06:21	-0.103	-0.571	0.321	8.237	18.480	0.118	0.749	-0.417
x		-0.074	-0.590	0.305	8.400	19.430	0.115	0.750	-0.420
σ		0.031	0.022	0.014	0.385	1.304	0.004	0.003	0.006
%RSD		41.630	3.735	4.501	4.578	6.710	3.579	0.413	1.483

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:05:43	-0.341	14.420	14.600	-0.048	0.276	0.059	0.000	6.731
2	12:06:02	-0.290	14.080	14.040	0.009	0.290	-0.157	0.000	6.584
3	12:06:21	-0.256	14.070	13.530	-0.120	0.111	-0.458	0.000	6.587
x		-0.295	14.190	14.060	-0.053	0.226	-0.185	0.000	6.634
σ		0.043	0.201	0.534	0.065	0.100	0.260	0.000	0.084
%RSD		14.440	1.419	3.803	122.200	44.270	140.100	0.000	1.264

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:05:43	101.508%	0.568	0.554	102.746%	-0.132	-0.140	0.082	0.061
2	12:06:02	103.241%	0.546	0.533	103.802%	-0.130	-0.140	-0.020	-0.014
3	12:06:21	104.719%	0.570	0.592	104.396%	-0.136	-0.130	0.017	0.008
x		103.156%	0.562	0.560	103.648%	-0.132	-0.137	0.026	0.018
σ		1.607%	0.013	0.030	0.836%	0.003	0.006	0.051	0.039
%RSD		1.558	2.392	5.302	0.806	2.209	4.276	193.800	210.900

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:05:43	101.719%	-0.235	0.157	0.208	0.970	1.016	101.935%	102.224%
2	12:06:02	103.170%	-0.242	0.160	0.193	0.987	1.011	104.504%	104.168%
3	12:06:21	104.592%	-0.253	0.204	0.173	0.960	1.006	104.536%	104.668%
x		103.160%	-0.243	0.173	0.191	0.972	1.011	103.658%	103.687%
σ		1.436%	0.009	0.026	0.018	0.014	0.005	1.493%	1.292%
%RSD		1.392	3.748	15.270	9.272	1.449	0.465	1.440	1.246

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	12:05:43	0.001	-0.003	0.014	0.011	0.014	100.201%
2	12:06:02	-0.003	-0.004	0.014	0.011	0.016	101.849%
3	12:06:21	0.000	-0.003	0.015	0.019	0.017	101.791%
x		-0.001	-0.003	0.014	0.013	0.016	101.280%
σ		0.002	0.000	0.000	0.005	0.002	0.935%
%RSD		327.400	8.559	2.364	34.150	11.030	0.923

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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	12:09:24	111.267%	-0.112	31.370	29.630	0.000	345.300	3.181	5.248
2	12:09:44	111.558%	-0.055	28.660	31.160	0.000	347.600	5.097	5.362
3	12:10:03	112.744%	-0.117	28.570	31.330	0.000	348.800	4.930	4.699
x		111.857%	-0.095	29.540	30.710	0.000	347.300	4.403	5.103
σ		0.783%	0.034	1.591	0.938	0.000	1.813	1.062	0.355
%RSD		0.700	36.370	5.386	3.056	0.000	0.522	24.110	6.949

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:24	16.650	437.400	0.000	56.750	152.800	257.000	101.676%	3.033
2	12:09:44	16.800	442.200	0.000	56.640	204.800	270.000	103.205%	3.263
3	12:10:03	17.670	445.300	0.000	55.650	157.000	277.700	103.923%	3.389
x		17.040	441.600	0.000	56.350	171.500	268.300	102.935%	3.229
σ		0.552	3.964	0.000	0.606	28.910	10.480	1.148%	0.180
%RSD		3.238	0.897	0.000	1.076	16.860	3.906	1.115	5.581

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:24	-0.323	2.126	0.518	7.648	4.537	-0.008	0.215	0.959
2	12:09:44	0.402	2.075	0.550	7.080	3.401	-0.001	0.212	0.852
3	12:10:03	1.074	2.007	0.545	6.673	2.836	-0.007	0.230	0.630
x		0.384	2.069	0.538	7.134	3.591	-0.005	0.219	0.814
σ		0.699	0.060	0.017	0.490	0.866	0.004	0.009	0.168
%RSD		181.800	2.878	3.235	6.865	24.120	72.390	4.320	20.630

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:24	0.917	2.969	2.923	-0.602	0.837	-0.556	0.000	0.325
2	12:09:44	1.011	3.119	2.971	-0.402	0.452	-0.574	0.000	0.320
3	12:10:03	0.869	2.964	3.168	-1.236	0.803	-0.852	0.000	0.304
x		0.932	3.017	3.021	-0.746	0.697	-0.661	0.000	0.316
σ		0.072	0.088	0.130	0.436	0.213	0.166	0.000	0.011
%RSD		7.740	2.922	4.293	58.360	30.610	25.160	0.000	3.396

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:24	104.861%	0.343	0.266	104.933%	0.354	0.373	0.022	0.022
2	12:09:44	108.518%	0.313	0.330	107.086%	0.265	0.255	0.000	0.066
3	12:10:03	109.731%	0.305	0.284	108.330%	0.125	0.187	-0.031	-0.022
x		107.704%	0.320	0.293	106.783%	0.248	0.272	-0.003	0.022
σ		2.535%	0.020	0.033	1.719%	0.116	0.094	0.026	0.044
%RSD		2.354	6.201	11.230	1.609	46.640	34.530	873.000	203.800

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:24	102.761%	5.333	0.542	0.424	0.431	0.360	104.152%	105.403%
2	12:09:44	105.303%	4.845	0.456	0.423	0.369	0.454	107.840%	108.038%
3	12:10:03	107.009%	4.799	0.383	0.442	0.369	0.379	108.810%	108.975%
x		105.024%	4.992	0.460	0.429	0.390	0.398	106.934%	107.472%
σ		2.138%	0.296	0.080	0.011	0.036	0.050	2.458%	1.852%
%RSD		2.036	5.926	17.290	2.450	9.269	12.560	2.298	1.723

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:24	0.003	0.005	8.140	7.207	7.537	106.688%
2	12:09:44	0.004	-0.000	8.184	7.612	7.692	106.746%
3	12:10:03	0.000	0.001	8.116	7.451	7.594	108.700%
x		0.003	0.002	8.147	7.423	7.608	107.378%
σ		0.002	0.003	0.034	0.204	0.078	1.145%
%RSD		79.260	158.900	0.423	2.745	1.030	1.066

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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	12:13:07	108.010%	-0.102	25.270	24.400	0.000	15440.000	59240.000	63230.000
2	12:13:26	108.146%	-0.083	24.860	24.810	0.000	15250.000	59580.000	63680.000
3	12:13:45	109.087%	-0.106	25.210	25.550	0.000	15290.000	60460.000	65010.000
x		108.414%	-0.097	25.120	24.920	0.000	15330.000	59760.000	63970.000
σ		0.586%	0.012	0.221	0.584	0.000	100.300	632.400	926.100
%RSD		0.541	12.620	0.879	2.343	0.000	0.654	1.058	1.448

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:07	48.040	997.500	0.000	15790.000	365400.000	376900.000	105.209%	2.083
2	12:13:26	50.060	1002.000	0.000	15610.000	364000.000	374100.000	107.011%	1.381
3	12:13:45	50.820	1028.000	0.000	15850.000	370400.000	381500.000	106.789%	1.799
x		49.640	1009.000	0.000	15750.000	366600.000	377500.000	106.336%	1.754
σ		1.435	16.510	0.000	123.900	3346.000	3724.000	0.983%	0.353
%RSD		2.891	1.636	0.000	0.787	0.913	0.986	0.924	20.120

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:07	-0.912	2.061	3882.000	14.690	757.100	3.564	-1.435	0.540
2	12:13:26	-0.159	2.182	3869.000	13.680	739.100	3.623	-1.172	0.454
3	12:13:45	0.309	2.073	3900.000	14.420	732.900	3.686	-1.214	0.530
x		-0.254	2.106	3884.000	14.260	743.000	3.624	-1.274	0.508
σ		0.616	0.067	15.650	0.519	12.590	0.061	0.141	0.047
%RSD		242.300	3.177	0.403	3.638	1.695	1.693	11.110	9.228

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:07	1.182	6.291	6.232	-0.558	0.880	0.225	0.000	780.800
2	12:13:26	1.094	6.319	5.742	0.958	0.869	0.032	0.000	781.100
3	12:13:45	1.228	6.161	6.072	-0.988	0.963	0.004	0.000	780.200
x		1.168	6.257	6.015	-0.196	0.904	0.087	0.000	780.700
σ		0.068	0.084	0.250	1.022	0.051	0.120	0.000	0.424
%RSD		5.822	1.346	4.156	521.700	5.684	137.800	0.000	0.054

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:07	108.741%	0.256	0.247	102.611%	-0.045	-0.046	0.110	0.113
2	12:13:26	111.120%	0.211	0.284	104.403%	-0.054	-0.046	0.054	0.118
3	12:13:45	112.719%	0.217	0.213	105.586%	-0.063	-0.074	0.076	0.110
x		110.860%	0.228	0.248	104.200%	-0.054	-0.055	0.080	0.114
σ		2.002%	0.024	0.036	1.498%	0.009	0.016	0.029	0.004
%RSD		1.805	10.660	14.360	1.438	16.210	29.630	35.600	3.927

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:07	102.849%	4.023	0.237	0.280	14.160	14.260	105.722%	106.196%
2	12:13:26	104.508%	3.969	0.260	0.285	14.360	13.930	108.657%	108.895%
3	12:13:45	107.345%	3.928	0.217	0.236	13.940	13.990	109.328%	110.533%
x		104.901%	3.973	0.238	0.267	14.150	14.060	107.902%	108.542%
σ		2.273%	0.048	0.021	0.027	0.214	0.180	1.918%	2.190%
%RSD		2.167	1.199	8.844	10.130	1.508	1.277	1.778	2.018

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:07	0.181	0.172	0.052	0.046	0.050	98.679%
2	12:13:26	0.187	0.172	0.049	0.048	0.050	99.806%
3	12:13:45	0.163	0.189	0.054	0.049	0.049	101.904%
x		0.177	0.177	0.052	0.048	0.050	100.129%
σ		0.012	0.009	0.003	0.002	0.001	1.637%
%RSD		6.817	5.333	5.241	3.479	1.451	1.634

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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	12:17:23	106.299%	-0.157	21.940	23.950	0.000	15400.000	60800.000	65250.000
2	12:17:43	109.904%	-0.148	20.700	23.410	0.000	15110.000	60280.000	65470.000
3	12:18:02	107.211%	-0.201	26.400	25.370	0.000	15270.000	61540.000	66840.000
x		107.805%	-0.169	23.010	24.240	0.000	15260.000	60880.000	65850.000
σ		1.874%	0.028	3.000	1.016	0.000	146.500	634.700	859.600
%RSD		1.739	16.530	13.040	4.189	0.000	0.960	1.043	1.305
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:17:23	67.690	1054.000	0.000	15640.000	363300.000	377800.000	105.576%	1.737
2	12:17:43	68.430	1059.000	0.000	15600.000	363200.000	377700.000	106.721%	1.674
3	12:18:02	67.960	1067.000	0.000	15620.000	365700.000	377400.000	106.851%	1.339
x		68.020	1060.000	0.000	15620.000	364000.000	377600.000	106.383%	1.583
σ		0.377	6.435	0.000	15.980	1430.000	194.700	0.702%	0.214
%RSD		0.554	0.607	0.000	0.102	0.393	0.052	0.660	13.490
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:17:23	1.023	2.006	4223.000	298.400	1009.000	4.278	-1.050	1.441
2	12:17:43	2.120	2.161	4253.000	299.000	993.400	4.204	-1.156	1.567
3	12:18:02	0.621	2.163	4236.000	298.800	996.600	4.158	-1.231	1.475
x		1.255	2.110	4237.000	298.700	999.500	4.213	-1.146	1.494
σ		0.776	0.090	15.120	0.307	8.018	0.060	0.091	0.065
%RSD		61.840	4.259	0.357	0.103	0.802	1.429	7.927	4.361
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:17:23	2.352	44.720	43.790	-0.124	1.447	-0.547	0.000	783.500
2	12:17:43	2.480	43.910	44.020	0.011	1.190	0.001	0.000	777.500
3	12:18:02	2.327	43.750	42.700	1.149	1.696	0.005	0.000	780.300
x		2.387	44.130	43.500	0.345	1.444	-0.180	0.000	780.400
σ		0.082	0.523	0.705	0.700	0.253	0.318	0.000	2.986
%RSD		3.435	1.186	1.621	202.500	17.520	176.400	0.000	0.383
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:17:23	111.514%	0.213	0.204	104.396%	-0.110	-0.129	0.126	0.079
2	12:17:43	113.553%	0.231	0.177	106.330%	-0.097	-0.123	0.053	0.088
3	12:18:02	114.906%	0.197	0.200	107.086%	-0.100	-0.114	0.071	0.087
x		113.324%	0.214	0.194	105.937%	-0.102	-0.122	0.083	0.085
σ		1.708%	0.017	0.015	1.387%	0.007	0.008	0.038	0.005
%RSD		1.507	8.023	7.552	1.309	6.493	6.272	46.070	5.448
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:17:23	104.607%	2.874	0.134	0.193	14.510	14.520	108.286%	109.331%
2	12:17:43	106.595%	2.853	0.152	0.141	14.090	14.400	111.343%	111.751%
3	12:18:02	106.944%	2.903	0.141	0.176	14.380	14.610	112.080%	112.431%
x		106.049%	2.877	0.142	0.170	14.330	14.510	110.570%	111.171%
σ		1.260%	0.025	0.009	0.026	0.213	0.107	2.011%	1.629%
%RSD		1.189	0.871	6.178	15.360	1.487	0.734	1.819	1.465
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	12:17:23	0.174	0.172	0.106	0.087	0.091	102.156%		
2	12:17:43	0.162	0.191	0.104	0.089	0.092	103.988%		
3	12:18:02	0.187	0.193	0.099	0.087	0.096	103.606%		
x		0.174	0.185	0.103	0.087	0.093	103.250%		
σ		0.012	0.011	0.004	0.001	0.003	0.966%		
%RSD		7.085	6.120	3.471	1.696	2.750	0.936		

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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	12:21:05	98.940%	2.646	30.500	31.400	0.000	17450.000	93990.000	100900.000
2	12:21:25	101.644%	3.115	30.400	30.400	0.000	17180.000	94090.000	101900.000
3	12:21:44	102.650%	3.099	31.000	32.110	0.000	17110.000	94280.000	102100.000
x		101.078%	2.953	30.630	31.300	0.000	17250.000	94120.000	101600.000
σ		1.918%	0.266	0.322	0.862	0.000	177.200	151.000	662.700
%RSD		1.898	9.012	1.052	2.752	0.000	1.027	0.160	0.652
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:21:05	8376.000	16280.000	0.000	16520.000	148900.000	158100.000	102.250%	4.782
2	12:21:25	8481.000	16390.000	0.000	16490.000	150900.000	157900.000	103.936%	5.108
3	12:21:44	8492.000	16410.000	0.000	16350.000	148700.000	158000.000	105.427%	4.886
x		8449.000	16360.000	0.000	16450.000	149500.000	158000.000	103.871%	4.926
σ		63.990	69.090	0.000	90.440	1210.000	98.970	1.589%	0.167
%RSD		0.757	0.422	0.000	0.550	0.810	0.063	1.530	3.384
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:21:05	-0.090	2.457	28110.000	172600.000	171900.000	665.700	69.350	599.700
2	12:21:25	1.744	2.489	28220.000	172600.000	172200.000	661.900	69.720	598.800
3	12:21:44	2.484	2.544	28280.000	173000.000	172200.000	656.500	66.840	596.600
x		1.379	2.497	28200.000	172700.000	172100.000	661.300	68.640	598.400
σ		1.325	0.044	82.940	196.700	175.100	4.588	1.565	1.588
%RSD		96.080	1.764	0.294	0.114	0.102	0.694	2.280	0.265
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:21:05	589.600	23880.000	24000.000	1.669	3.089	7.887	0.000	789.200
2	12:21:25	588.200	24030.000	24140.000	0.515	2.837	8.006	0.000	792.900
3	12:21:44	583.300	23900.000	24080.000	2.218	3.438	7.025	0.000	794.800
x		587.000	23940.000	24070.000	1.467	3.121	7.640	0.000	792.300
σ		3.305	86.150	67.800	0.869	0.302	0.535	0.000	2.813
%RSD		0.563	0.360	0.282	59.240	9.666	7.009	0.000	0.355
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:21:05	0.000	0.201	0.195	102.056%	-0.021	-0.040	9.083	8.587
2	12:21:25	0.000	0.183	0.233	104.063%	-0.028	-0.070	9.119	8.571
3	12:21:44	0.000	0.293	0.208	105.927%	-0.036	-0.083	8.669	8.539
x		0.000	0.226	0.212	104.015%	-0.029	-0.064	8.957	8.566
σ		0.000	0.059	0.019	1.936%	0.008	0.022	0.250	0.024
%RSD		0.000	26.060	8.960	1.861	26.730	34.210	2.791	0.285
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:21:05	102.038%	2.653	0.151	0.137	20.520	20.690	0.000	0.000
2	12:21:25	104.695%	2.564	0.122	0.168	20.690	20.570	0.000	0.000
3	12:21:44	105.706%	2.543	0.168	0.170	20.420	20.850	0.000	0.000
x		104.146%	2.587	0.147	0.159	20.540	20.700	0.000	0.000
σ		1.895%	0.059	0.023	0.018	0.134	0.138	0.000	0.000
%RSD		1.819	2.264	15.800	11.590	0.650	0.666	0.000	0.000
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	12:21:05	0.242	0.237	22.700	20.820	21.170	99.808%		
2	12:21:25	0.253	0.256	22.830	20.630	21.250	102.030%		
3	12:21:44	0.266	0.243	22.690	20.760	21.180	102.679%		
x		0.253	0.245	22.740	20.740	21.200	101.505%		
σ		0.012	0.010	0.079	0.096	0.044	1.506%		
%RSD		4.737	3.964	0.346	0.465	0.210	1.483		

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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	12:24:29	92.771%	95.740	94.930	96.770	0.000	47690.000	50850.000	52900.000
2	12:24:48	94.229%	96.060	103.200	97.930	0.000	47080.000	50690.000	53150.000
3	12:25:07	92.429%	96.710	98.440	99.060	0.000	47300.000	51430.000	54060.000
x		93.143%	96.171%	98.868%	97.922%	0.000	94.710%	101.972%	106.741%
σ		0.956%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.026	0.514	4.212	1.167	0.000	0.645	0.764	1.148

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:24:29	527.000	5373.000	0.000	49460.000	48160.000	49940.000	95.378%	101.600
2	12:24:48	533.200	5380.000	0.000	49330.000	48040.000	49710.000	95.002%	104.400
3	12:25:07	537.400	5430.000	0.000	49600.000	48410.000	49630.000	95.532%	98.520
x		106.501%	107.887%	0.000	98.926%	96.409%	99.522%	95.304%	101.484%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.273%	n/a
%RSD		0.983	0.574	0.000	0.268	0.388	0.320	0.286	2.881

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:24:29	100.400	102.700	520.500	26190.000	25870.000	101.400	100.500	99.220
2	12:24:48	101.700	103.600	525.200	26210.000	25940.000	101.700	99.480	101.000
3	12:25:07	102.700	103.700	525.100	26210.000	25810.000	101.000	101.300	100.200
x		101.602%	103.325%	104.718%	104.815%	103.489%	101.363%	100.446%	100.122%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.138	0.558	0.511	0.040	0.254	0.378	0.919	0.890

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:24:29	100.000	100.800	99.880	99.160	98.990	100.700	0.000	99.200
2	12:24:48	99.430	100.400	101.300	100.900	99.910	100.800	0.000	98.970
3	12:25:07	97.920	99.380	99.960	98.930	98.750	95.830	0.000	98.370
x		99.130%	100.176%	100.382%	99.666%	99.213%	99.104%	0.000	98.848%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.102	0.725	0.799	1.079	0.617	2.857	0.000	0.432

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:24:29	97.826%	99.130	98.900	97.094%	97.880	97.600	99.120	99.650
2	12:24:48	99.704%	101.600	101.800	98.025%	98.710	98.340	98.760	99.200
3	12:25:07	101.003%	101.300	100.700	98.971%	98.390	98.050	99.420	100.200
x		99.511%	100.678%	100.472%	98.030%	98.325%	97.998%	99.102%	99.672%
σ		1.598%	n/a	n/a	0.939%	n/a	n/a	n/a	n/a
%RSD		1.605	1.335	1.452	0.958	0.423	0.383	0.330	0.483

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:24:29	96.870%	96.960	95.660	95.820	97.560	97.080	100.239%	100.068%
2	12:24:48	98.513%	98.130	96.140	96.530	98.370	98.240	101.627%	101.343%
3	12:25:07	98.387%	99.640	97.810	97.530	98.720	98.020	102.227%	102.844%
x		97.923%	98.243%	96.534%	96.626%	98.218%	97.779%	101.364%	101.418%
σ		0.915%	n/a	n/a	n/a	n/a	n/a	1.020%	1.389%
%RSD		0.934	1.364	1.167	0.891	0.605	0.627	1.006	1.370

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	12:24:29	98.860	102.300	100.000	98.950	97.990	97.567%
2	12:24:48	100.500	104.600	101.100	101.000	100.000	97.601%
3	12:25:07	100.700	105.300	102.100	102.200	101.300	97.970%
x		100.017%	104.049%	101.057%	100.726%	99.783%	97.712%
σ		n/a	n/a	n/a	n/a	n/a	0.224%
%RSD		1.009	1.506	1.003	1.638	1.683	0.229

CCB3 7/18/2014 12:30:38 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	12:30:57	104.582%	-0.358	0.673	-0.163	0.000	-23.490	0.859	0.766
2	12:31:16	107.929%	-0.183	0.293	-0.273	0.000	-25.920	1.117	1.018
3	12:31:35	109.609%	-0.266	0.491	-0.447	0.000	-25.970	0.984	1.420
x		107.373%	-0.269	0.485	-0.294	0.000	-25.130	0.987	1.068
σ		2.559%	0.088	0.190	0.143	0.000	1.421	0.129	0.330
%RSD		2.384	32.560	39.150	48.710	0.000	5.655	13.110	30.920

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:30:57	-0.057	1.624	0.000	0.563	-9.158	8.376	107.913%	0.031
2	12:31:16	-0.074	2.078	0.000	-0.564	11.040	5.552	109.323%	0.131
3	12:31:35	0.027	2.006	0.000	-2.407	9.085	2.583	109.751%	-0.012
x		-0.035	1.903	0.000	-0.803	3.654	5.504	108.996%	0.050
σ		0.054	0.244	0.000	1.499	11.140	2.897	0.962%	0.073
%RSD		157.300	12.820	0.000	186.800	304.800	52.640	0.882	146.600

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:30:57	0.100	0.138	0.048	12.100	3.279	-0.007	-0.009	-0.726
2	12:31:16	0.056	0.079	0.077	9.971	3.550	-0.007	-0.007	-0.790
3	12:31:35	0.591	0.007	0.062	8.743	1.690	-0.013	-0.037	-0.621
x		0.249	0.075	0.062	10.270	2.840	-0.009	-0.018	-0.712
σ		0.297	0.066	0.014	1.699	1.004	0.004	0.016	0.085
%RSD		119.300	88.590	22.680	16.540	35.370	40.050	92.470	11.960

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:30:57	-0.344	0.001	0.063	-0.043	0.864	-0.026	0.000	0.013
2	12:31:16	-0.319	0.032	0.116	-0.189	1.193	-1.110	0.000	0.006
3	12:31:35	-0.301	0.117	0.148	-0.007	1.024	0.046	0.000	0.004
x		-0.322	0.050	0.109	-0.080	1.027	-0.363	0.000	0.008
σ		0.022	0.060	0.043	0.096	0.165	0.648	0.000	0.004
%RSD		6.766	119.100	39.190	120.500	16.020	178.400	0.000	55.380

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:30:57	109.511%	0.135	0.209	112.570%	-0.133	-0.143	0.020	0.012
2	12:31:16	112.044%	0.181	0.172	114.048%	-0.125	-0.135	-0.036	-0.023
3	12:31:35	112.294%	0.212	0.131	114.765%	-0.113	-0.141	-0.024	-0.022
x		111.283%	0.176	0.171	113.794%	-0.124	-0.140	-0.013	-0.011
σ		1.540%	0.039	0.039	1.119%	0.010	0.004	0.030	0.020
%RSD		1.383	22.110	22.920	0.983	8.275	3.068	222.800	183.300

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:30:57	108.777%	-0.172	0.085	0.113	0.014	0.015	106.488%	106.885%
2	12:31:16	110.524%	-0.205	0.107	0.083	-0.006	0.022	109.040%	108.848%
3	12:31:35	111.633%	-0.204	0.082	0.080	0.004	0.020	109.836%	109.790%
x		110.311%	-0.194	0.092	0.092	0.004	0.019	108.455%	108.508%
σ		1.440%	0.019	0.014	0.018	0.010	0.004	1.749%	1.482%
%RSD		1.305	9.566	15.040	20.010	247.800	21.070	1.612	1.366

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	12:30:57	0.001	-0.004	0.025	0.021	0.020	106.170%
2	12:31:16	0.003	-0.001	0.017	0.021	0.017	106.979%
3	12:31:35	0.002	-0.002	0.022	0.015	0.020	107.609%
x		0.002	-0.002	0.021	0.019	0.019	106.919%
σ		0.001	0.001	0.004	0.003	0.002	0.722%
%RSD		51.020	48.320	18.580	17.950	9.253	0.675

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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	12:34:42	105.306%	-0.114	0.664	-0.284	0.000	-3.278	0.203	0.673
2	12:35:01	106.188%	-0.238	0.985	-0.388	0.000	-2.723	0.431	0.708
3	12:35:20	104.860%	-0.215	0.553	-0.100	0.000	3.509	0.787	0.896
x		105.451%	-0.189	0.734	-0.257	0.000	-0.831	0.474	0.759
σ		0.675%	0.066	0.224	0.146	0.000	3.769	0.294	0.120
%RSD		0.640	35.100	30.550	56.620	0.000	453.700	62.030	15.840

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:34:42	2.433	6.226	0.000	1.444	0.352	11.760	106.618%	0.137
2	12:35:01	2.660	6.263	0.000	-0.598	0.159	13.330	108.026%	0.154
3	12:35:20	2.644	6.149	0.000	-1.408	-5.551	19.680	109.517%	0.272
x		2.579	6.213	0.000	-0.187	-1.680	14.920	108.054%	0.188
σ		0.127	0.058	0.000	1.470	3.354	4.193	1.450%	0.073
%RSD		4.915	0.938	0.000	784.500	199.700	28.100	1.342	39.060

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:34:42	-0.371	0.418	0.030	13.810	4.741	-0.012	0.070	-0.541
2	12:35:01	0.324	0.432	0.017	12.030	6.184	-0.019	0.013	-0.443
3	12:35:20	-0.053	0.423	0.014	11.500	4.212	-0.014	0.035	-0.456
x		-0.033	0.425	0.020	12.450	5.046	-0.015	0.039	-0.480
σ		0.348	0.007	0.009	1.211	1.021	0.003	0.029	0.053
%RSD		1051.000	1.638	43.430	9.726	20.230	21.490	73.220	11.040

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:34:42	-0.071	0.805	1.009	-0.011	1.113	-0.364	0.000	0.026
2	12:35:01	-0.224	0.817	0.883	0.017	0.825	0.176	0.000	0.017
3	12:35:20	-0.220	0.847	0.912	0.112	1.225	-0.211	0.000	0.042
x		-0.172	0.823	0.935	0.039	1.054	-0.133	0.000	0.028
σ		0.087	0.022	0.066	0.064	0.206	0.279	0.000	0.012
%RSD		50.820	2.615	7.032	163.200	19.560	209.400	0.000	44.030

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:34:42	110.782%	0.057	0.059	113.097%	-0.133	-0.146	-0.084	-0.056
2	12:35:01	113.453%	0.046	0.043	114.240%	-0.125	-0.152	-0.041	-0.019
3	12:35:20	115.117%	0.039	0.057	115.521%	-0.132	-0.140	-0.020	-0.016
x		113.117%	0.047	0.053	114.286%	-0.130	-0.146	-0.048	-0.030
σ		2.186%	0.009	0.009	1.213%	0.005	0.006	0.033	0.022
%RSD		1.933	19.350	16.200	1.061	3.603	4.016	67.890	73.270

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:34:42	108.818%	0.126	0.044	0.062	-0.006	0.026	108.470%	108.619%
2	12:35:01	111.387%	0.074	0.053	0.074	0.023	0.003	110.810%	110.825%
3	12:35:20	112.300%	0.058	0.002	0.026	0.008	0.006	112.923%	112.766%
x		110.835%	0.086	0.033	0.054	0.008	0.011	110.734%	110.737%
σ		1.805%	0.036	0.027	0.025	0.014	0.012	2.227%	2.075%
%RSD		1.629	41.360	81.500	46.410	169.100	107.200	2.011	1.874

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	12:34:42	0.001	-0.004	0.011	0.013	0.008	107.446%
2	12:35:01	-0.003	-0.006	0.012	0.016	0.011	107.977%
3	12:35:20	-0.002	-0.007	0.005	0.017	0.008	109.568%
x		-0.001	-0.006	0.009	0.015	0.009	108.330%
σ		0.002	0.001	0.004	0.002	0.002	1.105%
%RSD		155.400	23.840	42.610	12.440	17.050	1.020

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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	12:38:24	107.974%	45.550	940.900	973.500	0.000	42610.000	48080.000	51310.000
2	12:38:44	109.863%	44.730	971.700	980.000	0.000	42460.000	48510.000	52190.000
3	12:39:03	110.891%	43.700	979.900	984.800	0.000	42520.000	48890.000	52630.000
x		109.576%	44.660	964.200	979.400	0.000	42530.000	48490.000	52040.000
σ		1.480%	0.929	20.560	5.646	0.000	75.430	403.200	670.300
%RSD		1.350	2.079	2.133	0.576	0.000	0.177	0.832	1.288
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:38:24	2068.000	10050.000	0.000	45140.000	45010.000	46570.000	106.030%	944.900
2	12:38:44	2086.000	10160.000	0.000	44890.000	45230.000	46510.000	108.593%	943.300
3	12:39:03	2100.000	10250.000	0.000	45020.000	45000.000	46960.000	109.483%	955.000
x		2085.000	10150.000	0.000	45020.000	45080.000	46680.000	108.035%	947.800
σ		16.300	99.800	0.000	123.800	129.700	241.800	1.793%	6.358
%RSD		0.782	0.983	0.000	0.275	0.288	0.518	1.659	0.671
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:38:24	476.900	195.100	485.200	982.400	1047.000	464.300	457.100	228.500
2	12:38:44	476.500	195.100	486.300	979.600	1027.000	462.100	456.600	227.800
3	12:39:03	479.600	194.900	483.500	977.500	1034.000	460.600	449.800	227.200
x		477.600	195.100	485.000	979.800	1036.000	462.400	454.500	227.800
σ		1.682	0.154	1.406	2.432	10.370	1.844	4.098	0.669
%RSD		0.352	0.079	0.290	0.248	1.001	0.399	0.902	0.294
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:38:24	225.200	453.800	452.900	33.850	10.910	8.440	0.000	933.800
2	12:38:44	223.900	452.800	453.600	35.810	10.580	9.446	0.000	938.400
3	12:39:03	222.500	455.100	454.400	36.150	11.030	9.749	0.000	934.100
x		223.900	453.900	453.600	35.270	10.840	9.212	0.000	935.400
σ		1.332	1.148	0.728	1.243	0.231	0.685	0.000	2.534
%RSD		0.595	0.253	0.160	3.524	2.136	7.438	0.000	0.271
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:38:24	110.916%	977.900	1001.000	106.293%	46.170	46.070	46.760	41.540
2	12:38:44	113.288%	979.100	1009.000	109.034%	45.680	45.620	47.680	40.580
3	12:39:03	115.190%	984.300	1011.000	110.320%	45.880	46.210	48.070	40.790
x		113.131%	980.400	1007.000	108.549%	45.910	45.970	47.500	40.970
σ		2.141%	3.377	5.196	2.057%	0.248	0.308	0.670	0.502
%RSD		1.893	0.344	0.516	1.895	0.539	0.670	1.410	1.225
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:38:24	104.835%	1924.000	483.000	481.200	1852.000	1915.000	108.302%	109.559%
2	12:38:44	108.234%	1908.000	479.000	472.300	1841.000	1892.000	111.252%	112.028%
3	12:39:03	108.740%	1913.000	482.400	479.300	1850.000	1895.000	112.634%	113.777%
x		107.270%	1915.000	481.400	477.600	1848.000	1901.000	110.729%	111.788%
σ		2.124%	7.969	2.163	4.689	5.853	12.460	2.213%	2.119%
%RSD		1.980	0.416	0.449	0.982	0.317	0.656	1.998	1.896
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	12:38:24	45.340	46.990	18.920	18.780	18.650	103.753%		
2	12:38:44	45.980	47.210	19.090	18.900	18.740	105.380%		
3	12:39:03	45.880	47.820	19.360	19.290	18.880	105.335%		
x		45.730	47.340	19.120	18.990	18.760	104.823%		
σ		0.346	0.432	0.220	0.267	0.120	0.927%		
%RSD		0.757	0.913	1.150	1.408	0.638	0.884		

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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	12:44:51	103.670%	-0.169	131.000	133.900	0.000	201600.000	30660.000	32910.000
2	12:45:10	101.039%	-0.077	141.400	138.200	0.000	204500.000	31350.000	33850.000
3	12:45:29	104.733%	-0.071	137.300	137.100	0.000	202100.000	31310.000	33660.000
x		103.147%	-0.106	136.500	136.400	0.000	202700.000	31110.000	33480.000
σ		1.902%	0.055	5.245	2.222	0.000	1555.000	390.700	495.800
%RSD		1.844	52.280	3.842	1.629	0.000	0.767	1.256	1.481
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:44:51	108.000	18370.000	0.000	5981.000	137100.000	144600.000	103.342%	8.390
2	12:45:10	105.200	18790.000	0.000	5983.000	137200.000	145100.000	105.643%	6.858
3	12:45:29	107.000	18700.000	0.000	5949.000	137100.000	144800.000	106.716%	7.535
x		106.700	18620.000	0.000	5971.000	137100.000	144800.000	105.234%	7.594
σ		1.450	219.600	0.000	19.010	72.610	239.100	1.724%	0.767
%RSD		1.359	1.179	0.000	0.318	0.053	0.165	1.638	10.110
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:44:51	0.737	2.039	11260.000	58890.000	58080.000	11.010	3.520	3.051
2	12:45:10	0.740	2.174	11210.000	58440.000	57730.000	11.010	3.498	3.171
3	12:45:29	1.067	2.249	11210.000	58410.000	57770.000	10.530	3.356	3.338
x		0.848	2.154	11230.000	58580.000	57860.000	10.850	3.458	3.187
σ		0.190	0.107	31.370	265.500	193.800	0.280	0.089	0.144
%RSD		22.340	4.944	0.279	0.453	0.335	2.575	2.578	4.528
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:44:51	1.158	5.492	5.331	6.222	1.513	1.010	0.000	439.900
2	12:45:10	1.348	5.639	5.331	5.600	1.585	1.182	0.000	438.900
3	12:45:29	1.259	5.247	5.360	5.464	1.401	0.742	0.000	441.300
x		1.255	5.459	5.341	5.762	1.500	0.978	0.000	440.000
σ		0.095	0.198	0.016	0.404	0.093	0.222	0.000	1.227
%RSD		7.609	3.634	0.308	7.008	6.173	22.640	0.000	0.279
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:44:51	109.087%	7.427	7.494	104.312%	-0.104	-0.138	-0.071	-0.068
2	12:45:10	112.186%	7.466	7.431	105.572%	-0.118	-0.132	-0.056	-0.027
3	12:45:29	113.517%	7.365	7.219	107.559%	-0.127	-0.126	-0.119	-0.096
x		111.597%	7.420	7.382	105.814%	-0.116	-0.132	-0.082	-0.064
σ		2.273%	0.051	0.144	1.637%	0.012	0.006	0.033	0.035
%RSD		2.037	0.685	1.952	1.547	10.050	4.739	40.250	54.810
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:44:51	103.549%	3.594	0.446	0.419	110.000	112.100	106.797%	107.538%
2	12:45:10	105.096%	3.217	0.410	0.411	110.000	111.100	108.940%	110.133%
3	12:45:29	106.368%	2.985	0.380	0.440	111.100	110.700	111.244%	111.971%
x		105.004%	3.265	0.412	0.423	110.400	111.300	108.994%	109.881%
σ		1.412%	0.307	0.033	0.015	0.620	0.708	2.224%	2.227%
%RSD		1.344	9.406	8.124	3.503	0.562	0.636	2.041	2.027
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	12:44:51	0.076	0.068	0.114	0.115	0.115	101.845%		
2	12:45:10	0.069	0.063	0.141	0.114	0.125	103.464%		
3	12:45:29	0.052	0.054	0.118	0.111	0.112	103.898%		
x		0.066	0.062	0.124	0.113	0.117	103.069%		
σ		0.013	0.007	0.015	0.002	0.007	1.082%		
%RSD		19.250	10.940	11.820	1.925	5.764	1.050		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:48:33	98.517%	-0.131	29.610	27.340	0.000	42540.000	6036.000	6365.000
2	12:48:52	99.128%	-0.263	27.390	28.910	0.000	41890.000	6006.000	6401.000
3	12:49:11	98.023%	-0.217	26.200	28.460	0.000	41850.000	6088.000	6440.000
x		98.556%	-0.204	27.730	28.240	0.000	42090.000	6044.000	6402.000
σ		0.554%	0.067	1.728	0.809	0.000	384.500	41.320	37.850
%RSD		0.562	33.010	6.230	2.863	0.000	0.913	0.684	0.591
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:48:33	31.180	3626.000	0.000	1244.000	28140.000	29170.000	100.134%	0.975
2	12:48:52	20.930	3635.000	0.000	1238.000	27910.000	29320.000	100.323%	0.928
3	12:49:11	23.730	3636.000	0.000	1218.000	28090.000	29190.000	101.235%	1.598
x		25.280	3632.000	0.000	1233.000	28040.000	29230.000	100.564%	1.167
σ		5.300	5.397	0.000	13.720	120.300	81.110	0.589%	0.374
%RSD		20.960	0.149	0.000	1.112	0.429	0.278	0.585	32.050
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:48:33	1.154	0.628	2273.000	12060.000	11780.000	2.314	0.643	-0.001
2	12:48:52	0.787	0.543	2267.000	12040.000	11780.000	2.269	0.583	-0.005
3	12:49:11	1.145	0.646	2270.000	12000.000	11740.000	2.205	0.682	0.079
x		1.029	0.606	2270.000	12040.000	11770.000	2.263	0.636	0.024
σ		0.209	0.055	2.886	29.320	21.880	0.055	0.050	0.048
%RSD		20.340	9.124	0.127	0.244	0.186	2.423	7.835	196.100
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:48:33	-0.171	1.206	1.250	1.284	1.003	0.339	0.000	84.190
2	12:48:52	-0.247	1.061	1.270	1.549	1.055	0.435	0.000	84.480
3	12:49:11	-0.129	0.963	0.946	1.104	1.142	-0.053	0.000	85.200
x		-0.182	1.076	1.155	1.312	1.066	0.240	0.000	84.620
σ		0.060	0.122	0.182	0.224	0.071	0.259	0.000	0.523
%RSD		32.750	11.350	15.730	17.080	6.616	107.500	0.000	0.618
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:48:33	104.665%	1.604	1.570	104.447%	-0.131	-0.140	-0.010	-0.017
2	12:48:52	105.997%	1.377	1.519	105.648%	-0.138	-0.147	-0.023	0.001
3	12:49:11	106.741%	1.460	1.623	106.436%	-0.131	-0.128	0.014	0.010
x		105.801%	1.480	1.571	105.510%	-0.134	-0.138	-0.006	-0.002
σ		1.052%	0.115	0.052	1.001%	0.004	0.009	0.019	0.014
%RSD		0.994	7.750	3.305	0.949	3.211	6.673	314.900	702.400
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:48:33	102.353%	0.132	0.016	0.026	22.150	21.760	103.695%	104.599%
2	12:48:52	103.779%	0.104	0.011	0.033	22.020	22.500	105.961%	106.132%
3	12:49:11	104.313%	0.096	0.021	0.032	22.740	22.990	107.056%	107.046%
x		103.482%	0.111	0.016	0.030	22.310	22.410	105.570%	105.926%
σ		1.013%	0.019	0.005	0.004	0.383	0.618	1.714%	1.236%
%RSD		0.979	17.390	30.730	11.910	1.715	2.758	1.624	1.167
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	12:48:33	0.022	0.020	0.023	0.024	0.024	100.842%		
2	12:48:52	0.013	0.023	0.023	0.021	0.021	101.864%		
3	12:49:11	0.021	0.016	0.020	0.014	0.020	102.548%		
x		0.019	0.020	0.022	0.020	0.022	101.751%		
σ		0.005	0.004	0.002	0.005	0.002	0.859%		
%RSD		26.820	17.970	7.112	26.100	9.367	0.844		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:52:13	99.452%	44.530	1110.000	1113.000	0.000	245900.000	79600.000	85510.000
2	12:52:32	102.182%	44.680	1093.000	1110.000	0.000	245100.000	80240.000	86930.000
3	12:52:51	104.899%	44.540	1113.000	1107.000	0.000	243200.000	80020.000	86450.000
x		102.178%	44.580	1105.000	1110.000	0.000	244700.000	79950.000	86300.000
σ		2.724%	0.086	11.010	3.056	0.000	1400.000	327.800	719.300
%RSD		2.666	0.192	0.997	0.275	0.000	0.572	0.410	0.834
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:52:13	2277.000	28440.000	0.000	50400.000	180600.000	188900.000	105.433%	952.000
2	12:52:32	2322.000	28650.000	0.000	50530.000	179900.000	190200.000	106.456%	950.900
3	12:52:51	2342.000	28800.000	0.000	50390.000	179900.000	189600.000	109.024%	947.700
x		2314.000	28630.000	0.000	50440.000	180200.000	189600.000	106.971%	950.200
σ		32.910	178.700	0.000	74.780	377.600	628.500	1.850%	2.249
%RSD		1.423	0.624	0.000	0.148	0.210	0.332	1.730	0.237
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:52:13	469.500	192.200	11550.000	58500.000	57690.000	452.900	434.400	212.000
2	12:52:32	476.000	192.300	11590.000	58870.000	58370.000	470.000	438.200	212.900
3	12:52:51	473.100	191.500	11600.000	58600.000	57830.000	451.200	429.700	210.200
x		472.800	192.000	11580.000	58660.000	57960.000	458.000	434.100	211.700
σ		3.266	0.485	25.740	191.600	359.700	10.440	4.257	1.366
%RSD		0.691	0.253	0.222	0.327	0.621	2.280	0.981	0.645
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:52:13	206.400	427.800	434.000	40.430	11.810	9.673	0.000	1372.000
2	12:52:32	207.500	431.700	428.500	41.820	13.200	10.560	0.000	1380.000
3	12:52:51	203.300	430.600	433.900	40.000	12.760	10.210	0.000	1380.000
x		205.700	430.000	432.100	40.750	12.590	10.150	0.000	1377.000
σ		2.168	2.042	3.135	0.953	0.710	0.447	0.000	4.952
%RSD		1.054	0.475	0.726	2.337	5.638	4.408	0.000	0.359
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:52:13	110.598%	985.000	1029.000	103.611%	44.510	44.370	45.990	39.190
2	12:52:32	112.721%	991.400	1038.000	104.703%	44.790	44.430	46.780	39.060
3	12:52:51	115.248%	989.600	1032.000	107.341%	44.900	43.950	46.070	39.120
x		112.856%	988.600	1033.000	105.218%	44.740	44.250	46.280	39.120
σ		2.328%	3.298	4.666	1.918%	0.200	0.256	0.438	0.066
%RSD		2.063	0.334	0.452	1.823	0.447	0.579	0.947	0.168
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:52:13	102.735%	1948.000	481.000	479.500	1946.000	2029.000	107.887%	108.363%
2	12:52:32	104.983%	1937.000	478.800	479.000	1935.000	2008.000	111.061%	110.825%
3	12:52:51	106.182%	1952.000	482.400	481.100	1963.000	2032.000	111.396%	112.638%
x		104.633%	1946.000	480.700	479.900	1948.000	2023.000	110.115%	110.609%
σ		1.750%	7.671	1.813	1.052	13.700	13.240	1.936%	2.146%
%RSD		1.672	0.394	0.377	0.219	0.703	0.655	1.759	1.940
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	12:52:13	45.170	47.020	18.580	18.680	18.470	100.386%		
2	12:52:32	44.940	46.590	18.590	18.560	18.320	103.326%		
3	12:52:51	45.720	47.490	19.080	18.850	18.620	103.331%		
x		45.280	47.030	18.750	18.700	18.470	102.348%		
σ		0.398	0.450	0.287	0.147	0.148	1.699%		
%RSD		0.879	0.956	1.530	0.786	0.800	1.660		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:55:54	101.007%	46.250	1130.000	1118.000	0.000	247600.000	80510.000	86630.000
2	12:56:13	101.092%	46.870	1138.000	1164.000	0.000	251700.000	82290.000	88950.000
3	12:56:32	104.702%	43.590	1135.000	1134.000	0.000	248200.000	81720.000	88180.000
x		102.267%	45.570	1134.000	1139.000	0.000	249200.000	81500.000	87920.000
σ		2.109%	1.742	4.058	23.280	0.000	2198.000	908.900	1185.000
%RSD		2.062	3.823	0.358	2.044	0.000	0.882	1.115	1.348

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:55:54	2328.000	29070.000	0.000	51220.000	182600.000	191900.000	106.423%	952.800
2	12:56:13	2362.000	29390.000	0.000	51390.000	183100.000	192800.000	108.433%	953.100
3	12:56:32	2350.000	29150.000	0.000	51100.000	181400.000	192600.000	109.767%	953.400
x		2347.000	29200.000	0.000	51240.000	182400.000	192400.000	108.207%	953.100
σ		16.980	167.000	0.000	142.700	906.300	439.500	1.683%	0.298
%RSD		0.723	0.572	0.000	0.278	0.497	0.228	1.555	0.031

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:55:54	479.100	193.700	11700.000	58920.000	58460.000	476.800	442.800	211.500
2	12:56:13	478.100	193.800	11710.000	59080.000	58220.000	461.400	438.500	210.400
3	12:56:32	478.500	193.900	11720.000	58980.000	58240.000	473.000	436.600	209.500
x		478.600	193.800	11710.000	58990.000	58310.000	470.400	439.300	210.400
σ		0.527	0.101	10.060	79.170	130.200	8.028	3.166	1.026
%RSD		0.110	0.052	0.086	0.134	0.223	1.707	0.721	0.487

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:55:54	206.300	435.200	435.200	42.300	12.990	11.000	0.000	1385.000
2	12:56:13	202.400	433.300	432.100	42.180	13.550	10.750	0.000	1380.000
3	12:56:32	203.000	432.100	432.100	42.360	13.230	10.740	0.000	1381.000
x		203.900	433.500	433.100	42.280	13.260	10.830	0.000	1382.000
σ		2.092	1.571	1.820	0.090	0.283	0.148	0.000	2.685
%RSD		1.026	0.362	0.420	0.212	2.135	1.363	0.000	0.194

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:55:54	111.057%	982.400	1034.000	104.474%	45.500	44.660	47.160	39.210
2	12:56:13	115.226%	986.900	1035.000	106.908%	44.890	44.760	47.140	38.890
3	12:56:32	116.099%	992.800	1038.000	108.231%	44.550	44.870	46.930	39.410
x		114.127%	987.400	1036.000	106.538%	44.980	44.760	47.080	39.170
σ		2.695%	5.219	2.158	1.906%	0.483	0.109	0.124	0.262
%RSD		2.361	0.529	0.208	1.789	1.073	0.242	0.264	0.667

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:55:54	102.794%	1962.000	482.900	481.400	1962.000	2039.000	108.748%	109.353%
2	12:56:13	105.177%	1966.000	484.700	481.900	1976.000	2052.000	111.168%	111.378%
3	12:56:32	107.075%	1945.000	481.400	478.200	1956.000	2037.000	111.924%	112.986%
x		105.015%	1958.000	483.000	480.500	1964.000	2042.000	110.613%	111.239%
σ		2.145%	10.850	1.640	1.958	9.941	8.252	1.659%	1.821%
%RSD		2.043	0.554	0.340	0.407	0.506	0.404	1.500	1.637

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	12:55:54	46.160	48.120	18.830	18.980	18.690	100.763%
2	12:56:13	46.270	47.890	18.850	19.210	18.810	102.307%
3	12:56:32	46.390	48.550	19.190	18.950	18.810	102.719%
x		46.270	48.190	18.960	19.050	18.770	101.930%
σ		0.118	0.337	0.201	0.143	0.068	1.031%
%RSD		0.256	0.699	1.062	0.749	0.363	1.011

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:59:34	101.226%	50.310	1235.000	1249.000	0.000	247700.000	82680.000	88720.000
2	12:59:54	102.457%	51.100	1227.000	1253.000	0.000	246300.000	83120.000	89710.000
3	13:00:13	104.403%	48.560	1214.000	1246.000	0.000	244000.000	82590.000	89840.000
x		102.695%	49.990	1225.000	1249.000	0.000	246000.000	82800.000	89420.000
σ		1.602%	1.302	10.900	3.154	0.000	1897.000	284.500	614.600
%RSD		1.560	2.604	0.890	0.253	0.000	0.771	0.344	0.687
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:59:34	2492.000	28920.000	0.000	54030.000	181900.000	191900.000	105.984%	1018.000
2	12:59:54	2529.000	29160.000	0.000	53480.000	180600.000	190900.000	107.897%	1016.000
3	13:00:13	2570.000	29170.000	0.000	53420.000	181000.000	191000.000	109.906%	1022.000
x		2530.000	29080.000	0.000	53650.000	181200.000	191300.000	107.929%	1019.000
σ		39.110	145.100	0.000	335.800	663.500	550.500	1.961%	3.231
%RSD		1.545	0.499	0.000	0.626	0.366	0.288	1.817	0.317
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:59:34	567.200	215.900	11500.000	58350.000	57790.000	533.200	494.700	249.100
2	12:59:54	535.600	215.700	11480.000	58000.000	57360.000	531.400	493.100	247.200
3	13:00:13	566.300	214.900	11390.000	57850.000	57290.000	527.900	490.800	244.700
x		556.300	215.500	11460.000	58070.000	57480.000	530.800	492.800	247.000
σ		18.010	0.552	55.480	255.800	273.000	2.726	1.936	2.205
%RSD		3.237	0.256	0.484	0.441	0.475	0.514	0.393	0.893
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:59:34	239.600	488.100	487.800	43.260	14.330	11.470	0.000	1485.000
2	12:59:54	238.300	486.100	486.100	46.530	14.180	10.570	0.000	1472.000
3	13:00:13	238.400	484.900	483.400	46.130	14.630	11.060	0.000	1481.000
x		238.700	486.400	485.800	45.300	14.380	11.030	0.000	1479.000
σ		0.717	1.623	2.214	1.783	0.226	0.455	0.000	6.738
%RSD		0.300	0.334	0.456	3.935	1.569	4.120	0.000	0.455
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:59:34	111.292%	1063.000	1105.000	104.237%	45.100	44.860	51.370	43.380
2	12:59:54	113.946%	1055.000	1106.000	107.070%	44.640	44.650	50.810	43.430
3	13:00:13	115.346%	1061.000	1112.000	108.184%	45.100	44.750	52.140	44.300
x		113.528%	1060.000	1108.000	106.497%	44.950	44.750	51.440	43.700
σ		2.059%	4.092	3.819	2.035%	0.265	0.105	0.665	0.518
%RSD		1.814	0.386	0.345	1.911	0.589	0.234	1.293	1.185
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:59:34	103.326%	2097.000	517.400	514.600	2158.000	2258.000	107.658%	108.660%
2	12:59:54	105.273%	2091.000	536.800	513.100	2183.000	2273.000	109.138%	110.832%
3	13:00:13	105.882%	2096.000	538.700	515.700	2174.000	2272.000	111.443%	111.769%
x		104.827%	2095.000	530.900	514.500	2172.000	2267.000	109.413%	110.420%
σ		1.335%	2.989	11.770	1.286	12.800	8.500	1.907%	1.595%
%RSD		1.274	0.143	2.216	0.250	0.589	0.375	1.743	1.445
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	12:59:34	51.680	54.020	21.420	21.220	21.030	98.040%		
2	12:59:54	51.780	53.580	21.130	21.240	20.950	100.155%		
3	13:00:13	52.040	54.020	21.240	21.360	21.060	101.499%		
x		51.840	53.870	21.270	21.270	21.010	99.898%		
σ		0.188	0.251	0.146	0.075	0.057	1.744%		
%RSD		0.362	0.466	0.686	0.355	0.273	1.745		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:05:59	103.062%	-0.043	112.500	117.200	0.000	103900.000	6373.000	6912.000
2	13:06:18	105.174%	-0.093	113.400	113.900	0.000	103500.000	6417.000	6907.000
3	13:06:37	105.918%	-0.157	111.100	115.800	0.000	103700.000	6384.000	6961.000
x		104.718%	-0.098	112.300	115.600	0.000	103700.000	6391.000	6927.000
σ		1.481%	0.057	1.153	1.660	0.000	187.000	22.850	30.000
%RSD		1.415	58.360	1.026	1.436	0.000	0.180	0.358	0.433
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:05:59	276.200	15870.000	0.000	13260.000	64370.000	68010.000	105.897%	4.579
2	13:06:18	281.500	15930.000	0.000	13230.000	64140.000	67570.000	107.499%	10.430
3	13:06:37	281.200	16010.000	0.000	13220.000	64850.000	67840.000	108.414%	5.204
x		279.600	15940.000	0.000	13240.000	64450.000	67810.000	107.270%	6.738
σ		2.978	68.020	0.000	23.120	360.100	224.700	1.274%	3.213
%RSD		1.065	0.427	0.000	0.175	0.559	0.331	1.188	47.680
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:05:59	9.367	4.469	2885.000	776.800	875.500	5.757	22.200	4.916
2	13:06:18	11.970	4.795	2887.000	773.200	845.200	5.492	22.970	5.051
3	13:06:37	9.816	4.853	2903.000	774.300	849.800	5.594	22.720	4.780
x		10.380	4.706	2892.000	774.800	856.800	5.615	22.630	4.916
σ		1.390	0.207	9.726	1.841	16.360	0.134	0.390	0.136
%RSD		13.390	4.397	0.336	0.238	1.909	2.379	1.722	2.765
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:05:59	4.282	5.830	6.087	3.871	3.140	1.080	0.000	364.400
2	13:06:18	4.515	5.929	5.966	3.296	3.004	1.948	0.000	365.200
3	13:06:37	4.381	5.789	5.926	3.562	2.973	1.207	0.000	367.900
x		4.393	5.849	5.993	3.576	3.039	1.412	0.000	365.800
σ		0.117	0.072	0.084	0.288	0.089	0.469	0.000	1.819
%RSD		2.665	1.226	1.398	8.050	2.927	33.210	0.000	0.497
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:05:59	112.395%	25.790	26.330	108.775%	-0.130	-0.139	0.022	0.030
2	13:06:18	114.474%	25.960	25.960	110.283%	-0.120	-0.144	-0.026	-0.001
3	13:06:37	116.252%	25.660	25.950	111.660%	-0.130	-0.127	0.000	0.051
x		114.374%	25.800	26.080	110.239%	-0.126	-0.137	-0.001	0.027
σ		1.930%	0.148	0.214	1.443%	0.006	0.009	0.024	0.026
%RSD		1.688	0.575	0.820	1.309	4.537	6.248	2471.000	97.690
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:05:59	106.572%	3.227	0.279	0.351	24.740	24.770	109.274%	109.835%
2	13:06:18	108.772%	2.962	0.284	0.312	24.850	24.490	111.046%	111.974%
3	13:06:37	109.274%	2.810	0.302	0.272	24.760	25.010	113.577%	113.445%
x		108.206%	3.000	0.289	0.312	24.780	24.760	111.299%	111.751%
σ		1.437%	0.211	0.012	0.040	0.063	0.262	2.163%	1.815%
%RSD		1.328	7.024	4.244	12.790	0.255	1.057	1.943	1.624
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	13:05:59	0.167	0.165	0.121	0.102	0.110	105.202%		
2	13:06:18	0.165	0.169	0.120	0.094	0.106	106.913%		
3	13:06:37	0.145	0.153	0.121	0.104	0.110	107.151%		
x		0.159	0.162	0.120	0.100	0.109	106.422%		
σ		0.012	0.008	0.001	0.005	0.002	1.063%		
%RSD		7.502	4.963	0.420	5.368	2.238	0.999		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:09:40	106.012%	0.492	44.810	51.430	0.000	23120.000	6411.000	6790.000
2	13:09:59	107.150%	0.481	49.310	51.760	0.000	22640.000	6457.000	6829.000
3	13:10:18	106.454%	0.366	55.300	52.370	0.000	22610.000	6492.000	6964.000
x		106.539%	0.447	49.800	51.850	0.000	22790.000	6453.000	6861.000
σ		0.574%	0.070	5.261	0.476	0.000	284.700	40.720	91.130
%RSD		0.539	15.620	10.560	0.917	0.000	1.249	0.631	1.328

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:09:40	6062.000	15500.000	0.000	3577.000	13200.000	12970.000	107.906%	60.390
2	13:09:59	6118.000	15510.000	0.000	3533.000	13190.000	12820.000	109.161%	60.870
3	13:10:18	6192.000	15770.000	0.000	3556.000	13060.000	13020.000	109.082%	60.970
x		6124.000	15590.000	0.000	3555.000	13150.000	12940.000	108.717%	60.740
σ		65.130	153.500	0.000	22.450	76.810	104.500	0.703%	0.308
%RSD		1.063	0.985	0.000	0.631	0.584	0.808	0.647	0.507

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:09:40	178.500	10.710	114.400	9281.000	9060.000	0.803	3.389	7.004
2	13:09:59	177.900	10.220	114.400	9274.000	9053.000	0.760	3.400	6.971
3	13:10:18	178.200	10.370	115.100	9295.000	9033.000	0.723	2.956	7.083
x		178.200	10.430	114.600	9283.000	9049.000	0.762	3.248	7.020
σ		0.288	0.251	0.390	10.650	14.210	0.040	0.253	0.057
%RSD		0.162	2.401	0.340	0.115	0.157	5.245	7.789	0.819

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:09:40	7.333	42.300	42.980	2.565	1.572	-1.047	0.000	67.990
2	13:09:59	6.741	43.040	44.040	2.980	1.610	-1.467	0.000	68.550
3	13:10:18	6.954	42.350	42.530	3.141	1.359	-0.766	0.000	68.340
x		7.009	42.560	43.180	2.895	1.514	-1.093	0.000	68.290
σ		0.300	0.416	0.777	0.297	0.135	0.352	0.000	0.282
%RSD		4.281	0.977	1.800	10.260	8.926	32.240	0.000	0.414

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:09:40	116.425%	1.786	1.741	111.067%	-0.093	-0.086	0.187	0.211
2	13:09:59	118.141%	1.874	1.656	113.006%	-0.097	-0.102	0.174	0.187
3	13:10:18	120.146%	1.692	1.689	113.618%	-0.085	-0.099	0.155	0.176
x		118.237%	1.784	1.695	112.564%	-0.091	-0.096	0.172	0.191
σ		1.862%	0.091	0.043	1.332%	0.006	0.009	0.016	0.018
%RSD		1.575	5.105	2.531	1.183	6.405	8.921	9.341	9.456

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:09:40	107.890%	1.862	0.169	0.193	26.090	26.010	109.034%	109.679%
2	13:09:59	110.169%	1.671	0.187	0.194	25.790	26.070	111.794%	111.389%
3	13:10:18	110.734%	1.699	0.219	0.193	25.400	25.720	112.573%	112.685%
x		109.598%	1.744	0.192	0.193	25.760	25.940	111.134%	111.251%
σ		1.505%	0.103	0.025	0.000	0.346	0.188	1.860%	1.508%
%RSD		1.374	5.931	13.280	0.157	1.344	0.724	1.673	1.355

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:09:40	0.060	0.068	19.790	17.960	18.510	103.206%
2	13:09:59	0.071	0.062	19.710	17.850	18.510	104.747%
3	13:10:18	0.064	0.059	19.830	17.870	18.460	106.265%
x		0.065	0.063	19.780	17.900	18.490	104.739%
σ		0.006	0.005	0.061	0.058	0.032	1.530%
%RSD		8.896	7.273	0.310	0.323	0.170	1.460

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:13:21	99.950%	-0.265	31.170	26.280	0.000	1382.000	74.470	78.490
2	13:13:40	100.021%	-0.266	28.280	26.640	0.000	1394.000	79.700	80.420
3	13:14:00	101.045%	-0.332	28.350	26.500	0.000	1374.000	72.410	80.200
x		100.339%	-0.287	29.270	26.470	0.000	1383.000	75.530	79.700
σ		0.613%	0.038	1.648	0.186	0.000	9.632	3.758	1.056
%RSD		0.611	13.310	5.632	0.701	0.000	0.696	4.975	1.324
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:13:21	230.300	1920.000	0.000	1933.000	10800.000	10710.000	102.216%	0.583
2	13:13:40	233.100	1926.000	0.000	1939.000	11180.000	10730.000	102.927%	0.922
3	13:14:00	233.600	1950.000	0.000	1920.000	10640.000	10760.000	103.338%	0.725
x		232.400	1932.000	0.000	1931.000	10870.000	10730.000	102.827%	0.743
σ		1.807	15.950	0.000	9.697	274.000	25.600	0.568%	0.171
%RSD		0.778	0.825	0.000	0.502	2.520	0.239	0.552	22.940
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:13:21	35.280	7.053	9.222	182.600	204.800	0.143	0.301	0.416
2	13:13:40	36.350	7.006	9.279	178.500	199.000	0.127	0.291	0.369
3	13:14:00	35.500	6.874	8.882	175.700	191.000	0.156	0.394	0.311
x		35.710	6.978	9.127	178.900	198.300	0.142	0.329	0.365
σ		0.568	0.093	0.215	3.430	6.894	0.015	0.057	0.052
%RSD		1.591	1.332	2.353	1.917	3.477	10.300	17.370	14.320
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:13:21	0.465	2.253	2.194	4.014	1.981	0.991	0.000	38.140
2	13:13:40	0.450	2.374	2.230	3.324	2.038	-1.015	0.000	37.750
3	13:14:00	0.507	2.085	2.407	3.468	1.840	-0.444	0.000	38.290
x		0.474	2.237	2.277	3.602	1.953	-0.156	0.000	38.060
σ		0.029	0.145	0.114	0.364	0.102	1.033	0.000	0.280
%RSD		6.189	6.472	5.015	10.100	5.222	663.400	0.000	0.736
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:13:21	107.607%	1.304	1.263	109.092%	-0.127	-0.131	-0.004	0.008
2	13:13:40	109.711%	1.261	1.311	110.081%	-0.133	-0.135	0.059	0.040
3	13:14:00	111.036%	1.292	1.274	111.644%	-0.123	-0.146	-0.012	0.009
x		109.451%	1.286	1.283	110.272%	-0.127	-0.137	0.014	0.019
σ		1.729%	0.022	0.025	1.286%	0.005	0.008	0.039	0.018
%RSD		1.580	1.707	1.948	1.167	3.929	5.517	272.300	95.190
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:13:21	104.421%	0.073	0.321	0.339	2.475	2.552	106.967%	107.479%
2	13:13:40	107.592%	0.076	0.332	0.326	2.398	2.525	108.598%	109.445%
3	13:14:00	108.729%	-0.008	0.350	0.295	2.440	2.436	109.412%	110.604%
x		106.914%	0.047	0.335	0.320	2.438	2.504	108.325%	109.176%
σ		2.233%	0.048	0.015	0.022	0.038	0.061	1.245%	1.580%
%RSD		2.088	100.900	4.372	6.922	1.577	2.417	1.149	1.447
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	13:13:21	0.020	0.023	0.474	0.451	0.446	106.117%		
2	13:13:40	0.030	0.021	0.486	0.416	0.446	107.790%		
3	13:14:00	0.026	0.020	0.510	0.400	0.436	109.005%		
x		0.025	0.021	0.490	0.422	0.443	107.637%		
σ		0.005	0.002	0.019	0.026	0.006	1.450%		
%RSD		20.970	7.221	3.840	6.151	1.266	1.347		

CCV 1241000 7/18/2014 1:16:44 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	13:16:44	103.483%	96.260	98.940	97.680	0.000	47830.000	49520.000	50880.000
2	13:17:03	101.086%	97.570	102.400	98.660	0.000	48680.000	50360.000	52260.000
3	13:17:22	99.900%	96.790	107.100	100.300	0.000	49180.000	51270.000	52780.000
x		101.489%	96.875%	102.823%	98.884%	0.000	97.130%	100.771%	103.949%
σ		1.825%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.798	0.679	3.993	1.347	0.000	1.401	1.736	1.891

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:44	504.200	5268.000	0.000	50020.000	48340.000	49400.000	108.220%	100.100
2	13:17:03	523.800	5409.000	0.000	50320.000	49350.000	50490.000	106.468%	102.400
3	13:17:22	526.700	5418.000	0.000	50410.000	49340.000	50010.000	105.978%	98.690
x		103.653%	107.296%	0.000	100.501%	98.024%	99.934%	106.889%	100.404%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.178%	n/a
%RSD		2.362	1.572	0.000	0.413	1.188	1.095	1.103	1.856

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:44	99.580	101.300	511.900	25650.000	25470.000	100.700	100.800	101.100
2	13:17:03	101.400	102.900	519.300	25890.000	25670.000	101.900	101.500	102.500
3	13:17:22	101.400	102.600	523.900	26160.000	25940.000	103.000	102.800	101.400
x		100.785%	102.250%	103.676%	103.596%	102.775%	101.853%	101.677%	101.677%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.036	0.833	1.176	0.981	0.928	1.152	0.967	0.739

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:44	98.750	100.500	98.830	99.240	101.700	100.000	0.000	98.450
2	13:17:03	100.300	99.230	100.400	99.930	99.260	99.110	0.000	98.420
3	13:17:22	102.200	101.300	103.000	99.780	100.600	99.070	0.000	100.100
x		100.410%	100.352%	100.743%	99.649%	100.526%	99.392%	0.000	98.995%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.699	1.057	2.074	0.365	1.209	0.535	0.000	0.974

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:44	104.820%	98.410	98.980	104.394%	97.640	97.150	98.230	98.640
2	13:17:03	106.706%	101.000	100.400	104.670%	98.650	97.920	98.510	98.570
3	13:17:22	106.987%	101.600	102.300	105.400%	97.900	98.010	100.000	99.610
x		106.171%	100.318%	100.564%	104.821%	98.063%	97.692%	98.917%	98.938%
σ		1.179%	n/a	n/a	0.520%	n/a	n/a	n/a	n/a
%RSD		1.110	1.673	1.677	0.496	0.533	0.486	0.965	0.585

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:44	103.654%	97.440	95.410	95.530	98.800	99.460	103.684%	104.188%
2	13:17:03	103.970%	97.930	96.680	96.960	99.460	100.600	104.354%	104.941%
3	13:17:22	104.658%	99.140	98.680	98.000	99.780	100.600	105.288%	106.152%
x		104.094%	98.173%	96.924%	96.834%	99.348%	100.215%	104.442%	105.093%
σ		0.514%	n/a	n/a	n/a	n/a	n/a	0.806%	0.991%
%RSD		0.493	0.892	1.700	1.281	0.507	0.651	0.771	0.943

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:44	98.450	101.300	97.830	97.520	96.660	99.318%
2	13:17:03	100.200	103.900	100.400	99.850	98.880	98.796%
3	13:17:22	101.200	104.800	101.200	100.900	100.100	98.841%
x		99.945%	103.318%	99.807%	99.429%	98.551%	98.985%
σ		n/a	n/a	n/a	n/a	n/a	0.289%
%RSD		1.376	1.752	1.764	1.744	1.775	0.292

CCB4 7/18/2014 1:22:53 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	13:23:12	111.977%	-0.272	2.252	1.006	0.000	-30.730	2.197	1.517
2	13:23:32	113.871%	-0.106	2.930	1.176	0.000	-33.700	1.833	1.778
3	13:23:51	116.692%	-0.225	1.923	0.905	0.000	-37.150	2.381	1.630
x		114.180%	-0.201	2.368	1.029	0.000	-33.860	2.137	1.642
σ		2.373%	0.086	0.513	0.137	0.000	3.214	0.279	0.131
%RSD		2.078	42.650	21.670	13.300	0.000	9.491	13.070	7.961
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:23:12	-0.044	3.524	0.000	2.696	-11.310	0.717	116.737%	0.191
2	13:23:32	-0.184	3.058	0.000	1.467	10.950	4.101	117.635%	0.018
3	13:23:51	0.001	3.022	0.000	4.193	-2.899	0.573	118.900%	0.147
x		-0.076	3.201	0.000	2.785	-1.085	1.797	117.757%	0.119
σ		0.097	0.280	0.000	1.365	11.240	1.997	1.087%	0.090
%RSD		128.100	8.753	0.000	49.010	1036.000	111.100	0.923	75.810
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:23:12	0.433	0.108	0.168	15.310	4.050	-0.012	-0.008	-0.614
2	13:23:32	0.127	0.118	0.156	13.440	1.354	-0.007	0.022	-0.669
3	13:23:51	0.081	0.085	0.138	12.320	1.167	-0.011	0.029	-0.606
x		0.214	0.104	0.154	13.690	2.190	-0.010	0.014	-0.630
σ		0.191	0.017	0.015	1.512	1.613	0.003	0.020	0.034
%RSD		89.530	16.050	9.836	11.050	73.670	25.890	140.200	5.476
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:23:12	-0.448	0.155	0.190	0.130	1.594	-0.262	0.000	0.013
2	13:23:32	-0.421	0.107	0.234	-0.052	1.988	0.232	0.000	0.011
3	13:23:51	-0.425	0.275	0.232	0.158	1.341	0.107	0.000	0.013
x		-0.432	0.179	0.219	0.079	1.641	0.026	0.000	0.013
σ		0.014	0.087	0.025	0.114	0.326	0.257	0.000	0.001
%RSD		3.342	48.590	11.410	144.700	19.860	995.200	0.000	10.280
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:23:12	112.697%	0.346	0.326	118.040%	-0.124	-0.134	-0.003	0.005
2	13:23:32	114.679%	0.259	0.264	119.739%	-0.136	-0.144	-0.002	0.004
3	13:23:51	116.384%	0.238	0.260	120.369%	-0.124	-0.128	0.003	0.007
x		114.587%	0.281	0.284	119.383%	-0.128	-0.135	-0.001	0.006
σ		1.845%	0.058	0.037	1.204%	0.007	0.008	0.003	0.001
%RSD		1.610	20.560	13.090	1.009	5.722	6.046	393.600	24.110
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:23:12	116.748%	-0.149	0.087	0.088	0.026	0.011	113.355%	112.636%
2	13:23:32	119.126%	-0.183	0.102	0.063	0.021	0.023	115.094%	115.140%
3	13:23:51	119.496%	-0.174	0.082	0.050	0.030	0.008	116.535%	116.316%
x		118.457%	-0.169	0.090	0.067	0.026	0.014	114.994%	114.697%
σ		1.491%	0.018	0.010	0.019	0.004	0.008	1.592%	1.880%
%RSD		1.259	10.450	11.590	28.860	17.110	59.390	1.385	1.639
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	13:23:12	0.007	0.013	0.003	0.013	0.010	112.872%		
2	13:23:32	0.011	0.011	0.011	0.014	0.013	112.994%		
3	13:23:51	0.007	0.008	0.014	0.013	0.013	113.853%		
x		0.008	0.011	0.009	0.013	0.012	113.240%		
σ		0.002	0.003	0.006	0.001	0.002	0.535%		
%RSD		25.750	23.350	59.090	7.664	13.810	0.472		

180-34362-D-3-B @5 7/18/2014 1:26:38 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	13:26:57	114.462%	-0.183	11.090	11.850	0.000	3168.000	1030.000	1081.000
2	13:27:16	117.118%	-0.300	13.070	10.530	0.000	3128.000	1027.000	1081.000
3	13:27:35	114.817%	-0.147	10.110	10.830	0.000	3127.000	1030.000	1102.000
x		115.466%	-0.210	11.420	11.070	0.000	3141.000	1029.000	1088.000
σ		1.442%	0.080	1.507	0.694	0.000	23.640	1.723	12.360
%RSD		1.249	38.120	13.190	6.264	0.000	0.752	0.168	1.136

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:26:57	142.700	5855.000	0.000	266.300	2451.000	2384.000	119.198%	4.035
2	13:27:16	127.700	5848.000	0.000	264.600	2321.000	2376.000	119.417%	5.440
3	13:27:35	138.500	5926.000	0.000	263.700	2472.000	2376.000	120.610%	3.301
x		136.300	5876.000	0.000	264.800	2415.000	2378.000	119.742%	4.259
σ		7.748	43.450	0.000	1.313	82.080	5.062	0.760%	1.087
%RSD		5.684	0.739	0.000	0.496	3.400	0.213	0.634	25.520

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:26:57	0.541	3.721	68.270	7616.000	7427.000	0.315	2.355	0.414
2	13:27:16	0.695	3.920	68.840	7597.000	7469.000	0.295	2.244	0.466
3	13:27:35	0.586	3.902	68.080	7575.000	7440.000	0.315	2.142	0.501
x		0.607	3.848	68.400	7596.000	7445.000	0.308	2.247	0.460
σ		0.079	0.110	0.392	20.410	21.720	0.011	0.106	0.044
%RSD		12.990	2.866	0.573	0.269	0.292	3.574	4.727	9.542

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:26:57	0.656	33.870	35.510	-0.304	1.682	0.330	0.000	13.130
2	13:27:16	0.383	33.190	34.550	-0.308	2.332	-0.872	0.000	13.360
3	13:27:35	0.542	34.670	34.070	-0.196	1.634	0.324	0.000	13.520
x		0.527	33.910	34.710	-0.269	1.883	-0.073	0.000	13.340
σ		0.137	0.739	0.734	0.063	0.390	0.693	0.000	0.193
%RSD		26.000	2.179	2.114	23.500	20.700	953.200	0.000	1.443

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:26:57	114.429%	0.543	0.496	118.435%	-0.125	-0.125	0.179	0.178
2	13:27:16	116.955%	0.476	0.517	120.118%	-0.120	-0.133	0.190	0.221
3	13:27:35	116.786%	0.532	0.522	120.860%	-0.115	-0.129	0.154	0.171
x		116.057%	0.517	0.511	119.804%	-0.120	-0.129	0.174	0.190
σ		1.412%	0.036	0.014	1.243%	0.005	0.004	0.018	0.027
%RSD		1.217	6.970	2.672	1.037	4.214	2.876	10.320	14.070

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:26:57	116.666%	0.141	0.407	0.467	16.850	16.790	114.089%	113.668%
2	13:27:16	119.000%	0.128	0.389	0.394	17.120	16.920	116.926%	116.610%
3	13:27:35	120.496%	0.079	0.399	0.382	17.210	17.140	117.860%	117.243%
x		118.721%	0.116	0.398	0.414	17.060	16.950	116.291%	115.841%
σ		1.930%	0.033	0.009	0.046	0.185	0.176	1.964%	1.908%
%RSD		1.626	28.550	2.366	11.130	1.083	1.038	1.689	1.647

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:26:57	0.012	0.009	0.294	0.291	0.297	110.048%
2	13:27:16	0.004	0.009	0.335	0.309	0.312	110.791%
3	13:27:35	0.006	0.006	0.313	0.287	0.293	111.666%
x		0.008	0.008	0.314	0.295	0.301	110.835%
σ		0.004	0.001	0.021	0.012	0.010	0.810%
%RSD		55.950	18.340	6.622	3.955	3.254	0.731

180-34362-D-4-B @5 7/18/2014 1:30:20 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	13:30:39	100.188%	-0.266	39.070	44.810	0.000	89450.000	13240.000	14030.000
2	13:30:58	99.303%	-0.264	37.580	44.340	0.000	90370.000	13450.000	14350.000
3	13:31:17	99.801%	-0.330	38.950	45.400	0.000	89850.000	13520.000	14440.000
x		99.764%	-0.286	38.530	44.850	0.000	89890.000	13400.000	14270.000
σ		0.444%	0.037	0.828	0.529	0.000	459.200	144.600	213.300
%RSD		0.445	13.070	2.149	1.179	0.000	0.511	1.079	1.494
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:30:39	9.465	2046.000	0.000	2913.000	24210.000	24130.000	101.573%	1.352
2	13:30:58	9.181	2071.000	0.000	2925.000	24590.000	24110.000	102.024%	0.780
3	13:31:17	9.598	2075.000	0.000	2915.000	24110.000	25240.000	102.087%	0.844
x		9.414	2064.000	0.000	2918.000	24300.000	24490.000	101.895%	0.992
σ		0.213	15.700	0.000	6.209	250.200	645.100	0.280%	0.314
%RSD		2.263	0.761	0.000	0.213	1.029	2.634	0.275	31.620
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:30:39	1.083	0.401	911.800	10800.000	10600.000	3.676	0.040	0.558
2	13:30:58	-0.131	0.316	912.600	10810.000	10560.000	3.588	0.039	0.637
3	13:31:17	1.046	0.435	910.900	10840.000	10560.000	3.722	-0.034	0.606
x		0.666	0.384	911.800	10820.000	10570.000	3.662	0.015	0.600
σ		0.690	0.061	0.829	20.720	23.970	0.068	0.042	0.040
%RSD		103.600	16.020	0.091	0.192	0.227	1.857	287.200	6.623
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:30:39	-0.214	0.651	0.906	5.397	1.733	-0.109	0.000	193.700
2	13:30:58	-0.068	0.652	0.739	5.390	1.535	0.595	0.000	193.800
3	13:31:17	-0.237	0.711	0.915	4.788	1.418	-0.655	0.000	193.200
x		-0.173	0.671	0.853	5.192	1.562	-0.056	0.000	193.600
σ		0.092	0.034	0.099	0.350	0.159	0.627	0.000	0.295
%RSD		53.100	5.104	11.650	6.740	10.200	1114.000	0.000	0.153
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:30:39	106.603%	0.302	0.388	105.336%	-0.131	-0.146	-0.025	-0.018
2	13:30:58	107.874%	0.273	0.314	106.004%	-0.131	-0.127	-0.093	-0.064
3	13:31:17	109.298%	0.366	0.310	107.154%	-0.133	-0.147	-0.060	-0.034
x		107.925%	0.314	0.337	106.165%	-0.131	-0.140	-0.060	-0.038
σ		1.348%	0.048	0.044	0.920%	0.001	0.012	0.034	0.023
%RSD		1.249	15.330	12.980	0.866	0.857	8.341	56.980	60.650
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:30:39	103.039%	0.126	0.001	0.025	15.500	15.420	105.740%	105.974%
2	13:30:58	105.107%	0.135	-0.004	0.019	15.370	15.520	107.638%	107.937%
3	13:31:17	105.897%	0.108	-0.025	-0.000	15.370	15.370	108.895%	109.695%
x		104.681%	0.123	-0.009	0.014	15.410	15.440	107.425%	107.869%
σ		1.476%	0.014	0.014	0.013	0.078	0.074	1.588%	1.861%
%RSD		1.410	11.330	152.800	90.460	0.507	0.482	1.478	1.725
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	13:30:39	0.001	0.003	0.021	0.030	0.022	101.873%		
2	13:30:58	0.005	-0.000	0.028	0.032	0.029	103.055%		
3	13:31:17	0.009	0.001	0.037	0.032	0.034	104.356%		
x		0.005	0.001	0.029	0.031	0.028	103.094%		
σ		0.004	0.002	0.008	0.001	0.006	1.242%		
%RSD		84.390	130.400	26.940	4.100	20.740	1.205		

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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	13:34:21	93.939%	-0.251	1395.000	1428.000	0.000	518900.000	58930.000	61930.000
2	13:34:40	95.191%	-0.389	1392.000	1429.000	0.000	517100.000	59450.000	62860.000
3	13:34:59	97.161%	-0.192	1381.000	1425.000	0.000	507400.000	58880.000	62470.000
x		95.430%	-0.277	1389.000	1427.000	0.000	514500.000	59090.000	62420.000
σ		1.624%	0.101	7.413	2.084	0.000	6173.000	318.700	466.300
%RSD		1.702	36.490	0.533	0.146	0.000	1.200	0.539	0.747

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:34:21	743.800	16410.000	0.000	10850.000	25840.000	26110.000	98.306%	4.495
2	13:34:40	754.400	16670.000	0.000	10850.000	26140.000	26190.000	98.891%	3.950
3	13:34:59	745.300	16560.000	0.000	10900.000	26140.000	27960.000	99.364%	4.621
x		747.800	16550.000	0.000	10870.000	26040.000	26750.000	98.853%	4.355
σ		5.763	128.500	0.000	29.450	174.000	1046.000	0.530%	0.357
%RSD		0.771	0.776	0.000	0.271	0.668	3.912	0.536	8.195

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:34:21	-0.355	0.668	613.200	7970.000	7674.000	8.132	2.760	7.661
2	13:34:40	0.597	0.721	615.800	7986.000	7743.000	7.732	2.501	7.986
3	13:34:59	1.469	0.761	615.200	8034.000	7731.000	7.920	2.645	8.512
x		0.571	0.717	614.800	7997.000	7716.000	7.928	2.635	8.053
σ		0.912	0.046	1.348	33.320	36.560	0.200	0.130	0.430
%RSD		159.900	6.475	0.219	0.417	0.474	2.524	4.938	5.337

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:34:21	0.972	1160.000	1161.000	12.840	1.929	-0.090	0.000	286.500
2	13:34:40	1.033	1169.000	1174.000	13.470	2.111	0.861	0.000	289.500
3	13:34:59	1.250	1165.000	1169.000	12.740	2.738	1.334	0.000	288.400
x		1.085	1164.000	1168.000	13.020	2.259	0.702	0.000	288.100
σ		0.146	4.797	6.618	0.393	0.424	0.725	0.000	1.503
%RSD		13.480	0.412	0.567	3.017	18.780	103.400	0.000	0.522

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:34:21	102.656%	0.068	0.088	98.202%	-0.137	-0.140	7.859	7.553
2	13:34:40	104.228%	0.149	0.055	99.981%	-0.121	-0.150	7.877	7.255
3	13:34:59	105.341%	0.075	0.099	100.598%	-0.124	-0.163	7.198	7.426
x		104.075%	0.097	0.081	99.594%	-0.127	-0.151	7.645	7.412
σ		1.349%	0.045	0.023	1.244%	0.009	0.012	0.387	0.149
%RSD		1.296	46.090	28.210	1.249	7.015	7.747	5.059	2.016

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:34:21	97.561%	0.163	0.011	0.001	6.601	6.655	100.574%	101.965%
2	13:34:40	98.875%	0.151	-0.010	0.051	6.745	6.897	103.048%	103.750%
3	13:34:59	100.041%	0.138	0.017	0.011	6.498	6.463	103.593%	104.943%
x		98.825%	0.150	0.006	0.021	6.615	6.672	102.405%	103.553%
σ		1.241%	0.013	0.015	0.026	0.124	0.217	1.609%	1.499%
%RSD		1.255	8.428	239.900	126.800	1.881	3.254	1.571	1.447

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:34:21	0.021	0.020	0.100	0.094	0.098	93.991%
2	13:34:40	0.015	0.015	0.115	0.085	0.099	95.556%
3	13:34:59	0.015	0.012	0.118	0.097	0.104	96.706%
x		0.017	0.015	0.111	0.092	0.100	95.418%
σ		0.003	0.004	0.010	0.007	0.003	1.363%
%RSD		19.360	26.300	8.652	7.212	3.207	1.428

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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	13:38:04	107.806%	-0.202	19.090	17.150	0.000	3243.000	1334.000	1411.000
2	13:38:23	106.997%	0.061	15.530	16.390	0.000	3215.000	1356.000	1429.000
3	13:38:43	105.870%	-0.197	16.570	17.530	0.000	3245.000	1381.000	1455.000
x		106.891%	-0.113	17.060	17.020	0.000	3234.000	1357.000	1431.000
σ		0.972%	0.151	1.830	0.581	0.000	16.600	23.900	22.300
%RSD		0.910	133.800	10.730	3.414	0.000	0.513	1.761	1.558

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:38:04	904.300	7252.000	0.000	315.500	3080.000	3078.000	106.378%	28.330
2	13:38:23	900.700	7250.000	0.000	319.100	3115.000	3074.000	107.712%	26.220
3	13:38:43	918.200	7344.000	0.000	310.900	3026.000	3048.000	109.167%	27.540
x		907.700	7282.000	0.000	315.200	3074.000	3067.000	107.752%	27.360
σ		9.236	53.660	0.000	4.113	45.110	16.570	1.395%	1.068
%RSD		1.017	0.737	0.000	1.305	1.468	0.540	1.294	3.903

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:38:04	2.499	5.421	130.300	12520.000	12200.000	2.553	5.439	3.190
2	13:38:23	3.138	5.764	131.400	12500.000	12170.000	2.692	4.999	2.996
3	13:38:43	2.469	5.660	130.300	12450.000	12080.000	2.588	5.238	2.912
x		2.702	5.615	130.700	12490.000	12150.000	2.611	5.225	3.033
σ		0.378	0.176	0.620	35.970	60.050	0.072	0.220	0.143
%RSD		13.990	3.135	0.475	0.288	0.494	2.762	4.215	4.714

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:38:04	2.439	325.100	321.700	0.341	1.683	0.256	0.000	15.390
2	13:38:23	2.374	323.700	325.900	0.536	1.218	-0.984	0.000	15.410
3	13:38:43	2.580	319.500	323.000	-0.007	1.760	-0.808	0.000	15.380
x		2.464	322.800	323.600	0.290	1.553	-0.512	0.000	15.390
σ		0.106	2.892	2.162	0.275	0.293	0.671	0.000	0.013
%RSD		4.290	0.896	0.668	94.900	18.880	131.000	0.000	0.086

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:38:04	111.268%	0.354	0.407	112.273%	-0.130	-0.153	0.305	0.302
2	13:38:23	113.485%	0.428	0.383	114.183%	-0.127	-0.145	0.249	0.272
3	13:38:43	116.051%	0.416	0.357	115.884%	-0.127	-0.143	0.220	0.270
x		113.601%	0.400	0.382	114.113%	-0.128	-0.147	0.258	0.281
σ		2.393%	0.039	0.025	1.806%	0.001	0.005	0.044	0.018
%RSD		2.107	9.880	6.481	1.583	1.096	3.480	16.900	6.396

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:38:04	108.302%	0.075	0.358	0.408	28.600	28.550	107.849%	108.565%
2	13:38:23	111.275%	0.060	0.390	0.337	29.820	29.310	111.711%	111.413%
3	13:38:43	111.613%	0.094	0.381	0.416	28.480	29.260	112.123%	112.753%
x		110.397%	0.076	0.377	0.387	28.970	29.040	110.561%	110.910%
σ		1.822%	0.017	0.016	0.043	0.744	0.423	2.358%	2.139%
%RSD		1.650	22.330	4.367	11.190	2.567	1.458	2.133	1.928

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:38:04	0.011	0.008	1.264	1.109	1.182	107.011%
2	13:38:23	0.012	0.012	1.284	1.144	1.194	107.956%
3	13:38:43	0.016	0.012	1.427	1.122	1.225	109.232%
x		0.013	0.011	1.325	1.125	1.200	108.066%
σ		0.002	0.002	0.089	0.018	0.022	1.115%
%RSD		18.040	18.650	6.710	1.576	1.847	1.032

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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	13:41:48	95.616%	-0.255	146.500	155.100	0.000	396800.000	50930.000	53560.000
2	13:42:07	96.583%	-0.302	148.000	159.000	0.000	395200.000	51410.000	54240.000
3	13:42:26	95.286%	-0.186	157.700	153.800	0.000	402000.000	52050.000	55150.000
x		95.828%	-0.248	150.700	155.900	0.000	398000.000	51460.000	54320.000
σ		0.674%	0.058	6.055	2.689	0.000	3567.000	561.000	795.100
%RSD		0.703	23.420	4.017	1.724	0.000	0.896	1.090	1.464

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:41:48	525.300	2754.000	0.000	13080.000	26710.000	26590.000	98.908%	29.050
2	13:42:07	529.800	2800.000	0.000	13100.000	26810.000	26830.000	99.694%	30.910
3	13:42:26	538.500	2830.000	0.000	13200.000	27160.000	26880.000	98.961%	29.320
x		531.200	2795.000	0.000	13130.000	26890.000	26770.000	99.188%	29.760
σ		6.738	38.080	0.000	62.090	237.000	153.300	0.440%	1.008
%RSD		1.269	1.363	0.000	0.473	0.881	0.573	0.443	3.389

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:41:48	6.364	9.331	828.800	14980.000	14600.000	3.142	4.016	11.890
2	13:42:07	6.532	9.281	836.200	15060.000	14560.000	3.299	4.512	12.370
3	13:42:26	6.233	9.439	839.900	15130.000	14710.000	3.328	4.294	12.650
x		6.377	9.350	835.000	15060.000	14620.000	3.257	4.274	12.300
σ		0.150	0.081	5.665	75.160	80.010	0.100	0.249	0.383
%RSD		2.353	0.863	0.678	0.499	0.547	3.065	5.821	3.110

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:41:48	4.995	1327.000	1325.000	3.302	2.486	1.393	0.000	304.500
2	13:42:07	5.009	1330.000	1332.000	2.074	2.486	0.674	0.000	305.100
3	13:42:26	4.987	1325.000	1336.000	3.094	2.936	0.219	0.000	320.000
x		4.997	1328.000	1331.000	2.824	2.636	0.762	0.000	309.800
σ		0.011	2.586	5.586	0.657	0.259	0.592	0.000	8.782
%RSD		0.218	0.195	0.420	23.280	9.839	77.700	0.000	2.834

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:41:48	103.065%	3.971	3.568	100.370%	0.039	0.027	1.089	0.951
2	13:42:07	105.510%	3.751	3.643	101.783%	0.021	0.020	1.128	1.046
3	13:42:26	105.616%	3.686	3.873	101.472%	0.035	0.011	1.064	1.095
x		104.730%	3.802	3.695	101.208%	0.031	0.020	1.093	1.031
σ		1.443%	0.149	0.159	0.742%	0.009	0.008	0.032	0.073
%RSD		1.378	3.923	4.310	0.734	30.200	41.860	2.956	7.127

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:41:48	98.640%	6.555	0.483	0.459	46.660	46.920	101.971%	103.599%
2	13:42:07	100.157%	6.838	0.459	0.487	47.580	46.520	105.223%	106.077%
3	13:42:26	101.302%	6.883	0.447	0.473	46.850	46.850	105.939%	106.186%
x		100.033%	6.759	0.463	0.473	47.030	46.760	104.378%	105.287%
σ		1.335%	0.178	0.018	0.014	0.488	0.211	2.115%	1.463%
%RSD		1.335	2.628	3.956	2.940	1.037	0.452	2.026	1.389

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:41:48	0.051	0.042	33.010	30.280	31.090	97.553%
2	13:42:07	0.043	0.045	33.490	30.570	31.310	98.910%
3	13:42:26	0.045	0.045	33.550	30.830	31.570	98.580%
x		0.046	0.044	33.350	30.560	31.320	98.348%
σ		0.004	0.002	0.294	0.277	0.239	0.708%
%RSD		8.310	4.447	0.881	0.908	0.764	0.720

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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	13:45:30	111.221%	30.750	32.510	28.180	0.000	7313.000	28360.000	30270.000
2	13:45:49	112.578%	31.250	29.350	29.640	0.000	7335.000	28930.000	30960.000
3	13:46:08	113.600%	31.490	26.910	30.250	0.000	7339.000	28950.000	31150.000
x		112.466%	31.170	29.590	29.360	0.000	7329.000	28750.000	30790.000
σ		1.193%	0.379	2.809	1.061	0.000	13.790	336.700	463.300
%RSD		1.061	1.217	9.494	3.614	0.000	0.188	1.171	1.505
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:45:30	175300.000	101300.000	0.000	21520.000	37170.000	38980.000	116.981%	2144.000
2	13:45:49	178900.000	103400.000	0.000	21760.000	36670.000	38820.000	119.305%	2143.000
3	13:46:08	180600.000	104000.000	0.000	21780.000	36820.000	39410.000	119.510%	2167.000
x		178300.000	102900.000	0.000	21690.000	36890.000	39070.000	118.599%	2151.000
σ		2731.000	1413.000	0.000	142.800	257.600	303.700	1.405%	13.470
%RSD		1.532	1.373	0.000	0.658	0.698	0.777	1.185	0.626
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:45:30	177.100	468.100	21090.000	154700.000	154100.000	234.300	355.700	341.200
2	13:45:49	178.800	467.800	21160.000	154900.000	154700.000	234.700	355.700	340.800
3	13:46:08	178.800	470.600	21240.000	155500.000	155000.000	235.000	355.400	340.800
x		178.200	468.900	21160.000	155000.000	154600.000	234.600	355.600	340.900
σ		0.966	1.505	72.740	423.900	453.100	0.351	0.191	0.223
%RSD		0.542	0.321	0.344	0.273	0.293	0.150	0.054	0.065
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:45:30	332.400	1477.000	1482.000	9.905	9.347	26.650	0.000	300.300
2	13:45:49	336.300	1491.000	1488.000	11.040	8.716	27.480	0.000	289.200
3	13:46:08	334.600	1488.000	1491.000	9.094	8.972	26.950	0.000	302.900
x		334.400	1485.000	1487.000	10.010	9.012	27.030	0.000	297.500
σ		1.941	7.537	4.633	0.977	0.318	0.422	0.000	7.260
%RSD		0.580	0.507	0.312	9.756	3.526	1.562	0.000	2.441
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:45:30	0.000	24.780	24.640	114.954%	0.049	0.020	4.571	3.378
2	13:45:49	0.000	25.050	24.480	117.816%	0.045	0.020	4.481	3.308
3	13:46:08	0.000	24.940	24.510	118.676%	0.040	0.027	4.446	3.223
x		0.000	24.920	24.540	117.149%	0.045	0.023	4.499	3.303
σ		0.000	0.140	0.085	1.949%	0.004	0.004	0.065	0.078
%RSD		0.000	0.561	0.346	1.664	9.715	17.520	1.444	2.356
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:45:30	113.384%	11.370	0.282	0.354	3138.000	3163.000	0.000	0.000
2	13:45:49	115.426%	11.140	0.258	0.257	3172.000	3194.000	0.000	0.000
3	13:46:08	116.213%	11.210	0.251	0.279	3170.000	3206.000	0.000	0.000
x		115.008%	11.240	0.264	0.296	3160.000	3188.000	0.000	0.000
σ		1.460%	0.118	0.017	0.051	19.050	22.100	0.000	0.000
%RSD		1.270	1.049	6.286	17.150	0.603	0.693	0.000	0.000
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	13:45:30	3.006	3.071	164.300	147.200	153.800	107.732%		
2	13:45:49	3.043	3.073	165.400	148.800	158.900	109.333%		
3	13:46:08	3.023	3.128	166.700	149.000	159.400	109.773%		
x		3.024	3.091	165.500	148.300	157.400	108.946%		
σ		0.019	0.033	1.228	0.990	3.089	1.074%		
%RSD		0.626	1.054	0.742	0.667	1.963	0.986		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:11	114.918%	1.016	25.500	23.560	0.000	3558.000	4057.000	4367.000
2	13:49:30	113.247%	1.131	23.840	24.340	0.000	3574.000	4142.000	4475.000
3	13:49:50	115.247%	1.291	24.350	23.530	0.000	3556.000	4125.000	4459.000
x		114.471%	1.146	24.560	23.810	0.000	3563.000	4108.000	4433.000
σ		1.072%	0.138	0.849	0.457	0.000	9.691	44.860	58.270
%RSD		0.936	12.010	3.456	1.917	0.000	0.272	1.092	1.314
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:11	15460.000	25140.000	0.000	5953.000	5318.000	5281.000	114.397%	511.600
2	13:49:30	15840.000	25450.000	0.000	5990.000	5217.000	5267.000	115.066%	491.700
3	13:49:50	15880.000	25480.000	0.000	5920.000	5132.000	5275.000	116.258%	486.100
x		15730.000	25360.000	0.000	5954.000	5222.000	5274.000	115.240%	496.500
σ		229.900	189.900	0.000	35.140	93.100	6.787	0.943%	13.430
%RSD		1.462	0.749	0.000	0.590	1.783	0.129	0.818	2.705
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:11	14.480	48.990	906.200	19930.000	19540.000	17.550	21.620	26.580
2	13:49:30	15.770	48.610	910.300	20000.000	19640.000	17.390	21.890	26.080
3	13:49:50	18.510	49.060	912.800	19940.000	19440.000	17.230	21.450	26.230
x		16.260	48.890	909.800	19960.000	19540.000	17.390	21.650	26.300
σ		2.060	0.242	3.352	38.210	99.040	0.161	0.223	0.261
%RSD		12.670	0.496	0.368	0.191	0.507	0.927	1.032	0.993
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:11	25.290	55.580	55.670	1.328	2.102	0.094	0.000	39.380
2	13:49:30	25.900	56.840	55.960	1.786	1.641	1.019	0.000	40.100
3	13:49:50	26.190	55.920	56.650	2.412	1.763	2.317	0.000	40.690
x		25.800	56.110	56.090	1.842	1.835	1.143	0.000	40.060
σ		0.461	0.655	0.501	0.544	0.238	1.117	0.000	0.656
%RSD		1.787	1.167	0.893	29.540	13.000	97.670	0.000	1.638
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:11	0.000	6.714	6.517	117.332%	-0.122	-0.131	0.108	0.049
2	13:49:30	0.000	6.532	6.656	118.688%	-0.132	-0.107	0.064	0.035
3	13:49:50	0.000	6.670	6.305	119.757%	-0.116	-0.132	0.097	0.092
x		0.000	6.639	6.493	118.592%	-0.123	-0.123	0.089	0.058
σ		0.000	0.095	0.177	1.215%	0.008	0.014	0.023	0.030
%RSD		0.000	1.435	2.726	1.025	6.395	11.350	25.710	51.520
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:11	114.448%	2.379	0.100	0.098	109.600	111.400	0.000	0.000
2	13:49:30	115.615%	2.315	0.080	0.101	110.900	111.800	0.000	0.000
3	13:49:50	117.630%	2.309	0.088	0.066	109.400	111.200	0.000	0.000
x		115.898%	2.334	0.089	0.089	110.000	111.500	0.000	0.000
σ		1.610%	0.039	0.010	0.019	0.855	0.320	0.000	0.000
%RSD		1.389	1.680	11.350	21.810	0.777	0.287	0.000	0.000
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	13:49:11	0.335	0.338	11.780	10.400	10.860	111.083%		
2	13:49:30	0.343	0.344	11.860	10.450	11.090	112.259%		
3	13:49:50	0.347	0.359	12.030	10.590	11.060	113.875%		
x		0.342	0.347	11.890	10.480	11.000	112.406%		
σ		0.006	0.011	0.127	0.100	0.122	1.402%		
%RSD		1.692	3.094	1.069	0.949	1.110	1.247		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:52:52	117.479%	1.496	23.190	21.870	0.000	4093.000	5972.000	6474.000
2	13:53:11	116.521%	1.620	22.310	22.500	0.000	4102.000	6073.000	6548.000
3	13:53:30	116.331%	1.419	24.990	22.690	0.000	4105.000	6095.000	6616.000
x		116.777%	1.512	23.500	22.350	0.000	4100.000	6047.000	6546.000
σ		0.615%	0.101	1.366	0.427	0.000	6.262	65.680	71.360
%RSD		0.527	6.696	5.813	1.911	0.000	0.153	1.086	1.090
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:52:52	22740.000	33370.000	0.000	9276.000	7199.000	7446.000	117.314%	1065.000
2	13:53:11	23050.000	33650.000	0.000	9229.000	7272.000	7381.000	118.859%	1045.000
3	13:53:30	23290.000	33800.000	0.000	9182.000	7450.000	7408.000	119.309%	1048.000
x		23030.000	33610.000	0.000	9229.000	7307.000	7412.000	118.494%	1053.000
σ		276.000	221.900	0.000	47.040	128.800	32.350	1.046%	10.930
%RSD		1.199	0.660	0.000	0.510	1.763	0.437	0.883	1.038
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:52:52	47.660	58.280	1039.000	35540.000	34890.000	23.900	38.490	42.090
2	13:53:11	48.570	57.550	1036.000	35460.000	34750.000	23.820	38.930	42.490
3	13:53:30	48.990	57.850	1037.000	35320.000	34590.000	23.900	38.450	42.480
x		48.410	57.890	1037.000	35440.000	34740.000	23.870	38.630	42.360
σ		0.676	0.364	1.766	109.000	153.100	0.046	0.268	0.228
%RSD		1.397	0.630	0.170	0.308	0.441	0.192	0.695	0.538
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:52:52	42.370	125.000	127.400	1.154	1.411	0.240	0.000	38.450
2	13:53:11	41.810	125.800	125.600	0.819	1.323	0.703	0.000	38.520
3	13:53:30	42.290	126.600	126.800	3.896	1.290	0.352	0.000	38.470
x		42.160	125.800	126.600	1.957	1.341	0.432	0.000	38.480
σ		0.302	0.756	0.915	1.688	0.062	0.241	0.000	0.033
%RSD		0.716	0.601	0.723	86.290	4.655	55.930	0.000	0.084
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:52:52	0.000	5.259	5.137	116.797%	-0.109	-0.139	0.159	0.128
2	13:53:11	0.000	5.001	5.063	118.114%	-0.116	-0.114	0.086	0.088
3	13:53:30	0.000	4.920	5.040	118.474%	-0.127	-0.126	0.091	0.064
x		0.000	5.060	5.080	117.795%	-0.117	-0.126	0.112	0.093
σ		0.000	0.177	0.051	0.883%	0.009	0.012	0.041	0.032
%RSD		0.000	3.499	1.001	0.750	7.747	9.696	36.340	34.120
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:52:52	114.325%	5.048	0.292	0.278	155.800	156.300	0.000	0.000
2	13:53:11	116.022%	5.283	0.261	0.304	157.700	158.200	0.000	0.000
3	13:53:30	117.165%	5.300	0.274	0.244	156.400	156.000	0.000	0.000
x		115.837%	5.211	0.276	0.275	156.700	156.800	0.000	0.000
σ		1.429%	0.141	0.015	0.030	1.010	1.223	0.000	0.000
%RSD		1.234	2.703	5.603	11.070	0.645	0.780	0.000	0.000
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	13:52:52	0.526	0.552	18.870	16.580	17.420	109.213%		
2	13:53:11	0.519	0.538	18.720	16.990	17.620	110.407%		
3	13:53:30	0.534	0.546	18.570	16.930	17.480	111.066%		
x		0.526	0.545	18.720	16.830	17.510	110.229%		
σ		0.007	0.007	0.152	0.221	0.103	0.939%		
%RSD		1.399	1.246	0.811	1.314	0.590	0.852		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:56:33	116.340%	2.794	17.910	20.030	0.000	2985.000	5730.000	6171.000
2	13:56:52	116.844%	2.520	16.180	19.410	0.000	2955.000	5790.000	6253.000
3	13:57:11	116.257%	2.793	18.710	19.300	0.000	2995.000	5856.000	6375.000
x		116.480%	2.702	17.600	19.580	0.000	2978.000	5792.000	6266.000
σ		0.318%	0.158	1.294	0.393	0.000	21.210	63.140	102.300
%RSD		0.273	5.849	7.352	2.007	0.000	0.712	1.090	1.633

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:56:33	19850.000	32690.000	0.000	5357.000	6519.000	6704.000	115.693%	560.500
2	13:56:52	20060.000	32790.000	0.000	5341.000	6577.000	6756.000	117.202%	555.200
3	13:57:11	20390.000	33300.000	0.000	5352.000	6677.000	6742.000	117.234%	564.900
x		20100.000	32930.000	0.000	5350.000	6591.000	6734.000	116.709%	560.200
σ		274.400	325.600	0.000	7.811	80.030	26.880	0.881%	4.838
%RSD		1.365	0.989	0.000	0.146	1.214	0.399	0.755	0.864

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:56:33	36.410	34.170	954.600	31700.000	31140.000	18.090	21.840	21.770
2	13:56:52	36.720	34.450	964.800	31880.000	31010.000	18.040	21.990	22.050
3	13:57:11	39.760	34.250	966.300	31860.000	31070.000	17.980	21.500	21.870
x		37.630	34.290	961.900	31810.000	31070.000	18.040	21.780	21.900
σ		1.847	0.148	6.363	99.600	69.680	0.056	0.252	0.145
%RSD		4.910	0.433	0.661	0.313	0.224	0.309	1.159	0.662

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:56:33	21.240	72.690	73.910	1.840	1.245	0.130	0.000	60.270
2	13:56:52	21.490	73.420	73.020	0.771	1.030	0.563	0.000	61.540
3	13:57:11	21.790	72.550	74.810	3.344	1.330	1.408	0.000	61.700
x		21.510	72.890	73.910	1.985	1.202	0.700	0.000	61.170
σ		0.272	0.468	0.896	1.292	0.155	0.650	0.000	0.784
%RSD		1.263	0.642	1.212	65.100	12.860	92.900	0.000	1.282

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:56:33	0.000	2.962	2.688	116.472%	-0.114	-0.135	0.117	0.123
2	13:56:52	0.000	2.845	2.885	117.302%	-0.118	-0.113	0.105	0.083
3	13:57:11	0.000	2.842	2.817	119.164%	-0.117	-0.132	0.098	0.092
x		0.000	2.883	2.797	117.646%	-0.116	-0.127	0.106	0.099
σ		0.000	0.069	0.100	1.379%	0.002	0.012	0.010	0.021
%RSD		0.000	2.377	3.585	1.172	1.781	9.341	9.007	20.880

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:56:33	113.128%	3.046	0.042	0.089	161.500	162.300	0.000	0.000
2	13:56:52	115.946%	2.939	0.064	0.058	160.600	162.500	0.000	0.000
3	13:57:11	116.470%	3.060	0.043	0.055	161.900	163.400	0.000	0.000
x		115.181%	3.015	0.050	0.067	161.300	162.700	0.000	0.000
σ		1.797%	0.067	0.012	0.019	0.657	0.592	0.000	0.000
%RSD		1.561	2.206	24.310	27.990	0.407	0.364	0.000	0.000

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:56:33	0.354	0.349	12.300	11.340	11.570	109.580%
2	13:56:52	0.338	0.361	12.510	11.440	11.800	110.965%
3	13:57:11	0.342	0.360	12.650	11.500	11.850	111.597%
x		0.345	0.357	12.490	11.430	11.740	110.714%
σ		0.009	0.006	0.173	0.082	0.149	1.032%
%RSD		2.493	1.805	1.389	0.718	1.267	0.932

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:00:14	109.209%	-0.245	115.300	119.100	0.000	83010.000	11590.000	12420.000
2	14:00:33	110.200%	-0.306	114.700	116.700	0.000	82270.000	11500.000	12390.000
3	14:00:52	110.272%	-0.287	116.300	120.600	0.000	82430.000	11630.000	12620.000
x		109.894%	-0.280	115.500	118.800	0.000	82570.000	11570.000	12470.000
σ		0.594%	0.031	0.780	1.976	0.000	386.700	61.710	126.600
%RSD		0.540	11.150	0.676	1.664	0.000	0.468	0.533	1.015

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:00:14	16.820	4698.000	0.000	8785.000	88640.000	93590.000	108.676%	2.338
2	14:00:33	16.560	4688.000	0.000	8741.000	88660.000	92970.000	110.405%	1.716
3	14:00:52	16.970	4740.000	0.000	8757.000	88650.000	93510.000	110.458%	2.116
x		16.780	4709.000	0.000	8761.000	88650.000	93360.000	109.846%	2.057
σ		0.207	27.280	0.000	21.970	10.710	340.300	1.014%	0.315
%RSD		1.231	0.579	0.000	0.251	0.012	0.364	0.923	15.320

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:00:14	1.317	47.530	1.567	59.340	228.500	0.294	0.827	0.453
2	14:00:33	0.456	47.030	1.527	57.320	227.500	0.275	0.778	0.399
3	14:00:52	1.622	47.160	1.522	57.210	223.100	0.298	0.697	0.313
x		1.132	47.240	1.539	57.960	226.400	0.289	0.767	0.388
σ		0.605	0.261	0.025	1.197	2.874	0.012	0.066	0.071
%RSD		53.440	0.552	1.625	2.066	1.270	4.279	8.583	18.210

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:00:14	0.672	12.930	13.210	0.061	1.318	-0.067	0.000	183.200
2	14:00:33	0.474	13.010	12.560	-0.911	1.476	-0.662	0.000	184.200
3	14:00:52	0.432	13.430	13.050	1.009	1.334	0.015	0.000	184.300
x		0.526	13.120	12.940	0.053	1.376	-0.238	0.000	183.900
σ		0.128	0.271	0.341	0.960	0.087	0.369	0.000	0.609
%RSD		24.280	2.064	2.635	1819.000	6.321	155.100	0.000	0.331

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:00:14	113.090%	0.203	0.212	109.694%	-0.134	-0.152	-0.031	0.009
2	14:00:33	115.107%	0.239	0.219	111.578%	-0.130	-0.142	-0.025	-0.032
3	14:00:52	116.713%	0.232	0.232	113.033%	-0.125	-0.141	0.063	0.052
x		114.970%	0.225	0.221	111.435%	-0.130	-0.145	0.003	0.010
σ		1.816%	0.019	0.010	1.674%	0.005	0.006	0.053	0.042
%RSD		1.579	8.583	4.529	1.502	3.641	4.369	2074.000	434.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:00:14	108.169%	1.352	0.061	0.066	36.360	36.170	109.967%	110.150%
2	14:00:33	109.094%	1.404	0.076	0.121	35.840	36.360	111.922%	112.280%
3	14:00:52	110.137%	1.480	0.066	0.063	36.530	36.400	112.807%	113.194%
x		109.133%	1.412	0.068	0.083	36.240	36.310	111.565%	111.875%
σ		0.984%	0.064	0.008	0.033	0.362	0.122	1.453%	1.562%
%RSD		0.902	4.564	11.690	39.500	0.998	0.335	1.303	1.396

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:00:14	0.011	0.004	0.149	0.126	0.126	104.765%
2	14:00:33	0.016	0.008	0.143	0.143	0.131	105.673%
3	14:00:52	0.007	0.005	0.134	0.105	0.114	106.897%
x		0.012	0.006	0.142	0.125	0.124	105.778%
σ		0.004	0.002	0.007	0.019	0.009	1.070%
%RSD		37.900	33.880	5.191	15.340	6.986	1.011

CCV 1241000 7/18/2014 2:03:36 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	14:03:36	102.770%	94.630	96.630	99.970	0.000	48270.000	49360.000	50680.000
2	14:03:55	102.171%	96.520	97.760	96.800	0.000	48990.000	50610.000	51890.000
3	14:04:14	102.140%	96.680	90.130	99.910	0.000	48140.000	50210.000	52200.000
x		102.360%	95.944%	94.841%	98.894%	0.000	96.936%	100.114%	103.184%
σ		0.355%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.347	1.187	4.340	1.834	0.000	0.937	1.274	1.554

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:03:36	501.300	5229.000	0.000	50170.000	48260.000	49640.000	106.233%	101.500
2	14:03:55	516.900	5361.000	0.000	51000.000	49550.000	50810.000	104.661%	103.100
3	14:04:14	520.000	5374.000	0.000	50400.000	48250.000	50210.000	105.763%	101.700
x		102.547%	106.424%	0.000	101.048%	97.371%	100.442%	105.552%	102.087%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.807%	n/a
%RSD		1.962	1.512	0.000	0.849	1.531	1.169	0.764	0.845

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:03:36	99.550	102.100	514.600	25750.000	25560.000	101.100	102.000	102.600
2	14:03:55	101.800	104.000	522.800	26330.000	26030.000	103.100	105.500	102.500
3	14:04:14	101.200	103.300	519.700	26060.000	25860.000	102.200	103.400	102.400
x		100.845%	103.138%	103.806%	104.194%	103.268%	102.131%	103.606%	102.529%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.147	0.916	0.801	1.115	0.916	0.968	1.708	0.090

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:03:36	102.400	99.840	99.370	102.100	99.590	99.560	0.000	98.120
2	14:03:55	102.200	101.300	101.500	102.000	101.000	101.100	0.000	99.030
3	14:04:14	102.100	102.000	101.100	100.800	98.980	100.500	0.000	98.440
x		102.224%	101.041%	100.658%	101.636%	99.857%	100.377%	0.000	98.529%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.170	1.099	1.137	0.690	1.032	0.768	0.000	0.468

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:03:36	102.498%	96.710	98.080	102.560%	96.690	96.350	97.090	97.700
2	14:03:55	103.809%	100.300	100.500	103.827%	97.460	97.320	98.630	98.550
3	14:04:14	105.620%	101.900	101.300	105.080%	96.920	97.030	97.370	98.560
x		103.976%	99.639%	99.953%	103.822%	97.025%	96.899%	97.698%	98.270%
σ		1.568%	n/a	n/a	1.260%	n/a	n/a	n/a	n/a
%RSD		1.508	2.665	1.673	1.213	0.409	0.518	0.841	0.501

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:03:36	101.137%	97.190	94.300	94.310	98.500	98.750	101.071%	100.521%
2	14:03:55	102.711%	97.640	96.550	95.920	99.720	99.240	102.068%	102.538%
3	14:04:14	103.852%	97.890	96.770	96.270	98.940	99.280	104.057%	104.294%
x		102.567%	97.573%	95.876%	95.502%	99.053%	99.092%	102.399%	102.451%
σ		1.363%	n/a	n/a	n/a	n/a	n/a	1.520%	1.888%
%RSD		1.329	0.366	1.427	1.092	0.624	0.296	1.484	1.843

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:03:36	98.280	101.300	98.040	97.550	96.900	96.484%
2	14:03:55	100.400	103.700	100.400	100.300	99.340	96.559%
3	14:04:14	99.880	103.700	100.500	100.000	99.400	97.417%
x		99.535%	102.896%	99.639%	99.293%	98.543%	96.820%
σ		n/a	n/a	n/a	n/a	n/a	0.519%
%RSD		1.129	1.305	1.390	1.527	1.447	0.536

CCB5 7/18/2014 2:09:45 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	14:10:04	111.762%	-0.329	1.092	1.270	0.000	-40.110	0.978	1.343
2	14:10:23	113.476%	-0.369	1.581	0.736	0.000	-44.800	1.606	2.098
3	14:10:42	114.424%	-0.295	0.733	0.529	0.000	-41.080	1.596	1.890
x		113.221%	-0.331	1.135	0.845	0.000	-42.000	1.393	1.777
σ		1.350%	0.037	0.426	0.382	0.000	2.477	0.360	0.390
%RSD		1.192	11.190	37.520	45.260	0.000	5.898	25.830	21.970

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:10:04	-0.020	3.160	0.000	4.365	-0.918	5.622	116.581%	0.076
2	14:10:23	0.059	2.657	0.000	1.049	0.519	4.861	118.847%	0.110
3	14:10:42	0.129	3.772	0.000	2.660	3.895	1.306	118.931%	0.072
x		0.056	3.196	0.000	2.691	1.165	3.930	118.120%	0.086
σ		0.074	0.558	0.000	1.658	2.470	2.304	1.333%	0.021
%RSD		133.000	17.470	0.000	61.610	212.000	58.620	1.129	23.940

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:10:04	0.139	0.123	0.180	14.220	5.560	-0.012	-0.018	-0.628
2	14:10:23	0.174	0.115	0.149	12.770	2.526	-0.008	-0.030	-0.660
3	14:10:42	0.346	0.135	0.140	11.530	1.520	-0.005	0.010	-0.707
x		0.219	0.124	0.156	12.840	3.202	-0.008	-0.013	-0.665
σ		0.111	0.011	0.021	1.344	2.103	0.003	0.021	0.040
%RSD		50.580	8.494	13.350	10.470	65.680	38.420	159.100	5.962

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:10:04	-0.356	0.142	0.153	-0.126	1.704	-0.532	0.000	0.008
2	14:10:23	-0.448	0.156	0.064	-0.403	1.313	-0.650	0.000	0.008
3	14:10:42	-0.432	0.171	0.137	-0.259	1.523	-0.355	0.000	0.011
x		-0.412	0.156	0.118	-0.262	1.513	-0.512	0.000	0.009
σ		0.049	0.015	0.047	0.139	0.196	0.149	0.000	0.002
%RSD		12.000	9.369	40.070	52.790	12.930	29.040	0.000	19.210

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:10:04	114.401%	0.290	0.193	116.791%	-0.126	-0.140	0.046	0.043
2	14:10:23	117.430%	0.229	0.143	118.368%	-0.123	-0.138	0.001	0.005
3	14:10:42	118.688%	0.191	0.160	119.068%	-0.118	-0.144	0.040	0.032
x		116.840%	0.237	0.165	118.076%	-0.122	-0.140	0.029	0.027
σ		2.204%	0.050	0.025	1.167%	0.004	0.003	0.024	0.019
%RSD		1.886	21.020	15.310	0.988	3.287	2.229	84.250	72.480

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:10:04	113.271%	-0.214	0.075	0.102	-0.006	0.014	109.443%	108.799%
2	14:10:23	115.338%	-0.210	0.083	0.093	-0.006	0.021	112.417%	111.096%
3	14:10:42	116.375%	-0.219	0.079	0.101	0.031	0.011	112.115%	112.060%
x		114.995%	-0.214	0.079	0.099	0.006	0.015	111.325%	110.652%
σ		1.580%	0.004	0.004	0.005	0.021	0.005	1.637%	1.675%
%RSD		1.374	2.091	4.908	4.699	332.100	35.540	1.470	1.514

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:10:04	0.005	0.004	0.009	0.016	0.013	109.520%
2	14:10:23	0.005	0.003	0.003	0.014	0.012	109.924%
3	14:10:42	0.002	0.002	0.014	0.012	0.011	109.789%
x		0.004	0.003	0.009	0.014	0.012	109.744%
σ		0.002	0.001	0.005	0.002	0.001	0.206%
%RSD		40.130	27.420	59.170	12.580	5.323	0.187

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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	14:13:48	78.184%	-0.284	2402.000	2351.000	0.000	747800.000	22930.000	23990.000
2	14:14:07	78.256%	-0.203	2431.000	2382.000	0.000	739600.000	23130.000	24280.000
3	14:14:28	78.018%	-0.202	2467.000	2421.000	0.000	741400.000	23320.000	24880.000
x		78.153%	-0.230	2433.000	2385.000	0.000	742900.000	23130.000	24380.000
σ		0.122%	0.047	32.840	35.030	0.000	4308.000	195.900	457.900
%RSD		0.156	20.470	1.350	1.469	0.000	0.580	0.847	1.878
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:13:48	81.410	4251.000	0.000	87600.000	502000.000	521100.000	94.944%	1.597
2	14:14:07	82.780	4324.000	0.000	87410.000	534200.000	522000.000	95.682%	1.791
3	14:14:28	84.560	4366.000	0.000	87710.000	536700.000	523000.000	95.197%	1.473
x		82.920	4314.000	0.000	87570.000	524300.000	522000.000	95.274%	1.621
σ		1.576	58.190	0.000	148.700	19360.000	941.200	0.375%	0.160
%RSD		1.901	1.349	0.000	0.170	3.693	0.180	0.393	9.889
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:13:48	0.516	0.595	2410.000	291.600	1272.000	0.795	-1.377	3.827
2	14:14:07	0.995	0.593	2403.000	287.700	1254.000	0.749	-1.655	3.396
3	14:14:28	0.445	0.620	2411.000	287.600	1262.000	0.837	-1.481	3.839
x		0.652	0.603	2408.000	289.000	1263.000	0.794	-1.504	3.688
σ		0.299	0.015	4.422	2.280	8.852	0.044	0.141	0.253
%RSD		45.860	2.475	0.184	0.789	0.701	5.564	9.361	6.848
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:13:48	0.506	8.928	8.548	30.550	4.776	3.881	0.000	3460.000
2	14:14:07	0.253	8.992	7.910	30.450	5.242	2.838	0.000	3439.000
3	14:14:28	0.338	8.486	7.980	30.170	4.861	3.874	0.000	3450.000
x		0.366	8.802	8.146	30.390	4.959	3.531	0.000	3450.000
σ		0.129	0.276	0.350	0.200	0.248	0.600	0.000	10.220
%RSD		35.220	3.132	4.297	0.659	5.002	17.000	0.000	0.296
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:13:48	98.385%	61.290	61.410	92.725%	-0.126	-0.142	-0.009	0.006
2	14:14:07	100.619%	61.390	61.910	94.416%	-0.139	-0.131	-0.003	0.016
3	14:14:28	102.123%	61.090	62.690	95.042%	-0.124	-0.135	0.053	0.035
x		100.376%	61.250	62.000	94.061%	-0.130	-0.136	0.013	0.019
σ		1.881%	0.154	0.646	1.199%	0.008	0.005	0.034	0.015
%RSD		1.874	0.251	1.043	1.275	6.242	3.884	256.800	76.960
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:13:48	93.562%	0.085	1.131	1.150	24.190	24.590	98.059%	98.540%
2	14:14:07	95.772%	0.092	1.147	1.091	24.070	23.750	100.462%	100.709%
3	14:14:28	95.674%	0.039	1.140	1.120	24.630	24.730	101.483%	101.758%
x		95.003%	0.072	1.139	1.120	24.300	24.360	100.002%	100.336%
σ		1.249%	0.029	0.008	0.030	0.295	0.532	1.758%	1.641%
%RSD		1.315	39.860	0.694	2.659	1.213	2.184	1.758	1.636
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	14:13:48	0.002	0.002	0.215	0.191	0.223	89.514%		
2	14:14:07	0.005	0.002	0.250	0.240	0.232	90.690%		
3	14:14:28	0.003	0.002	0.215	0.234	0.216	92.571%		
x		0.003	0.002	0.227	0.222	0.224	90.925%		
σ		0.002	0.000	0.020	0.027	0.008	1.542%		
%RSD		46.760	17.030	8.989	12.040	3.526	1.696		

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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	14:17:31	112.542%	-0.329	35.150	34.260	0.000	14020.000	48040.000	51910.000
2	14:17:50	112.560%	-0.310	34.150	32.910	0.000	14000.000	48330.000	52330.000
3	14:18:10	114.837%	-0.239	29.860	31.470	0.000	13820.000	48180.000	52250.000
x		113.313%	-0.293	33.050	32.880	0.000	13950.000	48180.000	52160.000
σ		1.320%	0.048	2.813	1.396	0.000	109.100	147.800	223.200
%RSD		1.165	16.320	8.510	4.245	0.000	0.782	0.307	0.428
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:17:31	152.300	5835.000	0.000	2057.000	120100.000	128000.000	109.005%	3.733
2	14:17:50	151.400	5884.000	0.000	2045.000	120800.000	127200.000	110.368%	3.986
3	14:18:10	152.400	5821.000	0.000	2017.000	119700.000	126600.000	111.136%	3.778
x		152.100	5847.000	0.000	2040.000	120200.000	127300.000	110.170%	3.832
σ		0.547	33.260	0.000	20.940	585.000	701.200	1.079%	0.135
%RSD		0.360	0.569	0.000	1.027	0.487	0.551	0.980	3.511
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:17:31	0.668	3.939	124.800	341.000	568.900	0.512	2.185	1.959
2	14:17:50	-1.490	3.919	125.000	339.200	561.000	0.508	2.103	1.625
3	14:18:10	1.251	4.165	124.300	339.000	552.000	0.470	2.311	1.730
x		0.143	4.008	124.700	339.700	560.600	0.497	2.200	1.771
σ		1.444	0.137	0.370	1.092	8.447	0.023	0.104	0.171
%RSD		1008.000	3.405	0.297	0.322	1.507	4.695	4.746	9.668
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:17:31	2.263	22.760	23.290	1.019	1.549	-0.800	0.000	1240.000
2	14:17:50	1.913	22.830	23.310	-0.625	0.857	-0.661	0.000	1230.000
3	14:18:10	2.162	23.110	22.580	1.062	1.077	-0.790	0.000	1233.000
x		2.113	22.900	23.060	0.485	1.161	-0.750	0.000	1234.000
σ		0.181	0.185	0.416	0.962	0.354	0.077	0.000	5.054
%RSD		8.548	0.809	1.805	198.100	30.480	10.310	0.000	0.409
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:17:31	115.146%	0.707	0.694	112.022%	-0.082	-0.104	0.099	0.163
2	14:17:50	117.596%	0.689	0.733	113.154%	-0.092	-0.097	0.143	0.189
3	14:18:10	117.946%	0.575	0.634	113.375%	-0.089	-0.091	0.141	0.155
x		116.896%	0.657	0.687	112.850%	-0.088	-0.098	0.128	0.169
σ		1.526%	0.072	0.050	0.726%	0.005	0.006	0.025	0.018
%RSD		1.305	10.950	7.291	0.643	5.601	6.636	19.350	10.470
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:17:31	108.917%	1.693	0.798	0.841	51.200	51.700	112.241%	112.852%
2	14:17:50	110.190%	1.800	0.778	0.720	51.140	50.940	114.150%	114.398%
3	14:18:10	110.507%	1.734	0.785	0.770	50.670	50.750	115.018%	115.015%
x		109.871%	1.742	0.787	0.777	51.010	51.130	113.803%	114.088%
σ		0.841%	0.054	0.010	0.061	0.289	0.500	1.421%	1.114%
%RSD		0.766	3.110	1.298	7.842	0.567	0.977	1.249	0.977
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	14:17:31	0.009	0.007	0.981	0.901	0.931	107.953%		
2	14:17:50	0.014	0.006	1.071	0.922	0.978	108.851%		
3	14:18:10	0.010	0.008	1.014	0.942	0.961	109.157%		
x		0.011	0.007	1.022	0.922	0.957	108.654%		
σ		0.003	0.001	0.045	0.021	0.023	0.626%		
%RSD		24.170	13.180	4.438	2.264	2.447	0.576		

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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	14:21:13	112.215%	-0.232	134.300	132.000	0.000	56690.000	19890.000	21390.000
2	14:21:32	112.976%	-0.291	137.100	136.800	0.000	56390.000	19840.000	21530.000
3	14:21:51	113.720%	-0.331	138.700	140.200	0.000	55900.000	19710.000	21440.000
x		112.970%	-0.285	136.700	136.300	0.000	56330.000	19820.000	21450.000
σ		0.753%	0.050	2.185	4.126	0.000	399.400	93.330	70.020
%RSD		0.666	17.440	1.598	3.026	0.000	0.709	0.471	0.326
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:21:13	41.270	4185.000	0.000	31350.000	75730.000	79850.000	107.240%	2.516
2	14:21:32	40.360	4246.000	0.000	31010.000	75400.000	79760.000	108.870%	2.721
3	14:21:51	41.740	4193.000	0.000	30840.000	73700.000	78910.000	109.454%	2.584
x		41.120	4208.000	0.000	31070.000	74940.000	79510.000	108.521%	2.607
σ		0.701	33.270	0.000	261.700	1088.000	516.100	1.147%	0.104
%RSD		1.705	0.791	0.000	0.842	1.452	0.649	1.057	3.997
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:21:13	0.113	7.633	9.464	76.700	224.600	0.407	2.514	1.203
2	14:21:32	1.365	7.436	9.445	75.560	215.400	0.405	2.784	1.195
3	14:21:51	1.381	7.794	9.330	75.330	216.500	0.434	2.456	1.213
x		0.953	7.621	9.413	75.860	218.800	0.415	2.585	1.204
σ		0.728	0.179	0.073	0.736	5.016	0.016	0.175	0.009
%RSD		76.370	2.352	0.774	0.971	2.292	3.906	6.767	0.741
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:21:13	1.439	8.281	8.989	1.120	1.322	-0.109	0.000	447.200
2	14:21:32	1.522	8.200	8.744	-0.925	1.218	-0.184	0.000	447.300
3	14:21:51	1.399	8.344	8.202	-0.058	0.707	-0.226	0.000	449.700
x		1.453	8.275	8.645	0.045	1.082	-0.173	0.000	448.100
σ		0.063	0.072	0.403	1.026	0.329	0.059	0.000	1.416
%RSD		4.307	0.870	4.658	2258.000	30.420	34.230	0.000	0.316
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:21:13	111.616%	1.750	1.525	109.347%	-0.121	-0.144	0.194	0.181
2	14:21:32	113.669%	1.627	1.578	110.429%	-0.130	-0.141	0.160	0.126
3	14:21:51	114.011%	1.606	1.679	110.257%	-0.134	-0.142	0.141	0.180
x		113.099%	1.661	1.594	110.011%	-0.128	-0.142	0.165	0.162
σ		1.295%	0.078	0.078	0.581%	0.007	0.002	0.026	0.032
%RSD		1.145	4.688	4.886	0.528	5.437	1.115	16.030	19.420
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:21:13	106.031%	1.126	2.238	2.172	48.080	47.730	109.102%	109.170%
2	14:21:32	108.020%	1.169	2.192	2.152	46.680	47.800	110.756%	110.811%
3	14:21:51	107.865%	1.134	2.203	2.374	47.370	48.460	111.171%	112.123%
x		107.306%	1.143	2.211	2.233	47.380	48.000	110.343%	110.702%
σ		1.106%	0.023	0.024	0.123	0.698	0.401	1.094%	1.479%
%RSD		1.031	1.986	1.081	5.496	1.474	0.835	0.992	1.336
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	14:21:13	0.048	0.056	0.318	0.302	0.298	103.845%		
2	14:21:32	0.064	0.063	0.286	0.273	0.282	104.557%		
3	14:21:51	0.061	0.064	0.342	0.280	0.300	105.929%		
x		0.058	0.061	0.315	0.285	0.294	104.777%		
σ		0.009	0.005	0.028	0.015	0.010	1.060%		
%RSD		14.990	7.546	8.842	5.392	3.332	1.011		

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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	14:24:54	93.608%	-0.042	6.985	7.400	0.000	1800.000	9105.000	9624.000
2	14:25:14	93.492%	-0.065	6.348	6.101	0.000	1784.000	9210.000	9713.000
3	14:25:33	92.859%	0.147	8.441	5.576	0.000	1788.000	9171.000	9792.000
x		93.320%	0.014	7.258	6.359	0.000	1791.000	9162.000	9710.000
σ		0.403%	0.116	1.073	0.939	0.000	8.101	53.080	84.010
%RSD		0.432	855.500	14.790	14.770	0.000	0.452	0.579	0.865

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:24:54	797.100	1582.000	0.000	1744.000	15360.000	15390.000	93.150%	0.271
2	14:25:14	801.600	1604.000	0.000	1729.000	15520.000	15330.000	94.321%	0.431
3	14:25:33	811.200	1605.000	0.000	1701.000	15200.000	15230.000	94.221%	0.361
x		803.300	1597.000	0.000	1724.000	15360.000	15320.000	93.897%	0.354
σ		7.202	12.890	0.000	22.020	162.500	81.500	0.649%	0.080
%RSD		0.897	0.807	0.000	1.277	1.058	0.532	0.691	22.580

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:24:54	0.298	0.606	2884.000	18130.000	17620.000	66.380	7.660	62.770
2	14:25:14	0.916	0.477	2872.000	17930.000	17550.000	66.890	7.801	63.600
3	14:25:33	0.801	0.463	2873.000	17990.000	17600.000	66.230	7.166	62.110
x		0.672	0.515	2876.000	18020.000	17590.000	66.500	7.542	62.830
σ		0.329	0.079	6.452	101.600	36.560	0.345	0.333	0.748
%RSD		48.970	15.260	0.224	0.564	0.208	0.520	4.420	1.190

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:24:54	62.810	2455.000	2459.000	0.189	1.194	0.391	0.000	73.860
2	14:25:14	62.420	2450.000	2459.000	0.720	1.417	0.014	0.000	73.600
3	14:25:33	61.990	2439.000	2450.000	0.237	1.402	0.578	0.000	73.810
x		62.410	2448.000	2456.000	0.382	1.338	0.327	0.000	73.760
σ		0.409	8.229	5.491	0.293	0.125	0.287	0.000	0.138
%RSD		0.656	0.336	0.224	76.890	9.320	87.730	0.000	0.187

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:24:54	0.000	0.030	0.022	100.061%	-0.147	-0.157	0.898	0.871
2	14:25:14	0.000	0.050	0.015	101.265%	-0.140	-0.155	0.838	0.889
3	14:25:33	0.000	0.046	0.035	102.044%	-0.138	-0.155	0.800	0.823
x		0.000	0.042	0.024	101.124%	-0.142	-0.156	0.845	0.861
σ		0.000	0.011	0.010	0.999%	0.005	0.001	0.050	0.034
%RSD		0.000	25.430	42.700	0.988	3.617	0.550	5.878	3.990

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:24:54	97.493%	-0.189	-0.081	-0.049	2.011	1.821	102.176%	104.262%
2	14:25:14	99.195%	-0.155	-0.062	-0.080	2.095	2.153	105.417%	107.439%
3	14:25:33	101.041%	-0.174	-0.077	-0.068	2.091	2.089	105.742%	107.926%
x		99.243%	-0.173	-0.073	-0.066	2.066	2.021	104.445%	106.542%
σ		1.775%	0.017	0.010	0.016	0.047	0.176	1.972%	1.990%
%RSD		1.788	10.040	13.980	24.270	2.281	8.713	1.888	1.868

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:24:54	0.014	0.022	2.241	2.129	2.097	100.718%
2	14:25:14	0.023	0.023	2.270	2.032	2.113	101.927%
3	14:25:33	0.023	0.022	2.277	2.092	2.129	102.439%
x		0.020	0.022	2.263	2.084	2.113	101.695%
σ		0.005	0.001	0.019	0.049	0.016	0.883%
%RSD		26.700	2.984	0.849	2.344	0.739	0.869

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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	14:35:24	101.437%	0.621	9.621	6.692	0.000	77.390	102.200	110.500
2	14:35:45	104.289%	0.591	5.696	6.593	0.000	75.840	102.900	108.900
3	14:36:05	103.564%	1.201	8.262	5.547	0.000	81.510	103.900	114.300
x		103.097%	80.435%	157.187%	125.546%	0.000	78.249%	103.012%	111.202%
σ		1.482%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.438	42.700	25.360	10.110	0.000	3.747	0.836	2.494
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:35:24	33.820	579.200	0.000	107.900	138.300	111.800	104.047%	5.512
2	14:35:45	34.240	576.000	0.000	104.700	153.200	114.700	105.581%	5.158
3	14:36:05	34.750	580.300	0.000	107.400	99.780	103.200	105.567%	5.324
x		114.230%	115.698%	0.000	106.679%	130.412%	109.882%	105.065%	106.626%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.881%	n/a
%RSD		1.359	0.381	0.000	1.637	21.120	5.451	0.839	3.328
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:35:24	1.034	2.247	5.439	57.870	59.700	0.523	1.096	1.467
2	14:35:45	1.375	2.280	5.426	58.070	53.460	0.528	1.089	1.544
3	14:36:05	1.425	2.287	5.469	57.690	53.500	0.533	1.105	1.602
x		127.804%	113.570%	108.894%	115.751%	111.103%	105.652%	109.653%	76.901%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		16.630	0.944	0.403	0.330	6.466	0.902	0.729	4.402
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:35:24	1.696	5.916	5.342	0.764	6.328	5.494	0.000	4.914
2	14:35:45	1.646	5.654	5.565	1.193	7.135	6.065	0.000	5.054
3	14:36:05	1.810	5.802	6.070	1.128	7.756	6.215	0.000	5.004
x		85.875%	115.808%	113.180%	102.871%	141.458%	118.497%	0.000	99.805%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		4.885	2.268	6.591	22.490	10.120	6.418	0.000	1.421
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:35:24	111.967%	4.886	5.146	109.577%	0.980	0.968	1.099	1.093
2	14:35:45	113.449%	5.175	4.966	110.542%	0.964	0.888	1.005	1.062
3	14:36:05	114.715%	5.010	5.261	111.851%	0.920	0.920	1.002	1.064
x		113.377%	100.473%	102.493%	110.657%	95.438%	92.532%	103.544%	107.294%
σ		1.376%	n/a	n/a	1.141%	n/a	n/a	n/a	n/a
%RSD		1.213	2.880	2.898	1.031	3.272	4.337	5.333	1.618
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:35:24	105.568%	5.125	2.055	1.998	10.650	10.680	105.637%	105.259%
2	14:35:45	107.300%	5.247	2.091	2.051	10.890	10.400	106.832%	107.312%
3	14:36:05	108.444%	5.653	2.161	2.106	10.710	10.520	107.767%	108.334%
x		107.104%	106.835%	105.122%	102.580%	107.493%	105.358%	106.746%	106.968%
σ		1.448%	n/a	n/a	n/a	n/a	n/a	1.068%	1.566%
%RSD		1.352	5.183	2.556	2.615	1.165	1.343	1.000	1.464
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	14:35:24	1.001	1.037	1.096	1.070	1.059	107.394%		
2	14:35:45	1.032	1.064	1.103	1.045	1.064	108.261%		
3	14:36:05	1.049	1.080	1.058	1.098	1.073	107.721%		
x		102.738%	106.015%	108.579%	107.119%	106.521%	107.792%		
σ		n/a	n/a	n/a	n/a	n/a	0.438%		
%RSD		2.373	2.054	2.220	2.490	0.654	0.407		

CCV 1241000 7/18/2014 2:39:45 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	14:39:45	95.088%	95.080	91.120	94.580	0.000	47880.000	48890.000	50070.000
2	14:40:04	92.641%	95.730	103.700	96.810	0.000	47970.000	50020.000	50930.000
3	14:40:24	92.127%	95.640	103.300	95.920	0.000	47890.000	49920.000	51470.000
x		93.285%	95.486%	99.375%	95.769%	0.000	95.827%	99.220%	101.640%
σ		1.583%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.696	0.371	7.197	1.170	0.000	0.107	1.256	1.391

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:39:45	500.200	5111.000	0.000	49600.000	48500.000	49440.000	94.920%	97.930
2	14:40:04	509.900	5196.000	0.000	49890.000	48350.000	49810.000	93.463%	101.500
3	14:40:24	515.800	5225.000	0.000	49720.000	48880.000	50060.000	92.883%	102.500
x		101.729%	103.541%	0.000	99.476%	97.152%	99.534%	93.755%	100.659%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.050%	n/a
%RSD		1.544	1.144	0.000	0.290	0.560	0.627	1.119	2.403

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:39:45	98.690	100.800	512.100	25670.000	25600.000	101.300	100.900	101.100
2	14:40:04	99.710	101.400	518.300	25910.000	25760.000	101.400	101.300	101.500
3	14:40:24	100.700	101.900	517.500	26000.000	25880.000	101.100	102.300	100.600
x		99.716%	101.378%	103.193%	103.452%	102.997%	101.219%	101.475%	101.062%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.030	0.568	0.656	0.656	0.550	0.150	0.695	0.466

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:39:45	100.800	100.100	100.300	99.220	100.900	99.580	0.000	98.000
2	14:40:04	100.800	100.800	101.100	100.200	100.300	97.400	0.000	98.850
3	14:40:24	99.420	101.500	99.360	97.580	102.000	99.170	0.000	98.050
x		100.327%	100.777%	100.238%	98.996%	101.030%	98.717%	0.000	98.299%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.782	0.687	0.861	1.331	0.847	1.173	0.000	0.484

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:39:45	93.733%	98.650	97.990	93.391%	96.750	96.310	97.430	98.760
2	14:40:04	94.588%	100.100	101.400	93.921%	98.190	97.300	99.500	98.380
3	14:40:24	95.238%	101.000	102.000	93.942%	97.970	97.970	98.740	99.660
x		94.520%	99.915%	100.446%	93.751%	97.636%	97.194%	98.554%	98.936%
σ		0.755%	n/a	n/a	0.312%	n/a	n/a	n/a	n/a
%RSD		0.799	1.173	2.138	0.333	0.796	0.855	1.063	0.662

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:39:45	93.478%	97.640	96.430	95.250	97.230	98.550	95.212%	95.684%
2	14:40:04	93.785%	98.300	96.990	97.840	98.550	99.180	95.693%	96.715%
3	14:40:24	94.337%	98.270	97.100	96.750	97.120	98.250	96.880%	97.649%
x		93.867%	98.068%	96.841%	96.611%	97.633%	98.659%	95.929%	96.683%
σ		0.435%	n/a	n/a	n/a	n/a	n/a	0.859%	0.983%
%RSD		0.463	0.383	0.370	1.346	0.812	0.482	0.895	1.016

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:39:45	94.210	97.250	93.750	93.530	92.300	97.049%
2	14:40:04	96.270	98.920	96.090	95.710	94.590	96.711%
3	14:40:24	97.860	101.500	98.060	97.980	96.940	95.194%
x		96.111%	99.217%	95.966%	95.741%	94.610%	96.318%
σ		n/a	n/a	n/a	n/a	n/a	0.988%
%RSD		1.903	2.141	2.248	2.322	2.447	1.026

CCB6 7/18/2014 2:45:54 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	14:46:13	101.470%	-0.226	1.078	0.957	0.000	-18.770	1.719	2.031
2	14:46:33	104.884%	-0.235	1.128	0.764	0.000	-20.810	1.851	2.415
3	14:46:52	105.328%	-0.359	0.666	1.005	0.000	-24.030	1.291	1.935
x		103.894%	-0.273	0.958	0.909	0.000	-21.200	1.620	2.127
σ		2.111%	0.074	0.254	0.128	0.000	2.656	0.292	0.254
%RSD		2.032	27.120	26.500	14.030	0.000	12.530	18.050	11.940

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:46:13	-0.031	2.832	0.000	5.919	14.480	-0.583	103.363%	0.039
2	14:46:33	0.132	2.992	0.000	4.676	-1.263	1.663	104.363%	0.016
3	14:46:52	-0.034	2.531	0.000	2.204	-1.397	-1.498	105.434%	0.035
x		0.022	2.785	0.000	4.266	3.940	-0.139	104.387%	0.030
σ		0.095	0.234	0.000	1.891	9.129	1.627	1.036%	0.012
%RSD		420.200	8.396	0.000	44.330	231.700	1170.000	0.992	41.740

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:46:13	0.288	0.056	0.129	10.350	5.786	-0.005	0.002	-0.509
2	14:46:33	0.147	0.046	0.124	9.770	1.289	-0.004	0.031	-0.407
3	14:46:52	0.138	0.028	0.178	7.978	1.685	-0.009	0.019	-0.602
x		0.191	0.043	0.144	9.367	2.920	-0.006	0.017	-0.506
σ		0.084	0.014	0.030	1.237	2.490	0.002	0.015	0.098
%RSD		44.050	32.880	20.560	13.200	85.290	39.430	84.560	19.340

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:46:13	-0.486	0.184	0.144	-0.039	1.038	-0.631	0.000	0.012
2	14:46:33	-0.452	0.207	0.203	-0.124	1.331	-0.145	0.000	0.016
3	14:46:52	-0.487	0.184	0.161	-0.138	1.021	-0.655	0.000	0.008
x		-0.475	0.192	0.169	-0.100	1.130	-0.477	0.000	0.012
σ		0.020	0.013	0.031	0.054	0.174	0.288	0.000	0.004
%RSD		4.274	6.742	18.050	53.590	15.400	60.290	0.000	35.960

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:46:13	103.996%	0.200	0.184	107.826%	-0.139	-0.154	0.025	0.022
2	14:46:33	105.776%	0.150	0.160	108.983%	-0.129	-0.141	-0.050	-0.032
3	14:46:52	107.289%	0.174	0.146	110.072%	-0.124	-0.137	-0.027	-0.019
x		105.687%	0.175	0.163	108.960%	-0.130	-0.144	-0.017	-0.010
σ		1.648%	0.025	0.019	1.123%	0.008	0.009	0.039	0.028
%RSD		1.559	14.180	11.710	1.031	5.936	5.945	222.500	282.900

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:46:13	103.757%	-0.153	0.088	0.073	0.005	0.024	103.073%	103.227%
2	14:46:33	105.988%	-0.215	0.059	0.070	-0.006	0.038	105.527%	104.514%
3	14:46:52	106.720%	-0.205	0.078	0.069	0.004	0.012	106.037%	105.673%
x		105.488%	-0.191	0.075	0.071	0.001	0.025	104.879%	104.472%
σ		1.544%	0.034	0.015	0.002	0.006	0.013	1.585%	1.224%
%RSD		1.463	17.670	19.520	2.708	499.400	52.370	1.511	1.171

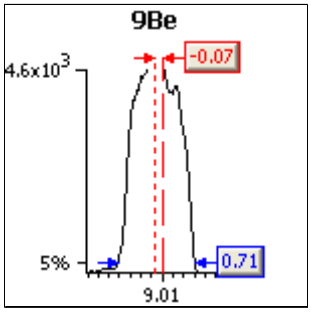
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:46:13	0.001	0.005	0.015	0.018	0.017	105.920%
2	14:46:33	0.004	0.002	0.007	0.008	0.011	106.526%
3	14:46:52	0.004	0.003	0.012	0.028	0.014	105.957%
x		0.003	0.003	0.011	0.018	0.014	106.134%
σ		0.002	0.002	0.004	0.010	0.003	0.340%
%RSD		57.490	48.520	38.400	55.250	21.010	0.320

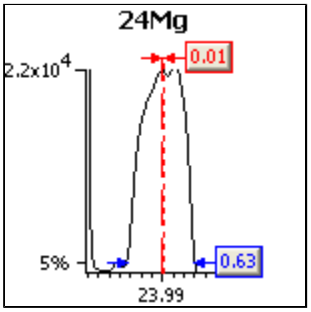
Performance Report

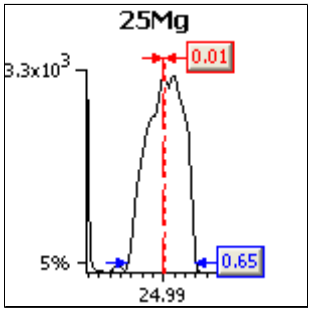
Sample details
Sample name : ITUNE
Acquired at : 7/18/2014 9:01:59 AM
Report name : EPA ILMO5.2/6020A 2.1 [3/15/2013 11:49:53 AM]

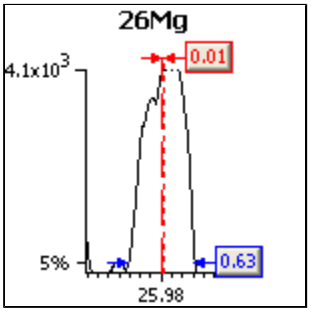
Mass Calibration verification

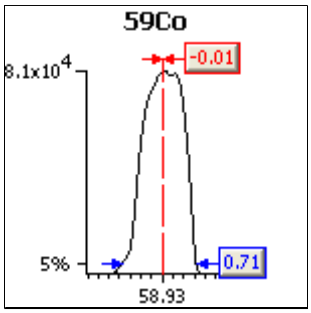
Acquisition parameters
Sweeps : 25
Dwell : 2.0 mSecs
Point spacing : 0.02 amu
Peak width measured at 5% of the peak maximum

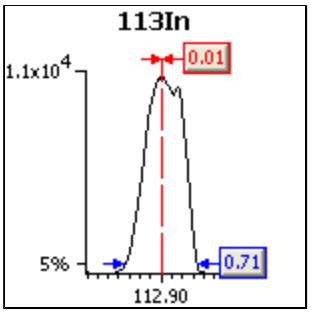


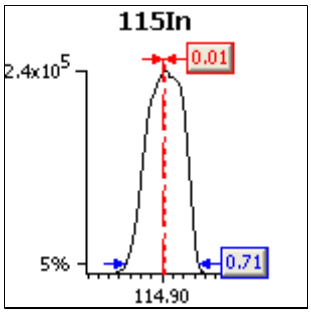


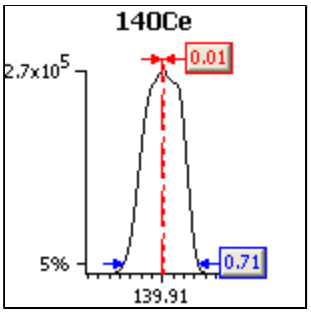


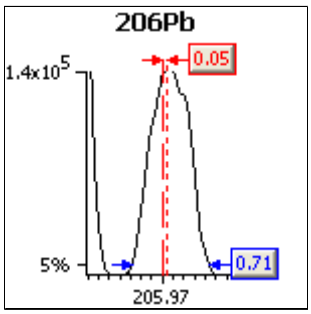


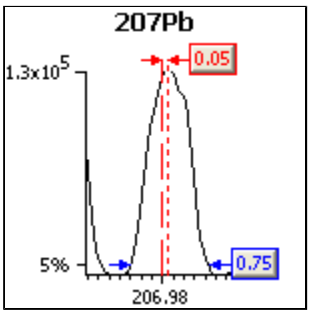


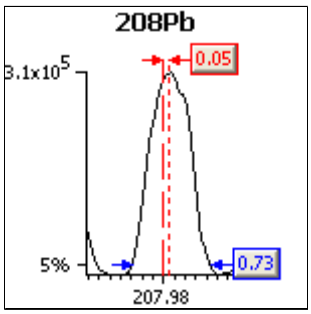












Analyte	Limits			Results	
	Max. width	Min. width	Max. error	Peak width	Peak error
9Be	0.90	0.45	0.10	0.71	-0.07
24Mg	0.90	0.45	0.10	0.63	0.01
25Mg	0.90	0.45	0.10	0.65	0.01
26Mg	0.90	0.45	0.10	0.63	0.01
59Co	0.90	0.45	0.10	0.71	-0.01
113In	0.90	0.45	0.10	0.71	0.01
115In	0.90	0.45	0.10	0.71	0.01
140Ce	0.90	0.45	0.10	0.71	0.01
206Pb	0.90	0.45	0.10	0.71	0.05
207Pb	0.90	0.45	0.10	0.75	0.05
208Pb	0.90	0.45	0.10	0.73	0.05

Sample details
Sample name : ITUNE
Acquired at : 7/18/2014 9:01:59 AM
Report name : EPA ILMO5.2/6020A 2.1 [3/15/2013 11:49:53 AM]

Tune conditions

Major	
Extraction	-184
Lens 1	2.0
Focus	22.7
D1	-50.2
Pole Bias	-1.0
Hexapole Bias	-3.0
Nebuliser	0.77
Sampling Depth	200

Minor	
Lens 2	-32.2
Lens 3	-187.5
Forward power	1404
Horizontal	85
Vertical	8
D2	-198
DA	-80.0
Cool	13.0
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	9:02:47 AM	1	4652	24696	3200	3969	150815	83011	1
2	9:04:12 AM	1	4684	24860	3116	3935	148347	83581	1
3	9:05:38 AM	1	4497	24636	3073	4033	147358	83456	0
4	9:07:03 AM	1	4610	24480	3198	4000	147161	83527	3
5	9:08:28 AM	1	4682	24867	3178	3885	147088	83142	0
x		1	4625	24708	3153	3964	148154	83343	1
σ		0.26	77.46	162.64	56.25	57.12	1571.07	251.94	1.12
%RSD		28.712	1.675	0.658	1.784	1.441	1.060	0.302	104.583

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	9:02:47 AM	18	0	10147	240925	1243	272563	3395	138244
2	9:04:12 AM	16	0	10301	242888	1227	274408	3468	139397
3	9:05:38 AM	17	0	10390	243033	1020	274731	3424	140171
4	9:07:03 AM	16	0	10209	241701	971	274832	3412	139428
5	9:08:28 AM	16	0	10261	241460	1069	274474	3435	139392
x		17	0	10261	242001	1106	274202	3427	139326
σ		1.07	0.12	92.07	920.90	122.95	932.66	27.33	689.89
%RSD		6.488	37.417	0.897	0.381	11.116	0.340	0.797	0.495

Run	Time	207Pb	208Pb	220Bkg
Dwell (mSecs)		0.0	0.0	0.0
Limits	%RSD	5.0%	5.0%	-
	Countrate	>500	>500	<2500
1	9:02:47 AM	124354	301995	0
2	9:04:12 AM	125113	303986	0
3	9:05:38 AM	125810	305145	0
4	9:07:03 AM	125545	304444	0
5	9:08:28 AM	124349	302200	0
x		125034	303554	0
σ		670.97	1394.03	0.11
%RSD		0.537	0.459	58.685

Ratio results

Run	Time	156Ce O/140Ce
Ratio limits		<0.0500
1	9:02:47 AM	0
2	9:04:12 AM	0

3	9:05:38 AM	0
4	9:07:03 AM	0
5	9:08:28 AM	0
x		0.0125
σ		0.00
%RSD		0.6923

Result : The performance report passed.

TestAmerica Pittsburgh Atomic Absorption Data for Mercury

Instrument: HG HYDRA AA

(HYDRA II)

Analyst Name: Lauren E T McGrath

Analysis Date: 7/16/2014

File ID: B407/6A#11657

Matrix: Waters

Analytical Method(s): 245.1 / (7470A) / 7470AD.O.D. / 7471A / 7471A D.O.D. / 7471B

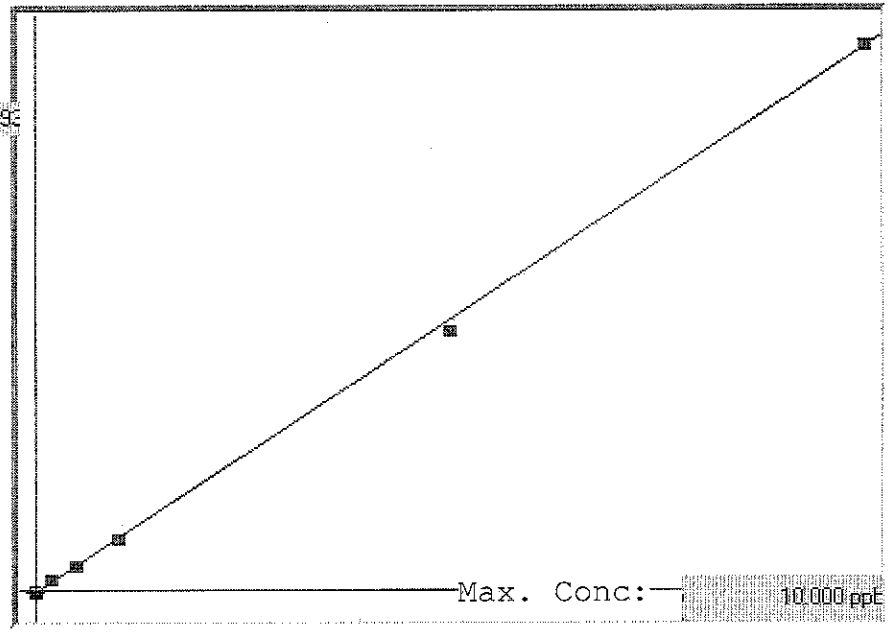
Job Number/SDG

34362	34778	
34389	34780	
34394	34782	
34403		
34550		
34551		
34554		
34555		
34558		
34560		
34562		
34589		
34612		
34641		
34655		
34661		
34690		
34733		
34742		
34774		
34775		

Lauren E T S Graph
7/16/2014
R40716A

METHG

Linear



A= 0.0000e+000

B= 1.0949e-004

C= 4.9406e-002

Rho= 0.9997566

Accept=Accepted

Accepted Date=

07/16/14 12:21

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
blank	0.000	0.008	0.008	-379	0.000	-379				
.2ppb	0.200	0.265	0.065	1967	0.0 %	1967				
.5ppb	0.500	0.522	0.022	4319	0.0 %	4319				
1.0ppb	1.000	0.994	-0.006	8631	0.0 %	8631				
5.0ppb	5.000	4.833	-0.167	43687	0.0 %	43687				
10.0ppb	10.000	10.078	0.078	91593	0.0 %	91593				

R40716A

Method: METHG Operator: Admin Date of Analysis: 16 Jul 2014 12:06:38

Seq ID	Type	Sample ID	Extended ID	Date	Conc.	Units	Stnd Conc	µ Abs.	Method	Chapter
2392	Std	blank - 1		16 Jul 2014 12:10:00	-	ppb	0.0000	-379	METHG	R40716A
2393	Std	.2ppb - 1		16 Jul 2014 12:11:45	-	ppb	0.2000	1967	METHG	R40716A
2394	Std	.5ppb - 1		16 Jul 2014 12:13:27	-	ppb	0.5000	4319	METHG	R40716A
2395	Std	1.0ppb - 1		16 Jul 2014 12:15:11	-	ppb	1.0000	8631	METHG	R40716A
2396	Std	5.0ppb - 1		16 Jul 2014 12:16:57	-	ppb	5.0000	43687	METHG	R40716A
2397	Std	10.0ppb - 1		16 Jul 2014 12:18:45	-	ppb	10.0000	91593	METHG	R40716A
2398	CK STND	ICV - 1		16 Jul 2014 12:26:16	99.6% 2.4904	ppb	-	22294	METHG	R40716A
2399	CK STND	ICB - 1		16 Jul 2014 12:27:57	0.0096	ppb	-	-364	METHG	R40716A
2400	CK STND	CRA - 1		16 Jul 2014 12:29:51	127.7% 0.2555	ppb	-	1882	METHG	R40716A
2401	CK STND	CCV - 1		16 Jul 2014 12:31:32	100.7% 5.0336	ppb	-	45522	METHG	R40716A
2402	CK STND	CCB - 1		16 Jul 2014 12:33:16	0.0051	ppb	-	-405	METHG	R40716A
2403	SMPL	MB 180-111612/1-A - 1		16 Jul 2014 12:35:19	0.0504	ppb	-	9	METHG	R40716A
2404	SMPL	LCS 180-111612/2-A - 1		16 Jul 2014 12:37:00	2.6185	ppb	-	23464	METHG	R40716A
2405	SMPL	LCSD 180-111612/3-A - 1		16 Jul 2014 12:38:42	2.5897	ppb	-	23201	METHG	R40716A
2406	SMPL	180-34362-D-1-A - 1		16 Jul 2014 12:40:35	0.0565	ppb	-	65	METHG	R40716A
2407	SMPL	180-34362-D-2-A - 1		16 Jul 2014 12:42:31	0.0502	ppb	-	7	METHG	R40716A
2408	SMPL	180-34362-D-3-A - 1		16 Jul 2014 12:44:12	0.0546	ppb	-	47	METHG	R40716A
2409	SMPL	180-34362-D-4-A - 1		16 Jul 2014 12:45:53	0.0525	ppb	-	28	METHG	R40716A
2410	SMPL	180-34362-D-5-A - 1		16 Jul 2014 12:47:35	0.0584	ppb	-	82	METHG	R40716A
2411	SMPL	180-34389-I-1-A - 1		16 Jul 2014 12:49:17	0.0551	ppb	-	52	METHG	R40716A
2412	SMPL	180-34389-I-2-A - 1		16 Jul 2014 12:50:59	0.0582	ppb	-	80	METHG	R40716A
2413	CK STND	CCV - 1		16 Jul 2014 12:52:41	102.5% 5.1236	ppb	-	46344	METHG	R40716A
2414	CK STND	CCB - 1		16 Jul 2014 12:54:23	0.0009	ppb	-	-443	METHG	R40716A
2415	SMPL	180-34389-I-3-A - 1		16 Jul 2014 12:56:26	0.0498	ppb	-	4	METHG	R40716A
2416	SMPL	180-34394-D-3-A - 1		16 Jul 2014 12:58:08	0.1940	ppb	-	1321	METHG	R40716A
2417	SMPL	180-34394-D-4-A - 1		16 Jul 2014 12:59:51	0.0436	ppb	-	-53	METHG	R40716A
2418	SMPL	180-34394-D-5-A - 1		16 Jul 2014 13:01:34	0.0535	ppb	-	37	METHG	R40716A
2419	SMPL	180-34394-D-6-A - 1		16 Jul 2014 13:03:15	0.0604	ppb	-	100	METHG	R40716A
2420	SMPL	180-34403-D-1-A - 1		16 Jul 2014 13:04:56	0.1014	ppb	-	475	METHG	R40716A
2421	SMPL	180-34403-D-2-A - 1		16 Jul 2014 13:06:38	0.0602	ppb	-	99	METHG	R40716A
2422	SMPL	180-34589-E-6-A - 1		16 Jul 2014 13:08:19	0.2501	ppb	-	1833	METHG	R40716A
2423	SMPL	180-34589-E-7-A - 1		16 Jul 2014 13:10:00	0.0475	ppb	-	-17	METHG	R40716A
2424	SMPL	180-34589-E-8-A - 1		16 Jul 2014 13:11:43	0.0611	ppb	-	107	METHG	R40716A
2425	CK STND	CCV - 1		16 Jul 2014 13:13:25	102.1% 5.1047	ppb	-	46171	METHG	R40716A
2426	CK STND	CCB - 1		16 Jul 2014 13:15:07	-0.0026	ppb	-	-475	METHG	R40716A
2427	SMPL	180-34589-E-9-A - 1		16 Jul 2014 13:17:09	0.0481	ppb	-	-12	METHG	R40716A
2428	SMPL	180-34612-A-1-A - 1		16 Jul 2014 13:18:51	0.0520	ppb	-	24	METHG	R40716A
2429	SMPL	MB 180-111597/1-A - 1		16 Jul 2014 13:20:34	0.0594	ppb	-	91	METHG	R40716A
2430	SMPL	LCS 180-111597/2-A - 1		16 Jul 2014 13:22:16	2.6419	ppb	-	23678	METHG	R40716A
2431	SMPL	LB 180-111408/18-E - 1		16 Jul 2014 13:23:59	0.0283	ppb	-	-193	METHG	R40716A
2432	SMPL	180-34775-A-1-J - 1		16 Jul 2014 13:25:54	0.0491	ppb	-	-3	METHG	R40716A
2433	SMPL	180-34775-A-1-K MS - 1		16 Jul 2014 13:27:36	4.8927	ppb	-	44235	METHG	R40716A
2434	SMPL	180-34775-A-1-L MSD - 1		16 Jul 2014 13:29:17	4.8140	ppb	-	43516	METHG	R40716A
2435	SMPL	180-34641-A-2-D - 1		16 Jul 2014 13:31:24	-0.0015	ppb	-	-465	METHG	R40716A
2436	SMPL	180-34742-A-1-D - 1		16 Jul 2014 13:33:32	2.9289	ppb	-	26299	METHG	R40716A
2437	CK STND	CCV - 1		16 Jul 2014 13:35:14	100.4% 5.0209	ppb	-	45406	METHG	R40716A
2438	CK STND	CCB - 1		16 Jul 2014 13:37:16	-0.0052	ppb	-	-499	METHG	R40716A
2439	SMPL	180-34661-A-1-J - 1		16 Jul 2014 13:39:19	0.0392	ppb	-	-93	METHG	R40716A
2440	SMPL	180-34774-A-1-D - 1		16 Jul 2014 13:41:01	0.0493	ppb	-	-1	METHG	R40716A
2441	SMPL	180-34690-A-1-L - 1		16 Jul 2014 13:42:42	0.0475	ppb	-	-17	METHG	R40716A
2442	SMPL	180-34655-A-1-H - 1		16 Jul 2014 13:44:25	0.0507	ppb	-	12	METHG	R40716A
2443	SMPL	180-34733-A-5-F - 1		16 Jul 2014 13:46:07	0.0530	ppb	-	33	METHG	R40716A
2444	SMPL	180-34733-A-13-F - 1		16 Jul 2014 13:47:49	0.0540	ppb	-	42	METHG	R40716A
2445	SMPL	180-34733-A-17-F - 1		16 Jul 2014 13:49:33	0.0584	ppb	-	82	METHG	R40716A
2446	SMPL	MB 180-111601/1-A - 1		16 Jul 2014 13:51:14	0.0526	ppb	-	29	METHG	R40716A

R40716A

Method: METHG Operator: Admin Date of Analysis: 16 Jul 2014 12:06:38

Seq ID	Type	Sample ID	Extended ID	Date	Conc.	Units	Stnd Conc	µ Abs.	Method	Chapter
2447	SMPL	LCS 180-111601/2-A - 1		16 Jul 2014 13:52:56	2.6017	ppb		23311	METHG	R40716A
2448	SMPL	LCSD 180-111601/3-A - 1		16 Jul 2014 13:54:38	2.6174	ppb		23454	METHG	R40716A
2449	CK STND	CCV - 1		16 Jul 2014 13:56:33	102.3% 5.1143	ppb		46259	METHG	R40716A
2450	CK STND	CCB - 1		16 Jul 2014 13:58:26	-0.0049	ppb		-496	METHG	R40716A
2451	SMPL	180-34550-A-1-C - 1		16 Jul 2014 14:00:29	0.0444	ppb		-46	METHG	R40716A
2452	SMPL	180-34550-A-2-E - 1		16 Jul 2014 14:02:11	0.0472	ppb		-20	METHG	R40716A
2453	SMPL	180-34550-A-3-E - 1		16 Jul 2014 14:03:53	0.0516	ppb		20	METHG	R40716A
2454	SMPL	180-34550-A-4-E - 1		16 Jul 2014 14:05:35	0.0528	ppb		31	METHG	R40716A
2455	SMPL	180-34550-A-5-E - 1		16 Jul 2014 14:07:17	0.0536	ppb		38	METHG	R40716A
2456	SMPL	180-34551-A-2-C - 1		16 Jul 2014 14:08:59	0.0514	ppb		18	METHG	R40716A
2457	SMPL	180-34551-A-3-C - 1		16 Jul 2014 14:10:42	0.0480	ppb		-13	METHG	R40716A
2458	SMPL	180-34554-A-1-C - 1		16 Jul 2014 14:12:25	0.0539	ppb		41	METHG	R40716A
2459	SMPL	180-34555-A-3-C - 1		16 Jul 2014 14:14:08	0.0517	ppb		21	METHG	R40716A
2460	SMPL	180-34558-A-1-C - 1		16 Jul 2014 14:15:50	0.0570	ppb		69	METHG	R40716A
2461	CK STND	CCV - 1		16 Jul 2014 14:17:32	101.3% 5.0627	ppb		45788	METHG	R40716A
2462	CK STND	CCB - 1		16 Jul 2014 14:19:14	0.0005	ppb		-447	METHG	R40716A
2463	SMPL	180-34558-A-2-C - 1		16 Jul 2014 14:21:16	0.0455	ppb		-36	METHG	R40716A
2464	SMPL	180-34560-A-1-C - 1		16 Jul 2014 14:22:58	0.1284	ppb		731	METHG	R40716A
2465		180-34562-A-1-C - 1		16 Jul 2014 14:24:40	HIGH	ppb		829280	METHG	R40716A
2466	SMPL	180-34778-A-1-C - 1		16 Jul 2014 14:26:07	-0.1841	ppb		-2133	METHG	R40716A
2467	SMPL	180-34780-A-1-C - 1		16 Jul 2014 14:29:55	0.0250	ppb		-223	METHG	R40716A
2468	SMPL	180-34782-A-1-C - 1		16 Jul 2014 14:31:40	0.0091	ppb		-368	METHG	R40716A
2469	SMPL	180-34562-A-1-C @50 - 1		16 Jul 2014 14:33:25	11.1619	ppb		101493	METHG	R40716A
2470	CK STND	CCV - 1		16 Jul 2014 14:35:08	102.7% 5.1361	ppb		46458	METHG	R40716A
2471	CK STND	CCV - 1		16 Jul 2014 14:37:23	102.3% 5.1171	ppb		46285	METHG	R40716A
2472	CK STND	CCB - 1		16 Jul 2014 14:39:30	-0.0049	ppb		-496	METHG	R40716A
2473	SMPL	180-34562-A-1-C @100 - 1		16 Jul 2014 14:41:47	5.7807	ppb		52345	METHG	R40716A
2474	CK STND	CCV - 1		16 Jul 2014 14:43:29	100.4% 5.0200	ppb		45398	METHG	R40716A
2475	CK STND	CCB - 1		16 Jul 2014 14:45:36	0.0025	ppb		-428	METHG	R40716A

Sample not Reported. Dilutions @ End of Run

End of Run
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7/16/2014

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Lauren E McGrath
7/16/2014
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Rack	Cup	Sample ID	Extended ID	Wt.	Vol.
1	1	MB 180-111612/1-A		1.0000	1.0000
1	2	LCS 180-111612/2-A		1.0000	1.0000
1	3	LCSD 180-111612/3-A		1.0000	1.0000
1	4	180-34362-D-1-A		1.0000	1.0000
1	5	180-34362-D-2-A		1.0000	1.0000
1	6	180-34362-D-3-A		1.0000	1.0000
1	7	180-34362-D-4-A		1.0000	1.0000
1	8	180-34362-D-5-A		1.0000	1.0000
1	9	180-34389-I-1-A		1.0000	1.0000
1	10	180-34389-I-2-A		1.0000	1.0000
1	11	180-34389-I-3-A		1.0000	1.0000
1	12	180-34394-D-3-A		1.0000	1.0000
1	13	180-34394-D-4-A		1.0000	1.0000
1	14	180-34394-D-5-A		1.0000	1.0000
1	15	180-34394-D-6-A		1.0000	1.0000
1	16	180-34403-D-1-A		1.0000	1.0000
1	17	180-34403-D-2-A		1.0000	1.0000
1	18	180-34589-E-6-A		1.0000	1.0000
1	19	180-34589-E-7-A		1.0000	1.0000
1	20	180-34589-E-8-A		1.0000	1.0000
1	21	180-34589-E-9-A		1.0000	1.0000
1	22	180-34612-A-1-A		1.0000	1.0000
1	23	MB 180-111597/1-A		1.0000	1.0000
1	24	LCS 180-111597/2-A		1.0000	1.0000
1	25	LB 180-111408/18-E		1.0000	1.0000
1	26	180-34775-A-1-J		1.0000	1.0000
1	27	180-34775-A-1-K MS		1.0000	1.0000
1	28	180-34775-A-1-L MSD		1.0000	1.0000
1	29	180-34641-A-2-D		1.0000	1.0000
1	30	180-34742-A-1-D		1.0000	1.0000
1	31	180-34661-A-1-J		1.0000	1.0000
1	32	180-34774-A-1-D		1.0000	1.0000
1	33	180-34690-A-1-L		1.0000	1.0000
1	34	180-34655-A-1-H		1.0000	1.0000
1	35	180-34733-A-5-F		1.0000	1.0000
1	36	180-34733-A-13-F		1.0000	1.0000
1	37	180-34733-A-17-F		1.0000	1.0000
1	38	MB 180-111601/1-A		1.0000	1.0000
1	39	LCS 180-111601/2-A		1.0000	1.0000

Lauren A McGrath
7/16/2014
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Rack	Cup	Sample ID	Extended ID	Wt.	Vol.
1	40	LCSD 180-111601/3-A		1.0000	1.0000
1	41	180-34550-A-1-C		1.0000	1.0000
1	42	180-34550-A-2-E		1.0000	1.0000
1	43	180-34550-A-3-E		1.0000	1.0000
1	44	180-34550-A-4-E		1.0000	1.0000
1	45	180-34550-A-5-E		1.0000	1.0000
1	46	180-34551-A-2-C		1.0000	1.0000
1	47	180-34551-A-3-C		1.0000	1.0000
1	48	180-34554-A-1-C		1.0000	1.0000
1	49	180-34555-A-3-C		1.0000	1.0000
1	50	180-34558-A-1-C		1.0000	1.0000
1	51	180-34558-A-2-C		1.0000	1.0000
1	52	180-34560-A-1-C		1.0000	1.0000
1	53	180-34562-A-1-C		1.0000	1.0000
1	54	180-34778-A-1-C		1.0000	1.0000
1	55	180-34780-A-1-C		1.0000	1.0000
1	56	180-34782-A-1-C		1.0000	1.0000
1	57	180-34562-A-1-C @50		1.0000	1.0000
1	58	180-34562-A-1-C @100		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

METALS BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Batch Number: 111726 Batch Start Date: 07/17/14 10:15 Batch Analyst: Becker, Sandy L

Batch Method: 3005A Batch End Date: 07/17/14 14:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAPITTICPMS 00017	MTAPITTMSA 00020	MTAPITTMSC 00026	
MB 180-111726/1		3005A, 6020A		50 mL	50 mL				
LCS 180-111726/2		3005A, 6020A		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
180-34362-D-1	H108-PZM003	3005A, 6020A	R	50 mL	50 mL				
180-34362-D-2	RW19-PZP000	3005A, 6020A	R	50 mL	50 mL				
180-34362-D-3	RW19-PZM050	3005A, 6020A	R	50 mL	50 mL				
180-34362-D-4	H108-PZM060	3005A, 6020A	R	50 mL	50 mL				
180-34362-D-5	RW19-PZM020	3005A, 6020A	R	50 mL	50 mL				

Batch Notes	
Batch Comment	metals D6
First End time	1415
Lot # of hydrochloric acid	2.5mL 1235782
Lot # of Nitric Acid	1mL 1241744
Hot Block ID number	3
Oven, Bath or Block Temperature 1	98
Pipette ID	F1204715U
Person who witnessed spiking	sb
First Start time	1015
ID number of the thermometer	IP2 CF=0.0 I1
Digestion Tube/Cup Lot #	1309271
Uncorrected Temperature	98 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.: 180-34362-1

SDG No.:

Batch Number: 111612 Batch Start Date: 07/16/14 10:10 Batch Analyst: McGrath, Lauren E

Batch Method: 7470A Batch End Date: 07/16/14 12:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MHgworkingCal 00843			
MB 180-111612/1		7470A, 7470A		50 mL	50 mL				
LCS 180-111612/2		7470A, 7470A		50 mL	50 mL	1.25 mL			
LCSD 180-111612/3		7470A, 7470A		50 mL	50 mL	1.25 mL			
180-34362-D-1	H108-PZM003	7470A, 7470A	T	50 mL	50 mL				
180-34362-D-2	RW19-PZP000	7470A, 7470A	T	50 mL	50 mL				
180-34362-D-3	RW19-PZM050	7470A, 7470A	T	50 mL	50 mL				
180-34362-D-4	H108-PZM060	7470A, 7470A	T	50 mL	50 mL				
180-34362-D-5	RW19-PZM020	7470A, 7470A	T	50 mL	50 mL				

Batch Notes	
Hydroxylamine Hydrochloride Lot	3ML 1251306 hg disp c6
Digestion End Time	1245
Digestion Start Time	1045
Sulfuric Acid Lot Number	2.75ML 1176972 hg disp 7n8924
Lot # of hydrochloric acid	1207949
Lot # of Nitric Acid	1.25ML 1207950 hg disp n1
Hot Block ID number	#1
Potassium Persulfate Lot Number	4ML 1251305 hg disp ks4
Potassium Permanganate Lot Number	7.5ML 1251304 hg disp kmN04
NaCl Lot #	1217635
Oven, Bath or Block Temperature 1	95 Celsius
Pipette ID	J00922
Repittetor Volume Check	YES
Stannous Chloride Lot Number	1251307
Temperature	95
ID number of the thermometer	IP29 (0.0) A3
Digestion Tube/Cup Lot #	1312222
Uncorrected Temperature	95 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.: 180-34362-1

SDG No.:

Batch Number: 111612 Batch Start Date: 07/16/14 10:10 Batch Analyst: McGrath, Lauren E

Batch Method: 7470A Batch End Date: 07/16/14 12:10

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.: 180-34362-1

SDG No.:

Batch Number: 111613 Batch Start Date: 07/16/14 10:10 Batch Analyst: McGrath, Lauren E

Batch Method: 7470A Batch End Date: 07/16/14 12:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MHgworkingCal 00843	MHgWorkingicv 00824		
ICV 180-111613/7		7470A, 7470A		50 mL	50 mL		1.25 mL		
ICB 180-111613/8		7470A, 7470A		50 mL	50 mL				
CRA 180-111613/9		7470A, 7470A		50 mL	50 mL	0.1 mL			
CCV 180-111613/10		7470A, 7470A		50 mL	50 mL	2.5 mL			
CCB 180-111613/11		7470A, 7470A		50 mL	50 mL				

Batch Notes	
Hydroxylamine Hydrochloride Lot	3ML 1251306 hg disp c6
Digestion End Time	1245
Digestion Start Time	1045
Sulfuric Acid Lot Number	2.75ML 1176972 hg disp 7n8924
Lot # of hydrochloric acid	1207949
Lot # of Nitric Acid	1.25ML 1207950 hg disp n1
Hot Block ID number	#1
Potassium Persulfate Lot Number	4ML 1251305 hg disp ks4
Potassium Permanganate Lot Number	7.5ML 1251304 hg disp kmN04
NaCl Lot #	1217635
Oven, Bath or Block Temperature 1	95 Celsius
Pipette ID	J00922
Repittetor Volume Check	YES
Stannous Chloride Lot Number	1251307
Temperature	95
ID number of the thermometer	IP29 (0.0) A3
Digestion Tube/Cup Lot #	1404094
Uncorrected Temperature	95 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.: 180-34362-1

SDG No.:

Batch Number: 111613 Batch Start Date: 07/16/14 10:10 Batch Analyst: McGrath, Lauren E

Batch Method: 7470A Batch End Date: 07/16/14 12:10

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: 180-34362-1

SDG No.:

Project: Sparrows Point Trust Offshore Investigat

Client Sample ID	Lab Sample ID
H108-PZM003	180-34362-1
RW19-PZP000	180-34362-2
RW19-PZM050	180-34362-3
H108-PZM060	180-34362-4
RW19-PZM020	180-34362-5

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: H108-PZM003 Lab Sample ID: 180-34362-1

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG ID.:

Matrix: Water Date Sampled: 06/26/2014 09:55

Reporting Basis: WET Date Received: 06/27/2014 08:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	21	10	3.2	ug/L			1	9014

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: RW19-PZP000 Lab Sample ID: 180-34362-2

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG ID.:

Matrix: Water Date Sampled: 06/26/2014 10:10

Reporting Basis: WET Date Received: 06/27/2014 08:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	1000	100	32	ug/L			10	9014

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: RW19-PZM050 Lab Sample ID: 180-34362-3

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG ID.:

Matrix: Water Date Sampled: 06/26/2014 11:05

Reporting Basis: WET Date Received: 06/27/2014 08:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	ND	10	3.2	ug/L			1	9014

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: H108-PZM060 Lab Sample ID: 180-34362-4

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG ID.:

Matrix: Water Date Sampled: 06/26/2014 11:30

Reporting Basis: WET Date Received: 06/27/2014 08:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	ND	10	3.2	ug/L			1	9014

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: RW19-PZM020 Lab Sample ID: 180-34362-5

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG ID.:

Matrix: Water Date Sampled: 06/26/2014 11:55

Reporting Basis: WET Date Received: 06/27/2014 08:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	ND	10	3.2	ug/L			1	9014

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Analyst: PGJ Batch Start Date: 07/10/2014

Reporting Units: ug/L Analytical Batch No.: 111072

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
4	ICV	09:57	Cyanide, Total	213	200	106	90-110		WCN0.2ICV_00266
5	ICB	09:57	Cyanide, Total	ND					
6	CCV	10:15	Cyanide, Total	96.4	100	96	90-110		WCN0.1CCV_00268
7	CCB	10:15	Cyanide, Total	ND					
18	CCV	10:22	Cyanide, Total	97.5	100	97	90-110		WCN0.1CCV_00268
19	CCB	10:22	Cyanide, Total	ND					
30	CCV	10:30	Cyanide, Total	97.1	100	97	90-110		WCN0.1CCV_00268
31	CCB	10:30	Cyanide, Total	ND					
42	CCV	10:37	Cyanide, Total	98.6	100	99	90-110		WCN0.1CCV_00268
43	CCB	10:37	Cyanide, Total	ND					
50	CCV	10:42	Cyanide, Total	101	100	101	90-110		WCN0.1CCV_00268
51	CCB	10:42	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.: 180-34362-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 111072	Date: 07/10/2014 10:15	Prep Batch: 111006	Date: 07/10/2014 08:35				
9014	MB 180-111006/4-A	Cyanide, Total	ND		ug/L	10	1

FORM III-IN

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 111072	Date: 07/10/2014 10:22		Prep Batch: 111006		Date: 07/10/2014 08:35						
9014	180-34362-5	Cyanide, Total	ND		ug/L						
9014	180-34362-5 MS	Cyanide, Total	9.11	J	ug/L	100	9	75-125			F1

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.: 180-34362-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 111072	Date: 07/10/2014 10:15		Prep Batch: 111006			Date: 07/10/2014 08:35					
						LCS Source: WCN10Si_00441					
9014	LCS 180-111006/3-A	Cyanide, Total	210		ug/L	200	105	85-115			

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.: 180-34362-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 111072	Date: 07/10/2014 10:15		Prep Batch: 111006			Date: 07/10/2014 08:35					
						LCS Source: WCN0.5L1_00434					
9014	LLCS 180-111006/1-A	Cyanide, Total	50.3		ug/L	50.0	101	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.: 180-34362-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 111072	Date: 07/10/2014 10:15		Prep Batch: 111006		Date: 07/10/2014 08:35						
					LCS Source: WCN10Pi_00436						
9014	HLCS 180-111006/2-A	Cyanide, Total	240		ug/L	250	96	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: 180-34362-1

SDG Number:

Matrix: Water Instrument ID: KONELAB1

Method: 9014 MDL Date: 04/15/2014 10:14

Prep Method: 9010C

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Cyanide, Total		10	3.2

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-34362-1

SDG Number:

Matrix: Water Instrument ID: KONELAB1

Method: 9014 XMDL Date: 04/15/2014 10:15

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Cyanide, Total		10	3.2

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Prep Method: 9010C

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LLCS 180-111006/1-A	07/10/2014 08:35	111006		50	50
HLCS 180-111006/2-A	07/10/2014 08:35	111006		50	50
LCS 180-111006/3-A	07/10/2014 08:35	111006		50	50
MB 180-111006/4-A	07/10/2014 08:35	111006		50	50
180-34362-1	07/10/2014 08:35	111006		50	50
180-34362-2	07/10/2014 08:35	111006		50	50
180-34362-3	07/10/2014 08:35	111006		50	50
180-34362-4	07/10/2014 08:35	111006		50	50
180-34362-5	07/10/2014 08:35	111006		50	50
180-34362-5 MS	07/10/2014 08:35	111006		50	50

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Instrument ID: KONELAB1 Method: 9014

Start Date: 07/10/2014 09:51 End Date: 07/10/2014 10:47

Lab Sample ID	D / F	Type	Time	Analytes																			
				CN																			
ZZZZZZ			09:51																				
ZZZZZZ			09:51																				
ZZZZZZ			09:51																				
ICV 180-111072/4	1		09:57	X																			
ICB 180-111072/5	1		09:57	X																			
CCV 180-111072/6	1		10:15	X																			
CCB 180-111072/7	1		10:15	X																			
LLCS 180-111006/1-A	1	T	10:15	X																			
HLCS 180-111006/2-A	1	T	10:15	X																			
LCS 180-111006/3-A	1	T	10:15	X																			
MB 180-111006/4-A	1	T	10:15	X																			
ZZZZZZ			10:15																				
ZZZZZZ			10:15																				
ZZZZZZ			10:15																				
ZZZZZZ			10:15																				
ZZZZZZ			10:15																				
ZZZZZZ			10:22																				
CCV 180-111072/18	1		10:22	X																			
CCB 180-111072/19	1		10:22	X																			
ZZZZZZ			10:22																				
ZZZZZZ			10:22																				
180-34362-1	1	T	10:22	X																			
ZZZZZZ			10:22																				
180-34362-3	1	T	10:22	X																			
180-34362-4	1	T	10:22	X																			
180-34362-5	1	T	10:22	X																			
180-34362-5 MS	1	T	10:22	X																			
ZZZZZZ			10:30																				
ZZZZZZ			10:30																				
CCV 180-111072/30	1		10:30	X																			
CCB 180-111072/31	1		10:30	X																			
ZZZZZZ			10:30																				
ZZZZZZ			10:30																				
ZZZZZZ			10:30																				
ZZZZZZ			10:30																				
ZZZZZZ			10:30																				
ZZZZZZ			10:30																				
ZZZZZZ			10:30																				
ZZZZZZ			10:36																				
ZZZZZZ			10:37																				
ZZZZZZ			10:37																				
CCV 180-111072/42	1		10:37	X																			

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Instrument ID: KONELAB1 Method: 9014

Start Date: 07/10/2014 09:51 End Date: 07/10/2014 10:47

Lab Sample ID	D / F	Type	Time	Analytes																				
				CN																				
CCB 180-111072/43	1		10:37	X																				
ZZZZZZ			10:37																					
ZZZZZZ			10:37																					
ZZZZZZ			10:37																					
ZZZZZZ			10:37																					
ZZZZZZ			10:37																					
180-34362-2	10	T	10:40	X																				
CCV 180-111072/50	1		10:42	X																				
CCB 180-111072/51	1		10:42	X																				
ZZZZZZ			10:44																					
CCV 180-111072/53			10:47																					
CCB 180-111072/54			10:47																					

Prep Types

T = Total/NA

AquaKem v. 6.5 AQ2
Results from time period:
Thu Jul 10 10:51:22 2014
Thu Jul 10 11:47:40 2014

Sample Id	Test short name	Result	Result unit	Result date and time	Percent Recovery	Dil. ratio	Manual dil. ratio	Response
CN 0.0	CN, T	0.00148	mg/l	7/10/14 9:51		0		0.01041
CN 0.5	CN, T	0.00616	mg/l	7/10/14 9:51		99		0.01604
CN 0.5	CN, T	0.01124	mg/l	7/10/14 9:51		49		0.02213
CN 0.5	CN, T	0.05003	mg/l	7/10/14 9:51		9		0.06873
CN 0.5	CN, T	0.09856	mg/l	7/10/14 9:51		4		0.12703
CN 0.5	CN, T	0.24456	mg/l	7/10/14 9:51		1		0.30243
CN 0.5	CN, T	0.50297	mg/l	7/10/14 9:51		0		0.61284
ICV CN	CN, T	0.21295	mg/l	7/10/14 9:57		0		0.26445
ICB CN	CN, T	0.00083	mg/l	7/10/14 9:57		0		0.00962
CCV CN	CN, T	0.09638	mg/l	7/10/14 10:15		0		0.12441
VCCB CN	CN, T	0.00065	mg/l	7/10/14 10:15		0		0.00941
LLCS 180-111006/	CN, T	0.05031	mg/l	7/10/14 10:15		0	0	0.06907
HLCS 180-111006/	CN, T	0.24016	mg/l	7/10/14 10:15		0	0	0.29713
LCS 180-111006/3	CN, T	0.20973	mg/l	7/10/14 10:15		0	0	0.26058
MB 180-111006/4-	CN, T	0.00004	mg/l	7/10/14 10:15		0	0	0.00868
180-34346-I-1-A	CN, T	-0.00031	mg/l	7/10/14 10:15		0	0	0.00826
180-34346-I-2-A	CN, T	-0.00006	mg/l	7/10/14 10:15		0	0	0.00856
180-34346-I-3-A	CN, T	-0.00029	mg/l	7/10/14 10:15		0	0	0.00828
180-34346-I-4-A	CN, T	-0.00011	mg/l	7/10/14 10:15		0	0	0.0085
180-34346-I-5-A	CN, T	-0.00019	mg/l	7/10/14 10:15		0	0	0.0084
180-34348-C-1-A	CN, T	0.00151	mg/l	7/10/14 10:22		0	0	0.01044
CCV CN	CN, T	0.09749	mg/l	7/10/14 10:22		0		0.12575
VCCB CN	CN, T	0.00061	mg/l	7/10/14 10:22		0		0.00937
180-34348-C-1-B	CN, T	0.11156	mg/l	7/10/14 10:22		0	0	0.14265
180-34348-C-1-C	CN, T	0.10827	mg/l	7/10/14 10:22		0	0	0.13869
180-34362-C-1-A	CN, T	0.02078	mg/l	7/10/14 10:22		0	0	0.0336
~~180-34362-C-2-A~~	~~CN, T~~	~~1.00029~~	~~mg/l~~	~~7/10/14 10:22~~		0	0	~~1.21027~~
180-34362-C-3-A	CN, T	0.00245	mg/l	7/10/14 10:22		0	0	0.01157
180-34362-C-4-A	CN, T	0.00117	mg/l	7/10/14 10:22		0	0	0.01004
180-34362-C-5-A	CN, T	0.00079	mg/l	7/10/14 10:22		0	0	0.00958
180-34362-C-5-B	CN, T	0.00911	mg/l	7/10/14 10:22		0	0	0.01957
180-34397-F-1-A	CN, T	-0.00061	mg/l	7/10/14 10:30		0	0	0.0079
180-34397-E-2-A	CN, T	-0.00022	mg/l	7/10/14 10:30		0	0	0.00837
CCV CN	CN, T	0.09707	mg/l	7/10/14 10:30		0		0.12525
VCCB CN	CN, T	0.00059	mg/l	7/10/14 10:30		0		0.00934
180-34397-F-3-A	CN, T	0.00108	mg/l	7/10/14 10:30		0	0	0.00993
~~180-34433-I-2-A~~	~~CN, T~~	~~0.90356~~	~~mg/l~~	~~7/10/14 10:30~~		0	0	~~1.09407~~
180-34441-C-1-A	CN, T	0.00155	mg/l	7/10/14 10:30		0	0	0.01049
180-34463-G-2-A	CN, T	0.00476	mg/l	7/10/14 10:30		0	0	0.01436
180-34493-D-10-A	CN, T	0.00017	mg/l	7/10/14 10:30		0	0	0.00883
LLCS 180-111010/	CN, T	0.05034	mg/l	7/10/14 10:30		0	0	0.0691
HLCS 180-111010/	CN, T	0.2342	mg/l	7/10/14 10:30		0	0	0.28998
LCS 180-111010/3	CN, T	0.20969	mg/l	7/10/14 10:37		0	0	0.26054
MB 180-111010/4-	CN, T	0.00037	mg/l	7/10/14 10:37		0	0	0.00908
180-34348-D-1-A	CN, T	-0.00058	mg/l	7/10/14 10:37		0	0	0.00794
CCV CN	CN, T	0.09856	mg/l	7/10/14 10:37		0		0.12703
VCCB CN	CN, T	0.00077	mg/l	7/10/14 10:37		0		0.00956
180-34348-D-1-B	CN, T	0.10529	mg/l	7/10/14 10:37		0	0	0.13512
180-34348-D-1-C	CN, T	0.10755	mg/l	7/10/14 10:37		0	0	0.13784
180-34397-E-1-A	CN, T	0.00004	mg/l	7/10/14 10:37		0	0	0.00869
180-34397-F-2-A	CN, T	0.00001	mg/l	7/10/14 10:37		0	0	0.00864

Sample Id	Test short name	Result	Result unit	Result date and time	Percent Recovery	Dil. ratio	Manual dil. ratio	Response
180-34397-E-3-A	CN, T	-0.00071	mg/l	7/10/14 10:37		0	0	0.00778
180-34362-C-2-A	CN, T	1.01322	mg/l	7/10/14 10:40		9	0	0.13035
CCV CN	CN, T	0.10051	mg/l	7/10/14 10:42		0		0.12937
VCCB CN	CN, T	0.00002	mg/l	7/10/14 10:42		0		0.00865
180-34433-I-2-A	CN, T	0.95191	mg/l	7/10/14 10:44		9	0	0.12298
CCV CN	CN, T	0.10323	mg/l	7/10/14 10:47		0		0.13264
VCCB CN	CN, T	0.00032	mg/l	7/10/14 10:47		0		0.00902

Laboratory
Analyzer User

10.07.2014 12:49

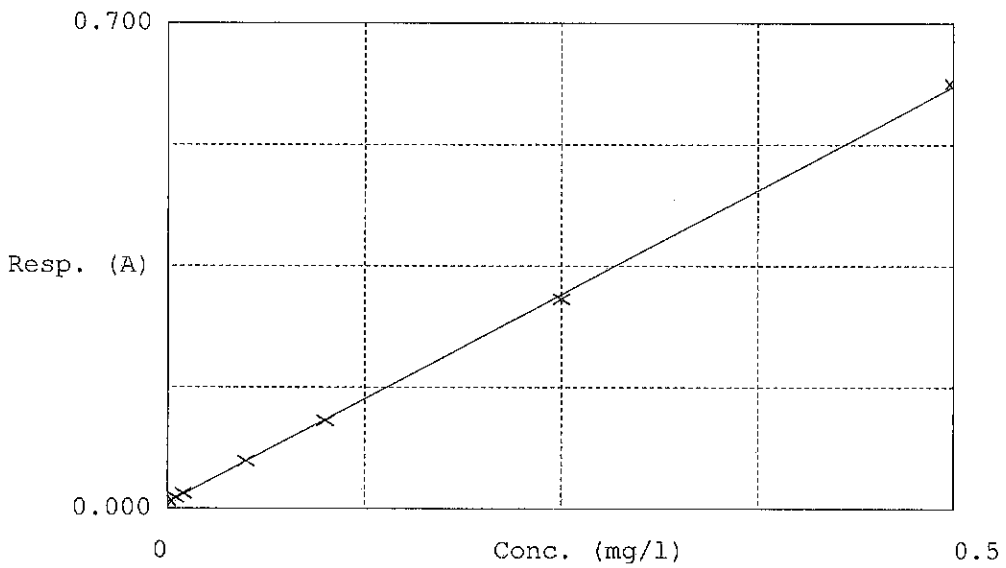
Test CN, T

Accepted 10.07.2014 10:57

Factor 0.832
Bias 0.009

Coeff. of det. 0.999779

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	CN 0.0	0.010	0.00148	0.00000	
2	CN 0.5	0.016	0.00616	0.00500	
3	CN 0.5	0.022	0.01124	0.01000	
4	CN 0.5	0.069	0.05003	0.05000	
5	CN 0.5	0.127	0.09856	0.10000	
6	CN 0.5	0.302	0.24456	0.25000	
7	CN 0.5	0.613	0.50297	0.50000	
8	ICB CN(control)	0.010	0.00083	0.00000	
9	ICV CN(control)	0.264	0.21295	0.20000	

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34362-1

SDG No.:

Batch Number: 111006 Batch Start Date: 07/10/14 08:35 Batch Analyst: Johnson, Paul

Batch Method: 9010C Batch End Date: 07/10/14 10:05

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	SulfideCheck	ChlorineCheck	WCN0.5L1 00434	WCN10Pi 00436
LLCS 180-111006/1		9010C, 9014		50 mL	50 mL			5 mL	
HLCS 180-111006/2		9010C, 9014		50 mL	50 mL				1.25 mL
LCS 180-111006/3		9010C, 9014		50 mL	50 mL				
MB 180-111006/4		9010C, 9014		50 mL	50 mL				
180-34362-C-1	H108-PZM003	9010C, 9014	T	50 mL	50 mL	N	N		
180-34362-C-2	RW19-PZP000	9010C, 9014	T	50 mL	50 mL	N	N		
180-34362-C-3	RW19-PZM050	9010C, 9014	T	50 mL	50 mL	N	N		
180-34362-C-4	H108-PZM060	9010C, 9014	T	50 mL	50 mL	N	N		
180-34362-C-5	RW19-PZM020	9010C, 9014	T	50 mL	50 mL	N	N		
180-34362-C-5 MS	RW19-PZM020	9010C, 9014	T	50 mL	50 mL	N	N		

Lab Sample ID	Client Sample ID	Method Chain	Basis	WCN10Si 00441					
LLCS 180-111006/1		9010C, 9014							
HLCS 180-111006/2		9010C, 9014							
LCS 180-111006/3		9010C, 9014		1 mL					
MB 180-111006/4		9010C, 9014							
180-34362-C-1	H108-PZM003	9010C, 9014	T						
180-34362-C-2	RW19-PZP000	9010C, 9014	T						
180-34362-C-3	RW19-PZM050	9010C, 9014	T						
180-34362-C-4	H108-PZM060	9010C, 9014	T						
180-34362-C-5	RW19-PZM020	9010C, 9014	T						
180-34362-C-5 MS	RW19-PZM020	9010C, 9014	T	0.5 mL					

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.: 180-34362-1

SDG No.:

Batch Number: 111006 Batch Start Date: 07/10/14 08:35 Batch Analyst: Johnson, Paul

Batch Method: 9010C Batch End Date: 07/10/14 10:05

Batch Notes	
Distillation Temperature	150 Degrees C
KI-Starch Paper Lot #	1135994
Lead Acetate Lot #	1112962
Magnesium Chloride Dispenser ID	42145
Magnesium Chloride Lot Number	1180843
NaOH Dispenser ID	11100333
Sodium Hydroxide Reagent ID Number	1222154
Pipette ID	J1207624U
Sulfamic Acid Reagent ID Number	955307
Sulfuric Acid Dispenser ID	21014
Sulfuric Acid Reagent ID Number	1205408

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.: 180-34362-1

SDG No.:

Batch Number: 111072 Batch Start Date: 07/10/14 09:51 Batch Analyst: Johnson, Paul

Batch Method: 9014 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	WCN0.1CCV 00268	WCN0.2ICV 00266		
ICV 180-111072/4		9014		10 mL	10 mL		10 mL		
CCV 180-111072/6		9014		10 mL	10 mL	10 mL			
CCV 180-111072/18		9014		10 mL	10 mL	10 mL			
CCV 180-111072/30		9014		10 mL	10 mL	10 mL			
CCV 180-111072/42		9014		10 mL	10 mL	10 mL			
CCV 180-111072/50		9014		10 mL	10 mL	10 mL			

Batch Notes	
Buffer Reagent ID Number	1116777
Chloramine-T Reagent ID Number	1239513
NaOH Lot #	1222154
Pipette ID	J1207624U
Pyridine-Barbituric Acid Reagent ID	1185318

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.

Shipping and Receiving Documents

Chain of Cust

180-34362 Chain of Custody

TestAmerica

Client Information	Sampler: MPITM	Lab PM: Gamber, Carrie L	COC No.: 180-18121-4668.1
Client Contact: Sanita Corum	Phone:	E-Mail: carrie.gamber@testamericainc.com	Page: Page 1 of 1
Company: EA Engineering, Science, and Technology		Analysis Requested	Job #:
Address: 225 Schilling Circle	Due Date Requested:		Preservation Codes:
City: Hunt Valley	TAT Requested (days): standard		A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: MD, 21031			
Phone:	PO #: Purchase Order Requested		Other:
Email: scorum@eaest.com	WO #:		
Project Name: Sparrows Point Trust Offshore Investigat	Project #: 18013274		
Site: Sparrows Pt	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	VOC (8260C)	SVOC (8270D)	Metals (6020A + 7470A)	Cyanide (9014)	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
H108-PZM003	6/26/14	0955	G	W	N	N	X	X	X	X	17	
RW19-PZP000		1010					X	X	X	X		
RW19-PZM050		1105					X	X	X	X		
H108-PZM060		1130					X	X	X	X		
RW19-PZM020		1155					X	X	X	X		
062614-TB		0830			N	N	X				2	trip blank

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify): see contract

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 6/26/14 1600	Company	Received by:	Date/Time: 6/27/14 8:00	Company: TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

FedEx Express NEW

FedEx Tracking Number 8030 3798 7932

Form ID No.

4 Expre
NOTE: Se

Next B

180-34362 Waybill

up to 150 lbs.
0 lbs., use the new Freight US Airbill.

fedex.com 1.800.GoFedEx 1.800.463.3339

1 From

Date 6/26/14

Sender's Name Tim McJilton Phone 410 343-9481

Company EA Engineering Science & Technology

Address 1311 Continental Drive Suite K

Dept./Floor/Suite/Room

City Abingdon State MD ZIP 21009

2 Your Internal Billing Reference 15131.01.0008

3 To

Recipient's Name Sample Receiving Phone 412 963-7058

Company Test America Pittsburgh

Address 301 Alpha Drive

We cannot deliver to P.O. boxes or P.O. ZIP codes

Dept./Floor/Suite/Room

Address

Use this line for the HOLD location address or for continuation of your shipping address

City Pittsburgh

HOLD Weekday
FedEx location address REQUIRED. NOT available for FedEx First Overnight

HOLD Saturday
FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Uncorrected temp 4.8 °C 15235
Thermometer ID #1

CF 0 Initials AM

PT-WI-SR-001 effective 7/26/13

8030 3798 7932

FedEx First
Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected

FedEx Priority Overnight
Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected

FedEx Standard Overnight
Next business afternoon.* Saturday Delivery NOT available

Second business morning.* Saturday Delivery NOT available

FedEx 2Day
Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected

FedEx Express Saver
Third business day.* Saturday Delivery NOT available

5 Packaging * Declared value limit $500

FedEx Envelope* FedEx Pak* FedEx Box FedEx Tube Other

6 Special Handling and Delivery Signature Options

SATURDAY Delivery
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver

No Signature Required
Package may be left without obtaining a signature for delivery

Direct Signature
Someone at recipient's address may sign for delivery. Fee applies.

Indirect Signature
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?

No Yes As per attached Shipper's Declaration Yes Shipper's Declaration not required. Dry Ice Dry Ice, 9, UN 1845 x kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below.

Sender Acct. No in Section 1 will be billed Recipient Third Party Credit Card Cash/Check

Total Packages 1 Total Weight 1 lbs

Credit Card Auth

644

1 Our liability is limited to US$100 unless you declare a higher value. See the current FedEx Service Guide for details.

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Login Sample Receipt Checklist

Client: EA Engineering, Science, and Technology

Job Number: 180-34362-1

Login Number: 34362

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Watson, Debbie

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	