

ANALYTICAL REPORT

Job Number: 180-34298-1

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.
Debra Bowen
Project Manager I
7/18/2014 11:27 AM

Designee for
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07/18/2014

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CASE NARRATIVE

Client: EA Engineering, Science, and Technology

Project: Sparrows Point Trust Offshore Investigation

Report Number: 180-34298-1

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 06/26/2014; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.7 C.

VOLATILE ORGANIC COMPOUNDS (GC/MS)

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

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS)

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

METALS

The samples were analyzed at a dilution due to matrix interference. The reporting limits have been adjusted accordingly.

GENERAL CHEMISTRY

Cyanide, Total was detected in method blank MB 180-110350/4-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.

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

Instrument ID: CHHP4 Analysis Batch Number: 98677Lab 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.: 180-34298-1

SDG No.: _____

Instrument ID: CHHP4 Analysis Batch Number: 98677Lab 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.: 180-34298-1

SDG No.: _____

Instrument ID: CHHP4 Analysis Batch Number: 107478Lab 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.: 180-34298-1

SDG No.: _____

Instrument ID: CHHP4 Analysis Batch Number: 107478Lab 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.: 180-34298-1

SDG No.: _____

Instrument ID: CHHP4 Analysis Batch Number: 110534Lab Sample ID: 180-34298-1 Client Sample ID: _____Date Analyzed: 07/07/14 03:45 Lab File ID: 4070607.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	07/07/14 03:15

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

Instrument ID: CH731 Analysis Batch Number: 107633Lab 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	piccolino v	06/05/14 10:20
N-Nitrosodimethylamine	2.46	Poor chromatography	piccolino v	06/05/14 10:20
Pyridine	2.58	Poor chromatography	piccolino v	06/05/14 10:20
Methyl methanesulfonate	4.68	Poor chromatography	piccolino v	06/05/14 10:20
Benzydine	11.85	Poor chromatography	piccolino v	06/05/14 10:20
Di-n-octyl phthalate	15.09	Poor chromatography	piccolino v	06/05/14 10:20
Benzo[b]fluoranthene	15.97	Poor chromatography	piccolino v	06/05/14 10:20
Benzo[k]fluoranthene	16.02	Poor chromatography	piccolino v	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	piccolino v	06/05/14 10:38
Benzoic acid	7.17	Poor chromatography	piccolino v	06/05/14 10:38
Dibenz(a,h)anthracene	18.97	Poor chromatography	piccolino v	06/05/14 10:38

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

Instrument ID: CH731 Analysis Batch Number: 107633Lab 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.: 180-34298-1

SDG No.: _____

Instrument ID: CH731 Analysis Batch Number: 110612

Lab Sample ID: CCVIS 180-110612/3 Client Sample ID: _____

Date Analyzed: 07/07/14 11:06 Lab File ID: V0707003.D GC Column: Rxi-5SilMS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
N-Nitrosodimethylamine	2.47	Poor chromatography	piccolino v	07/07/14 13:09
Benzoic acid	7.22	Poor chromatography	piccolino v	07/07/14 13:09

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

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

SAMPLE SUMMARY

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
180-34298-1	062514-TB	Water	06/25/2014 0815	06/26/2014 0820
180-34298-2	062514-DP	Water	06/25/2014 0000	06/26/2014 0820
180-34298-3	TS04-PDM004	Water	06/25/2014 1340	06/26/2014 0820
180-34298-4	RW20-PZP000	Water	06/25/2014 1250	06/26/2014 0820
180-34298-5	RW20-PZM020	Water	06/25/2014 1005	06/26/2014 0820

EXECUTIVE SUMMARY - Detections

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Lab Sample ID	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
180-34298-2	062514-DP					
Anthracene		0.062	J	0.21	ug/L	8270D LL
Bis(2-ethylhexyl) phthalate		19		2.1	ug/L	8270D LL
Butyl benzyl phthalate		0.26	J	1.0	ug/L	8270D LL
Fluoranthene		0.12	J	0.21	ug/L	8270D LL
Fluorene		0.12	J	0.21	ug/L	8270D LL
Phenanthrene		0.50		0.21	ug/L	8270D LL
Pyrene		0.052	J	0.21	ug/L	8270D LL
Total Recoverable						
Arsenic		25		5.0	ug/L	6020A
Cadmium		97		5.0	ug/L	6020A
Chromium		6.1	J	10	ug/L	6020A
Lead		1.0	J	5.0	ug/L	6020A
Selenium		5.1	J	25	ug/L	6020A
Nickel		19		5.0	ug/L	6020A
Zinc		22000		25	ug/L	6020A
Copper		2.1	J	10	ug/L	6020A
180-34298-3	TS04-PDM004					
Bis(2-ethylhexyl) phthalate		1.6	J	1.9	ug/L	8270D LL
Butyl benzyl phthalate		0.24	J	0.96	ug/L	8270D LL
Cyanide, Total		3.2	J B	10	ug/L	9014
Total Recoverable						
Arsenic		40		5.0	ug/L	6020A
Cadmium		3.1	J	5.0	ug/L	6020A
Chromium		32		10	ug/L	6020A
Lead		25		5.0	ug/L	6020A
Antimony		1.5	J	10	ug/L	6020A
Nickel		51		5.0	ug/L	6020A
Zinc		2400		25	ug/L	6020A
Copper		15		10	ug/L	6020A

EXECUTIVE SUMMARY - Detections

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Lab Sample ID	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
180-34298-4	RW20-PZP000					
Anthracene		0.064	J	0.20	ug/L	8270D LL
Benzo[a]anthracene		0.16	J	0.20	ug/L	8270D LL
Bis(2-ethylhexyl) phthalate		5.5		2.0	ug/L	8270D LL
Butyl benzyl phthalate		0.71	J	1.0	ug/L	8270D LL
Chrysene		0.26		0.20	ug/L	8270D LL
Fluoranthene		0.11	J	0.20	ug/L	8270D LL
Fluorene		0.084	J	0.20	ug/L	8270D LL
Phenanthrene		0.39		0.20	ug/L	8270D LL
Pyrene		0.063	J	0.20	ug/L	8270D LL
Cyanide, Total		160	B	10	ug/L	9014
Total Recoverable						
Arsenic		85		5.0	ug/L	6020A
Chromium		9.2	J	10	ug/L	6020A
Lead		7.1		5.0	ug/L	6020A
Antimony		5.3	J	10	ug/L	6020A
Nickel		11		5.0	ug/L	6020A
Zinc		37		25	ug/L	6020A
Copper		9.6	J	10	ug/L	6020A
180-34298-5	RW20-PZM020					
Bis(2-ethylhexyl) phthalate		1.3	J	2.0	ug/L	8270D LL
Butyl benzyl phthalate		0.28	J	1.0	ug/L	8270D LL
Cyanide, Total		3.7	J B	10	ug/L	9014
Total Recoverable						
Arsenic		25		5.0	ug/L	6020A
Cadmium		100		5.0	ug/L	6020A
Chromium		5.0	J	10	ug/L	6020A
Lead		0.97	J	5.0	ug/L	6020A
Selenium		6.4	J	25	ug/L	6020A
Antimony		0.13	J	10	ug/L	6020A
Nickel		18		5.0	ug/L	6020A
Zinc		23000		25	ug/L	6020A
Copper		2.1	J	10	ug/L	6020A

METHOD SUMMARY

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

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: 180-34298-1

Method	Analyst	Analyst ID
SW846 8260C	Zukowski, Mike	MAZ
SW846 8270D LL	Piccolino, Vincent	VVP
SW846 6020A	Reinheimer, Bill	WTR
SW846 7470A	McGrath, Lauren E	LEM
SW846 9014	Johnson, Paul	PGJ

Analytical Data

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Client Sample ID: 062514-TB

Lab Sample ID: 180-34298-1

Date Sampled: 06/25/2014 0815

Client Matrix: Water

Date Received: 06/26/2014 0820

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:	4070607.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/07/2014 0345			Final Weight/Volume:	5 mL
Prep Date:	07/07/2014 0345				

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)	100		62 - 123
4-Bromofluorobenzene (Surr)	101		75 - 120
Dibromofluoromethane (Surr)	93		80 - 120
Toluene-d8 (Surr)	98		80 - 120

Analytical Data

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Client Sample ID: 062514-DP

Lab Sample ID: 180-34298-2
 Client Matrix: Water

Date Sampled: 06/25/2014 0000
 Date Received: 06/26/2014 0820

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: 4070611.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 07/07/2014 0534		Final Weight/Volume: 5 mL
Prep Date: 07/07/2014 0534		

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)	90		62 - 123
4-Bromofluorobenzene (Surr)	107		75 - 120
Dibromofluoromethane (Surr)	89		80 - 120
Toluene-d8 (Surr)	113		80 - 120

Analytical Data

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Client Sample ID: TS04-PDM004

Lab Sample ID: 180-34298-3

Date Sampled: 06/25/2014 1340

Client Matrix: Water

Date Received: 06/26/2014 0820

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:	4070612.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/07/2014 0601			Final Weight/Volume:	5 mL
Prep Date:	07/07/2014 0601				

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)	104		75 - 120
Dibromofluoromethane (Surr)	91		80 - 120
Toluene-d8 (Surr)	106		80 - 120

Analytical Data

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Client Sample ID: RW20-PZP000

Lab Sample ID: 180-34298-4

Date Sampled: 06/25/2014 1250

Client Matrix: Water

Date Received: 06/26/2014 0820

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:	4070613.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/07/2014 0628			Final Weight/Volume:	5 mL
Prep Date:	07/07/2014 0628				

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)	101		62 - 123
4-Bromofluorobenzene (Surr)	107		75 - 120
Dibromofluoromethane (Surr)	97		80 - 120
Toluene-d8 (Surr)	110		80 - 120

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Client Sample ID: RW20-PZM020

Lab Sample ID: 180-34298-5

Date Sampled: 06/25/2014 1005

Client Matrix: Water

Date Received: 06/26/2014 0820

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:	4070614.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/07/2014 0655			Final Weight/Volume:	5 mL
Prep Date:	07/07/2014 0655				

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)	88		62 - 123
4-Bromofluorobenzene (Surr)	99		75 - 120
Dibromofluoromethane (Surr)	94		80 - 120
Toluene-d8 (Surr)	107		80 - 120

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Client Sample ID: 062514-DP

Lab Sample ID: 180-34298-2

Date Sampled: 06/25/2014 0000

Client Matrix: Water

Date Received: 06/26/2014 0820

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:	180-110164	Lab File ID:	V0708015.D
Dilution:	1.0			Initial Weight/Volume:	240 mL
Analysis Date:	07/08/2014 1943			Final Weight/Volume:	0.25 mL
Prep Date:	07/01/2014 1047			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.030	0.21
Acenaphthylene	ND		0.022	0.21
Anthracene	0.062	J	0.020	0.21
Benzidine	ND		4.9	21
Benzo[a]anthracene	ND		0.038	0.21
Benzo[b]fluoranthene	ND		0.051	0.21
Benzo[k]fluoranthene	ND		0.031	0.21
Benzoic acid	ND		1.7	5.2
Benzo[g,h,i]perylene	ND		0.030	0.21
Benzo[a]pyrene	ND		0.029	0.21
Bis(2-chloroethoxy)methane	ND		0.14	1.0
Bis(2-chloroethyl)ether	ND		0.033	1.0
Bis(2-ethylhexyl) phthalate	19		0.46	2.1
2,2'-oxybis[1-chloropropane]	ND		0.025	1.0
4-Bromophenyl phenyl ether	ND		0.12	1.0
4-Chlorophenyl phenyl ether	ND		0.083	1.0
2-Chloronaphthalene	ND		0.032	0.21
Butyl benzyl phthalate	0.26	J	0.22	1.0
Chrysene	ND		0.032	0.21
Dibenz(a,h)anthracene	ND		0.028	0.21
Di-n-butyl phthalate	ND		0.25	1.0
Di-n-octyl phthalate	ND		0.21	1.0
Diethyl phthalate	ND		0.31	1.0
Dimethyl phthalate	ND		0.19	1.0
3,3'-Dichlorobenzidine	ND		0.15	1.0
2,4-Dinitrotoluene	ND		0.22	1.0
2,6-Dinitrotoluene	ND		0.14	1.0
2-Chlorophenol	ND		0.23	1.0
2,4-Dichlorophenol	ND		0.070	1.0
2,4-Dimethylphenol	ND		0.18	1.0
2,4-Dinitrophenol	ND		2.6	5.2
2-Nitrophenol	ND		0.12	1.0
2,4,6-Trichlorophenol	ND		0.31	1.0
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.12	1.0
1,2,4-Trichlorobenzene	ND		0.089	1.0
4-Chloro-3-methylphenol	ND		0.18	1.0
4-Nitrophenol	ND		0.84	5.2
4,6-Dinitro-2-methylphenol	ND		1.6	5.2
Fluoranthene	0.12	J	0.022	0.21
Fluorene	0.12	J	0.025	0.21
Hexachlorobenzene	ND		0.064	1.0
Hexachlorobutadiene	ND		0.098	1.0
Hexachlorocyclopentadiene	ND		0.14	1.0
Hexachloroethane	ND		0.14	1.0
Indeno[1,2,3-cd]pyrene	ND		0.045	0.21
Isophorone	ND		0.077	1.0

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Client Sample ID: 062514-DP

Lab Sample ID: 180-34298-2

Date Sampled: 06/25/2014 0000

Client Matrix: Water

Date Received: 06/26/2014 0820

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:	180-110164	Lab File ID:	V0708015.D
Dilution:	1.0			Initial Weight/Volume:	240 mL
Analysis Date:	07/08/2014 1943			Final Weight/Volume:	0.25 mL
Prep Date:	07/01/2014 1047			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	ND		0.024	0.21
Nitrobenzene	ND		0.16	2.1
N-Nitrosodi-n-propylamine	ND		0.052	1.0
N-Nitrosodimethylamine	ND		0.12	1.0
N-Nitrosodiphenylamine	ND		0.13	1.0
Phenanthrene	0.50		0.043	0.21
Pyrene	0.052	J	0.024	0.21
Pentachlorophenol	ND		0.52	1.0
Phenol	ND		0.058	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	73		30 - 150
2-Fluorobiphenyl	83		30 - 150
2-Fluorophenol (Surr)	51		30 - 150
Nitrobenzene-d5 (Surr)	88		30 - 150
Phenol-d5 (Surr)	49		30 - 150
Terphenyl-d14 (Surr)	80		10 - 150

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Client Sample ID: TS04-PDM004

Lab Sample ID: 180-34298-3

Date Sampled: 06/25/2014 1340

Client Matrix: Water

Date Received: 06/26/2014 0820

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:	180-110164	Lab File ID:	V0708016.D
Dilution:	1.0			Initial Weight/Volume:	260 mL
Analysis Date:	07/08/2014 2012			Final Weight/Volume:	0.25 mL
Prep Date:	07/01/2014 1047			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	1.6	J	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	0.24	J	0.21	0.96
Chrysene	ND		0.030	0.19
Dibenz(a,h)anthracene	ND		0.026	0.19
Di-n-butyl phthalate	ND		0.23	0.96
Di-n-octyl phthalate	ND		0.20	0.96
Diethyl phthalate	ND		0.29	0.96
Dimethyl phthalate	ND		0.18	0.96
3,3'-Dichlorobenzidine	ND		0.14	0.96
2,4-Dinitrotoluene	ND		0.21	0.96
2,6-Dinitrotoluene	ND		0.13	0.96
2-Chlorophenol	ND		0.22	0.96
2,4-Dichlorophenol	ND		0.065	0.96
2,4-Dimethylphenol	ND		0.16	0.96
2,4-Dinitrophenol	ND		2.4	4.8
2-Nitrophenol	ND		0.11	0.96
2,4,6-Trichlorophenol	ND		0.29	0.96
1,2-Diphenylhydrazine(as Azobenzene)	ND		0.11	0.96
1,2,4-Trichlorobenzene	ND		0.082	0.96
4-Chloro-3-methylphenol	ND		0.16	0.96
4-Nitrophenol	ND		0.77	4.8
4,6-Dinitro-2-methylphenol	ND		1.5	4.8
Fluoranthene	ND		0.020	0.19
Fluorene	ND		0.023	0.19
Hexachlorobenzene	ND		0.059	0.96
Hexachlorobutadiene	ND		0.090	0.96
Hexachlorocyclopentadiene	ND		0.13	0.96
Hexachloroethane	ND		0.13	0.96
Indeno[1,2,3-cd]pyrene	ND		0.042	0.19
Isophorone	ND		0.071	0.96

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Client Sample ID: TS04-PDM004

Lab Sample ID: 180-34298-3

Date Sampled: 06/25/2014 1340

Client Matrix: Water

Date Received: 06/26/2014 0820

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:	180-110164	Lab File ID:	V0708016.D
Dilution:	1.0			Initial Weight/Volume:	260 mL
Analysis Date:	07/08/2014 2012			Final Weight/Volume:	0.25 mL
Prep Date:	07/01/2014 1047			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)	54		30 - 150
2-Fluorobiphenyl	92		30 - 150
2-Fluorophenol (Surr)	51		30 - 150
Nitrobenzene-d5 (Surr)	91		30 - 150
Phenol-d5 (Surr)	55		30 - 150
Terphenyl-d14 (Surr)	88		10 - 150

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Client Sample ID: RW20-PZP000

Lab Sample ID: 180-34298-4

Date Sampled: 06/25/2014 1250

Client Matrix: Water

Date Received: 06/26/2014 0820

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:	180-110164	Lab File ID:	V0708017.D
Dilution:	1.0			Initial Weight/Volume:	250 mL
Analysis Date:	07/08/2014 2040			Final Weight/Volume:	0.25 mL
Prep Date:	07/01/2014 1047			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.029	0.20
Acenaphthylene	ND		0.022	0.20
Anthracene	0.064	J	0.019	0.20
Benzidine	ND		4.7	20
Benzo[a]anthracene	0.16	J	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	5.5		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	0.71	J	0.21	1.0
Chrysene	0.26		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	0.11	J	0.021	0.20
Fluorene	0.084	J	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: 180-34298-1

Client Sample ID: RW20-PZP000

Lab Sample ID: 180-34298-4

Date Sampled: 06/25/2014 1250

Client Matrix: Water

Date Received: 06/26/2014 0820

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:	180-110164	Lab File ID:	V0708017.D
Dilution:	1.0			Initial Weight/Volume:	250 mL
Analysis Date:	07/08/2014 2040			Final Weight/Volume:	0.25 mL
Prep Date:	07/01/2014 1047			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	0.39		0.042	0.20
Pyrene	0.063	J	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)	66		30 - 150
2-Fluorobiphenyl	83		30 - 150
2-Fluorophenol (Surr)	66		30 - 150
Nitrobenzene-d5 (Surr)	89		30 - 150
Phenol-d5 (Surr)	65		30 - 150
Terphenyl-d14 (Surr)	68		10 - 150

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Client Sample ID: RW20-PZM020

Lab Sample ID: 180-34298-5

Date Sampled: 06/25/2014 1005

Client Matrix: Water

Date Received: 06/26/2014 0820

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:	180-110164	Lab File ID:	V0708018.D
Dilution:	1.0			Initial Weight/Volume:	250 mL
Analysis Date:	07/08/2014 2108			Final Weight/Volume:	0.25 mL
Prep Date:	07/01/2014 1047			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	1.3	J	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	0.28	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: 180-34298-1

Client Sample ID: RW20-PZM020

Lab Sample ID: 180-34298-5

Date Sampled: 06/25/2014 1005

Client Matrix: Water

Date Received: 06/26/2014 0820

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:	180-110164	Lab File ID:	V0708018.D
Dilution:	1.0			Initial Weight/Volume:	250 mL
Analysis Date:	07/08/2014 2108			Final Weight/Volume:	0.25 mL
Prep Date:	07/01/2014 1047			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)	32		30 - 150
2-Fluorobiphenyl	88		30 - 150
2-Fluorophenol (Surr)	35		30 - 150
Nitrobenzene-d5 (Surr)	94		30 - 150
Phenol-d5 (Surr)	42		30 - 150
Terphenyl-d14 (Surr)	92		10 - 150

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Client Sample ID: 062514-DP

Lab Sample ID: 180-34298-2

Date Sampled: 06/25/2014 0000

Client Matrix: Water

Date Received: 06/26/2014 0820

6020A Metals (ICP/MS)-Total Recoverable

Analysis Method:	6020A	Analysis Batch:	180-111800	Instrument ID:	M
Prep Method:	3005A	Prep Batch:	180-111451	Lab File ID:	M40716A.xml
Dilution:	5.0			Initial Weight/Volume:	50.0 mL
Analysis Date:	07/16/2014 2105			Final Weight/Volume:	50.0 mL
Prep Date:	07/15/2014 0753				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Arsenic	25		1.5	5.0
Cadmium	97		0.57	5.0
Chromium	6.1	J	2.7	10
Lead	1.0	J	0.096	5.0
Selenium	5.1	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	19		0.87	5.0
Zinc	22000		4.8	25
Copper	2.1	J	1.2	10

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	180-111238	Instrument ID:	K
Prep Method:	7470A	Prep Batch:	180-111203	Lab File ID:	R40711C.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	07/11/2014 1454			Final Weight/Volume:	50 mL
Prep Date:	07/11/2014 1147				

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

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Client Sample ID: TS04-PDM004

Lab Sample ID: 180-34298-3

Date Sampled: 06/25/2014 1340

Client Matrix: Water

Date Received: 06/26/2014 0820

6020A Metals (ICP/MS)-Total Recoverable

Analysis Method:	6020A	Analysis Batch:	180-111800	Instrument ID:	M
Prep Method:	3005A	Prep Batch:	180-111451	Lab File ID:	M40716A.xml
Dilution:	5.0			Initial Weight/Volume:	50.0 mL
Analysis Date:	07/16/2014 2129			Final Weight/Volume:	50.0 mL
Prep Date:	07/15/2014 0753				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Arsenic	40		1.5	5.0
Cadmium	3.1	J	0.57	5.0
Chromium	32		2.7	10
Lead	25		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	1.5	J	0.094	10
Nickel	51		0.87	5.0
Zinc	2400		4.8	25
Copper	15		1.2	10

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	180-111238	Instrument ID:	K
Prep Method:	7470A	Prep Batch:	180-111203	Lab File ID:	R40711C.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	07/11/2014 1456			Final Weight/Volume:	50 mL
Prep Date:	07/11/2014 1147				

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

Analytical Data

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Client Sample ID: RW20-PZP000

Lab Sample ID: 180-34298-4
Client Matrix: Water

Date Sampled: 06/25/2014 1250
Date Received: 06/26/2014 0820

6020A Metals (ICP/MS)-Total Recoverable

Analysis Method: 6020A Analysis Batch: 180-111800 Instrument ID: M
Prep Method: 3005A Prep Batch: 180-111451 Lab File ID: M40716A.xml
Dilution: 5.0 Initial Weight/Volume: 50.0 mL
Analysis Date: 07/16/2014 2133 Final Weight/Volume: 50.0 mL
Prep Date: 07/15/2014 0753

Analyte	Result (ug/L)	Qualifier	MDL	RL
Arsenic	85		1.5	5.0
Cadmium	ND		0.57	5.0
Chromium	9.2	J	2.7	10
Lead	7.1		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	5.3	J	0.094	10
Nickel	11		0.87	5.0
Zinc	37		4.8	25
Copper	9.6	J	1.2	10

7470A Mercury (CVAA)

Analysis Method: 7470A Analysis Batch: 180-111238 Instrument ID: K
Prep Method: 7470A Prep Batch: 180-111203 Lab File ID: R40711C.CSV
Dilution: 1.0 Initial Weight/Volume: 50 mL
Analysis Date: 07/11/2014 1458 Final Weight/Volume: 50 mL
Prep Date: 07/11/2014 1147

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

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Client Sample ID: RW20-PZM020

Lab Sample ID: 180-34298-5

Date Sampled: 06/25/2014 1005

Client Matrix: Water

Date Received: 06/26/2014 0820

6020A Metals (ICP/MS)-Total Recoverable

Analysis Method:	6020A	Analysis Batch:	180-111800	Instrument ID:	M
Prep Method:	3005A	Prep Batch:	180-111451	Lab File ID:	M40716A.xml
Dilution:	5.0			Initial Weight/Volume:	50.0 mL
Analysis Date:	07/16/2014 2137			Final Weight/Volume:	50.0 mL
Prep Date:	07/15/2014 0753				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Arsenic	25		1.5	5.0
Cadmium	100		0.57	5.0
Chromium	5.0	J	2.7	10
Lead	0.97	J	0.096	5.0
Selenium	6.4	J	2.1	25
Silver	ND		0.18	5.0
Beryllium	ND		0.18	5.0
Thallium	ND		0.076	5.0
Antimony	0.13	J	0.094	10
Nickel	18		0.87	5.0
Zinc	23000		4.8	25
Copper	2.1	J	1.2	10

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	180-111238	Instrument ID:	K
Prep Method:	7470A	Prep Batch:	180-111203	Lab File ID:	R40711C.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	07/11/2014 1500			Final Weight/Volume:	50 mL
Prep Date:	07/11/2014 1147				

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

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

General Chemistry

Client Sample ID: 062514-DP

Lab Sample ID: 180-34298-2

Date Sampled: 06/25/2014 0000

Client Matrix: Water

Date Received: 06/26/2014 0820

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	ND		ug/L	3.2	10	1.0	9014
	Analysis Batch: 180-110390	Analysis Date: 07/03/2014 0346					
	Prep Batch: 180-110350	Prep Date: 07/02/2014 1340					

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

General Chemistry

Client Sample ID: TS04-PDM004

Lab Sample ID: 180-34298-3

Date Sampled: 06/25/2014 1340

Client Matrix: Water

Date Received: 06/26/2014 0820

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	3.2	J B	ug/L	3.2	10	1.0	9014
	Analysis Batch: 180-110390	Analysis Date: 07/03/2014 0346					
	Prep Batch: 180-110350	Prep Date: 07/02/2014 1340					

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

General Chemistry

Client Sample ID: RW20-PZP000

Lab Sample ID: 180-34298-4

Date Sampled: 06/25/2014 1250

Client Matrix: Water

Date Received: 06/26/2014 0820

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	160	B	ug/L	3.2	10	1.0	9014
	Analysis Batch: 180-110390	Analysis Date: 07/03/2014 0346					
	Prep Batch: 180-110350	Prep Date: 07/02/2014 1340					

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

General Chemistry

Client Sample ID: RW20-PZM020

Lab Sample ID: 180-34298-5

Date Sampled: 06/25/2014 1005

Client Matrix: Water

Date Received: 06/26/2014 0820

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	3.7	J B	ug/L	3.2	10	1.0	9014
	Analysis Batch: 180-110390	Analysis Date: 07/03/2014 0346					
	Prep Batch: 180-110350	Prep Date: 07/02/2014 1340					

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

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
180-34298-1	062514-TB	93	100	98	101
180-34298-2	062514-DP	89	90	113	107
180-34298-3	TS04-PDM004	91	91	106	104
180-34298-4	RW20-PZP000	97	101	110	107
180-34298-5	RW20-PZM020	94	88	107	99
MB 180-110534/10		90	88	100	94
LCS 180-110534/7		95	95	92	113
LCSD 180-110534/8		91	95	94	108

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

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
180-34298-2	062514-DP	51	49	88	83	73	80
180-34298-3	TS04-PDM004	51	55	91	92	54	88
180-34298-4	RW20-PZP000	66	65	89	83	66	68
180-34298-5	RW20-PZM020	35	42	94	88	32	92
MB 180-110164/1-A		62	54	67	61	60	85
LCS 180-110164/2-A		56	54	62	63	63	75
LCSD 180-110164/3-A		61	60	67	66	68	79

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

Quality Control Results

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Method Blank - Batch: 180-110534

**Method: 8260C
Preparation: 5030C**

Lab Sample ID: MB 180-110534/10
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 07/07/2014 0318
 Prep Date: 07/07/2014 0318
 Leach Date: N/A

Analysis Batch: 180-110534
 Prep Batch: N/A
 Leach Batch: N/A
 Units: ug/L

Instrument ID: CHHP4
 Lab File ID: 4070606.D
 Initial Weight/Volume: 5 mL
 Final Weight/Volume: 5 mL

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

Quality Control Results

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

**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.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
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

Quality Control Results

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

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

**Method: 8260C
Preparation: 5030C**

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

LCSD Lab Sample ID: LCSD 180-110534/8
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 07/07/2014 0439
 Prep Date: 07/07/2014 0439
 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

Quality Control Results

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Method Blank - Batch: 180-110164

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

Lab Sample ID: MB 180-110164/1-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 07/07/2014 1230
 Prep Date: 07/01/2014 1046
 Leach Date: N/A

Analysis Batch: 180-110612
 Prep Batch: 180-110164
 Leach Batch: N/A
 Units: ug/L

Instrument ID: CH731
 Lab File ID: V0707006.D
 Initial Weight/Volume: 250 mL
 Final Weight/Volume: 0.25 mL
 Injection Volume: 2 uL

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

Quality Control Results

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Method Blank - Batch: 180-110164

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

Lab Sample ID: MB 180-110164/1-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 07/07/2014 1230
 Prep Date: 07/01/2014 1046
 Leach Date: N/A

Analysis Batch: 180-110612
 Prep Batch: 180-110164
 Leach Batch: N/A
 Units: ug/L

Instrument ID: CH731
 Lab File ID: V0707006.D
 Initial Weight/Volume: 250 mL
 Final Weight/Volume: 0.25 mL
 Injection Volume: 2 uL

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)	60	30 - 150
2-Fluorobiphenyl	61	30 - 150
2-Fluorophenol (Surr)	62	30 - 150
Nitrobenzene-d5 (Surr)	67	30 - 150
Phenol-d5 (Surr)	54	30 - 150
Terphenyl-d14 (Surr)	85	10 - 150

Quality Control Results

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 180-110164**

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

LCS Lab Sample ID: LCS 180-110164/2-A	Analysis Batch: 180-110612	Instrument ID: CH731
Client Matrix: Water	Prep Batch: 180-110164	Lab File ID: V0707010.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 250 mL
Analysis Date: 07/07/2014 1423	Units: ug/L	Final Weight/Volume: 0.25 mL
Prep Date: 07/01/2014 1046		Injection Volume: 2 uL
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 180-110164/3-A	Analysis Batch: 180-110612	Instrument ID: CH731
Client Matrix: Water	Prep Batch: 180-110164	Lab File ID: V0707011.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 250 mL
Analysis Date: 07/07/2014 1452	Units: ug/L	Final Weight/Volume: 0.25 mL
Prep Date: 07/01/2014 1046		Injection Volume: 2 uL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Acenaphthene	63	66	30 - 150	5	35		
Acenaphthylene	61	63	30 - 150	4	35		
Anthracene	64	65	30 - 150	2	35		
Benzidine	39	34	10 - 150	13	35	J	J
Benzo[a]anthracene	64	67	30 - 150	5	35		
Benzo[b]fluoranthene	62	66	30 - 150	7	35		
Benzo[k]fluoranthene	63	70	30 - 150	10	35		
Benzoic acid	47	54	10 - 150	12	35		
Benzo[g,h,i]perylene	61	64	30 - 150	5	35		
Benzo[a]pyrene	65	69	30 - 150	6	35		
Bis(2-chloroethoxy)methane	56	59	30 - 150	4	35		
Bis(2-chloroethyl)ether	49	53	30 - 150	7	35		
Bis(2-ethylhexyl) phthalate	56	61	30 - 150	8	35		
2,2'-oxybis[1-chloropropane]	42	48	30 - 150	13	35		
4-Bromophenyl phenyl ether	72	72	30 - 150	1	35		
4-Chlorophenyl phenyl ether	68	72	30 - 150	5	35		
2-Chloronaphthalene	57	59	30 - 150	4	35		
Butyl benzyl phthalate	60	63	30 - 150	6	35		
Chrysene	65	65	30 - 150	1	35		
Dibenz(a,h)anthracene	61	65	30 - 150	6	35		
Di-n-butyl phthalate	62	65	30 - 150	4	35		
Di-n-octyl phthalate	59	66	10 - 150	12	35		
Diethyl phthalate	69	75	30 - 150	9	35		
Dimethyl phthalate	64	68	30 - 150	5	35		
3,3'-Dichlorobenzidine	58	60	10 - 150	4	35		
2,4-Dinitrotoluene	64	70	30 - 150	9	35		
2,6-Dinitrotoluene	63	66	30 - 150	3	35		
2-Chlorophenol	53	59	30 - 150	10	35		
2,4-Dichlorophenol	63	68	30 - 150	8	35		
2,4-Dimethylphenol	65	67	30 - 150	4	35		
2,4-Dinitrophenol	53	59	10 - 150	11	35		
2-Nitrophenol	60	63	30 - 150	5	35		
2,4,6-Trichlorophenol	68	74	30 - 150	8	35		
1,2-Diphenylhydrazine(as Azobenzene)	66	65	30 - 150	2	35		
1,2,4-Trichlorobenzene	64	68	30 - 150	6	35		
4-Chloro-3-methylphenol	58	66	30 - 150	13	35		

Quality Control Results

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 180-110164**

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

LCS Lab Sample ID: LCS 180-110164/2-A	Analysis Batch: 180-110612	Instrument ID: CH731
Client Matrix: Water	Prep Batch: 180-110164	Lab File ID: V0707010.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 250 mL
Analysis Date: 07/07/2014 1423	Units: ug/L	Final Weight/Volume: 0.25 mL
Prep Date: 07/01/2014 1046		Injection Volume: 2 uL
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 180-110164/3-A	Analysis Batch: 180-110612	Instrument ID: CH731
Client Matrix: Water	Prep Batch: 180-110164	Lab File ID: V0707011.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 250 mL
Analysis Date: 07/07/2014 1452	Units: ug/L	Final Weight/Volume: 0.25 mL
Prep Date: 07/01/2014 1046		Injection Volume: 2 uL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
4-Nitrophenol	79	90	30 - 150	12	35		
4,6-Dinitro-2-methylphenol	65	68	30 - 150	4	35		
Fluoranthene	64	67	30 - 150	6	35		
Fluorene	64	68	30 - 150	6	35		
Hexachlorobenzene	71	72	30 - 150	1	35		
Hexachlorobutadiene	69	70	30 - 150	2	35		
Hexachlorocyclopentadiene	81	79	30 - 150	2	35		
Hexachloroethane	54	60	30 - 150	10	35		
Indeno[1,2,3-cd]pyrene	63	66	30 - 150	5	35		
Isophorone	63	67	30 - 150	6	35		
Naphthalene	58	61	30 - 150	6	35		
Nitrobenzene	63	65	30 - 150	3	35		
N-Nitrosodi-n-propylamine	57	62	30 - 150	9	35		
N-Nitrosodimethylamine	65	71	30 - 150	8	35		
N-Nitrosodiphenylamine	63	63	30 - 150	0	35		
Phenanthrene	60	64	30 - 150	6	35		
Pyrene	63	64	30 - 150	2	35		
Pentachlorophenol	77	83	10 - 150	7	35		
Phenol	53	57	30 - 150	7	35		
Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits				
2,4,6-Tribromophenol (Surr)	63	68	30 - 150				
2-Fluorobiphenyl	63	66	30 - 150				
2-Fluorophenol (Surr)	56	61	30 - 150				
Nitrobenzene-d5 (Surr)	62	67	30 - 150				
Phenol-d5 (Surr)	54	60	30 - 150				
Terphenyl-d14 (Surr)	75	79	10 - 150				

Quality Control Results

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 180-110164**

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

LCS Lab Sample ID: LCS 180-110164/2-A Units: ug/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 07/07/2014 1423
 Prep Date: 07/01/2014 1046
 Leach Date: N/A

LCSD Lab Sample ID: LCSD 180-110164/3-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 07/07/2014 1452
 Prep Date: 07/01/2014 1046
 Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Acenaphthene	20.0	20.0	12.6	13.3
Acenaphthylene	20.0	20.0	12.2	12.6
Anthracene	20.0	20.0	12.7	13.0
Benzidine	20.0	20.0	7.76 J	6.82 J
Benzo[a]anthracene	20.0	20.0	12.7	13.4
Benzo[b]fluoranthene	20.0	20.0	12.4	13.2
Benzo[k]fluoranthene	20.0	20.0	12.6	13.9
Benzoic acid	20.0	20.0	9.49	10.7
Benzo[g,h,i]perylene	20.0	20.0	12.2	12.8
Benzo[a]pyrene	20.0	20.0	13.0	13.9
Bis(2-chloroethoxy)methane	20.0	20.0	11.3	11.7
Bis(2-chloroethyl)ether	20.0	20.0	9.83	10.5
Bis(2-ethylhexyl) phthalate	20.0	20.0	11.3	12.2
2,2'-oxybis[1-chloropropane]	20.0	20.0	8.42	9.58
4-Bromophenyl phenyl ether	20.0	20.0	14.3	14.4
4-Chlorophenyl phenyl ether	20.0	20.0	13.6	14.4
2-Chloronaphthalene	20.0	20.0	11.4	11.9
Butyl benzyl phthalate	20.0	20.0	11.9	12.7
Chrysene	20.0	20.0	13.0	13.1
Dibenz(a,h)anthracene	20.0	20.0	12.2	13.0
Di-n-butyl phthalate	20.0	20.0	12.4	12.9
Di-n-octyl phthalate	20.0	20.0	11.7	13.3
Diethyl phthalate	20.0	20.0	13.7	14.9
Dimethyl phthalate	20.0	20.0	12.9	13.6
3,3'-Dichlorobenzidine	20.0	20.0	11.6	12.0
2,4-Dinitrotoluene	20.0	20.0	12.8	13.9
2,6-Dinitrotoluene	20.0	20.0	12.7	13.1
2-Chlorophenol	20.0	20.0	10.7	11.8
2,4-Dichlorophenol	20.0	20.0	12.6	13.7
2,4-Dimethylphenol	20.0	20.0	12.9	13.4
2,4-Dinitrophenol	40.0	40.0	21.1	23.6
2-Nitrophenol	20.0	20.0	12.1	12.7
2,4,6-Trichlorophenol	20.0	20.0	13.7	14.8
1,2-Diphenylhydrazine(as Azobenzene)	20.0	20.0	13.2	13.0
1,2,4-Trichlorobenzene	20.0	20.0	12.8	13.5
4-Chloro-3-methylphenol	20.0	20.0	11.6	13.2
4-Nitrophenol	40.0	40.0	31.7	35.9
4,6-Dinitro-2-methylphenol	40.0	40.0	26.1	27.3
Fluoranthene	20.0	20.0	12.7	13.5

Quality Control Results

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 180-110164**

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

LCS Lab Sample ID: LCS 180-110164/2-A Units: ug/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 07/07/2014 1423
 Prep Date: 07/01/2014 1046
 Leach Date: N/A

LCSD Lab Sample ID: LCSD 180-110164/3-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 07/07/2014 1452
 Prep Date: 07/01/2014 1046
 Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Fluorene	20.0	20.0	12.7	13.5
Hexachlorobenzene	20.0	20.0	14.2	14.4
Hexachlorobutadiene	20.0	20.0	13.8	14.1
Hexachlorocyclopentadiene	20.0	20.0	16.1	15.9
Hexachloroethane	20.0	20.0	10.9	12.1
Indeno[1,2,3-cd]pyrene	20.0	20.0	12.5	13.2
Isophorone	20.0	20.0	12.6	13.5
Naphthalene	20.0	20.0	11.6	12.3
Nitrobenzene	20.0	20.0	12.5	12.9
N-Nitrosodi-n-propylamine	20.0	20.0	11.4	12.5
N-Nitrosodimethylamine	20.0	20.0	13.1	14.1
N-Nitrosodiphenylamine	20.0	20.0	12.7	12.7
Phenanthrene	20.0	20.0	12.0	12.7
Pyrene	20.0	20.0	12.6	12.9
Pentachlorophenol	40.0	40.0	30.9	33.2
Phenol	20.0	20.0	10.6	11.4

Quality Control Results

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Method Blank - Batch: 180-111451

Lab Sample ID: MB 180-111451/1-A
Client Matrix: Water
Dilution: 1.0
Analysis Date: 07/16/2014 1941
Prep Date: 07/15/2014 0753
Leach Date: N/A

Analysis Batch: 180-111800
Prep Batch: 180-111451
Leach Batch: N/A
Units: ug/L

Method: 6020A Preparation: 3005A Total Recoverable

Instrument ID: M
Lab File ID: M40716A.xml
Initial Weight/Volume: 50.0 mL
Final Weight/Volume: 50.0 mL

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	ND		0.019	2.0
Nickel	ND		0.17	1.0
Zinc	ND		0.96	5.0
Copper	ND		0.24	2.0

Quality Control Results

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 180-111451**

**Method: 6020A
Preparation: 3005A
Total Recoverable**

LCS Lab Sample ID: LCS 180-111451/2-A	Analysis Batch: 180-111800	Instrument ID: M
Client Matrix: Water	Prep Batch: 180-111451	Lab File ID: M40716A.xml
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 50.0 mL
Analysis Date: 07/16/2014 1945	Units: ug/L	Final Weight/Volume: 50.0 mL
Prep Date: 07/15/2014 0753		
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 180-111451/3-A	Analysis Batch: 180-111800	Instrument ID: M
Client Matrix: Water	Prep Batch: 180-111451	Lab File ID: M40716A.xml
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 50.0 mL
Analysis Date: 07/16/2014 1949	Units: ug/L	Final Weight/Volume: 50.0 mL
Prep Date: 07/15/2014 0753		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Arsenic	90	92	80 - 120	2	20		
Cadmium	97	96	80 - 120	0	20		
Chromium	99	100	80 - 120	1	20		
Lead	96	97	80 - 120	2	20		
Selenium	95	105	80 - 120	11	20		
Silver	93	95	80 - 120	1	20		
Beryllium	90	91	80 - 120	1	20		
Thallium	92	95	80 - 120	2	20		
Antimony	96	96	80 - 120	0	20		
Nickel	92	93	80 - 120	2	20		
Zinc	93	93	80 - 120	1	20		
Copper	91	92	80 - 120	2	20		

Quality Control Results

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 180-111451**

**Method: 6020A
Preparation: 3005A
Total Recoverable**

LCS Lab Sample ID: LCS 180-111451/2-A Units: ug/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 07/16/2014 1945
 Prep Date: 07/15/2014 0753
 Leach Date: N/A

LCSD Lab Sample ID: LCSD 180-111451/3-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 07/16/2014 1949
 Prep Date: 07/15/2014 0753
 Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Arsenic	40.0	40.0	36.1	36.8
Cadmium	50.0	50.0	48.3	48.2
Chromium	200	200	197	200
Lead	20.0	20.0	19.2	19.5
Selenium	10.0	10.0	9.46	10.5
Silver	50.0	50.0	46.7	47.4
Beryllium	50.0	50.0	44.8	45.3
Thallium	50.0	50.0	46.2	47.3
Antimony	500	500	480	481
Nickel	500	500	459	467
Zinc	500	500	464	467
Copper	250	250	227	231

Serial Dilution - Batch: 180-111451

**Method: 6020A
Preparation: 3005A
Total Recoverable**

Lab Sample ID: 180-34298-2 Analysis Batch: 180-111800
 Client Matrix: Water Prep Batch: 180-111451
 Dilution: 25 Leach Batch: N/A
 Analysis Date: 07/16/2014 2108 Units: ug/L
 Prep Date: 07/15/2014 0753
 Leach Date: N/A

Instrument ID: M
 Lab File ID: M40716A.xml
 Initial Weight/Volume: 50.0 mL
 Final Weight/Volume: 50.0 mL

Analyte	Sample Result/Qual	Result	%Diff	Limit	Qual
Arsenic	25	24.9	NC	10	J
Cadmium	97	95.0	1.7	10	
Chromium	6.1 J	ND	NC	10	
Lead	1.0 J	0.750	NC	10	J
Selenium	5.1 J	ND	NC	10	
Silver	ND	ND	NC	10	
Beryllium	ND	ND	NC	10	
Thallium	ND	ND	NC	10	
Antimony	ND	ND	NC	10	
Nickel	19	17.5	NC	10	J
Zinc	22000	23000	4.5	10	
Copper	2.1 J	ND	NC	10	

Quality Control Results

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Method Blank - Batch: 180-111203

Lab Sample ID: MB 180-111203/1-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 07/11/2014 1412
 Prep Date: 07/11/2014 1147
 Leach Date: N/A

Analysis Batch: 180-111238
 Prep Batch: 180-111203
 Leach Batch: N/A
 Units: ug/L

**Method: 7470A
 Preparation: 7470A**

Instrument ID: K
 Lab File ID: R40711C.CSV
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Result	Qual	MDL	RL
Mercury	ND		0.038	0.20

Lab Control Sample - Batch: 180-111203

Lab Sample ID: LCS 180-111203/2-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 07/11/2014 1414
 Prep Date: 07/11/2014 1147
 Leach Date: N/A

Analysis Batch: 180-111238
 Prep Batch: 180-111203
 Leach Batch: N/A
 Units: ug/L

**Method: 7470A
 Preparation: 7470A**

Instrument ID: K
 Lab File ID: R40711C.CSV
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	2.50	2.58	103	80 - 120	

Quality Control Results

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Method Blank - Batch: 180-110350

Method: 9014
Preparation: 9010C

Lab Sample ID: MB 180-110350/4-A	Analysis Batch: 180-110390	Instrument ID: KONELAB1
Client Matrix: Water	Prep Batch: 180-110350	Lab File ID: 070314CN.xls
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 50 mL
Analysis Date: 07/03/2014 0332	Units: ug/L	Final Weight/Volume: 50 mL
Prep Date: 07/02/2014 1340		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
Cyanide, Total	3.70	J	3.2	10

Low Level Control Sample - Batch: 180-110350

Method: 9014
Preparation: 9010C

Lab Sample ID: LLCS 180-110350/1-A	Analysis Batch: 180-110390	Instrument ID: KONELAB1
Client Matrix: Water	Prep Batch: 180-110350	Lab File ID: 070314CN.xls
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 50 mL
Analysis Date: 07/03/2014 0331	Units: ug/L	Final Weight/Volume: 50 mL
Prep Date: 07/02/2014 1340		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cyanide, Total	50.0	50.8	102	90 - 110	

High Level Control Sample - Batch: 180-110350

Method: 9014
Preparation: 9010C

Lab Sample ID: HLCS 180-110350/2-A	Analysis Batch: 180-110390	Instrument ID: KONELAB1
Client Matrix: Water	Prep Batch: 180-110350	Lab File ID: 070314CN.xls
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 50 mL
Analysis Date: 07/03/2014 0331	Units: ug/L	Final Weight/Volume: 50 mL
Prep Date: 07/02/2014 1340		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cyanide, Total	250	239	96	90 - 110	

Lab Control Sample - Batch: 180-110350

Method: 9014
Preparation: 9010C

Lab Sample ID: LCS 180-110350/3-A	Analysis Batch: 180-110390	Instrument ID: KONELAB1
Client Matrix: Water	Prep Batch: 180-110350	Lab File ID: 070314CN.xls
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 50 mL
Analysis Date: 07/03/2014 0332	Units: ug/L	Final Weight/Volume: 50 mL
Prep Date: 07/02/2014 1340		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cyanide, Total	200	204	102	85 - 115	

DATA REPORTING QUALIFIERS

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Lab Section	Qualifier	Description
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	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
General Chemistry	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.

Quality Control Results

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

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	
180-34298-1	062514-TB	T	Water	8260C	
180-34298-2	062514-DP	T	Water	8260C	
180-34298-3	TS04-PDM004	T	Water	8260C	
180-34298-4	RW20-PZP000	T	Water	8260C	
180-34298-5	RW20-PZM020	T	Water	8260C	

Report Basis

T = Total

GC/MS Semi VOA

Prep Batch: 180-110164					
LCS 180-110164/2-A	Lab Control Sample	T	Water	3520C	
LCSD 180-110164/3-A	Lab Control Sample Duplicate	T	Water	3520C	
MB 180-110164/1-A	Method Blank	T	Water	3520C	
180-34298-2	062514-DP	T	Water	3520C	
180-34298-3	TS04-PDM004	T	Water	3520C	
180-34298-4	RW20-PZP000	T	Water	3520C	
180-34298-5	RW20-PZM020	T	Water	3520C	
Analysis Batch:180-110612					
LCS 180-110164/2-A	Lab Control Sample	T	Water	8270D LL	180-110164
LCSD 180-110164/3-A	Lab Control Sample Duplicate	T	Water	8270D LL	180-110164
MB 180-110164/1-A	Method Blank	T	Water	8270D LL	180-110164
Analysis Batch:180-110717					
180-34298-2	062514-DP	T	Water	8270D LL	180-110164
180-34298-3	TS04-PDM004	T	Water	8270D LL	180-110164
180-34298-4	RW20-PZP000	T	Water	8270D LL	180-110164
180-34298-5	RW20-PZM020	T	Water	8270D LL	180-110164

Report Basis

T = Total

Quality Control Results

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 180-111203					
LCS 180-111203/2-A	Lab Control Sample	T	Water	7470A	
MB 180-111203/1-A	Method Blank	T	Water	7470A	
180-34298-2	062514-DP	T	Water	7470A	
180-34298-3	TS04-PDM004	T	Water	7470A	
180-34298-4	RW20-PZP000	T	Water	7470A	
180-34298-5	RW20-PZM020	T	Water	7470A	
Analysis Batch:180-111238					
LCS 180-111203/2-A	Lab Control Sample	T	Water	7470A	180-111203
MB 180-111203/1-A	Method Blank	T	Water	7470A	180-111203
180-34298-2	062514-DP	T	Water	7470A	180-111203
180-34298-3	TS04-PDM004	T	Water	7470A	180-111203
180-34298-4	RW20-PZP000	T	Water	7470A	180-111203
180-34298-5	RW20-PZM020	T	Water	7470A	180-111203
Prep Batch: 180-111451					
LCS 180-111451/2-A	Lab Control Sample	R	Water	3005A	
LCSD 180-111451/3-A	Lab Control Sample Duplicate	R	Water	3005A	
MB 180-111451/1-A	Method Blank	R	Water	3005A	
180-34298-2	062514-DP	R	Water	3005A	
180-34298-3	TS04-PDM004	R	Water	3005A	
180-34298-4	RW20-PZP000	R	Water	3005A	
180-34298-5	RW20-PZM020	R	Water	3005A	
Analysis Batch:180-111800					
LCS 180-111451/2-A	Lab Control Sample	R	Water	6020A	180-111451
LCSD 180-111451/3-A	Lab Control Sample Duplicate	R	Water	6020A	180-111451
MB 180-111451/1-A	Method Blank	R	Water	6020A	180-111451
180-34298-2	062514-DP	R	Water	6020A	180-111451
180-34298-3	TS04-PDM004	R	Water	6020A	180-111451
180-34298-4	RW20-PZP000	R	Water	6020A	180-111451
180-34298-5	RW20-PZM020	R	Water	6020A	180-111451

Report Basis

R = Total Recoverable

T = Total

Quality Control Results

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Prep Batch: 180-110350					
HLCS 180-110350/2-A	High Level Control Sample	T	Water	9010C	
LCS 180-110350/3-A	Lab Control Sample	T	Water	9010C	
LLCS 180-110350/1-A	Low Level Control Sample	T	Water	9010C	
MB 180-110350/4-A	Method Blank	T	Water	9010C	
180-34298-2	062514-DP	T	Water	9010C	
180-34298-3	TS04-PDM004	T	Water	9010C	
180-34298-4	RW20-PZP000	T	Water	9010C	
180-34298-5	RW20-PZM020	T	Water	9010C	
Analysis Batch:180-110390					
HLCS 180-110350/2-A	High Level Control Sample	T	Water	9014	180-110350
LCS 180-110350/3-A	Lab Control Sample	T	Water	9014	180-110350
LLCS 180-110350/1-A	Low Level Control Sample	T	Water	9014	180-110350
MB 180-110350/4-A	Method Blank	T	Water	9014	180-110350
180-34298-2	062514-DP	T	Water	9014	180-110350
180-34298-3	TS04-PDM004	T	Water	9014	180-110350
180-34298-4	RW20-PZP000	T	Water	9014	180-110350
180-34298-5	RW20-PZM020	T	Water	9014	180-110350

Report Basis

T = Total

Quality Control Results

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Laboratory Chronicle

Lab ID: 180-34298-1

Client ID: 062514-TB

Sample Date/Time: 06/25/2014 08:15

Received Date/Time: 06/26/2014 08:20

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	180-34298-G-1		180-110534		07/07/2014 03:45	1	TAL PIT	MAZ
A:8260C	180-34298-G-1		180-110534		07/07/2014 03:45	1	TAL PIT	MAZ

Lab ID: 180-34298-2

Client ID: 062514-DP

Sample Date/Time: 06/25/2014 00:00

Received Date/Time: 06/26/2014 08:20

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	180-34298-G-2		180-110534		07/07/2014 05:34	1	TAL PIT	MAZ
A:8260C	180-34298-G-2		180-110534		07/07/2014 05:34	1	TAL PIT	MAZ
P:3520C	180-34298-A-2-A		180-110717	180-110164	07/01/2014 10:47	1	TAL PIT	BJT
A:8270D LL	180-34298-A-2-A		180-110717	180-110164	07/08/2014 19:43	1	TAL PIT	VVP
P:3005A	180-34298-C-2-B ^5		180-111800	180-111451	07/15/2014 07:53	5	TAL PIT	JWS
A:6020A	180-34298-C-2-B ^5		180-111800	180-111451	07/16/2014 21:05	5	TAL PIT	WTR
P:7470A	180-34298-C-2-A		180-111238	180-111203	07/11/2014 11:47	1	TAL PIT	LEM
A:7470A	180-34298-C-2-A		180-111238	180-111203	07/11/2014 14:54	1	TAL PIT	LEM
P:9010C	180-34298-D-2-A		180-110390	180-110350	07/02/2014 13:40	1	TAL PIT	PGJ
A:9014	180-34298-D-2-A		180-110390	180-110350	07/03/2014 03:46	1	TAL PIT	PGJ

Lab ID: 180-34298-2 SD

Client ID: 062514-DP

Sample Date/Time: 06/25/2014 00:00

Received Date/Time: 06/26/2014 08:20

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	180-34298-C-2-B SD ^25		180-111800	180-111451	07/15/2014 07:53	25	TAL PIT	JWS
A:6020A	180-34298-C-2-B SD ^25		180-111800	180-111451	07/16/2014 21:08	25	TAL PIT	WTR

Lab ID: 180-34298-3

Client ID: TS04-PDM004

Sample Date/Time: 06/25/2014 13:40

Received Date/Time: 06/26/2014 08:20

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	180-34298-G-3		180-110534		07/07/2014 06:01	1	TAL PIT	MAZ
A:8260C	180-34298-G-3		180-110534		07/07/2014 06:01	1	TAL PIT	MAZ
P:3520C	180-34298-A-3-A		180-110717	180-110164	07/01/2014 10:47	1	TAL PIT	BJT
A:8270D LL	180-34298-A-3-A		180-110717	180-110164	07/08/2014 20:12	1	TAL PIT	VVP
P:3005A	180-34298-C-3-B ^5		180-111800	180-111451	07/15/2014 07:53	5	TAL PIT	JWS
A:6020A	180-34298-C-3-B ^5		180-111800	180-111451	07/16/2014 21:29	5	TAL PIT	WTR
P:7470A	180-34298-C-3-A		180-111238	180-111203	07/11/2014 11:47	1	TAL PIT	LEM
A:7470A	180-34298-C-3-A		180-111238	180-111203	07/11/2014 14:56	1	TAL PIT	LEM
P:9010C	180-34298-D-3-A		180-110390	180-110350	07/02/2014 13:40	1	TAL PIT	PGJ
A:9014	180-34298-D-3-A		180-110390	180-110350	07/03/2014 03:46	1	TAL PIT	PGJ

Quality Control Results

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Laboratory Chronicle

Lab ID: 180-34298-4

Client ID: RW20-PZP000

Sample Date/Time: 06/25/2014 12:50

Received Date/Time: 06/26/2014 08:20

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	180-34298-G-4		180-110534		07/07/2014 06:28	1	TAL PIT	MAZ
A:8260C	180-34298-G-4		180-110534		07/07/2014 06:28	1	TAL PIT	MAZ
P:3520C	180-34298-A-4-A		180-110717	180-110164	07/01/2014 10:47	1	TAL PIT	BJT
A:8270D LL	180-34298-A-4-A		180-110717	180-110164	07/08/2014 20:40	1	TAL PIT	VVP
P:3005A	180-34298-C-4-B ^5		180-111800	180-111451	07/15/2014 07:53	5	TAL PIT	JWS
A:6020A	180-34298-C-4-B ^5		180-111800	180-111451	07/16/2014 21:33	5	TAL PIT	WTR
P:7470A	180-34298-C-4-A		180-111238	180-111203	07/11/2014 11:47	1	TAL PIT	LEM
A:7470A	180-34298-C-4-A		180-111238	180-111203	07/11/2014 14:58	1	TAL PIT	LEM
P:9010C	180-34298-D-4-A		180-110390	180-110350	07/02/2014 13:40	1	TAL PIT	PGJ
A:9014	180-34298-D-4-A		180-110390	180-110350	07/03/2014 03:46	1	TAL PIT	PGJ

Lab ID: 180-34298-5

Client ID: RW20-PZM020

Sample Date/Time: 06/25/2014 10:05

Received Date/Time: 06/26/2014 08:20

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	180-34298-A-5		180-110534		07/07/2014 06:55	1	TAL PIT	MAZ
A:8260C	180-34298-A-5		180-110534		07/07/2014 06:55	1	TAL PIT	MAZ
P:3520C	180-34298-C-5-A		180-110717	180-110164	07/01/2014 10:47	1	TAL PIT	BJT
A:8270D LL	180-34298-C-5-A		180-110717	180-110164	07/08/2014 21:08	1	TAL PIT	VVP
P:3005A	180-34298-E-5-B ^5		180-111800	180-111451	07/15/2014 07:53	5	TAL PIT	JWS
A:6020A	180-34298-E-5-B ^5		180-111800	180-111451	07/16/2014 21:37	5	TAL PIT	WTR
P:7470A	180-34298-E-5-A		180-111238	180-111203	07/11/2014 11:47	1	TAL PIT	LEM
A:7470A	180-34298-E-5-A		180-111238	180-111203	07/11/2014 15:00	1	TAL PIT	LEM
P:9010C	180-34298-F-5-A		180-110390	180-110350	07/02/2014 13:40	1	TAL PIT	PGJ
A:9014	180-34298-F-5-A		180-110390	180-110350	07/03/2014 03:46	1	TAL PIT	PGJ

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:3520C	MB 180-110164/1-A		180-110612	180-110164	07/01/2014 10:46	1	TAL PIT	BJT
A:8270D LL	MB 180-110164/1-A		180-110612	180-110164	07/07/2014 12:30	1	TAL PIT	VVP
P:3005A	MB 180-111451/1-A		180-111800	180-111451	07/15/2014 07:53	1	TAL PIT	JWS
A:6020A	MB 180-111451/1-A		180-111800	180-111451	07/16/2014 19:41	1	TAL PIT	WTR
P:7470A	MB 180-111203/1-A		180-111238	180-111203	07/11/2014 11:47	1	TAL PIT	LEM
A:7470A	MB 180-111203/1-A		180-111238	180-111203	07/11/2014 14:12	1	TAL PIT	LEM
P:9010C	MB 180-110350/4-A		180-110390	180-110350	07/02/2014 13:40	1	TAL PIT	PGJ
A:9014	MB 180-110350/4-A		180-110390	180-110350	07/03/2014 03:32	1	TAL PIT	PGJ

Quality Control Results

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Laboratory Chronicle

Lab ID: LCS

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P: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:3520C	LCS 180-110164/2-A		180-110612	180-110164	07/01/2014 10:46	1	TAL PIT	BJT
A:8270D LL	LCS 180-110164/2-A		180-110612	180-110164	07/07/2014 14:23	1	TAL PIT	VVP
P:3005A	LCS 180-111451/2-A		180-111800	180-111451	07/15/2014 07:53	1	TAL PIT	JWS
A:6020A	LCS 180-111451/2-A		180-111800	180-111451	07/16/2014 19:45	1	TAL PIT	WTR
P:7470A	LCS 180-111203/2-A		180-111238	180-111203	07/11/2014 11:47	1	TAL PIT	LEM
A:7470A	LCS 180-111203/2-A		180-111238	180-111203	07/11/2014 14:14	1	TAL PIT	LEM
P:9010C	LCS 180-110350/3-A		180-110390	180-110350	07/02/2014 13:40	1	TAL PIT	PGJ
A:9014	LCS 180-110350/3-A		180-110390	180-110350	07/03/2014 03:32	1	TAL PIT	PGJ

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:3520C	LCSD 180-110164/3-A		180-110612	180-110164	07/01/2014 10:46	1	TAL PIT	BJT
A:8270D LL	LCSD 180-110164/3-A		180-110612	180-110164	07/07/2014 14:52	1	TAL PIT	VVP
P:3005A	LCSD 180-111451/3-A		180-111800	180-111451	07/15/2014 07:53	1	TAL PIT	JWS
A:6020A	LCSD 180-111451/3-A		180-111800	180-111451	07/16/2014 19:49	1	TAL PIT	WTR

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 180-110350/1-A		180-110390	180-110350	07/02/2014 13:40	1	TAL PIT	PGJ
A:9014	LLCS 180-110350/1-A		180-110390	180-110350	07/03/2014 03:31	1	TAL PIT	PGJ

Quality Control Results

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Laboratory Chronicle

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 180-110350/2-A		180-110390	180-110350	07/02/2014 13:40	1	TAL PIT	PGJ
A:9014	HLCS 180-110350/2-A		180-110390	180-110350	07/03/2014 03:31	1	TAL PIT	PGJ

Lab References:

TAL PIT = TestAmerica Pittsburgh

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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							
.MCALSPECAREV_00005	05/01/15		Inorganic Ventures, Lot F2-MEB524026		MCALSPECB 00007	10 mL	Zinc	0.1 ppm							
							Antimony	0.1 ppm							
							(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							
.MCALSPECB 00007	05/01/15		Inorganic Ventures, Lot F2-MEB524027				Silver	5 ppm							
							Thallium	5 ppm							
							Zinc	5 ppm							
							(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														
.MMSCRI-1B_00003	10/01/14		Inorganic Ventures, Lot G2-MEB496135		MMSCRI-2_00005	1 mL	Zinc	0.005 ppm							
							Antimony	0.002 ppm							
							(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														

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MMSCRI-2_00005	10/01/14		Inorganic Ventures, Lot F2-MEB439153			(Purchased Reagent)	Zinc Antimony	1.25 ppm 0.5 ppm
MHgworkingCal_00840	07/11/14	07/10/14	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_00821	07/11/14	07/10/14	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_00056	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
					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		
					MMSICSAB-1_00007	0.2 mL	Zinc	0.025 ppm
							Ba	0.02 ppm
							Beryllium	0.02 ppm
							Lead	0.02 ppm
							Sr	0.025 ppm
MMSICSAB-2_00006	0.2 mL	Thallium	0.02 ppm					
		V	0.02 ppm					
		Antimony	0.02 ppm					
		B	0.05 ppm					
		Selenium	0.05 ppm					
		Si	0.5 ppm					
.M6020ICS-0A_00004	09/01/14		Inorganic Ventures, Lot G2-MEB476152			(Purchased Reagent)	Sn	0.1 ppm
							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.: 180-34298-1

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							
.MMSICSAB-2_00006	05/01/15		Inorganic Ventures, Lot G2-MEB467043		(Purchased Reagent)		V	10 ppm							
							Antimony	10 ppm							
							B	25 ppm							
							Selenium	25 ppm							
							Si	250 ppm							
MICSAX_00051	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							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

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_00033	07/01/14	06/01/14	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_00034	07/01/14	06/01/14	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

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
MTAPITMSA_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
MTAPITMSC_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.: 180-34298-1

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.: 180-34298-1

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.: 180-34298-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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_00018	11/23/14	05/23/14	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.: 180-34298-1

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.: 180-34298-1

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
.SVTAPITINRni_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.: 180-34298-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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.: 180-34298-1

SDG No.: _____

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

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SDG No.:

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

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Lab Name: TestAmerica Pittsburgh

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SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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.: 180-34298-1

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.: 180-34298-1

SDG No.: _____

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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.: 180-34298-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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	SVLVstdl_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.: 180-34298-1

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
							Benzydine	40 ug/mL
					SVLVstd3_00005	800 uL	Benzoic acid	80 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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
..SVLVstd1_00017	01/30/15		Restek, Lot A094002		(Purchased Reagent)		Terphenyl-d14 (Surr)	40 ug/mL
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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
..SVLVstd3_00005	02/28/16		Restek, Lot A093441		(Purchased Reagent)		Benzidine	2000 ug/mL
..SVLVstd5_00007	02/28/15		Restek, Lot A093442		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
							2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							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.: 180-34298-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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.: 180-34298-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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.: 180-34298-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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.: 180-34298-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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.: 180-34298-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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.: 180-34298-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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.: 180-34298-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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.: 180-34298-1

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.: 180-34298-1

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				2-Naphthylamine	1000 ug/mL
..SVLVlist12_00001	02/28/15		Restek, Lot A093658				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.: 180-34298-1

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)	Methyl methanesulfonate	1000 ug/mL
							1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine (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.: 180-34298-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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.: 180-34298-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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.: 180-34298-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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.: 180-34298-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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
							Benzydine	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.: 180-34298-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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
.SVTAPITINRni_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.: 180-34298-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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					

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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)	7,12-Dimethylbenz (a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
							1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine (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.: 180-34298-1

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.: 180-34298-1

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
					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							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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
							Benidine	40 ug/mL
							Caprolactam	40 ug/mL
							Benzoic acid	80 ug/mL
							Indene	40 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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.: 180-34298-1

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.: 180-34298-1

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.: 180-34298-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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-2c1evePRI_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.: 180-34298-1

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.: 180-34298-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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.: 180-34298-1

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	VOAACRES2ND_00043	0.125 mL	Acrolein	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration						
					Reagent ID	Volume Added								
.VOAACRES2ND_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				
							VOALIST3STD1P_00005	0.125 mL	Pentachloroethane	25 ug/mL				
					Acetonitrile	250 ug/mL								
Ethanol	1250 ug/mL													
Isopropyl 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
.VOALIST3STD1P_00005							12/31/15		Restek, Lot A099930			(Purchased Reagent)	Pentachloroethane	2000 ug/mL
	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.: 180-34298-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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.: 180-34298-1

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-Trichloropropene	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-Dichloropropene	200 ug/mL
							1,3,5-Trimethylbenzene	200 ug/mL
							1,3-Dichlorobenzene	200 ug/mL
							1,3-Dichloropropene	200 ug/mL
							1,4-Dichlorobenzene	200 ug/mL
							1,4-Dioxane	4000 ug/mL
							2,2-Dichloropropene	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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.: 180-34298-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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
WCNO.1CCV_00267	07/05/14	06/30/14	NaOH, Lot 4402720	100 mL	WCN10Pi_00435	1 mL	Cyanide, Total	0.1 mg/L
.WCN10Pi_00435	07/05/14	06/30/14	Sodium Hydroxide, 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
WCNO.2ICV_00265	07/05/14	06/30/14	NaOH, Lot 4402720	100 mL	WCN10Si_00440	2 mL	Cyanide, Total	0.2 mg/L
.WCN10Si_00440	07/05/14	06/30/14	Sodium Hydroxide, 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
WCNO.5L1_00433	07/05/14	06/30/14	Sodium Hydroxide, Lot 4402720	100 mL	WCN10Pi_00435	5 mL	Cyanide, Total	0.5 mg/L
.WCN10Pi_00435	07/05/14	06/30/14	Sodium Hydroxide, 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_00435	07/05/14	06/30/14	Sodium Hydroxide, 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_00440	07/05/14	06/30/14	Sodium Hydroxide, 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

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."



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, Cr ₃	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 $k = 2$.

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

(\bar{x}) = mean

x_i = individual results

n = number of measurements

$$\text{Uncertainty } (\pm) = 2 \left[\sum (s_i)^2 \right]^{1/2}$$

2 = the coverage factor.

$\left[\sum (s_i)^2 \right]^{1/2}$ = 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.

- 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 $k = 2$.

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

(\bar{x}) = mean

x_i = individual results

n = number of measurements

$$\text{Uncertainty } (\pm) = 2 \left[\sum (s_i)^2 \right]^{1/2}$$

2 = the coverage factor.

$\left[\sum (s_i)^2 \right]^{1/2}$ = 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.

- 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 $\mu\text{g/mL}$ - 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 $20 \pm 4^\circ\text{C}$. 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.

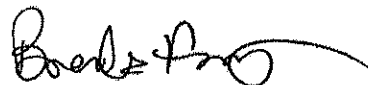
Certification Date: April 04, 2014

Expiration Date:

EXPIRES
01st 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



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."



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.

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

(\bar{x}) = mean

x_i = individual results

n = number of measurements

$$\text{Uncertainty } (\pm) = 2 \left[\sum (s_i)^2 \right]^{1/2}$$

2 = the coverage factor.

$\left[\sum (s_i)^2 \right]^{1/2}$ = 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.

· 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.

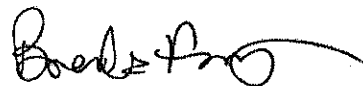
11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: April 04, 2014

Expiration Date: **EXPIRES**
01/2015

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



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."



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.

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

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

$$\text{Uncertainty } (\pm) = 2 \left[\sum (s_i)^2 \right]^{1/2}$$

2 = the coverage factor.
 $\left[\sum (s_i)^2 \right]^{1/2}$ = 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.

Q	Al	0.000049	M	Dy	< 0.012339	Q	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	Q	Mg	0.000589	M	Rh	< 0.002056	Q	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	Q	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
Q	Cd	< 0.004600	M	Hf	< 0.004113	Q	Ni	< 0.001000	M	Se	< 0.016451	M	W	< 0.020564
Q	Ca	0.002160	M	Ho	< 0.001028	M	Nb	< 0.001028	Q	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	Q	Pd	< 0.003800	Q	Na	0.000491	M	Yb	< 0.002056
M	Cr	< 0.010282	Q	Fe	< 0.001100	Q	P	< 0.002600	M	Sr	< 0.001028	M	Y	< 0.062257
M	Co	< 0.006169	M	La	< 0.001028	M	Pt	< 0.004113	Q	S	< 0.025000	M	Zn	< 0.041129
M	Cu	< 0.012339	M	Pb	< 0.006169	Q	K	< 0.002000	M	Ta	< 0.014395	M	Zr	< 0.010282

M - Checked by ICP-MS

Q - Checked by ICP-OES

i - Spectral Interference

n - Not Checked For

s - Solution Standard Element

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep tightly sealed when not in use. Store and use at $20 \pm 4^\circ\text{C}$. 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; $\text{Hg}(\text{OH})(\text{aq}) 1+$

Chemical Compatibility - Stable in HNO_3 . 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% HNO_3 / LDPE container, stable in 10% HNO_3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO_3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO_3 / LDPE container.

Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO_3); Oxide (Soluble in HNO_3); 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 $\mu\text{g}/\text{mL}$	1	atom	
ICP-OES 194.227 nm	0.03 / 0.005 $\mu\text{g}/\text{mL}$	1	ion	V
ICP-OES 253.652 nm	0.1 / 0.03 $\mu\text{g}/\text{mL}$	1	atom	Ta, <u>Co</u> , 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.

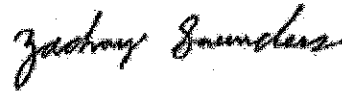
Certification Date: January 03, 2013

Expiration Date: **EXPIRES**

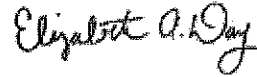
01/03/2015

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



1070831



Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material



Chemical Testing
Cert #2495.02

Catalog Number: ZCAL-60-250 **Lot No.** 4-283NY
Description: Custom Claritas Standard
Matrix: 5% HNO₃ / 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
Au	<0.9	Ga	2	Ir	<0.3	Pd	<4	Sc	<10
Bi	<3	Gd	<0.2	La	2	Pr	0.04	Sm	<0.5
Ce	1	Ge	<5	Li	<2	Pt	<1	Ta	7
Cs	<0.4	Hf	<0.7	Lu	<0.04	Rb	30	Tb	<0.07
Dy	<0.2	Hg	<0.7	Nb	20	Re	<0.3	Te	<1
Er	<0.2	Ho	<0.07	Nd	<0.4	Rh	<2	Th	0.3
Eu	<0.1	In	<0.7	P	<500	Ru	<1	Tm	<0.01
								U	0.2
								W	<0.7
								Y	0.7
								Yb	<0.01
								Zr	20

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: [Signature]

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



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
EJR*

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, Cr ₃	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 $k = 2$.

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

(\bar{x}) = mean

x_i = individual results

n = number of measurements

$$\text{Uncertainty } (\pm) = 2 \left[\sum (s_i)^2 \right]^{1/2}$$

2 = the coverage factor.

$\left[\sum (s_i)^2 \right]^{1/2}$ = 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.

- 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 $20 \pm 4^\circ\text{C}$. **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 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



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."



2.0 **DESCRIPTION OF CRM** **Custom Solution**
 Catalog No.: TAPITT-MSCRI-2
 Lot Number: F2-MEB439153
 Matrix: 3% HNO₃(v/v), tr. HF

Rec'd 10/11/13
LSR

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.

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

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

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

2 = the coverage factor.
 $[\sum (s_i)^2]^{1/2}$ = 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.
- 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.

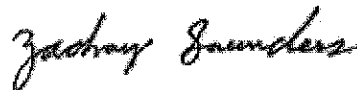
11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: September 14, 2012

Expiration Date: **EXPIRES**
01/30/2014

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



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."



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.

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

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

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

2 = the coverage factor.
 $[\sum (s_i)^2]^{1/2}$ = 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.
- 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 $20 \pm 4^\circ\text{C}$. **Do Not** pipette from the container. **Do Not** return portions removed from pipetting to container.

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

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

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

9.0 HOMOGENEITY - This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Inorganic Ventures homogeneity data indicate that the end user should take a minimum sample size of 0.2mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration"

- Chemical Testing - Accredited A2LA Certificate Number 883.01

10.3 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Materials Production - Accredited A2LA Certificate Number 883.02

10.4 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.5 10CFR21 - Nuclear Regulatory Commission

- Reporting Defects and Non-Compliance

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

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

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

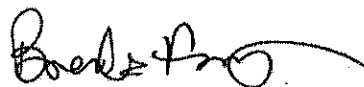
11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: April 04, 2014

Expiration Date: **EXPIRES**
01/3/2015

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



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."



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.

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

(\bar{x}) = mean

x_i = individual results

n = number of measurements

$$\text{Uncertainty } (\pm) = 2 \left[\sum (s_i)^2 \right]^{1/2}$$

2 = the coverage factor.

$\left[\sum (s_i)^2 \right]^{1/2}$ = 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.

The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a NIST SRM/CRM. 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**
01/2015

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



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."



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, Cr ₃	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 $k = 2$.

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

(\bar{x}) = mean

x_i = individual results

n = number of measurements

$$\text{Uncertainty } (\pm) = 2 \left[\sum (s_i)^2 \right]^{1/2}$$

2 = the coverage factor.

$\left[\sum (s_i)^2 \right]^{1/2}$ = 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.
- 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 ON 11/8/2014

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 $20 \pm 4^\circ\text{C}$. **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: December 04, 2013

Expiration Date: EXPIRES

01/2015

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

21741



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

www.restek.com

700936
700935



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.

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

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

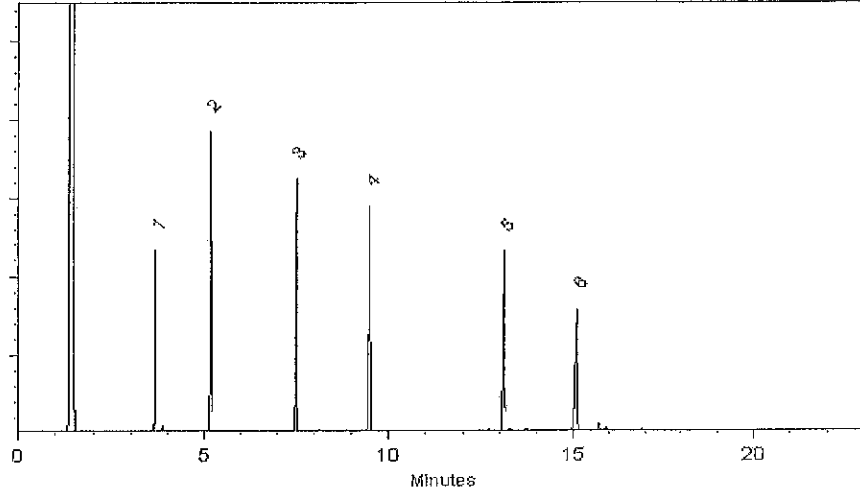
250°C

Det. Temp:

330°C

Det. Type:

FID



Jodi E. Breon
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



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

www.restek.com

CF#
 258013-16
 787907-921



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.

SVL/STD/SEC

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

CERTIFIED VALUES

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

10	1,2-Dichlorobenzene	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	$\mu\text{g/mL}$	+/-	5.8141	$\mu\text{g/mL}$	Gravimetric
	CAS # 106-47-8.SEC				8.7957		Unstressed
	Purity 99%				17.3886		Stressed
30	Hexachlorobutadiene	1,000.0	$\mu\text{g/mL}$	+/-	5.8139	$\mu\text{g/mL}$	Gravimetric
	CAS # 87-68-3.SEC				8.7954		Unstressed
	Purity 97%				17.3881		Stressed
31	2-Methylnaphthalene	1,000.0	$\mu\text{g/mL}$	+/-	5.8141	$\mu\text{g/mL}$	Gravimetric
	CAS # 91-57-6.SEC				8.7957		Unstressed
	Purity 99%				17.3886		Stressed
32	4-Chloro-3-methylphenol	1,000.0	$\mu\text{g/mL}$	+/-	5.8141	$\mu\text{g/mL}$	Gravimetric
	CAS # 59-50-7.SEC				8.7957		Unstressed
	Purity 99%				17.3886		Stressed
33	1-Methylnaphthalene	1,000.0	$\mu\text{g/mL}$	+/-	5.8141	$\mu\text{g/mL}$	Gravimetric
	CAS # 90-12-0.SEC				8.7957		Unstressed
	Purity 99%				17.3886		Stressed
34	1,2,4,5-Tetrachlorobenzene	1,000.0	$\mu\text{g/mL}$	+/-	5.8141	$\mu\text{g/mL}$	Gravimetric
	CAS # 95-94-3.SEC				8.7957		Unstressed
	Purity 99%				17.3886		Stressed
35	Hexachlorocyclopentadiene	1,000.0	$\mu\text{g/mL}$	+/-	5.8140	$\mu\text{g/mL}$	Gravimetric
	CAS # 77-47-4.SEC				8.7956		Unstressed
	Purity 98%				17.3885		Stressed
36	2,4,6-Trichlorophenol	1,000.0	$\mu\text{g/mL}$	+/-	5.8140	$\mu\text{g/mL}$	Gravimetric
	CAS # 88-06-2.SEC				8.7956		Unstressed
	Purity 98%				17.3885		Stressed
37	2,4,5-Trichlorophenol	1,000.0	$\mu\text{g/mL}$	+/-	5.8141	$\mu\text{g/mL}$	Gravimetric
	CAS # 95-95-4.SEC				8.7957		Unstressed
	Purity 99%				17.3886		Stressed
38	2-Chloronaphthalene	1,000.0	$\mu\text{g/mL}$	+/-	5.8141	$\mu\text{g/mL}$	Gravimetric
	CAS # 91-58-7.SEC				8.7957		Unstressed
	Purity 99%				17.3886		Stressed
39	Biphenyl	1,000.0	$\mu\text{g/mL}$	+/-	5.8141	$\mu\text{g/mL}$	Gravimetric
	CAS # 92-52-4.SEC				8.7957		Unstressed
	Purity 99%				17.3886		Stressed
40	2-Nitroaniline	1,000.0	$\mu\text{g/mL}$	+/-	5.8141	$\mu\text{g/mL}$	Gravimetric
	CAS # 88-74-4.SEC				8.7957		Unstressed
	Purity 99%				17.3886		Stressed
41	Acenaphthylene	1,000.0	$\mu\text{g/mL}$	+/-	5.8139	$\mu\text{g/mL}$	Gravimetric
	CAS # 208-96-8.SEC				8.7954		Unstressed
	Purity 97%				17.3881		Stressed
42	1,3-Dinitrobenzene	1,000.0	$\mu\text{g/mL}$	+/-	5.8141	$\mu\text{g/mL}$	Gravimetric
	CAS # 99-65-0.SEC				8.7957		Unstressed
	Purity 99%				17.3886		Stressed
43	Dimethylphthalate	1,000.0	$\mu\text{g/mL}$	+/-	5.8141	$\mu\text{g/mL}$	Gravimetric
	CAS # 131-11-3.SEC				8.7957		Unstressed
	Purity 99%				17.3886		Stressed
44	2,6-Dinitrotoluene	1,000.0	$\mu\text{g/mL}$	+/-	5.8141	$\mu\text{g/mL}$	Gravimetric
	CAS # 606-20-2.SEC				8.7957		Unstressed
	Purity 99%				17.3886		Stressed
45	Acenaphthene	1,000.0	$\mu\text{g/mL}$	+/-	5.8141	$\mu\text{g/mL}$	Gravimetric
	CAS # 83-32-9.SEC				8.7957		Unstressed
	Purity 99%				17.3886		Stressed
46	3-Nitroaniline	1,000.0	$\mu\text{g/mL}$	+/-	5.8141	$\mu\text{g/mL}$	Gravimetric
	CAS # 99-09-2.SEC				8.7957		Unstressed
	Purity 99%				17.3886		Stressed
47	2,4-Dinitrophenol	2,000.0	$\mu\text{g/mL}$	+/-	11.6282	$\mu\text{g/mL}$	Gravimetric
	CAS # 51-28-5.SEC				17.5913		Unstressed
	Purity 99%				34.7772		Stressed

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

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

Specific Reference Material Notes:

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

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

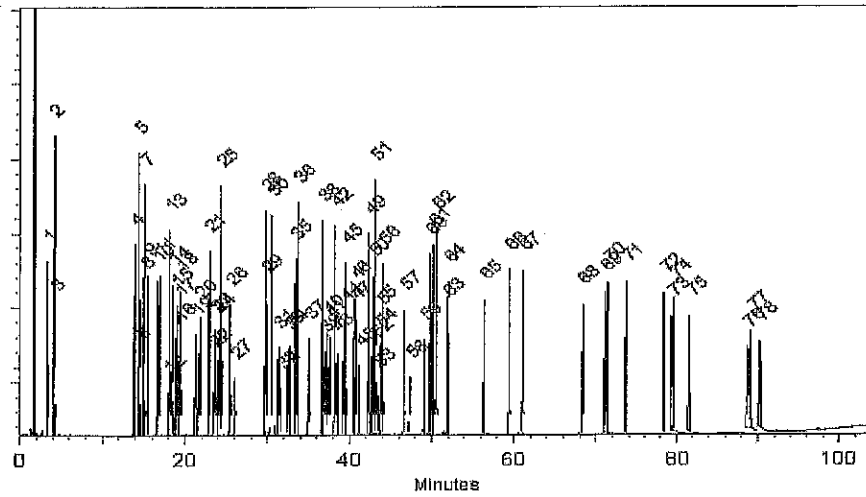
Carrier Gas:
hydrogen-constant pressure 10 psi

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
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



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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 CAS # 111-91-1 * Purity 99%	(Lot 317200)	1,000.0 µg/mL	+/- 5.8275 +/- 6.6877 +/- 16.4233	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	2,4-Dichlorophenol CAS # 120-83-2.SEC Purity 99%	(Lot FHM01)	1,000.5 µg/mL	+/- 5.8304 +/- 6.6911 +/- 16.4315	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	1,2,4-Trichlorobenzene CAS # 120-82-1.SEC Purity 99%	(Lot OGO01)	1,000.3 µg/mL	+/- 5.8295 +/- 6.6899 +/- 16.4288	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Naphthalene CAS # 91-20-3.SEC Purity 99%	(Lot 4KW3H-OO)	1,000.0 µg/mL	+/- 5.8275 +/- 6.6877 +/- 16.4233	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	4-Chloroaniline CAS # 106-47-8.SEC Purity 99%	(Lot 10171860)	1,001.0 µg/mL	+/- 5.8333 +/- 6.6944 +/- 16.4397	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	Hexachlorobutadiene CAS # 87-68-3.SEC Purity 97%	(Lot 2009400)	1,000.7 µg/mL	+/- 5.8317 +/- 6.6925 +/- 16.4351	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	2-Methylnaphthalene CAS # 91-57-6.SEC Purity 99%	(Lot 76023-1)	1,000.7 µg/mL	+/- 5.8314 +/- 6.6922 +/- 16.4343	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	4-Chloro-3-methylphenol CAS # 59-50-7.SEC Purity 99%	(Lot FDO02)	1,000.0 µg/mL	+/- 5.8275 +/- 6.6877 +/- 16.4233	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	1-Methylnaphthalene CAS # 90-12-0.SEC Purity 99%	(Lot UATSA)	1,000.7 µg/mL	+/- 5.8314 +/- 6.6922 +/- 16.4343	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	1,2,4,5-Tetrachlorobenzene CAS # 95-94-3.SEC Purity 99%	(Lot AF02)	1,001.2 µg/mL	+/- 5.8343 +/- 6.6955 +/- 16.4425	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Hexachlorocyclopentadiene CAS # 77-47-4.SEC Purity 99%	(Lot 0012013)	1,001.5 µg/mL	+/- 5.8363 +/- 6.6977 +/- 16.4480	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	2,4,6-Trichlorophenol CAS # 88-06-2.SEC Purity 98%	(Lot UUMYM)	1,003.0 µg/mL	+/- 5.8452 +/- 6.7080 +/- 16.4731	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	2,4,5-Trichlorophenol CAS # 95-95-4.SEC Purity 99%	(Lot MKBG3862V)	1,000.0 µg/mL	+/- 5.8275 +/- 6.6877 +/- 16.4233	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	2-Chloronaphthalene CAS # 91-58-7.SEC Purity 99%	(Lot LB89364V)	1,000.7 µg/mL	+/- 5.8314 +/- 6.6922 +/- 16.4343	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Biphenyl CAS # 92-52-4.SEC Purity 99%	(Lot 330QE)	1,001.2 µg/mL	+/- 5.8343 +/- 6.6955 +/- 16.4425	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
40	2-Nitroaniline CAS # 88-74-4.SEC Purity 99%	(Lot T6E7B)	1,000.3 µg/mL	+/- 5.8295 +/- 6.6899 +/- 16.4288	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

73	Benzo(b)fluoranthene CAS # 205-99-2.SEC Purity 97%	(Lot 012012)	1,000.4 µg/mL	+/- 5.8298 +/- 6.6903 +/- 16.4298	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
74	Benzo(k)fluoranthene CAS # 207-08-9.SEC Purity 99%	(Lot 022011)	1,000.7 µg/mL	+/- 5.8314 +/- 6.6922 +/- 16.4343	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
75	Benzo(a)pyrene CAS # 50-32-8.SEC Purity 99%	(Lot 2IGMD)	1,000.2 µg/mL	+/- 5.8285 +/- 6.6888 +/- 16.4261	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
76	Indeno(1,2,3-cd)pyrene CAS # 193-39-5.SEC Purity 99%	(Lot 012011)	1,001.3 µg/mL	+/- 5.8353 +/- 6.6966 +/- 16.4452	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
77	Dibenz(a,h)anthracene CAS # 53-70-3.SEC Purity 99%	(Lot 0012012)	1,000.5 µg/mL	+/- 5.8304 +/- 6.6911 +/- 16.4315	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
78	Benzo(g,h,i)perylene CAS # 191-24-2 * Purity 99%	(Lot ER020708-08)	1,001.5 µg/mL	+/- 5.8363 +/- 6.6977 +/- 16.4480	µg/mL µg/mL µg/mL	Gravimetric Unstressed 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)

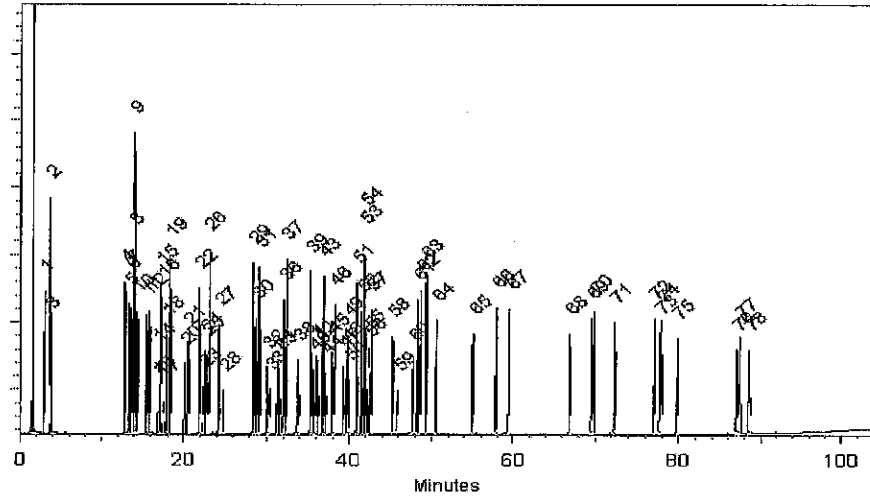
Carrier Gas:
hydrogen-constant pressure 10 psi

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 D. Maje

Date Mixed: 12-Nov-2013 **Balance:** 1128353505

Jennifer L. Pollino

Jennifer L. Pollino - QC Analyst

Date Passed: 20-Nov-2013

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

RESTEK CERTIFIED REFERENCE MATERIAL

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 Tel: (800)356-1688
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Certificate of Analysis



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567673 **Lot No.:** 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	2,001.2 µg/mL	+/-	11.6351	µg/mL	Gravimetric
	CAS # 105-60-2 (Lot 10000218)		+/-	13.3830	µg/mL	Unstressed
	Purity 99%		+/-	32.8662	µg/mL	Stressed
2	Atrazine	2,003.0 µg/mL	+/-	11.6457	µg/mL	Gravimetric
	CAS # 1912-24-9 (Lot TZ8ED)		+/-	13.3952	µg/mL	Unstressed
	Purity 98%		+/-	32.8961	µg/mL	Stressed
3	Benzidine	2,005.0 µg/mL	+/-	11.6572	µg/mL	Gravimetric
	CAS # 92-87-5 (Lot 130627JLM)		+/-	13.4085	µg/mL	Unstressed
	Purity 99%		+/-	32.9286	µg/mL	Stressed
4	3,3'-Dichlorobenzidine	2,012.0 µg/mL	+/-	11.6979	µg/mL	Gravimetric
	CAS # 91-94-1 (Lot 130701JLM)		+/-	13.4553	µg/mL	Unstressed
	Purity 99%		+/-	33.0436	µg/mL	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.

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	2,003.0 µg/mL	+/-	11.7547	µg/mL	Gravimetric
	CAS # 105-60-2.SEC (Lot BLJTB)		+/-	21.9884	µg/mL	Unstressed
	Purity 99%		+/-	37.2316	µg/mL	Stressed
2	Atrazine	2,004.0 µg/mL	+/-	11.7606	µg/mL	Gravimetric
	CAS # 1912-24-9.SEC (Lot 1132400)		+/-	21.9994	µg/mL	Unstressed
	Purity 99%		+/-	37.2502	µg/mL	Stressed
3	Benzidine	2,005.0 µg/mL	+/-	11.7665	µg/mL	Gravimetric
	CAS # 92-87-5.SEC (Lot 1301900)		+/-	22.0103	µg/mL	Unstressed
	Purity 99%		+/-	37.2688	µg/mL	Stressed
4	3,3'-Dichlorobenzidine	2,001.0 µg/mL	+/-	11.7430	µg/mL	Gravimetric
	CAS # 91-94-1.SEC (Lot 2010900)		+/-	21.9664	µg/mL	Unstressed
	Purity 99%		+/-	37.1944	µg/mL	Stressed

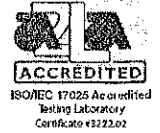
Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%



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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:

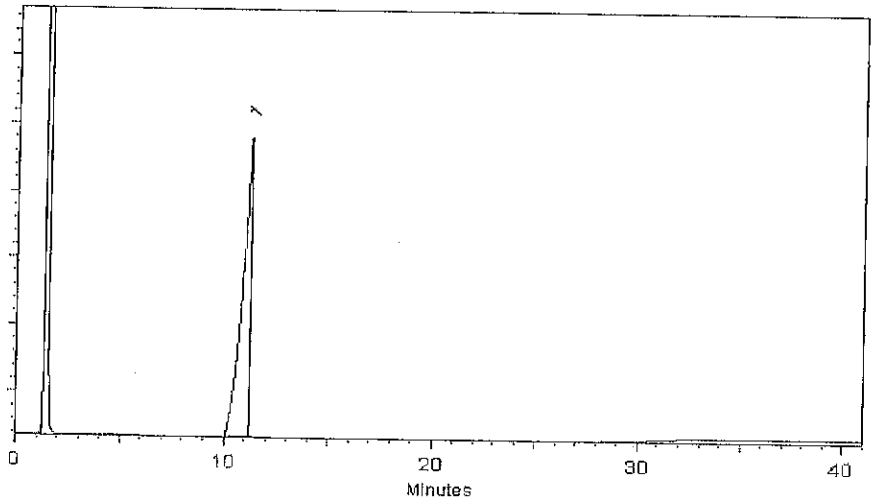
250°C

Det. Temp:

330°C

Det. Type:

FID



Jodi E. Breon
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



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SVLV A093668
 SEC
 070913



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. : 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:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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Certificate of Composition

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.
This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567677 Lot No.: A092457
 Description : SV LW Std 6
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%				



CERTIFIED REFERENCE MATERIAL

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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. : 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 CAS # 122-39-4.SEC (Lot 10164691) Purity 99%	1,696.0 µg/mL	+/- 9.9531 µg/mL Gravimetric +/- 18.6182 µg/mL Unstressed +/- 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.



CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis



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

Catalog No. : 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	2,004.0 µg/mL	+/-	11.7606	µg/mL	Gravimetric
	CAS # 100-52-7.SEC (Lot E7DWH)		+/-	64.2594	µg/mL	Unstressed
	Purity 99%		+/-	74.6931	µg/mL	Stressed
2	Indene	2,016.0 µg/mL	+/-	11.8310	µg/mL	Gravimetric
	CAS # 95-13-6.SEC (Lot IG5II)		+/-	64.6442	µg/mL	Unstressed
	Purity 99%		+/-	75.1403	µg/mL	Stressed
3	Benzoic acid	2,014.4 µg/mL	+/-	11.8214	µg/mL	Gravimetric
	CAS # 65-85-0.SEC (Lot QD3UO)		+/-	64.5918	µg/mL	Unstressed
	Purity 97%		+/-	75.0795	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.

S VLV SURR SAK

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.#110223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

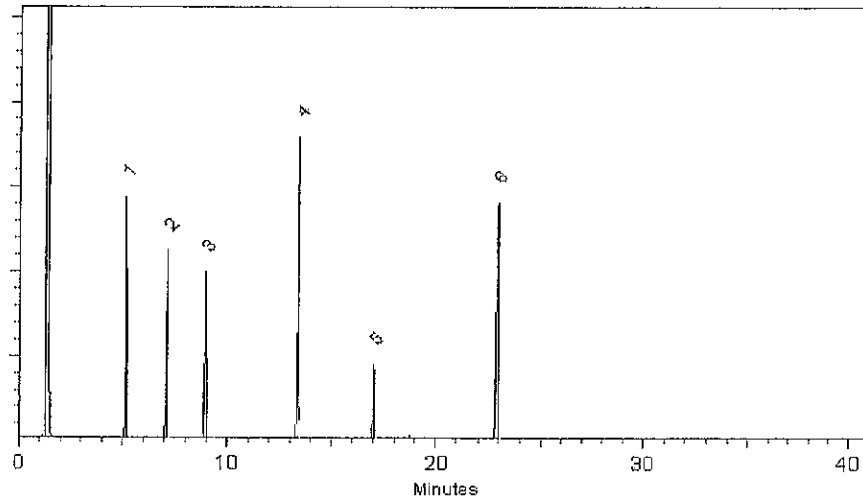
250°C

Det. Temp:

330°C

Det. Type:

FID



Diane Shaffer
Diane Shaffer - QA Analyst

Date Passed: 22-Feb-2013

Balance: 1128342313

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

SPEXertificate®

Certificate of Reference Material



Reference Materials Producer
CERT #2495.01
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:

<u>Compound</u>	<u>CAS #</u>	<u>Purity</u>	<u>Labeled</u>	<u>Actual†</u>
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: J. Mao



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Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

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

Catalog No. : 567645 **Lot No.:** A093341
Description : 8260 List 1 / Std #3 Gases
 8260 List 1 / Std #3 Gases 2,000 ug/ml, P&T Methanol, 1 ml/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : February 2015 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) CAS # 75-71-8 Purity 99%	2,000.0 µg/mL	+/-	13.8716	µg/mL Gravimetric
			+/-	25.2661	µg/mL Unstressed
			+/-	28.2336	µg/mL Stressed
2	Chloromethane (methyl chloride) CAS # 74-87-3 Purity 99%	1,999.8 µg/mL	+/-	13.9993	µg/mL Gravimetric
			+/-	25.3348	µg/mL Unstressed
			+/-	28.2945	µg/mL Stressed
3	Vinyl chloride CAS # 75-01-4 Purity 99%	2,000.1 µg/mL	+/-	13.9625	µg/mL Gravimetric
			+/-	25.3168	µg/mL Unstressed
			+/-	28.2792	µg/mL Stressed
4	1,3-Butadiene CAS # 106-99-0 Purity 99%	2,000.0 µg/mL	+/-	13.3773	µg/mL Gravimetric
			+/-	24.9981	µg/mL Unstressed
			+/-	27.9940	µg/mL Stressed
5	Bromomethane (methyl bromide) CAS # 74-83-9 Purity 99%	2,000.1 µg/mL	+/-	14.2856	µg/mL Gravimetric
			+/-	25.4963	µg/mL Unstressed
			+/-	28.4399	µg/mL Stressed
6	Chloroethane (ethyl chloride) CAS # 75-00-3 Purity 99%	2,000.0 µg/mL	+/-	13.2200	µg/mL Gravimetric
			+/-	24.9143	µg/mL Unstressed
			+/-	27.9191	µg/mL Stressed
7	Dichlorofluoromethane (CFC-21) CAS # 75-43-4 Purity 99%	2,000.0 µg/mL	+/-	13.5174	µg/mL Gravimetric
			+/-	25.0735	µg/mL Unstressed
			+/-	28.0614	µg/mL Stressed
8	Trichlorofluoromethane (CFC-11) CAS # 75-69-4 Purity 99%	1,999.9 µg/mL	+/-	13.1170	µg/mL Gravimetric
			+/-	24.8590	µg/mL Unstressed
			+/-	27.8696	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. : 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	µg/mL Gravimetric
			+/-	25.2661	µg/mL Unstressed
			+/-	28.2336	µg/mL Stressed
2	Chloromethane (methyl chloride) CAS # 74-87-3 Purity 99%	1,999.8 µg/mL	+/-	13.9993	µg/mL Gravimetric
			+/-	25.3348	µg/mL Unstressed
			+/-	28.2945	µg/mL Stressed
3	Vinyl chloride CAS # 75-01-4 Purity 99%	2,000.1 µg/mL	+/-	13.9625	µg/mL Gravimetric
			+/-	25.3168	µg/mL Unstressed
			+/-	28.2792	µg/mL Stressed
4	1,3-Butadiene CAS # 106-99-0 Purity 99%	2,000.0 µg/mL	+/-	13.3773	µg/mL Gravimetric
			+/-	24.9981	µg/mL Unstressed
			+/-	27.9940	µg/mL Stressed
5	Bromomethane (methyl bromide) CAS # 74-83-9 Purity 99%	2,000.1 µg/mL	+/-	14.2856	µg/mL Gravimetric
			+/-	25.4963	µg/mL Unstressed
			+/-	28.4399	µg/mL Stressed
6	Chloroethane (ethyl chloride) CAS # 75-00-3 Purity 99%	2,000.0 µg/mL	+/-	13.2200	µg/mL Gravimetric
			+/-	24.9143	µg/mL Unstressed
			+/-	27.9191	µg/mL Stressed
7	Dichlorofluoromethane (CFC-21) CAS # 75-43-4 Purity 99%	2,000.0 µg/mL	+/-	13.5174	µg/mL Gravimetric
			+/-	25.0735	µg/mL Unstressed
			+/-	28.0614	µg/mL Stressed
8	Trichlorofluoromethane (CFC-11) CAS # 75-69-4 Purity 99%	1,999.9 µg/mL	+/-	13.1170	µg/mL Gravimetric
			+/-	24.8590	µg/mL Unstressed
			+/-	27.8696	µg/mL Stressed

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



CERTIFIED REFERENCE MATERIAL

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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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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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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Catalog No. :	<u>567649</u>	Lot No.:	<u>A093504</u>
Description :	<u>8260 Internal Standard</u>		
	<u>8260 Internal Standard 250-5,000 ug/ml, P&T Methanol, 5 ml/ampul</u>		
Container Size :	<u>5 mL</u>	Pkg Amt:	<u>> 5 mL</u>
Expiration Date :	<u>February 2018</u>	Storage:	<u>0°C or colder</u>

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
			Value	Unit	Method	Notes
1	tert-Butyl-d9-alcohol CAS # 25725-11-5 Purity 99%	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric	
			+/- 110.6323	µg/mL	Unstressed	
			+/- 111.0833	µg/mL	Stressed	
2	Fluorobenzene CAS # 462-06-6 Purity 99%	250.0 µg/mL	+/- 1.4535	µg/mL	Gravimetric	
			+/- 5.5316	µg/mL	Unstressed	
			+/- 5.5542	µg/mL	Stressed	
3	1,4-Dioxane-d8 CAS # 17647-74-4 Purity 99%	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric	
			+/- 110.6323	µg/mL	Unstressed	
			+/- 111.0833	µg/mL	Stressed	
4	Chlorobenzene-d5 CAS # 3114-55-4 Purity 99%	250.0 µg/mL	+/- 1.4535	µg/mL	Gravimetric	
			+/- 5.5316	µg/mL	Unstressed	
			+/- 5.5542	µg/mL	Stressed	
5	1,4-Dichlorobenzene-d4 CAS # 3855-82-1 Purity 99%	250.0 µg/mL	+/- 1.4535	µg/mL	Gravimetric	
			+/- 5.5316	µg/mL	Unstressed	
			+/- 5.5542	µg/mL	Stressed	

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



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Catalog No. : 567642 **Lot No.:** A093365
Description : 8260 List 1 / Std #2 Ketones
8260 List 1 / Std #2 Ketones 10,000 ug/ml, P&T Methanol/Water (90:10), 1 ml/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : February 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Acetone	10,000.0 µg/mL	+/-	58.1378	µg/mL	Gravimetric
	CAS # 67-64-1		+/-	798.6896	µg/mL	Unstressed
	Purity 99%		+/-	799.0807	µg/mL	Stressed
2	2-Butanone (MEK)	10,000.0 µg/mL	+/-	58.1378	µg/mL	Gravimetric
	CAS # 78-93-3		+/-	798.6896	µg/mL	Unstressed
	Purity 99%		+/-	799.0807	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	10,000.0 µg/mL	+/-	58.1378	µg/mL	Gravimetric
	CAS # 108-10-1		+/-	798.6896	µg/mL	Unstressed
	Purity 99%		+/-	799.0807	µg/mL	Stressed
4	2-Hexanone	10,000.0 µg/mL	+/-	58.1378	µg/mL	Gravimetric
	CAS # 591-78-6		+/-	798.6896	µg/mL	Unstressed
	Purity 99%		+/-	799.0807	µg/mL	Stressed
Solvent:	P&T Methanol/Water (90:10)					
	CAS # 67-56-1/7732-18-5					
	Purity 99%					



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Catalog No. : 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)	2,000.0 µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 60-29-7		+/-	44.2531	µg/mL	Unstressed
	Purity 99%		+/-	44.4335	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	1,999.9 µg/mL	+/-	11.6279	µg/mL	Gravimetric
	CAS # 76-13-1		+/-	44.2519	µg/mL	Unstressed
	Purity 97%		+/-	44.4323	µg/mL	Stressed
3	1,1-dichloroethene	2,000.0 µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 75-35-4		+/-	44.2527	µg/mL	Unstressed
	Purity 98%		+/-	44.4331	µg/mL	Stressed
4	tert-Butanol (TBA)	20,000.0 µg/mL	+/-	116.2756	µg/mL	Gravimetric
	CAS # 75-65-0		+/-	442.5291	µg/mL	Unstressed
	Purity 99%		+/-	444.3332	µg/mL	Stressed
5	Iodomethane (methyl iodide)	2,000.0 µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 74-88-4		+/-	44.2531	µg/mL	Unstressed
	Purity 99%		+/-	44.4335	µg/mL	Stressed
6	Allyl chloride (3-chloropropene)	2,000.0 µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 107-05-1		+/-	44.2527	µg/mL	Unstressed
	Purity 98%		+/-	44.4331	µg/mL	Stressed
7	Methyl acetate	10,000.0 µg/mL	+/-	58.1378	µg/mL	Gravimetric
	CAS # 79-20-9		+/-	221.2646	µg/mL	Unstressed
	Purity 99%		+/-	222.1666	µg/mL	Stressed
8	Carbon disulfide	2,000.0 µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 75-15-0		+/-	44.2527	µg/mL	Unstressed
	Purity 98%		+/-	44.4331	µg/mL	Stressed
9	Methylene chloride (dichloromethane)	2,000.0 µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 75-09-2		+/-	44.2531	µg/mL	Unstressed
	Purity 99%		+/-	44.4335	µg/mL	Stressed

10	Acrylonitrile	20,000.0	µg/mL	+/-	116.2756	µg/mL	Gravimetric
	CAS # 107-13-1				442.5291		Unstressed
	Purity 99%				444.3332		Stressed
11	Methyl-tert-butyl ether (MTBE)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 1634-04-4				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
12	cis-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 156-59-2				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
13	n-Hexane (C6)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 110-54-3				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
14	1,1-Dichloroethane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 75-34-3				44.2527		Unstressed
	Purity 98%				44.4331		Stressed
15	2,2-Dichloropropane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 594-20-7				44.2527		Unstressed
	Purity 98%				44.4331		Stressed
16	trans-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 156-60-5				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
17	chloroform	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 67-66-3				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
18	Isobutanol (2-Methyl-1-propanol)	50,000.0	µg/mL	+/-	290.6891	µg/mL	Gravimetric
	CAS # 78-83-1				1,106.3228		Unstressed
	Purity 99%				1,110.8331		Stressed
19	Bromochloromethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 74-97-5				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
20	Tetrahydrofuran	4,000.0	µg/mL	+/-	23.2563	µg/mL	Gravimetric
	CAS # 109-99-9				88.5061		Unstressed
	Purity 99%				88.8670		Stressed
21	1,1,1-trichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-55-6				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
22	Cyclohexane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 110-82-7				44.2527		Unstressed
	Purity 98%				44.4331		Stressed
23	1,1-Dichloropropene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 563-58-6				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
24	carbon tetrachloride	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 56-23-5				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
25	n-Heptane (C7)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 142-82-5				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
26	Benzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-43-2				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
27	1,2-Dichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 107-06-2				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
28	Trichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-01-6				44.2531		Unstressed
	Purity 99%				44.4335		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		Unstressed
	Purity 99%				44.4335		Stressed
49	Styrene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 100-42-5				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
50	Isopropylbenzene (cumene)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 98-82-8				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
51	bromoform	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 75-25-2				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
52	1,1,1,2-Tetrachloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-34-5				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
53	1,2,3-Trichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 96-18-4				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
54	trans-1,4-dichloro-2-butene	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 110-57-6				44.2527		Unstressed
	Purity 98%				44.4331		Stressed
55	n-Propylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 103-65-1				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
56	Bromobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-86-1				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
57	1,3,5-Trimethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-67-8				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
58	2-Chlorotoluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-49-8				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
59	4-Chlorotoluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-43-4				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
60	tert-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 98-06-6				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
61	1,2,4-Trimethylbenzene	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 95-63-6				44.2527		Unstressed
	Purity 98%				44.4331		Stressed
62	sec-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 135-98-8				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
63	4-Isopropyltoluene (p-Cymene)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 99-87-6				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
64	1,3-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 541-73-1				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
65	1,4-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-46-7				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
66	n-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 104-51-8				44.2531		Unstressed
	Purity 99%				44.4335		Stressed

67	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3 Purity 97%	2,000.0 µg/mL	+/- 11.6284 +/- 44.2540 +/- 44.4344	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3 Purity 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
72	1,2,3-Trichlorobenzene CAS # 87-61-6 Purity 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
Solvent: P&T Methanol CAS # 67-56-1 Purity 99%					

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

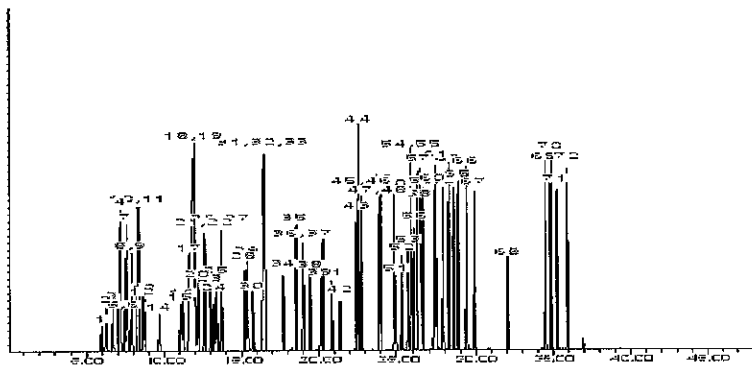
Carrier Gas:
helium-constant pressure 30 psi

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



Jennifer L. Pollino
Jennifer L. Pollino - QC Analyst

Date Passed: 01-Mar-2013

Balance: B251644995

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



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 Bellefonte, PA 16823-8812
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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. : 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	µg/mL	Gravimetric
			+/-	44.2531	µg/mL	Unstressed
			+/-	44.4335	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1 Purity 97%	1,999.9 µg/mL	+/-	11.6279	µg/mL	Gravimetric
			+/-	44.2519	µg/mL	Unstressed
			+/-	44.4323	µg/mL	Stressed
3	1,1-dichloroethene CAS # 75-35-4 Purity 98%	2,000.0 µg/mL	+/-	11.6281	µg/mL	Gravimetric
			+/-	44.2527	µg/mL	Unstressed
			+/-	44.4331	µg/mL	Stressed
4	tert-Butanol (TBA) CAS # 75-65-0 Purity 99%	20,000.0 µg/mL	+/-	116.2756	µg/mL	Gravimetric
			+/-	442.5291	µg/mL	Unstressed
			+/-	444.3332	µg/mL	Stressed
5	Iodomethane (methyl iodide) CAS # 74-88-4 Purity 99%	2,000.0 µg/mL	+/-	11.6282	µg/mL	Gravimetric
			+/-	44.2531	µg/mL	Unstressed
			+/-	44.4335	µg/mL	Stressed
6	Allyl chloride (3-chloropropene) CAS # 107-05-1 Purity 98%	2,000.0 µg/mL	+/-	11.6281	µg/mL	Gravimetric
			+/-	44.2527	µg/mL	Unstressed
			+/-	44.4331	µg/mL	Stressed
7	Methyl acetate CAS # 79-20-9 Purity 99%	10,000.0 µg/mL	+/-	58.1378	µg/mL	Gravimetric
			+/-	221.2646	µg/mL	Unstressed
			+/-	222.1666	µg/mL	Stressed
8	Carbon disulfide CAS # 75-15-0 Purity 98%	2,000.0 µg/mL	+/-	11.6281	µg/mL	Gravimetric
			+/-	44.2527	µg/mL	Unstressed
			+/-	44.4331	µg/mL	Stressed
9	Methylene chloride (dichloromethane) CAS # 75-09-2 Purity 99%	2,000.0 µg/mL	+/-	11.6282	µg/mL	Gravimetric
			+/-	44.2531	µg/mL	Unstressed
			+/-	44.4335	µg/mL	Stressed

10	Acrylonitrile	20,000.0	µg/mL	+/-	116.2756	µg/mL	Gravimetric
	CAS # 107-13-1				442.5291		Unstressed
	Purity 99%				444.3332		Stressed
11	Methyl-tert-butyl ether (MTBE)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 1634-04-4				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
12	cis-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 156-59-2				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
13	n-Hexane (C6)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 110-54-3				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
14	1,1-Dichloroethane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 75-34-3				44.2527		Unstressed
	Purity 98%				44.4331		Stressed
15	2,2-Dichloropropane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 594-20-7				44.2527		Unstressed
	Purity 98%				44.4331		Stressed
16	trans-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 156-60-5				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
17	chloroform	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 67-66-3				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
18	Isobutanol (2-Methyl-1-propanol)	50,000.0	µg/mL	+/-	290.6891	µg/mL	Gravimetric
	CAS # 78-83-1				1,106.3228		Unstressed
	Purity 99%				1,110.8331		Stressed
19	Bromochloromethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 74-97-5				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
20	Tetrahydrofuran	4,000.0	µg/mL	+/-	23.2563	µg/mL	Gravimetric
	CAS # 109-99-9				88.5061		Unstressed
	Purity 99%				88.8670		Stressed
21	1,1,1-trichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-55-6				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
22	Cyclohexane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 110-82-7				44.2527		Unstressed
	Purity 98%				44.4331		Stressed
23	1,1-Dichloropropene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 563-58-6				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
24	carbon tetrachloride	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 56-23-5				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
25	n-Heptane (C7)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 142-82-5				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
26	Benzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-43-2				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
27	1,2-Dichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 107-06-2				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
28	Trichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-01-6				44.2531		Unstressed
	Purity 99%				44.4335		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	1,1,1,2-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 CAS # 95-50-1 Purity 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3 Purity 97%	2,000.0 µg/mL	+/- 11.6284 +/- 44.2540 +/- 44.4344	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3 Purity 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
72	1,2,3-Trichlorobenzene CAS # 87-61-6 Purity 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
Solvent:	P&T Methanol CAS # 67-56-1 Purity 99%				

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

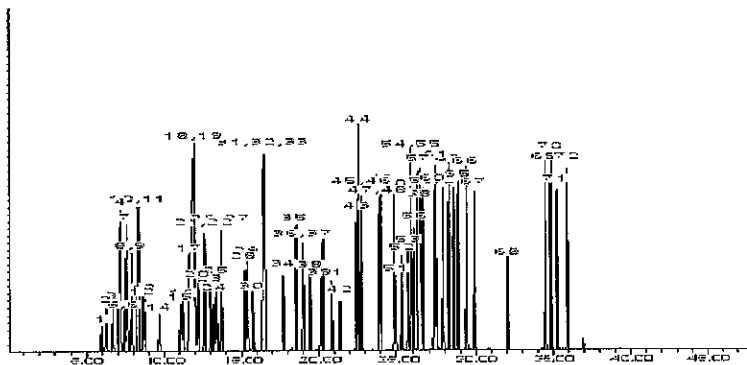
Carrier Gas:
helium-constant pressure 30 psi

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



Jennifer L. Pollino
Jennifer L. Pollino - QC Analyst

Date Passed: 01-Mar-2013

Balance: B251644995

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



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

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

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

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

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

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

Column:

60m x .25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:

helium-constant pressure 30 psi

Temp. Program:

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

Inj. Temp:

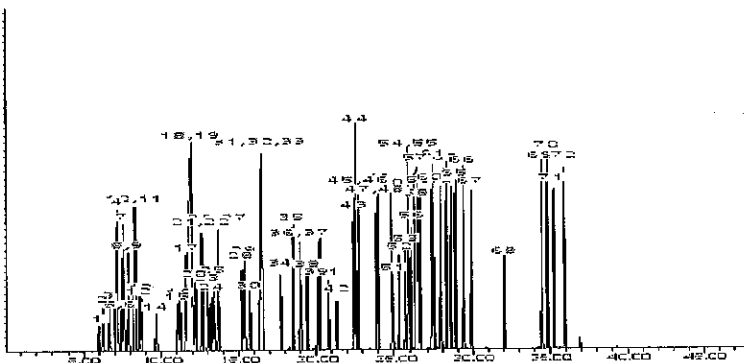
200°C

Det. Temp:

250°C

Det. Type:

MSD



Jennifer L. Pollino
Jennifer L. Pollino - QC Analyst

Date Passed: 01-Mar-2013

Balance: 1127510105

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



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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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. : 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%



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
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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. : 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 CAS # 108-05-4 Purity 99%	4,016.0 µg/mL (Lot 131011JLM)	+/- 23.5681	µg/mL	Gravimetric
			+/- 213.7467	µg/mL	Unstressed
			+/- 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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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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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 CAS # 107-02-8 Purity 99%	19,750.0 µg/mL (Lot 140205JLM)	+/- 115.6406 µg/mL Gravimetric +/- 633.2471 µg/mL Unstressed +/- 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 CAS # 107-02-8 Purity 99%	19,750.0 µg/mL (Lot 140429JLM)	+/- 115.6406	µg/mL	Gravimetric
			+/- 633.2471	µg/mL	Unstressed
			+/- 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 CAS # 110-75-8 Purity 99%	2,000.0 µg/mL	+/-	11.6282	µg/mL	Gravimetric
			+/-	44.2531	µg/mL	Unstressed
			+/-	44.4335	µg/mL	Stressed

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

Tech Tips:

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

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



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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 CAS # 110-75-8,SEC Purity 99%	2,000.0 µg/mL	+/-	11.6550	µg/mL	Gravimetric
			+/-	44.2601	µg/mL	Unstressed
			+/-	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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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. : 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)	20,007.0 µg/mL	+/-	117.1454	µg/mL	Gravimetric
	CAS # 67-63-0 (Lot SHBC5752V)		+/-	1,064.8186	µg/mL	Unstressed
	Purity 99%		+/-	1,065.9927	µg/mL	Stressed
2	Chloroprene (2-chloro-1,3-butadiene)	2,000.0 µg/mL	+/-	32.2441	µg/mL	Gravimetric
	CAS # 126-99-8 (Lot 130611JLM)		+/-	110.6029	µg/mL	Unstressed
	Purity 99%		+/-	110.7159	µg/mL	Stressed
3	Ethyl acetate	4,002.0 µg/mL	+/-	23.4860	µg/mL	Gravimetric
	CAS # 141-78-6 (Lot SHBD3394V)		+/-	213.0015	µg/mL	Unstressed
	Purity 99%		+/-	213.2364	µg/mL	Stressed
4	Methacrylonitrile	20,000.5 µg/mL	+/-	117.1073	µg/mL	Gravimetric
	CAS # 126-98-7 (Lot 2194000)		+/-	1,064.4727	µg/mL	Unstressed
	Purity 99%		+/-	1,065.6464	µg/mL	Stressed
5	2,2,4-Trimethylpentane (isooctane)	2,004.5 µg/mL	+/-	11.7635	µg/mL	Gravimetric
	CAS # 540-84-1 (Lot SHBB2470V)		+/-	106.6871	µg/mL	Unstressed
	Purity 99%		+/-	106.8047	µg/mL	Stressed
6	1-Butanol	50,001.0 µg/mL	+/-	292.7518	µg/mL	Gravimetric
	CAS # 71-36-3 (Lot SHBC1840V)		+/-	2,661.1667	µg/mL	Unstressed
	Purity 99%		+/-	2,664.1010	µg/mL	Stressed
7	1,4-Difluorobenzene	2,006.5 µg/mL	+/-	11.7753	µg/mL	Gravimetric
	CAS # 540-36-3 (Lot 13105AO)		+/-	106.7935	µg/mL	Unstressed
	Purity 99%		+/-	106.9112	µg/mL	Stressed
8	Ethyl acrylate	2,005.5 µg/mL	+/-	11.7694	µg/mL	Gravimetric
	CAS # 140-88-5 (Lot 10129902)		+/-	106.7403	µg/mL	Unstressed
	Purity 99%		+/-	106.8580	µg/mL	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 BCBI4343V)			+/-	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 Ppd: PGJ Opm: 05/16/14
 Cyanide 1000 ppm Primary



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



performance through chemistry
 Jackson's Pointe Commerce Park - Building 1000
 1010 Jackson's Pointe Court, Zelienople, PA 16063
 Ph: 412-826-5230 | Fax: 724-473-0647 | www.labchem.com

CERTIFICATE OF ANALYSIS

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

Catalog Number: LC13545

Mfg Date: 04/29/2014

Lot Number: D111-14

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

An ISO9001:2008 certified company. Registration # 0306-01

05/13/2014 11:07:48 AM

Form #17.12 06/19/2012

Page 1 of 1



RIC

1195709
ID: WCN1000S_00014
Exp:09/30/14 Prpd:PGJ Opm:05/19/14
Cyanide 1000 ppm Secondary

EMIC

1195710
ID: WAvCN1000S_00014
Exp:09/30/14 Prpd:PGJ Opm:05/19/14
Available Cyanide 1000 pp

MPANY

Arlington, TX 76012
Pocomoke City, MD 21851
Batesville, IN 47006

http://www.riccachemical.com
1-888-GO-RICCA

customerservice@riccachemical.com

Certificate of Analysis

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

Lot Number: 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: 180-34298-1

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.: 180-34298-1

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 #
062514-TB	180-34298-1	93	100	98	101
062514-DP	180-34298-2	89	90	113	107
TS04-PDM004	180-34298-3	91	91	106	104
RW20-PZP000	180-34298-4	97	101	110	107
RW20-PZM020	180-34298-5	94	88	107	99
	MB 180-110534/10	90	88	100	94
	LCS 180-110534/7	95	95	92	113
	LCSD 180-110534/8	91	95	94	108

DBFM = Dibromofluoromethane (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

QC LIMITS
80-120
62-123
80-120
75-120

Column to be used to flag recovery values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 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
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

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	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 IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 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
062514-TB	180-34298-1	4070607.D	07/07/2014 03:45
	LCS 180-110534/7	4070608.D	07/07/2014 04:12
	LCSD 180-110534/8	4070609.D	07/07/2014 04:39
062514-DP	180-34298-2	4070611.D	07/07/2014 05:34
TS04-PDM004	180-34298-3	4070612.D	07/07/2014 06:01
RW20-PZP000	180-34298-4	4070613.D	07/07/2014 06:28
RW20-PZM020	180-34298-5	4070614.D	07/07/2014 06:55

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 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.: 180-34298-1
 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.: 180-34298-1
 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
062514-TB	180-34298-1	4070607.D	07/07/2014	03:45
	LCS 180-110534/7	4070608.D	07/07/2014	04:12
	LCSD 180-110534/8	4070609.D	07/07/2014	04:39
062514-DP	180-34298-2	4070611.D	07/07/2014	05:34
TS04-PDM004	180-34298-3	4070612.D	07/07/2014	06:01
RW20-PZP000	180-34298-4	4070613.D	07/07/2014	06:28
RW20-PZM020	180-34298-5	4070614.D	07/07/2014	06:55

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 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
180-34298-1	062514-TB	148207	4.75	1043136	7.68	246301	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
180-34298-2	062514-DP	156692	4.76	1198036	7.68	242333	10.77
180-34298-3	TS04-PDM004	148274	4.76	1117511	7.68	233030	10.77
180-34298-4	RW20-PZP000	141021	4.77	1064543	7.69	231322	10.77
180-34298-5	RW20-PZM020	148794	4.75	1187295	7.69	256310	10.77

Column used to flag values outside QC limits

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 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				
180-34298-1	062514-TB	278862	13.12				
LCS 180-110534/7		382161	13.09				
LCSD 180-110534/8		392514	13.09				
180-34298-2	062514-DP	323148	13.13				
180-34298-3	TS04-PDM004	301674	13.12				
180-34298-4	RW20-PZP000	290946	13.13				
180-34298-5	RW20-PZM020	289418	13.12				

Column used to flag values outside QC limits

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 SDG No.: _____
 Client Sample ID: 062514-TB Lab Sample ID: 180-34298-1
 Matrix: Water Lab File ID: 4070607.D
 Analysis Method: 8260C Date Collected: 06/25/2014 08:15
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 03:45
 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.: 180-34298-1
 SDG No.: _____
 Client Sample ID: 062514-TB Lab Sample ID: 180-34298-1
 Matrix: Water Lab File ID: 4070607.D
 Analysis Method: 8260C Date Collected: 06/25/2014 08:15
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 03:45
 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)	100		62-123
460-00-4	4-Bromofluorobenzene (Surr)	101		75-120
1868-53-7	Dibromofluoromethane (Surr)	93		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070607.D
 Lims ID: 180-34298-G-1 Lab Sample ID: 180-34298-1
 Client ID: 062514-TB
 Sample Type: Client
 Inject. Date: 07-Jul-2014 03:45:30 ALS Bottle#: 6 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-34298-G-1
 Misc. Info.: 180-0002060-006
 Operator ID: 430936 Instrument ID: CHHP4
 Method: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\MMSVOA_CHHP4.m
 Limit Group: VOA 8260C ICAL
 Last Update: 07-Jul-2014 03:13:32 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: XAWRK009

First Level Reviewer: zukowskim

Date: 07-Jul-2014 03:15:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.750	4.792	-0.042	93	148207	5000.0	
* 2 Fluorobenzene (IS)	96	7.681	7.674	0.007	99	1043136	250.0	
* 3 Chlorobenzene-d5	119	10.771	10.763	0.008	83	246301	250.0	M
* 4 1,4-Dichlorobenzene-d4	152	13.124	13.093	0.031	92	278862	250.0	
\$ 5 Dibromofluoromethane (Surr	113	6.939	6.932	0.007	60	295424	231.3	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	7.310	7.303	0.007	67	258902	250.2	
\$ 7 Toluene-d8 (Surr)	98	9.323	9.316	0.007	92	1366284	244.4	
\$ 8 4-Bromofluorobenzene (Surr	95	11.950	11.931	0.019	95	450031	252.5	
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

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

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070607.D

Injection Date: 07-Jul-2014 03:45:30

Instrument ID: CHHP4

Operator ID: 430936

Lims ID: 180-34298-G-1

Lab Sample ID: 180-34298-1

Worklist Smp#: 6

Client ID: 062514-TB

Purge Vol: 5.000 mL

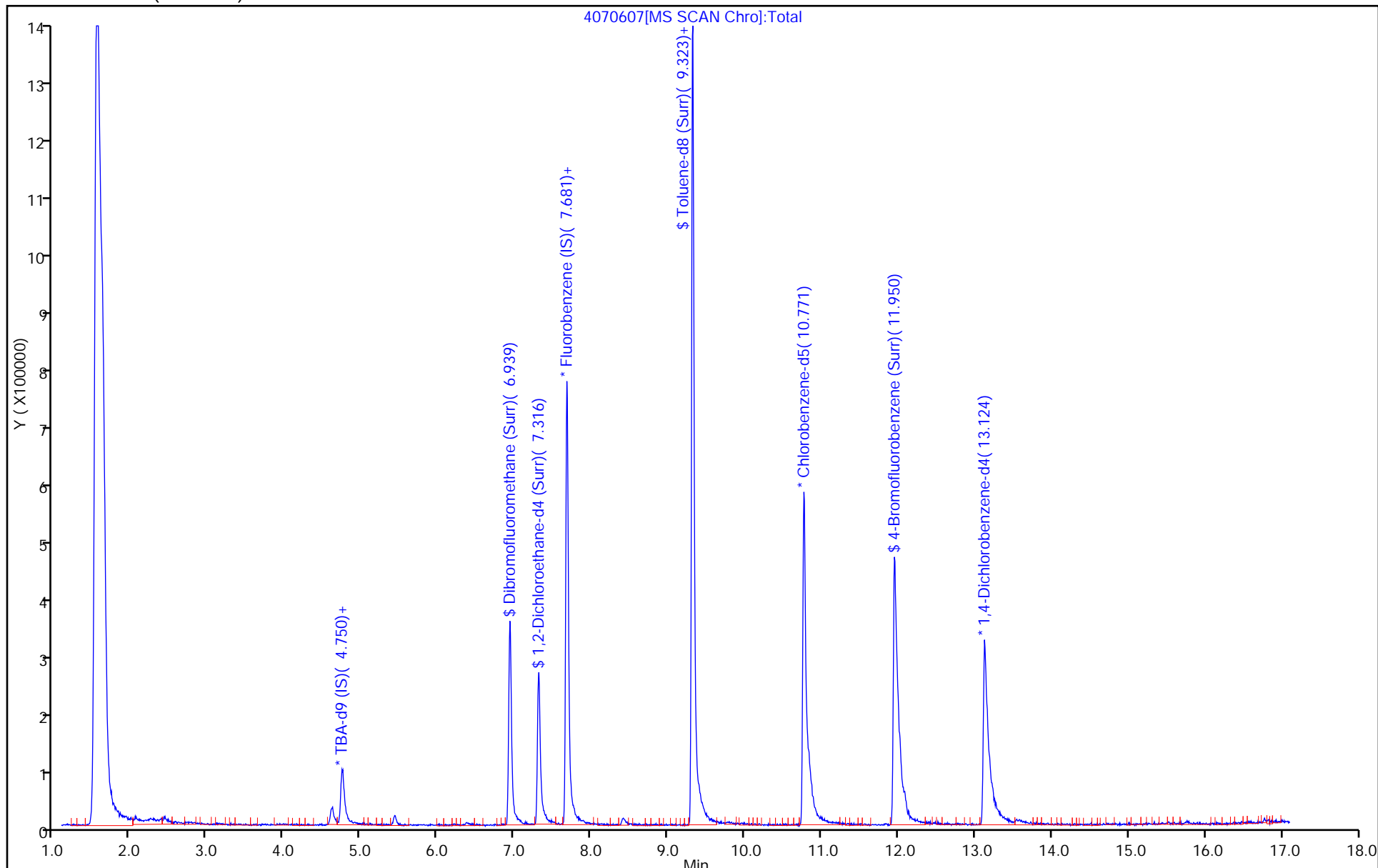
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: MSVOA_CHHP4

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



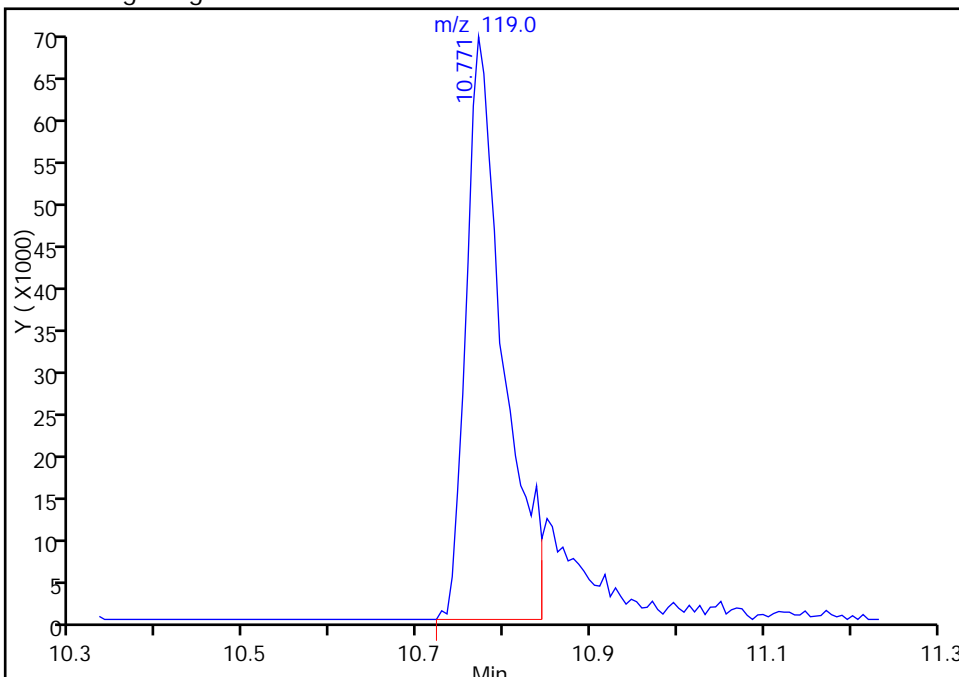
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070607.D
Injection Date: 07-Jul-2014 03:45:30 Instrument ID: CHHP4
Lims ID: 180-34298-G-1 Lab Sample ID: 180-34298-1
Client ID: 062514-TB
Operator ID: 430936 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 Chlorobenzene-d5, CAS: 3114-55-4

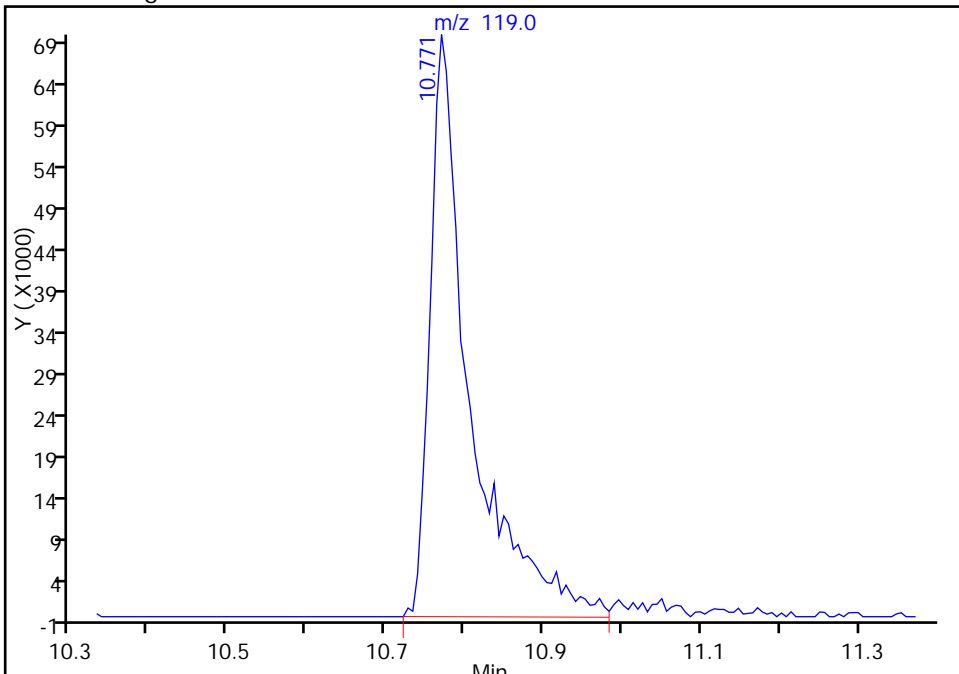
Processing Integration Results

RT: 10.77
Response: 206724
Amount: 250.0000



Manual Integration Results

RT: 10.77
Response: 246301
Amount: 250.0000



Reviewer: zukowskim, 07-Jul-2014 03:15:31
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 SDG No.: _____
 Client Sample ID: 062514-DP Lab Sample ID: 180-34298-2
 Matrix: Water Lab File ID: 4070611.D
 Analysis Method: 8260C Date Collected: 06/25/2014 00:00
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 05:34
 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.: 180-34298-1
 SDG No.: _____
 Client Sample ID: 062514-DP Lab Sample ID: 180-34298-2
 Matrix: Water Lab File ID: 4070611.D
 Analysis Method: 8260C Date Collected: 06/25/2014 00:00
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 05:34
 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)	90		62-123
460-00-4	4-Bromofluorobenzene (Surr)	107		75-120
1868-53-7	Dibromofluoromethane (Surr)	89		80-120
2037-26-5	Toluene-d8 (Surr)	113		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070611.D
 Lims ID: 180-34298-G-2 Lab Sample ID: 180-34298-2
 Client ID: 062514-DP
 Sample Type: Client
 Inject. Date: 07-Jul-2014 05:34:30 ALS Bottle#: 10 Worklist Smp#: 11
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-34298-G-2
 Misc. Info.: 180-0002060-011
 Operator ID: 430936 Instrument ID: CHHP4
 Method: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\MMSVOA_CHHP4.m
 Limit Group: VOA 8260C ICAL
 Last Update: 07-Jul-2014 05:06:47 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 05:06:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.763	4.792	-0.029	93	156692	5000.0	
* 2 Fluorobenzene (IS)	96	7.682	7.674	0.008	99	1198036	250.0	
* 3 Chlorobenzene-d5	119	10.772	10.763	0.009	83	242333	250.0	
* 4 1,4-Dichlorobenzene-d4	152	13.125	13.093	0.032	91	323148	250.0	
\$ 5 Dibromofluoromethane (Surr	113	6.940	6.932	0.008	59	324715	221.4	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	7.311	7.303	0.008	70	266482	224.2	
\$ 7 Toluene-d8 (Surr)	98	9.318	9.316	0.002	93	1553799	282.6	
\$ 8 4-Bromofluorobenzene (Surr	95	11.951	11.931	0.020	95	468757	267.3	
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

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070611.D

Injection Date: 07-Jul-2014 05:34:30

Instrument ID: CHHP4

Operator ID: 430936

Lims ID: 180-34298-G-2

Lab Sample ID: 180-34298-2

Worklist Smp#: 11

Client ID: 062514-DP

Purge Vol: 5.000 mL

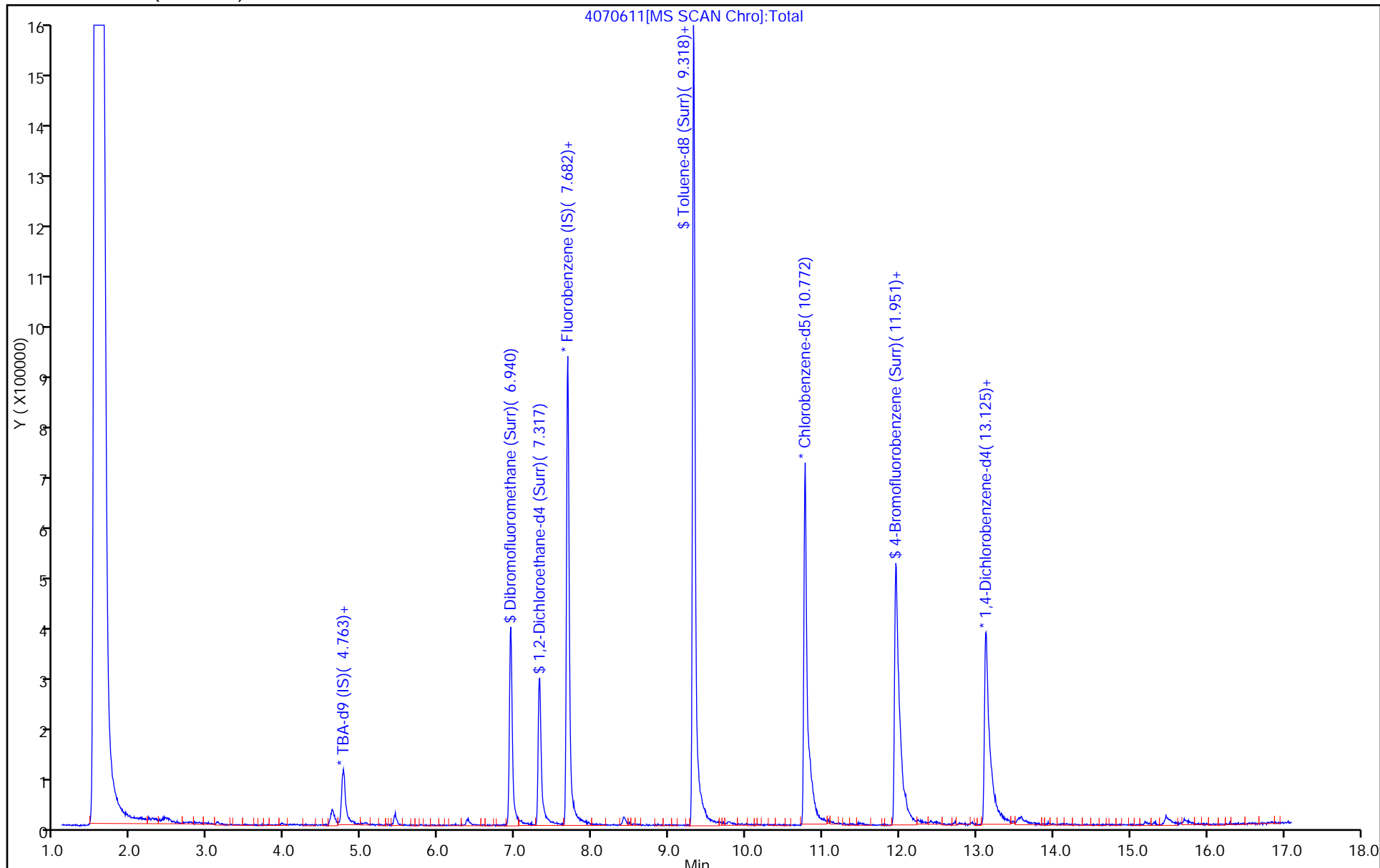
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: MSVOA_CHHP4

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 SDG No.: _____
 Client Sample ID: TS04-PDM004 Lab Sample ID: 180-34298-3
 Matrix: Water Lab File ID: 4070612.D
 Analysis Method: 8260C Date Collected: 06/25/2014 13:40
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 06:01
 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.: 180-34298-1
 SDG No.: _____
 Client Sample ID: TS04-PDM004 Lab Sample ID: 180-34298-3
 Matrix: Water Lab File ID: 4070612.D
 Analysis Method: 8260C Date Collected: 06/25/2014 13:40
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 06:01
 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)	104		75-120
1868-53-7	Dibromofluoromethane (Surr)	91		80-120
2037-26-5	Toluene-d8 (Surr)	106		80-120

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070612.D
 Lims ID: 180-34298-G-3 Lab Sample ID: 180-34298-3
 Client ID: TS04-PDM004
 Sample Type: Client
 Inject. Date: 07-Jul-2014 06:01:30 ALS Bottle#: 11 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-34298-G-3
 Misc. Info.: 180-0002060-012
 Operator ID: 430936 Instrument ID: CHHP4
 Method: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\MMSVOA_CHHP4.m
 Limit Group: VOA 8260C ICAL
 Last Update: 07-Jul-2014 05:22:32 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: XAWRK009

First Level Reviewer: zukowskim

Date: 07-Jul-2014 05:22:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.756	4.792	-0.036	95	148274	5000.0	
* 2 Fluorobenzene (IS)	96	7.681	7.674	0.007	99	1117511	250.0	
* 3 Chlorobenzene-d5	119	10.770	10.763	0.007	84	233030	250.0	
* 4 1,4-Dichlorobenzene-d4	152	13.124	13.093	0.031	91	301674	250.0	
\$ 5 Dibromofluoromethane (Surr	113	6.939	6.932	0.007	60	309910	226.5	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	7.316	7.303	0.013	67	252402	227.7	
\$ 7 Toluene-d8 (Surr)	98	9.323	9.316	0.007	93	1400002	264.7	
\$ 8 4-Bromofluorobenzene (Surr	95	11.950	11.931	0.019	94	437225	259.3	
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	

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070612.D

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

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070612.D

Injection Date: 07-Jul-2014 06:01:30

Instrument ID: CHHP4

Operator ID: 430936

Lims ID: 180-34298-G-3

Lab Sample ID: 180-34298-3

Worklist Smp#: 12

Client ID: TS04-PDM004

Purge Vol: 5.000 mL

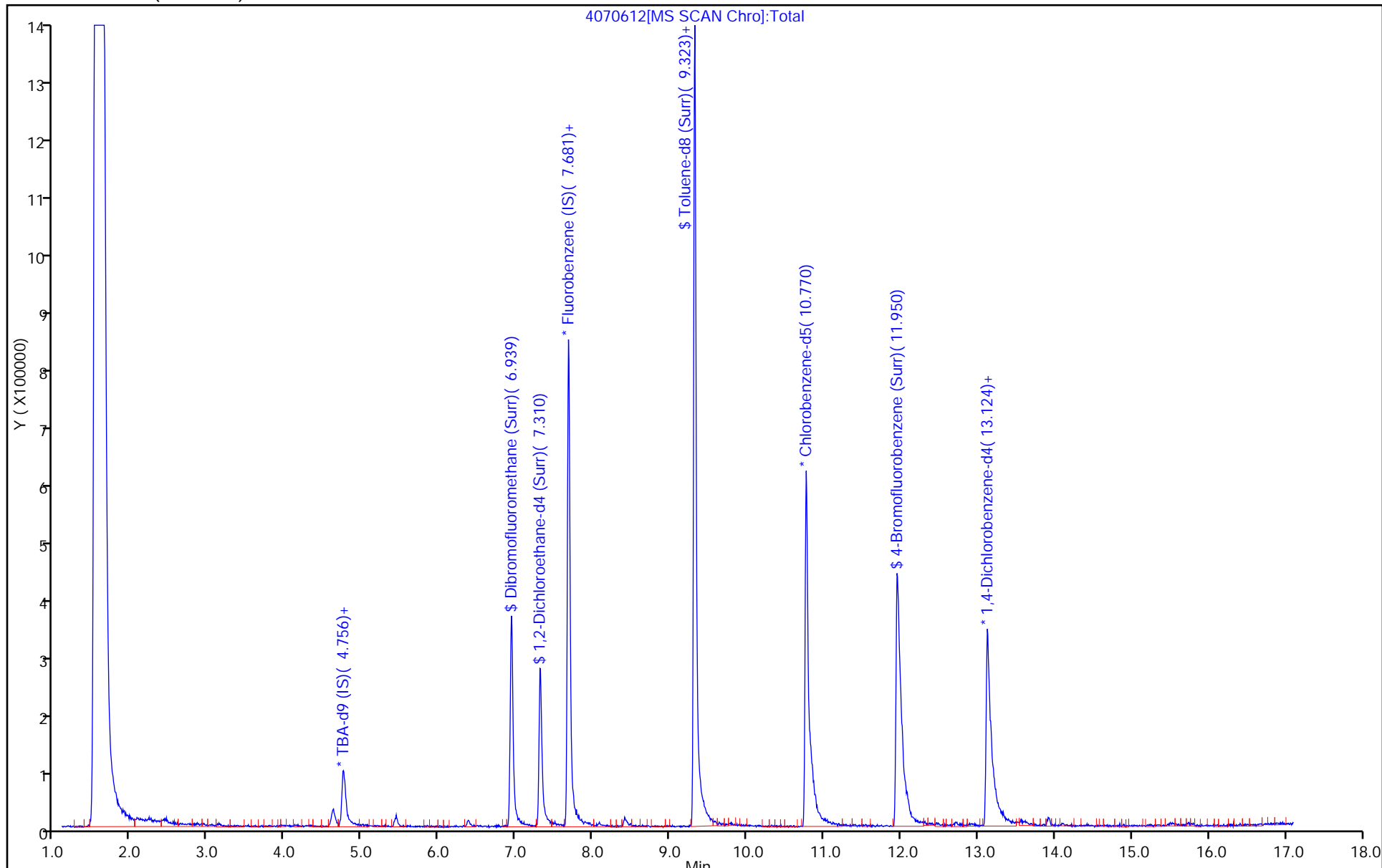
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: MSVOA_CHHP4

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 SDG No.: _____
 Client Sample ID: RW20-PZP000 Lab Sample ID: 180-34298-4
 Matrix: Water Lab File ID: 4070613.D
 Analysis Method: 8260C Date Collected: 06/25/2014 12:50
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 06:28
 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.: 180-34298-1
 SDG No.: _____
 Client Sample ID: RW20-PZP000 Lab Sample ID: 180-34298-4
 Matrix: Water Lab File ID: 4070613.D
 Analysis Method: 8260C Date Collected: 06/25/2014 12:50
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 06:28
 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)	101		62-123
460-00-4	4-Bromofluorobenzene (Surr)	107		75-120
1868-53-7	Dibromofluoromethane (Surr)	97		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\4070613.D
 Lims ID: 180-34298-G-4 Lab Sample ID: 180-34298-4
 Client ID: RW20-PZP000
 Sample Type: Client
 Inject. Date: 07-Jul-2014 06:28:30 ALS Bottle#: 12 Worklist Smp#: 13
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-34298-G-4
 Misc. Info.: 180-0002060-013
 Operator ID: 430936 Instrument ID: CHHP4
 Method: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\MMSVOA_CHHP4.m
 Limit Group: VOA 8260C ICAL
 Last Update: 07-Jul-2014 05:55:26 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 05:55:26

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	90	141021	5000.0	
* 2 Fluorobenzene (IS)	96	7.686	7.674	0.012	99	1064543	250.0	
* 3 Chlorobenzene-d5	119	10.769	10.763	0.006	83	231322	250.0	
* 4 1,4-Dichlorobenzene-d4	152	13.129	13.093	0.036	90	290946	250.0	
\$ 5 Dibromofluoromethane (Surr	113	6.944	6.932	0.012	60	317508	243.6	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	7.315	7.303	0.012	67	266051	251.9	
\$ 7 Toluene-d8 (Surr)	98	9.322	9.316	0.006	92	1440387	274.4	
\$ 8 4-Bromofluorobenzene (Surr	95	11.955	11.931	0.024	94	447276	267.2	
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

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070613.D

Injection Date: 07-Jul-2014 06:28:30

Instrument ID: CHHP4

Operator ID: 430936

Lims ID: 180-34298-G-4

Lab Sample ID: 180-34298-4

Worklist Smp#: 13

Client ID: RW20-PZP000

Purge Vol: 5.000 mL

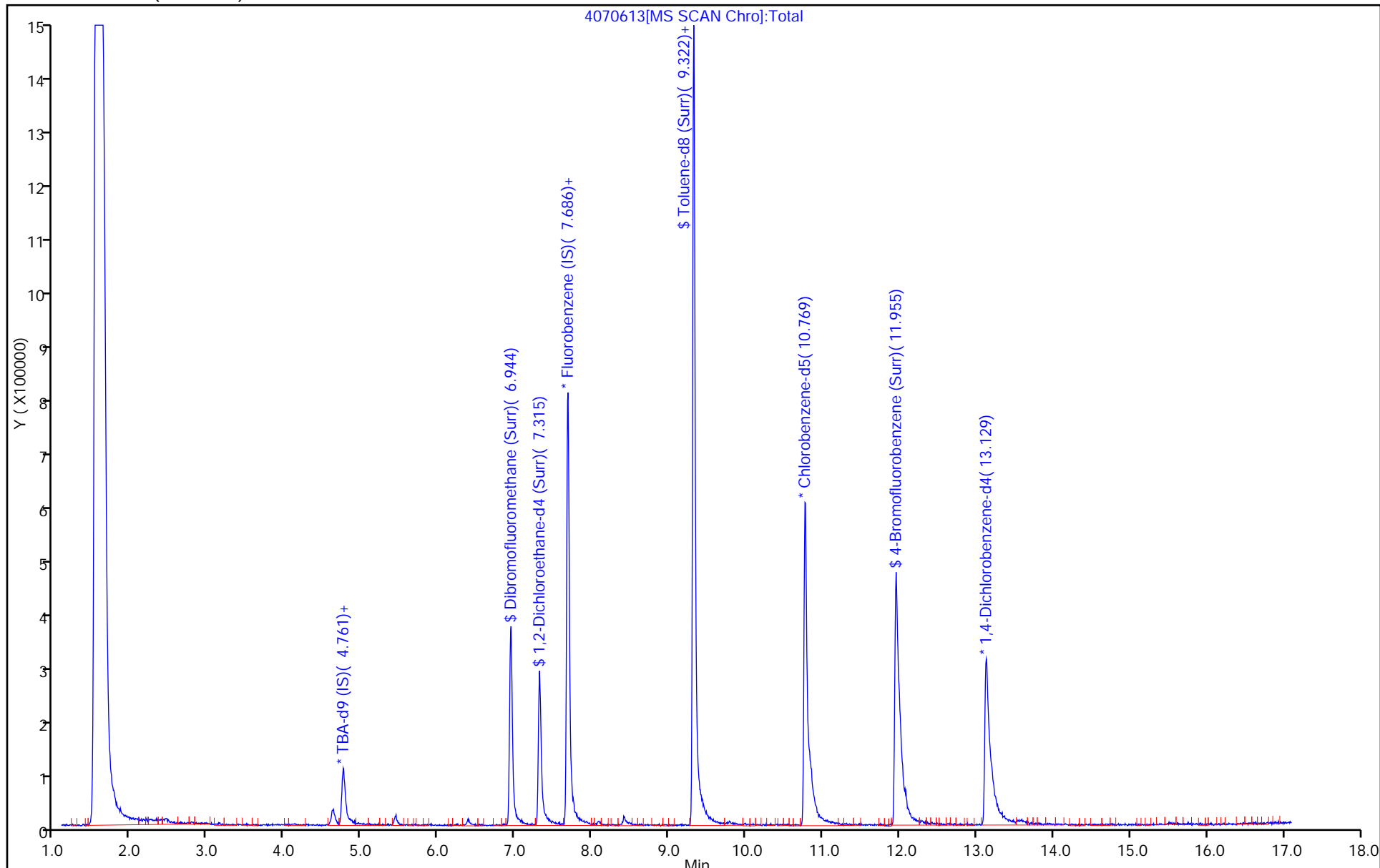
Dil. Factor: 1.0000

ALS Bottle#: 12

Method: MSVOA_CHHP4

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 SDG No.: _____
 Client Sample ID: RW20-PZM020 Lab Sample ID: 180-34298-5
 Matrix: Water Lab File ID: 4070614.D
 Analysis Method: 8260C Date Collected: 06/25/2014 10:05
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 06:55
 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.: 180-34298-1
 SDG No.: _____
 Client Sample ID: RW20-PZM020 Lab Sample ID: 180-34298-5
 Matrix: Water Lab File ID: 4070614.D
 Analysis Method: 8260C Date Collected: 06/25/2014 10:05
 Sample wt/vol: 5(mL) Date Analyzed: 07/07/2014 06:55
 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)	99		75-120
1868-53-7	Dibromofluoromethane (Surr)	94		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\4070614.D
 Lims ID: 180-34298-A-5 Lab Sample ID: 180-34298-5
 Client ID: RW20-PZM020
 Sample Type: Client
 Inject. Date: 07-Jul-2014 06:55:30 ALS Bottle#: 13 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-34298-A-5
 Misc. Info.: 180-0002060-014
 Operator ID: 430936 Instrument ID: CHHP4
 Method: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\MMSVOA_CHHP4.m
 Limit Group: VOA 8260C ICAL
 Last Update: 08-Jul-2014 07:24:36 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: XAWRK029

First Level Reviewer: zukowskim

Date: 08-Jul-2014 07:24:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.754	4.792	-0.038	90	148794	5000.0	
* 2 Fluorobenzene (IS)	96	7.685	7.674	0.011	99	1187295	250.0	
* 3 Chlorobenzene-d5	119	10.768	10.763	0.005	82	256310	250.0	
* 4 1,4-Dichlorobenzene-d4	152	13.122	13.093	0.029	91	289418	250.0	
\$ 5 Dibromofluoromethane (Surr	113	6.937	6.932	0.005	59	342134	235.4	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	7.314	7.303	0.011	67	260170	220.9	
\$ 7 Toluene-d8 (Surr)	98	9.321	9.316	0.005	92	1556863	267.7	
\$ 8 4-Bromofluorobenzene (Surr	95	11.954	11.931	0.023	96	460598	248.3	
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

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP4\20140706-2060.b\4070614.D

Injection Date: 07-Jul-2014 06:55:30

Instrument ID: CHHP4

Operator ID: 430936

Lims ID: 180-34298-A-5

Lab Sample ID: 180-34298-5

Worklist Smp#: 14

Client ID: RW20-PZM020

Purge Vol: 5.000 mL

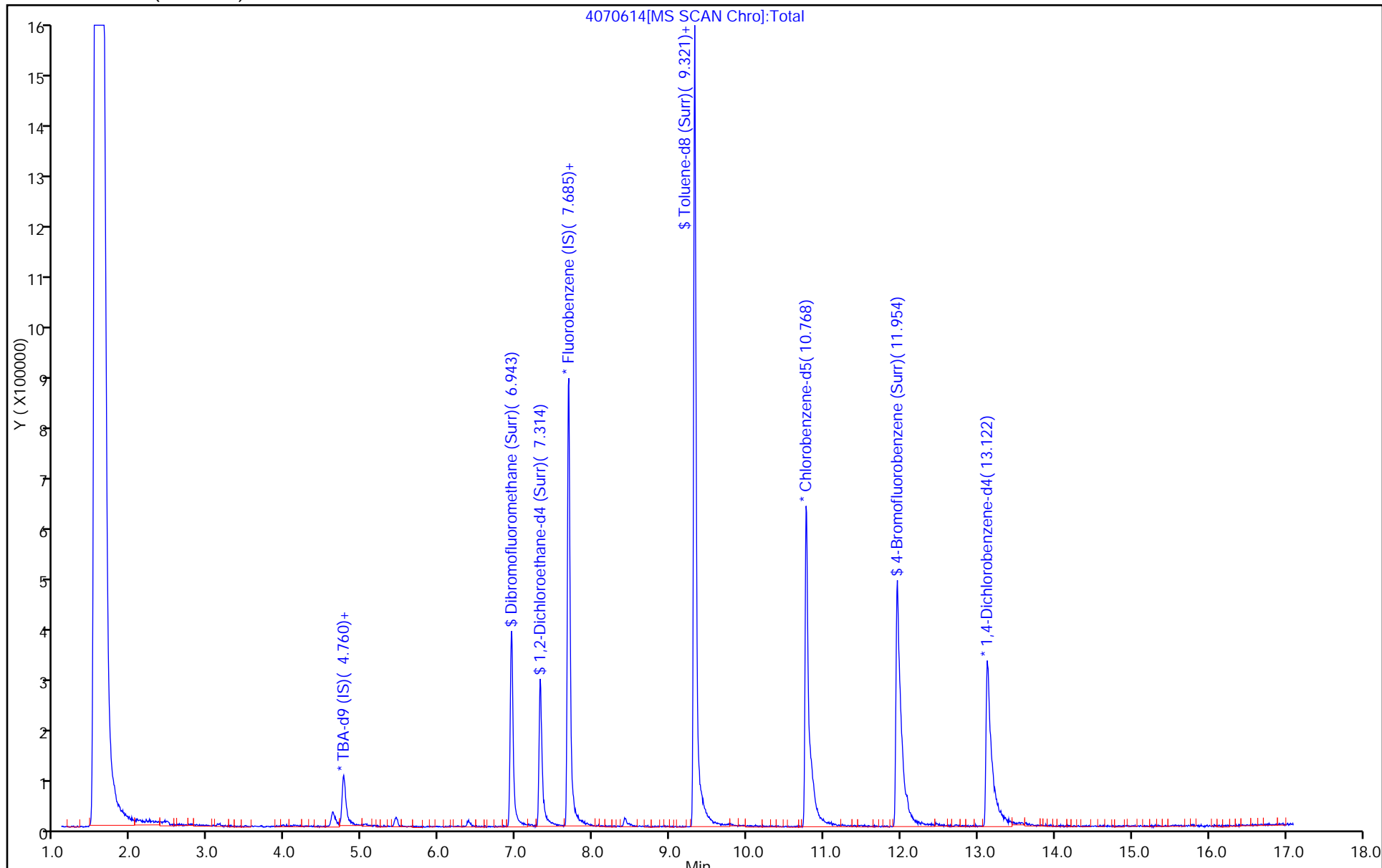
Dil. Factor: 1.0000

ALS Bottle#: 13

Method: MSVOA_CHHP4

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1 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 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
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.: 180-34298-1 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 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
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.: 180-34298-1 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.: 180-34298-1 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 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7				LVL 6	LVL 7			
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

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

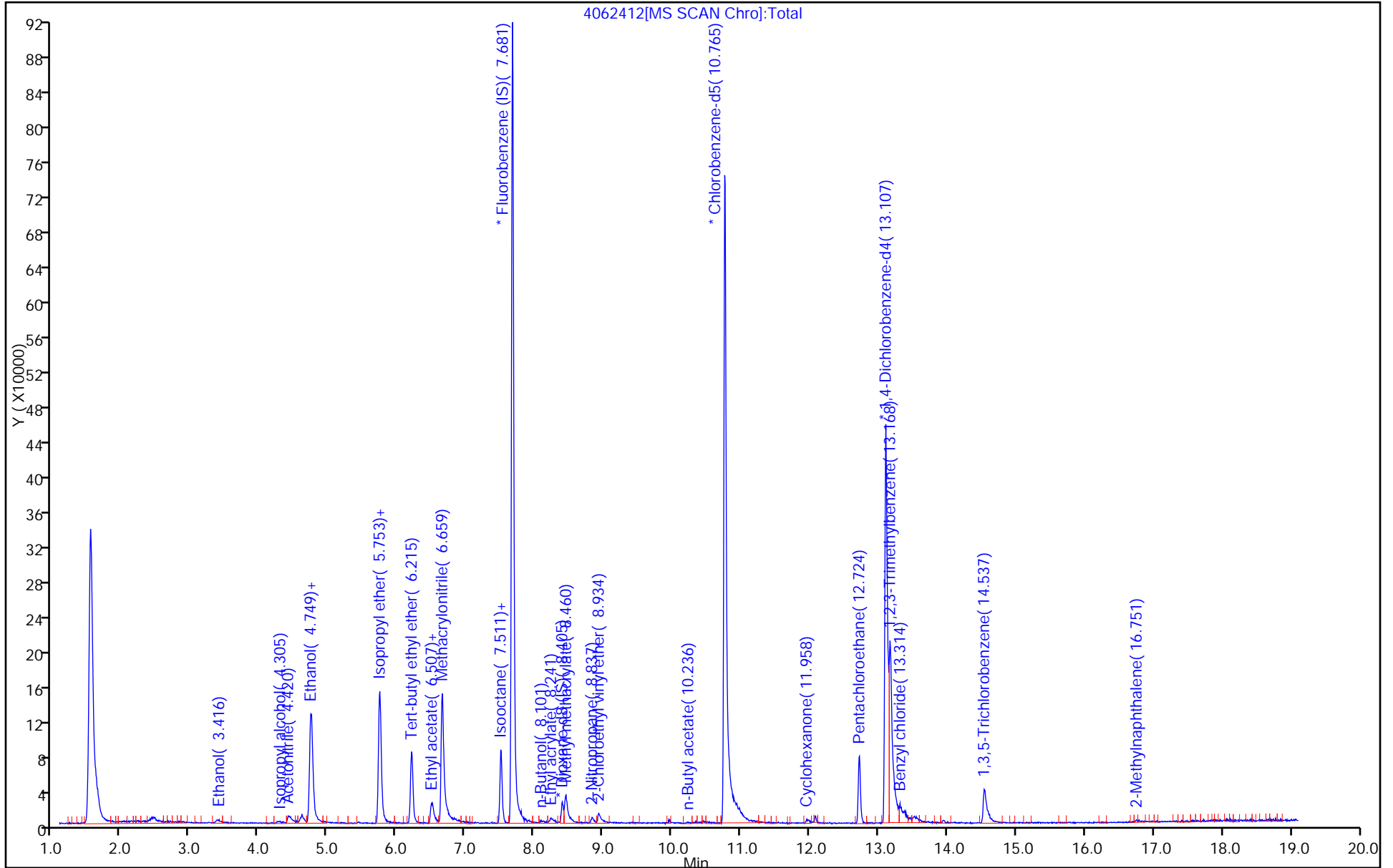
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: MSVOA_CHHP4

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



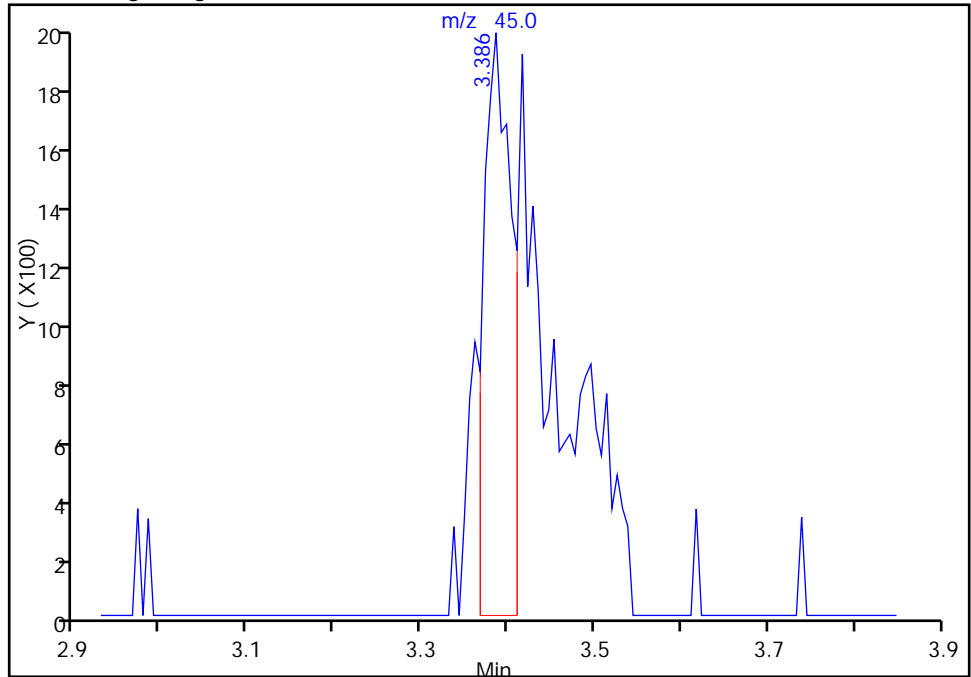
TestAmerica Pittsburgh

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

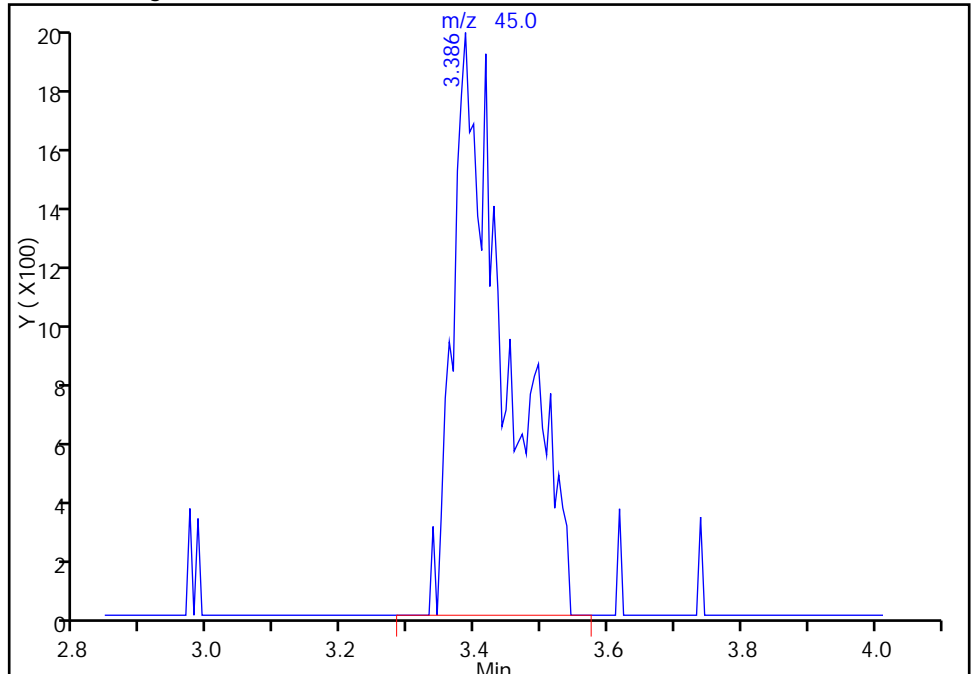
RT: 3.39
Response: 4369
Amount: 795.5646

Processing Integration Results



RT: 3.39
Response: 11022
Amount: 1411.2067

Manual Integration Results



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

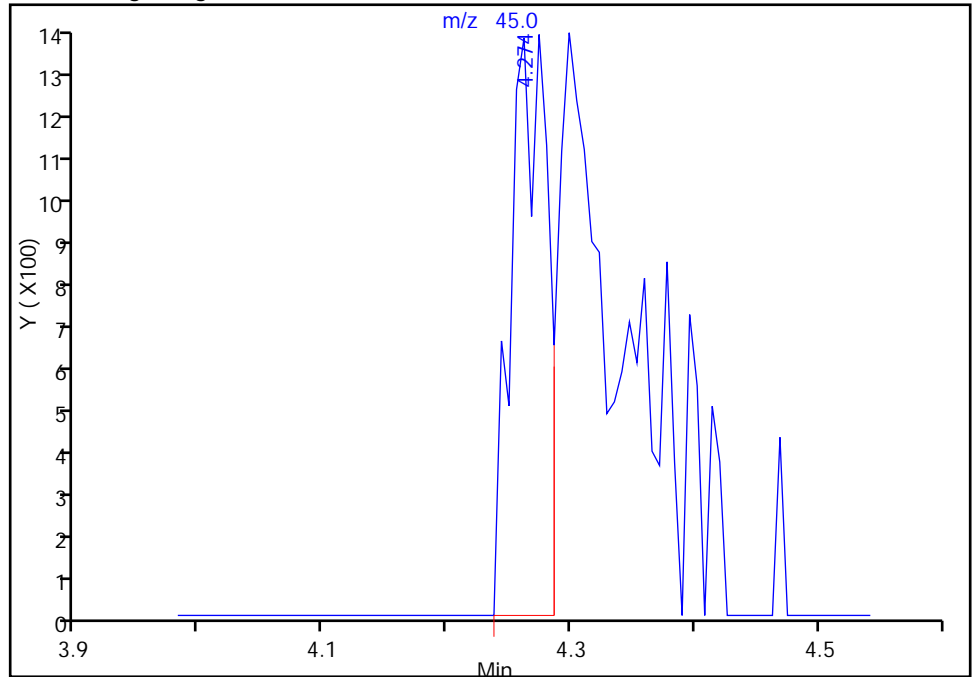
TestAmerica Pittsburgh

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

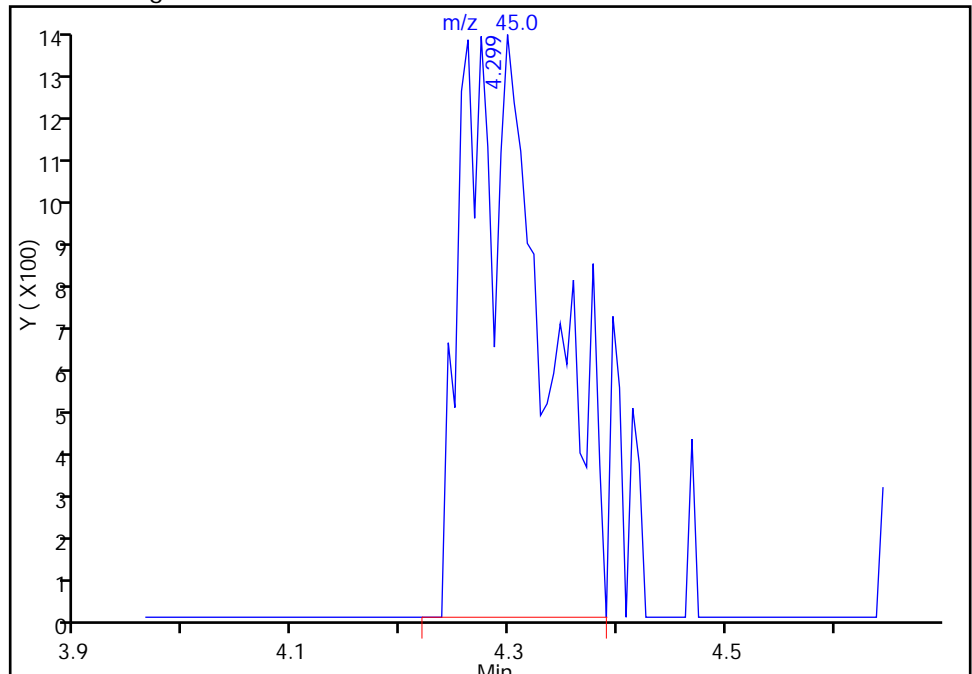
RT: 4.27
Response: 2793
Amount: 120.8539

Processing Integration Results



RT: 4.30
Response: 7123
Amount: 224.8212

Manual Integration Results



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

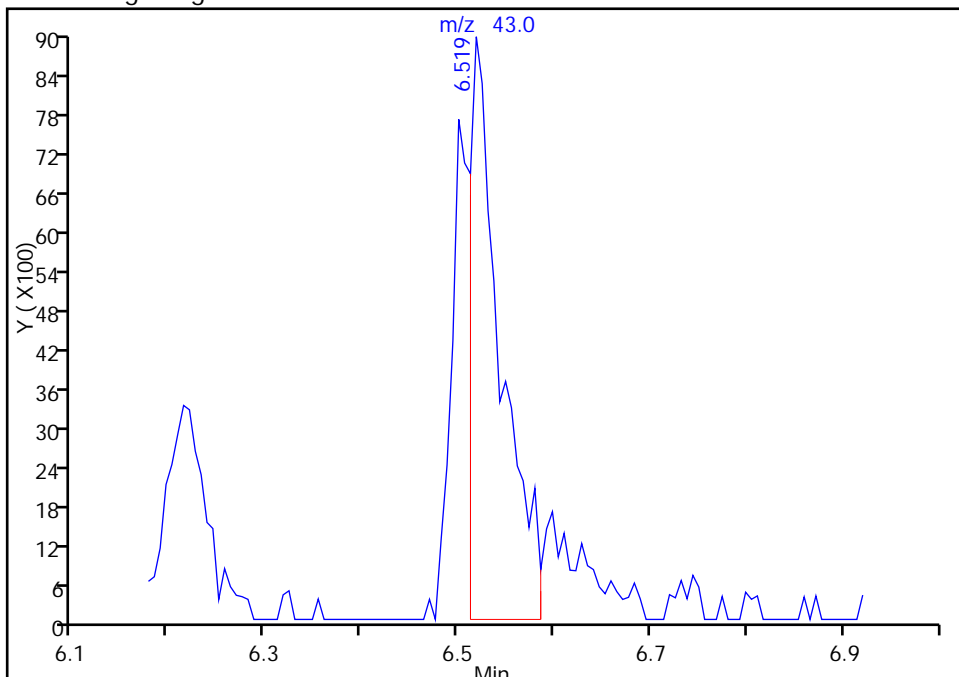
TestAmerica Pittsburgh

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

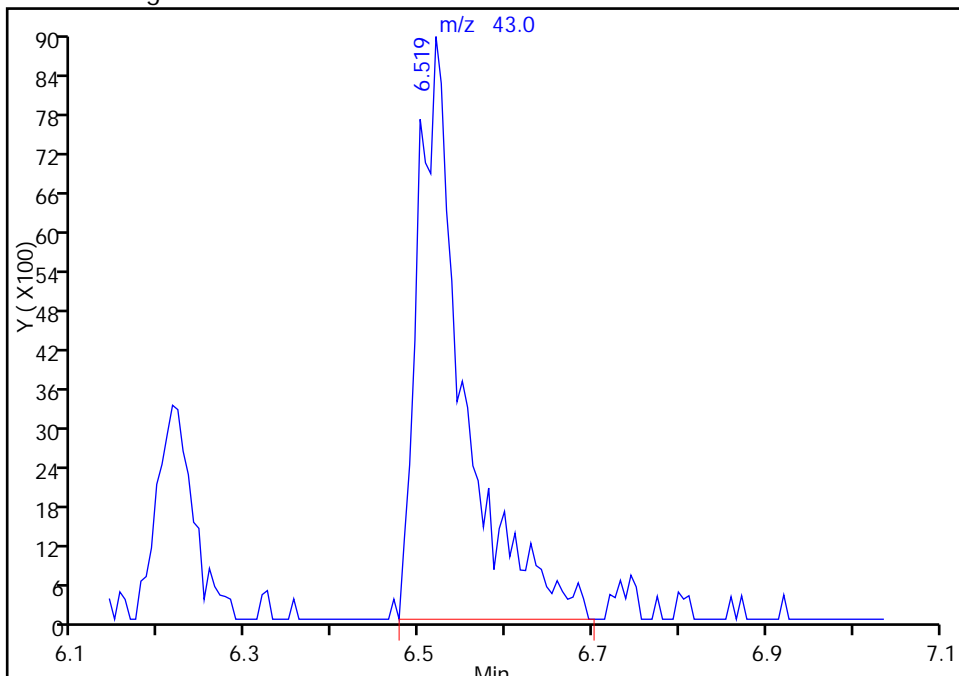
RT: 6.52
Response: 19870
Amount: 46.325493

Processing Integration Results



RT: 6.52
Response: 32868
Amount: 55.442337

Manual Integration Results



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

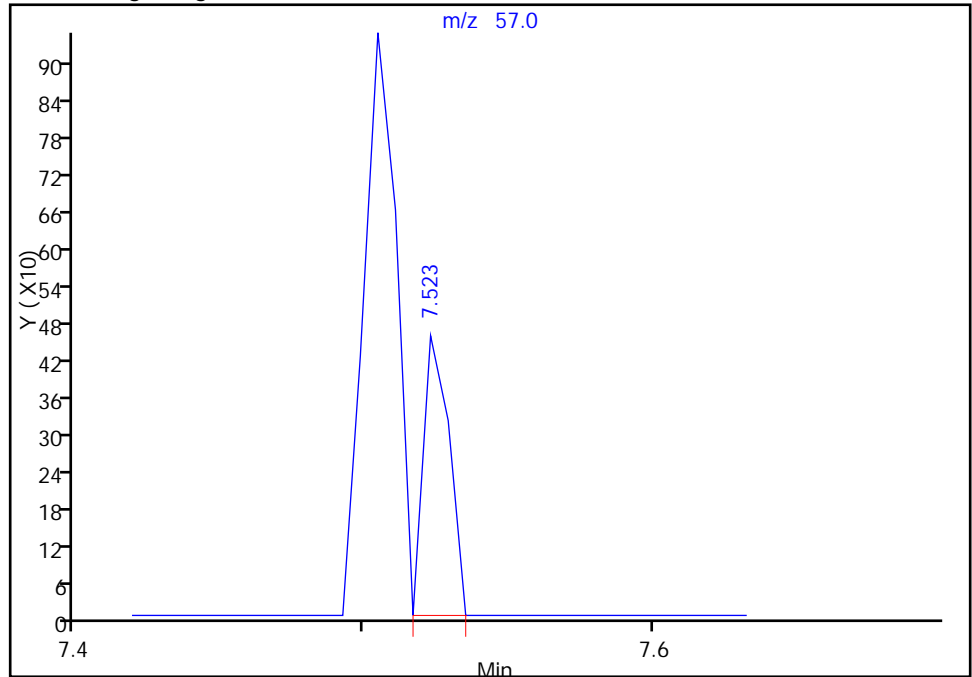
TestAmerica Pittsburgh

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

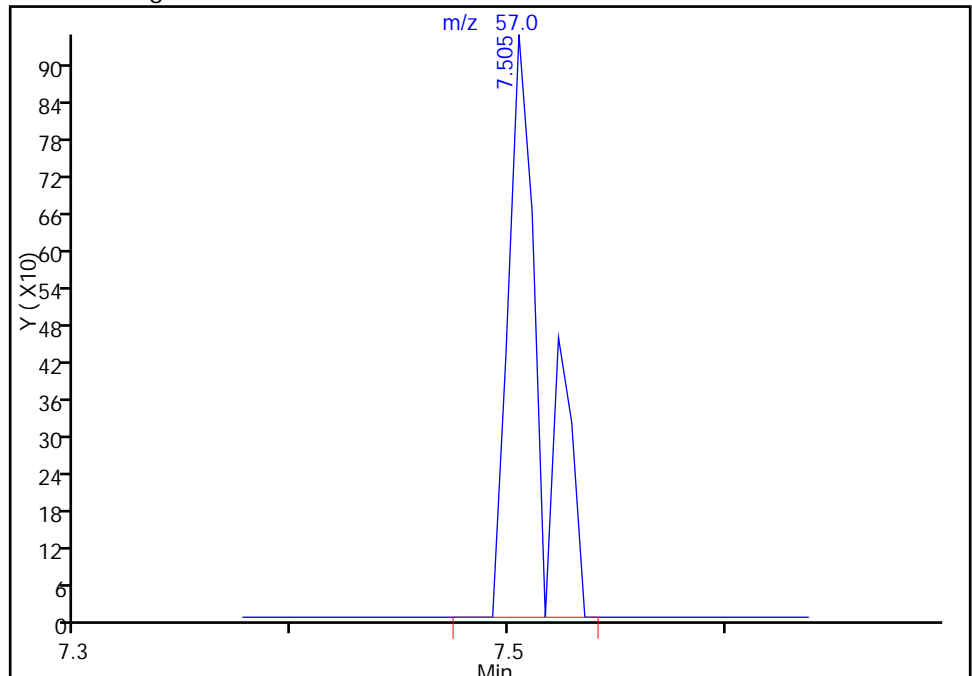
RT: 7.52
Response: 282
Amount: 24.042471

Processing Integration Results



RT: 7.50
Response: 1023
Amount: 25.138545

Manual Integration Results



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

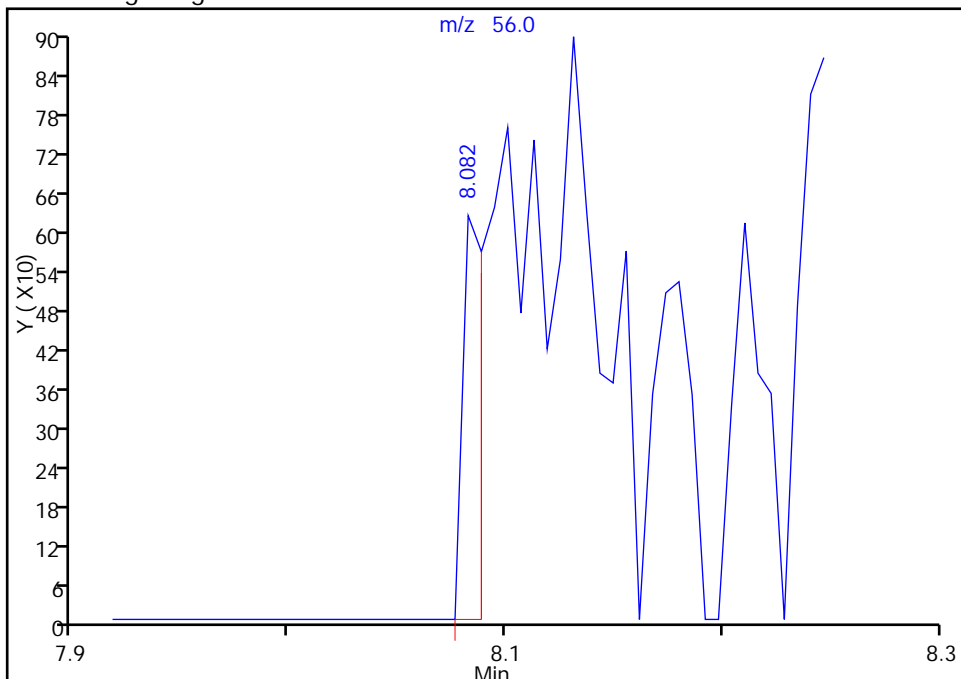
TestAmerica Pittsburgh

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

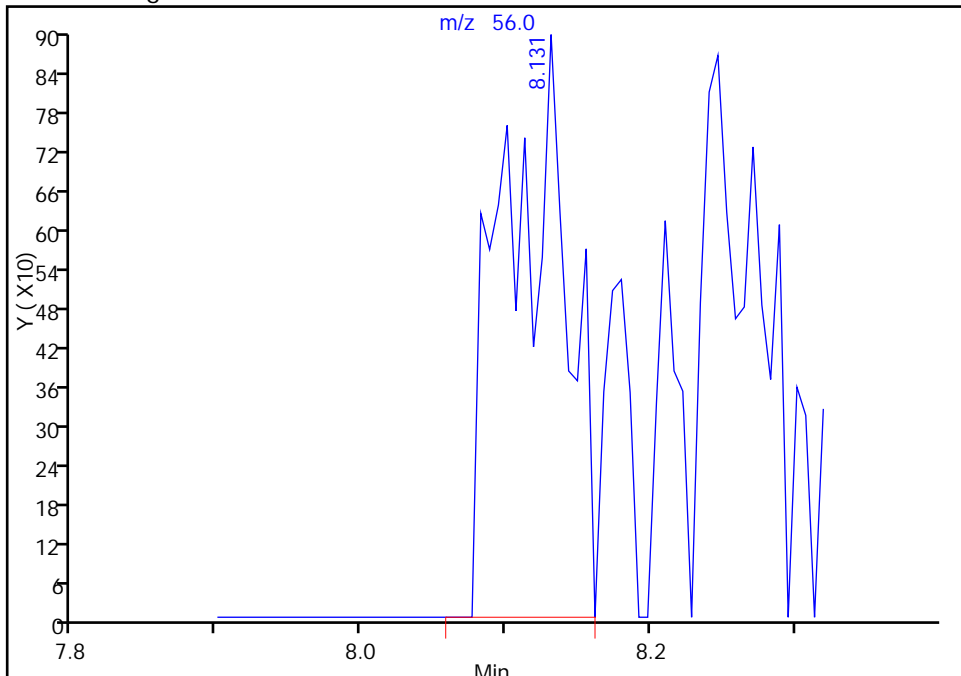
RT: 8.08
Response: 431
Amount: 922.1741

Processing Integration Results



RT: 8.13
Response: 2756
Amount: 327.9314

Manual Integration Results



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

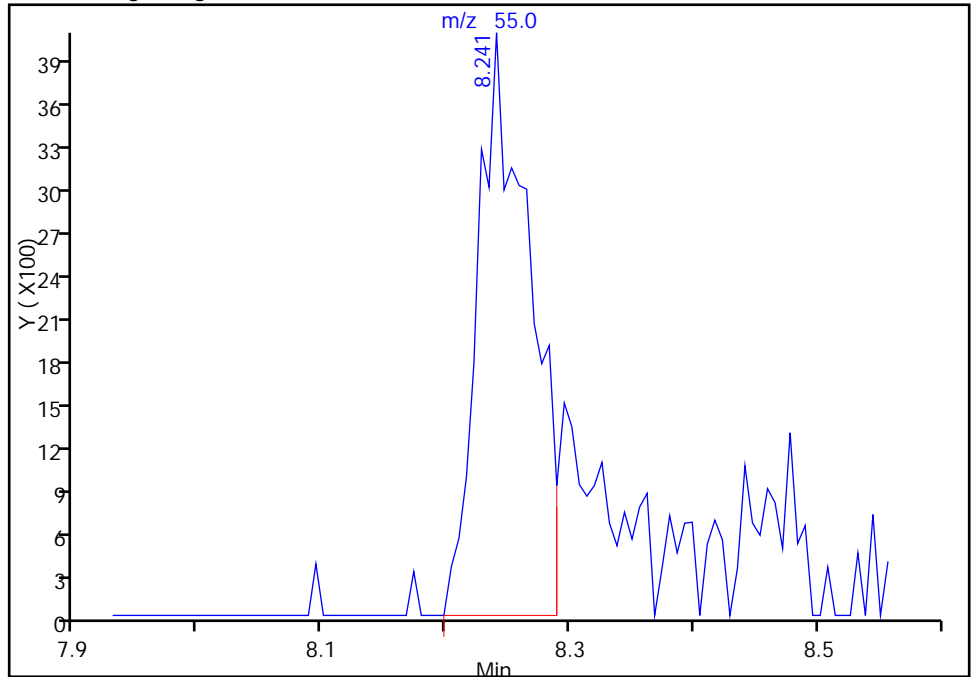
TestAmerica Pittsburgh

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

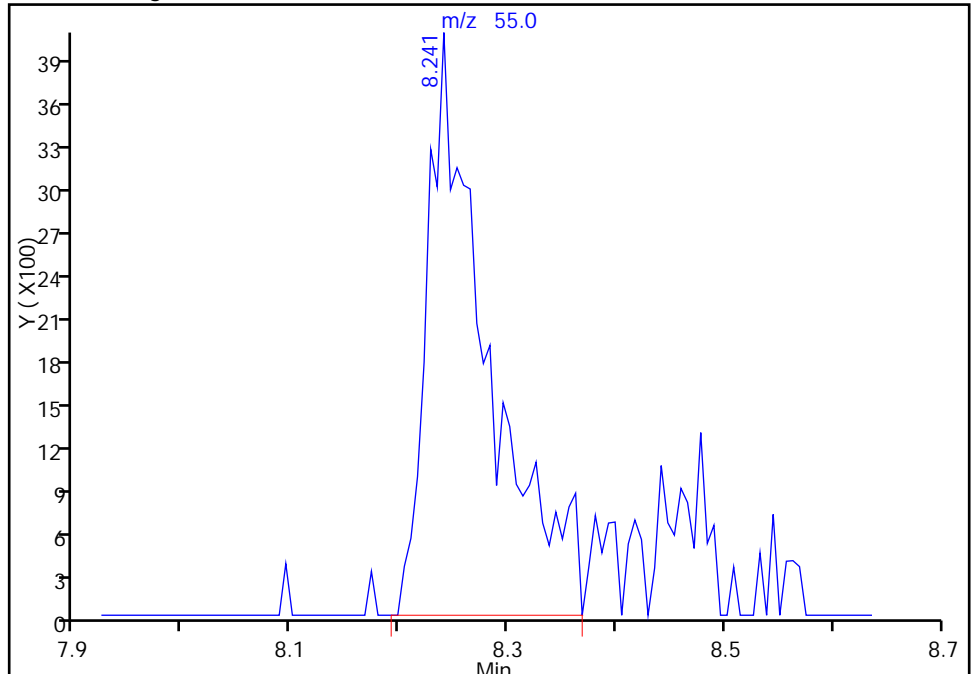
RT: 8.24
Response: 11771
Amount: 25.678452

Processing Integration Results



RT: 8.24
Response: 15571
Amount: 20.914121

Manual Integration Results



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

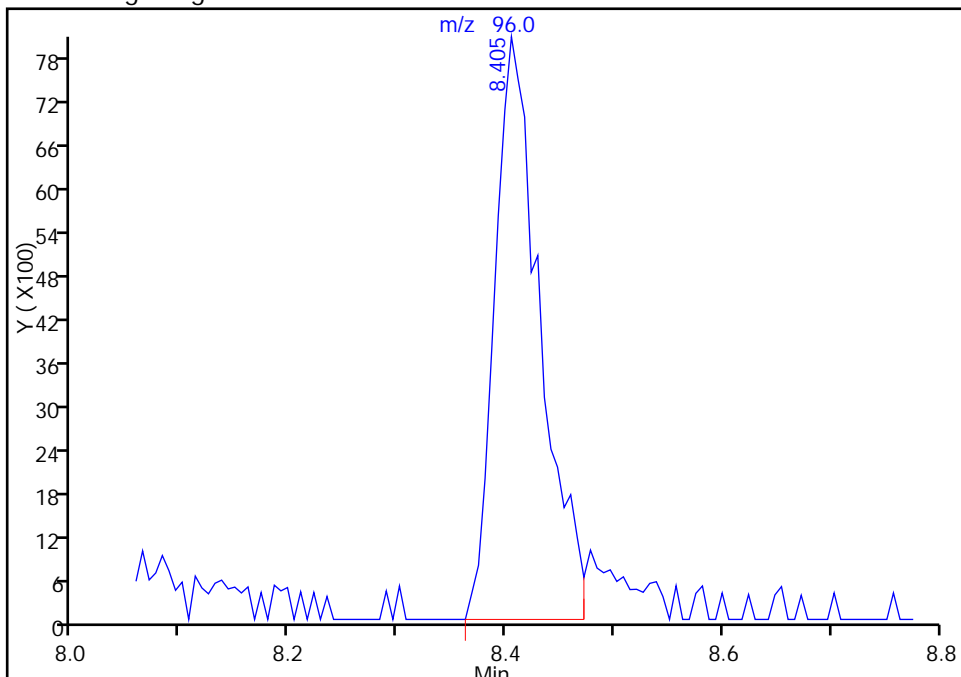
TestAmerica Pittsburgh

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

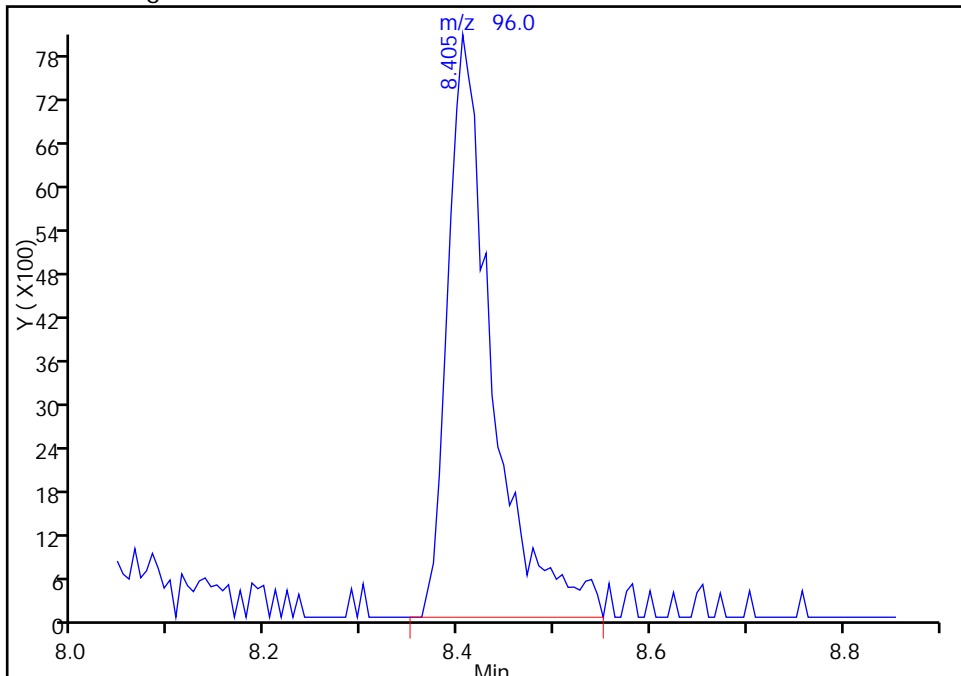
RT: 8.40
Response: 23569
Amount: 5000.0000

Processing Integration Results



RT: 8.40
Response: 26012
Amount: 5000.0000

Manual Integration Results



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

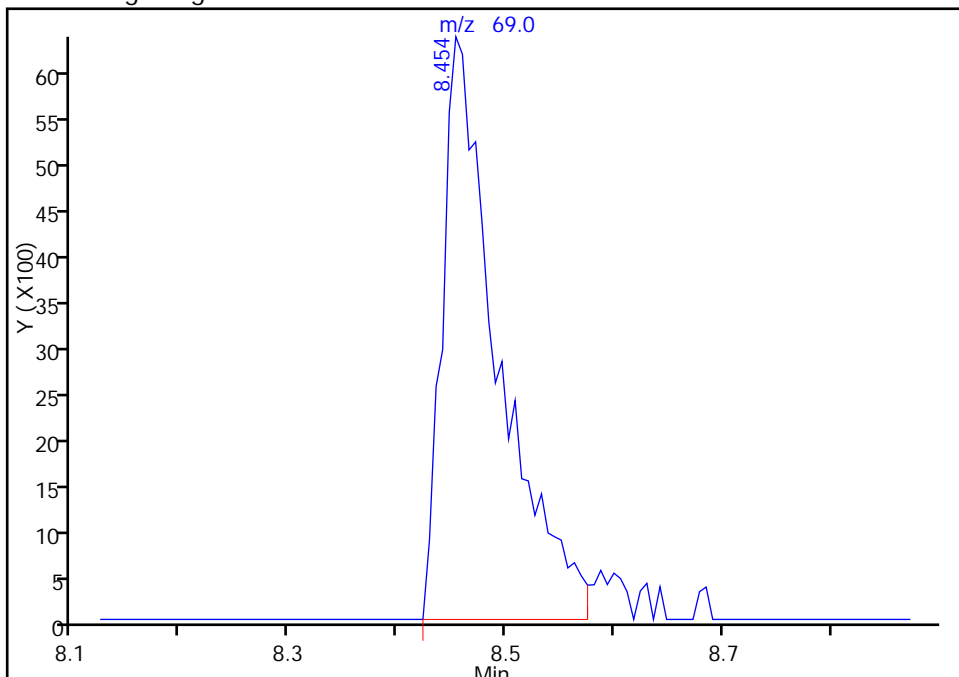
TestAmerica Pittsburgh

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

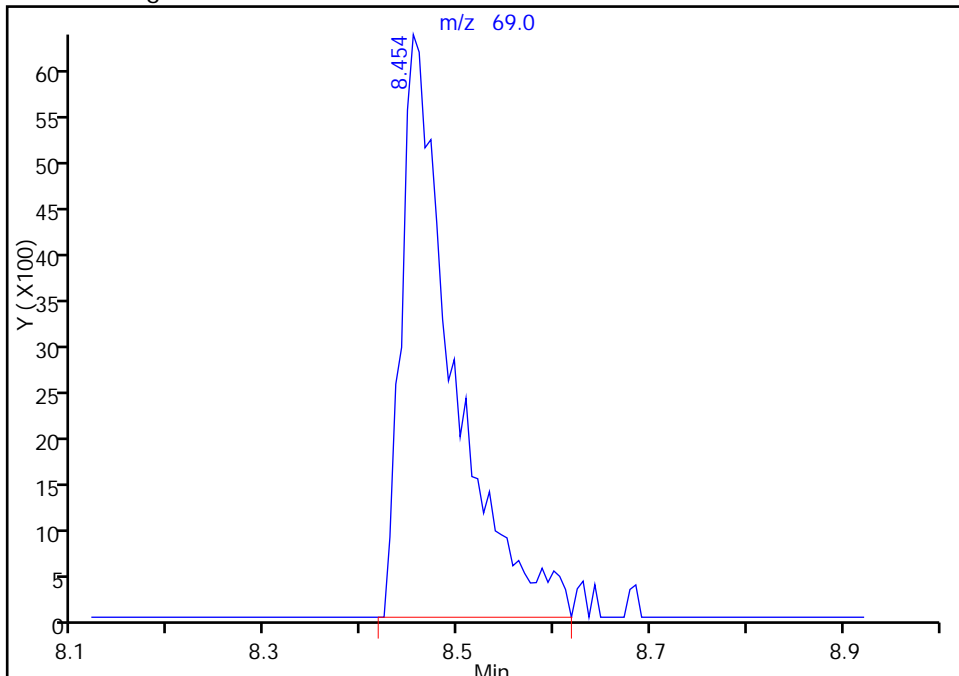
RT: 8.45
Response: 22768
Amount: 47.537022

Processing Integration Results



RT: 8.45
Response: 23700
Amount: 49.209341

Manual Integration Results



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

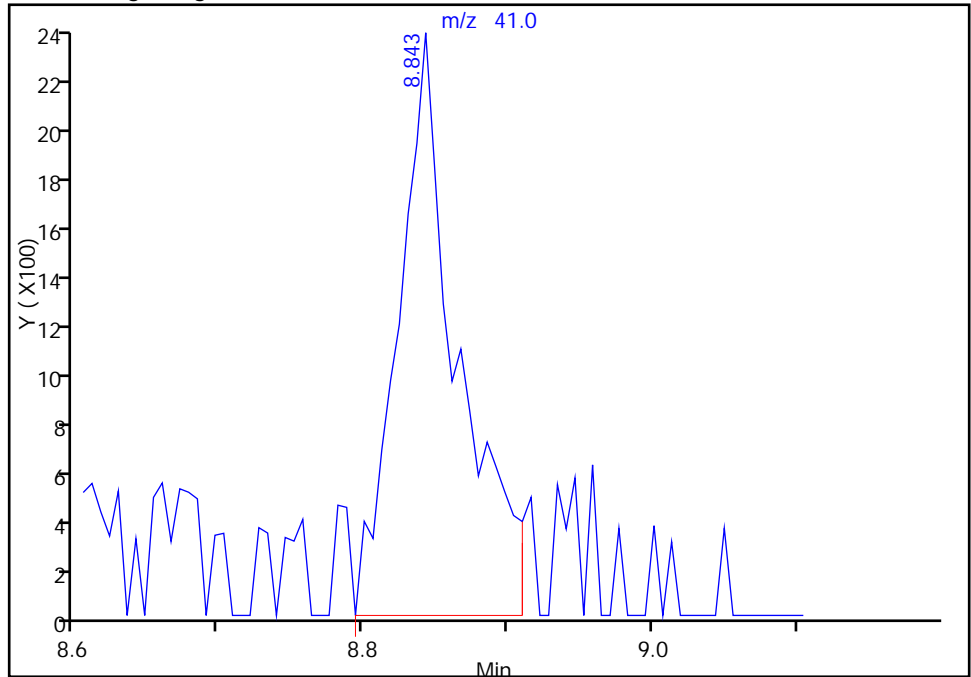
TestAmerica Pittsburgh

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

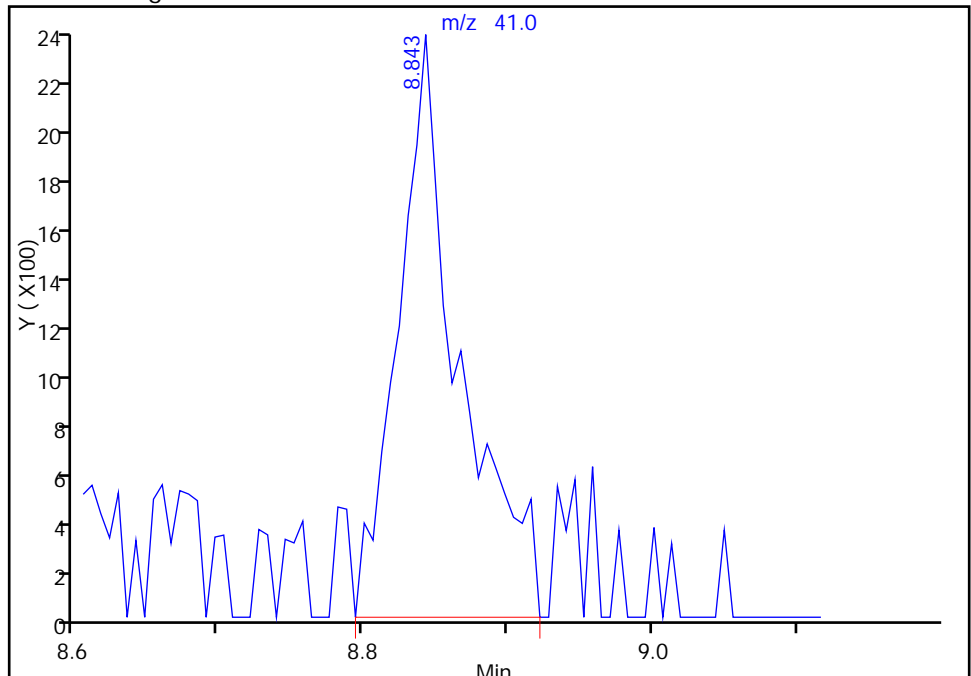
RT: 8.84
Response: 6818
Amount: 53.128568

Processing Integration Results



RT: 8.84
Response: 6994
Amount: 54.287307

Manual Integration Results



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

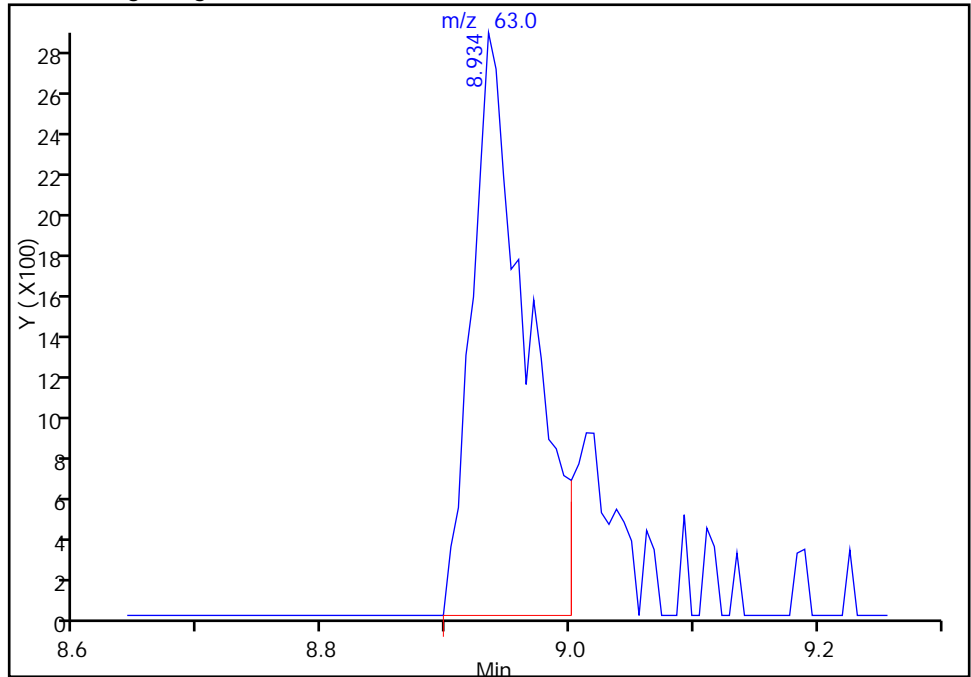
TestAmerica Pittsburgh

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

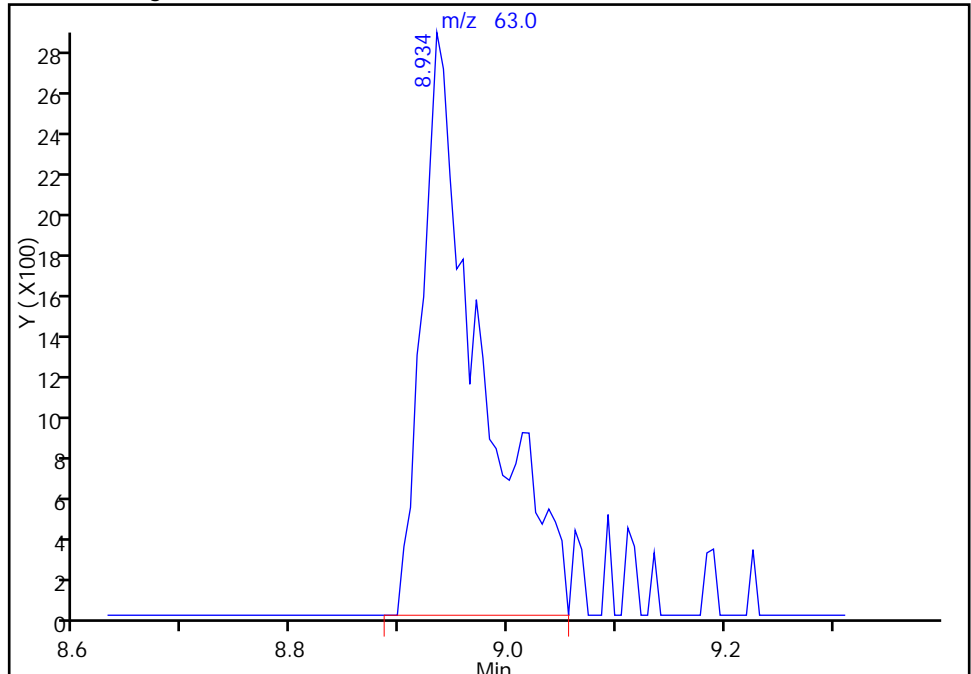
RT: 8.93
Response: 8757
Amount: 73.454415

Processing Integration Results



RT: 8.93
Response: 10516
Amount: 60.485111

Manual Integration Results



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

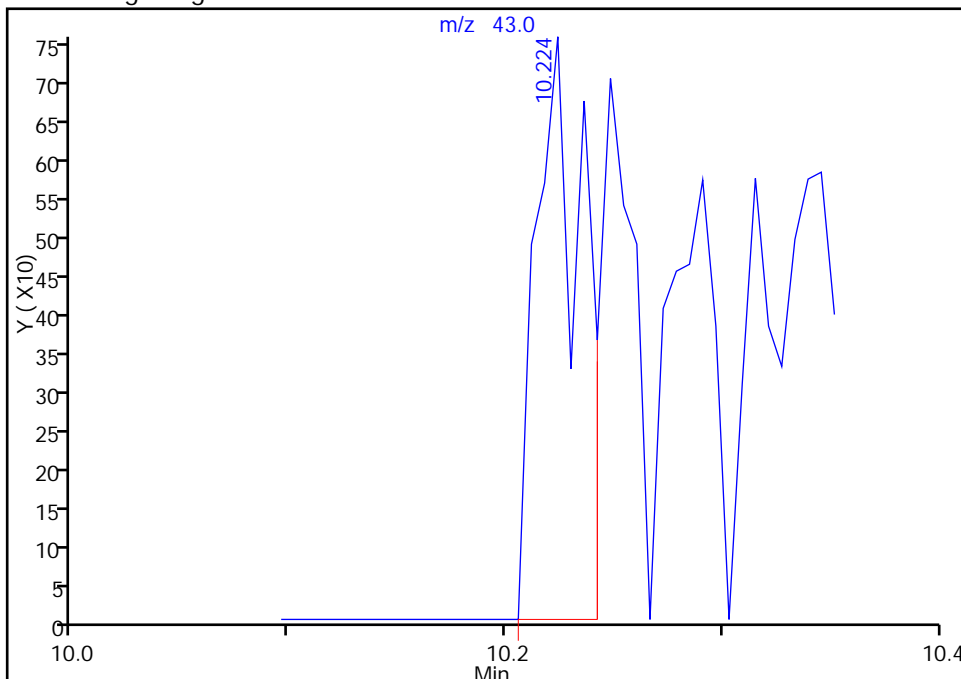
TestAmerica Pittsburgh

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

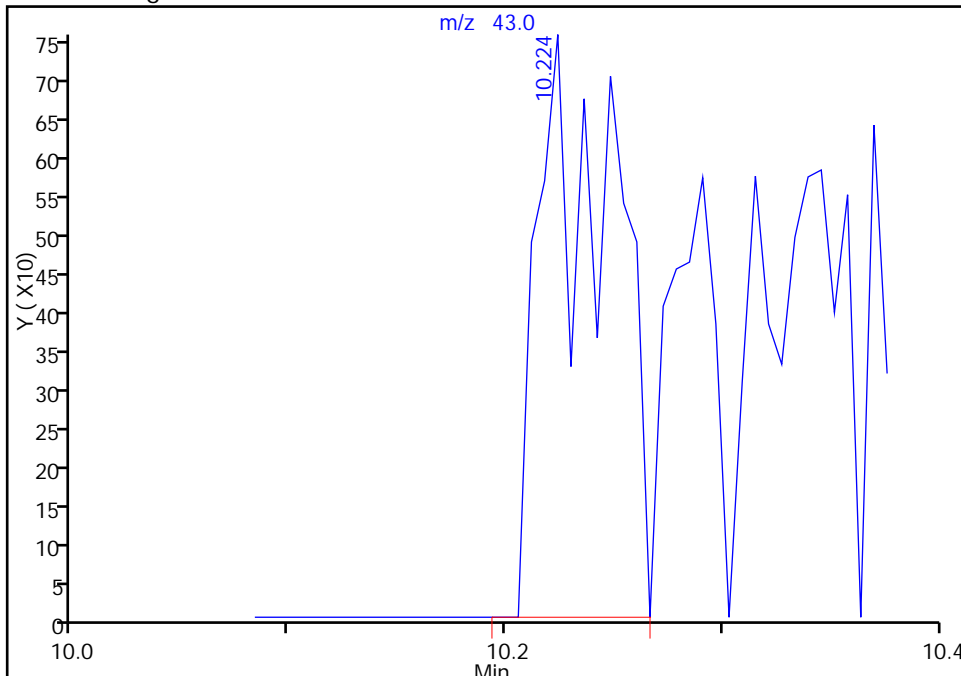
RT: 10.22
Response: 1152
Amount: 47.806466

Processing Integration Results



RT: 10.22
Response: 1780
Amount: 48.421856

Manual Integration Results



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

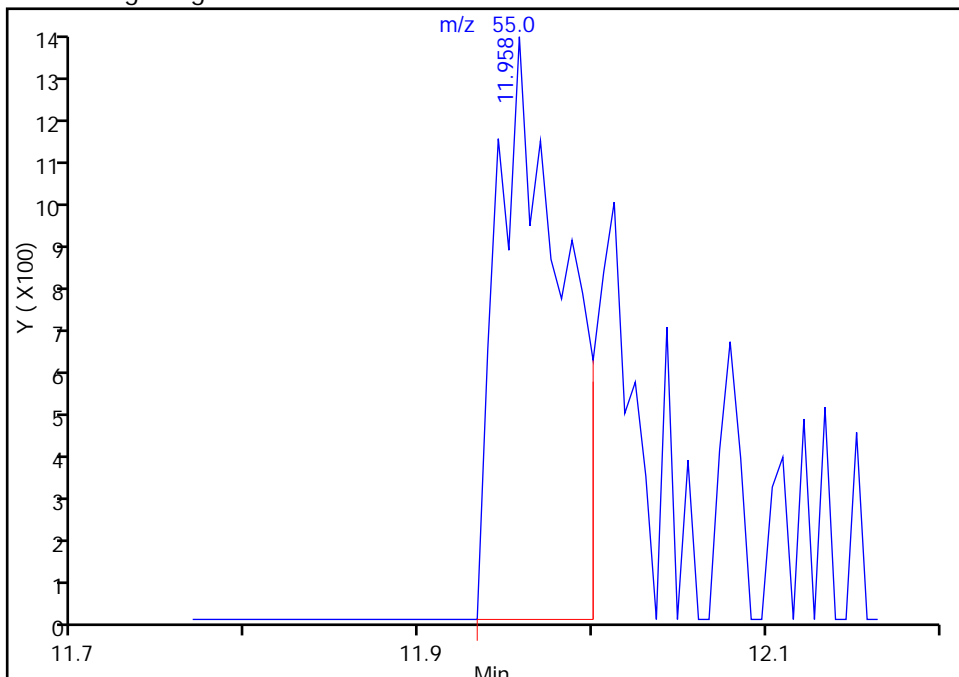
TestAmerica Pittsburgh

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

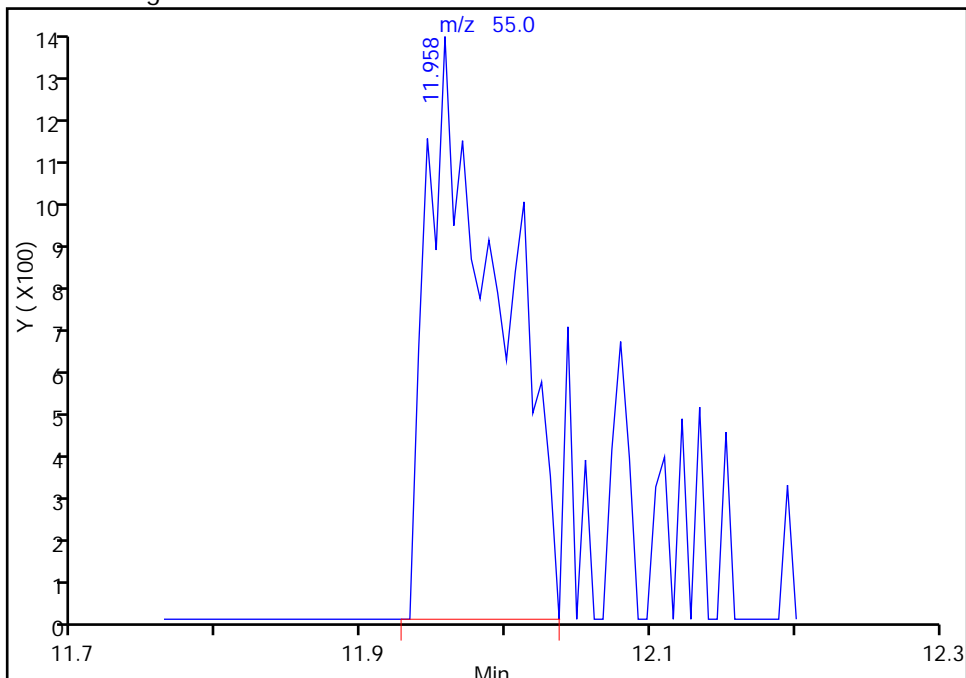
RT: 11.96
Response: 3550
Amount: 333.8387

Processing Integration Results



RT: 11.96
Response: 4687
Amount: 197.3328

Manual Integration Results



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

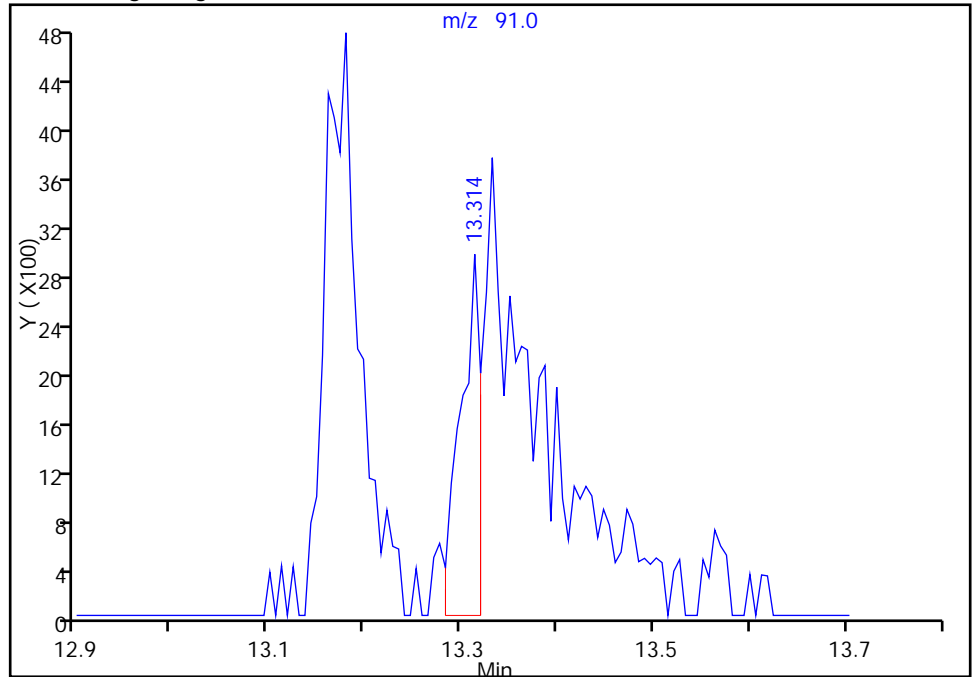
TestAmerica Pittsburgh

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

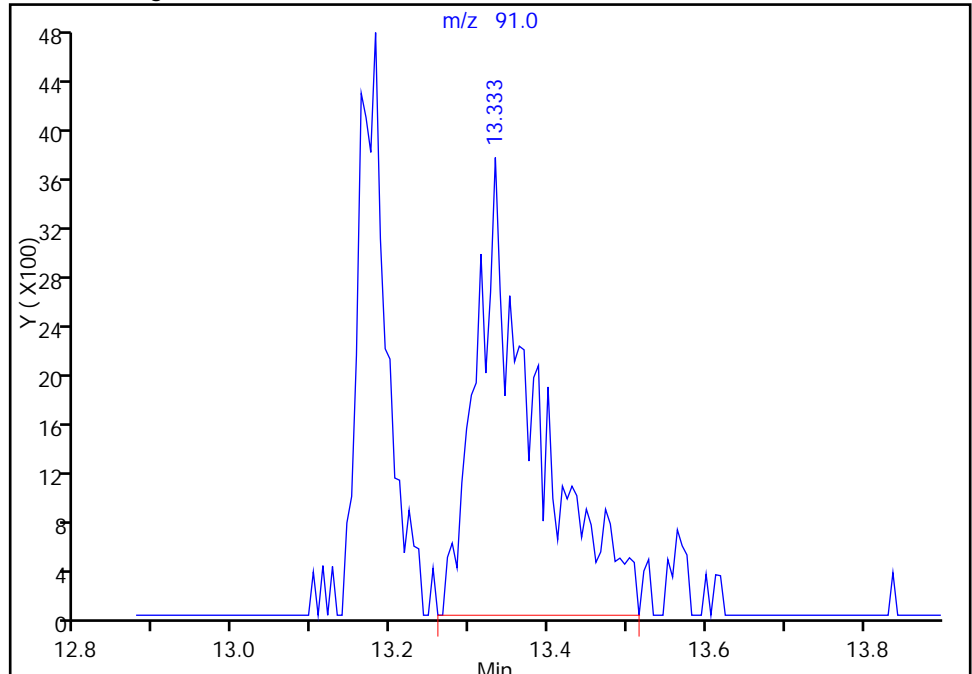
RT: 13.31
Response: 4230
Amount: 24.217645

Processing Integration Results



RT: 13.33
Response: 19314
Amount: 21.852691

Manual Integration Results



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

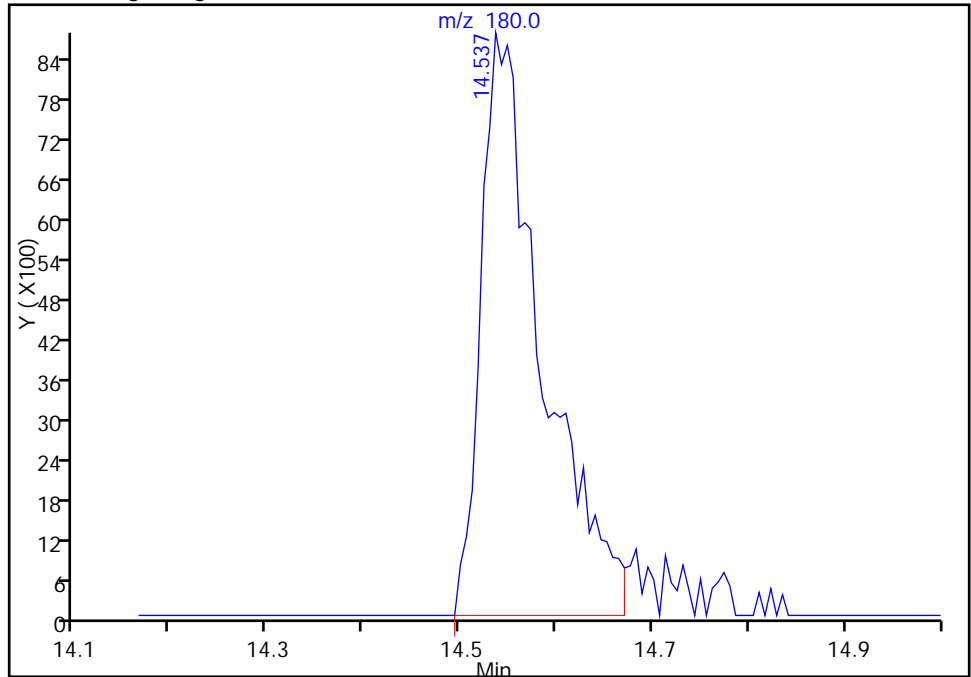
TestAmerica Pittsburgh

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

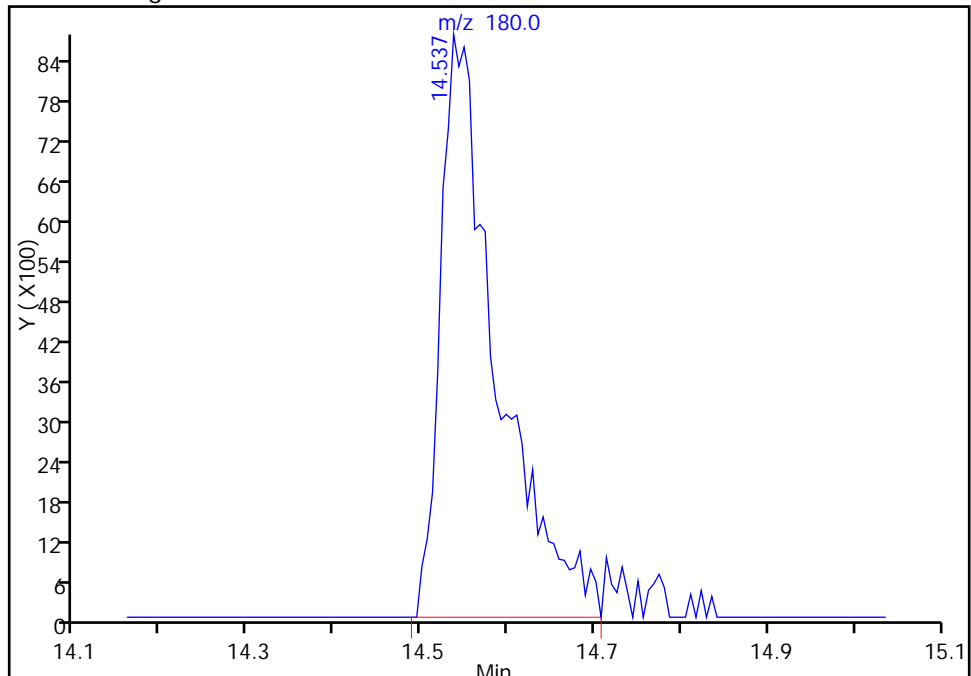
RT: 14.54
Response: 38663
Amount: 27.438412

Processing Integration Results



RT: 14.54
Response: 39884
Amount: 28.165470

Manual Integration Results



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

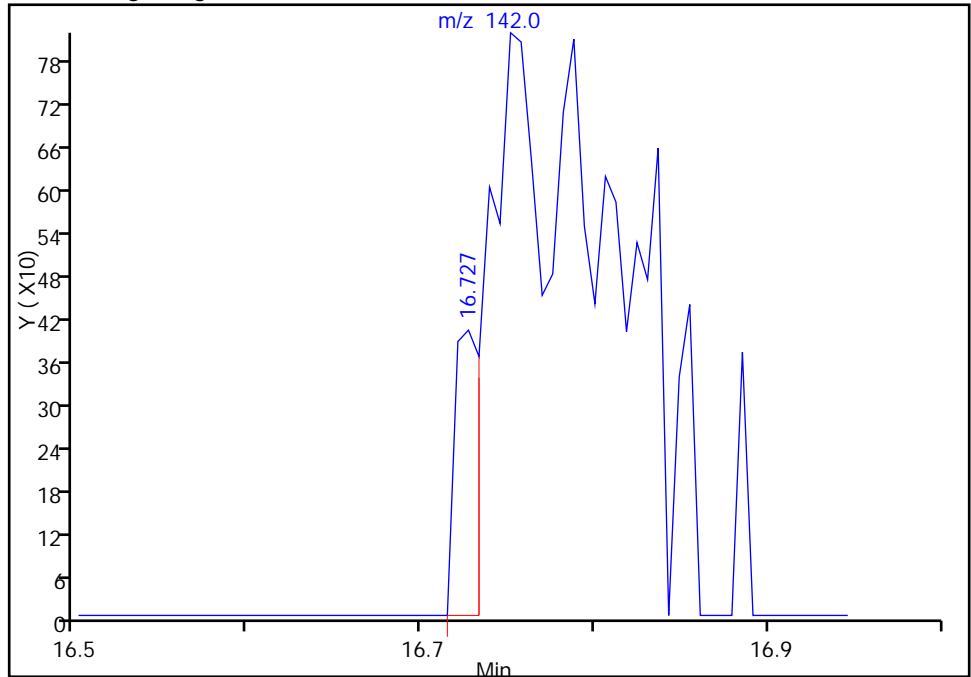
TestAmerica Pittsburgh

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

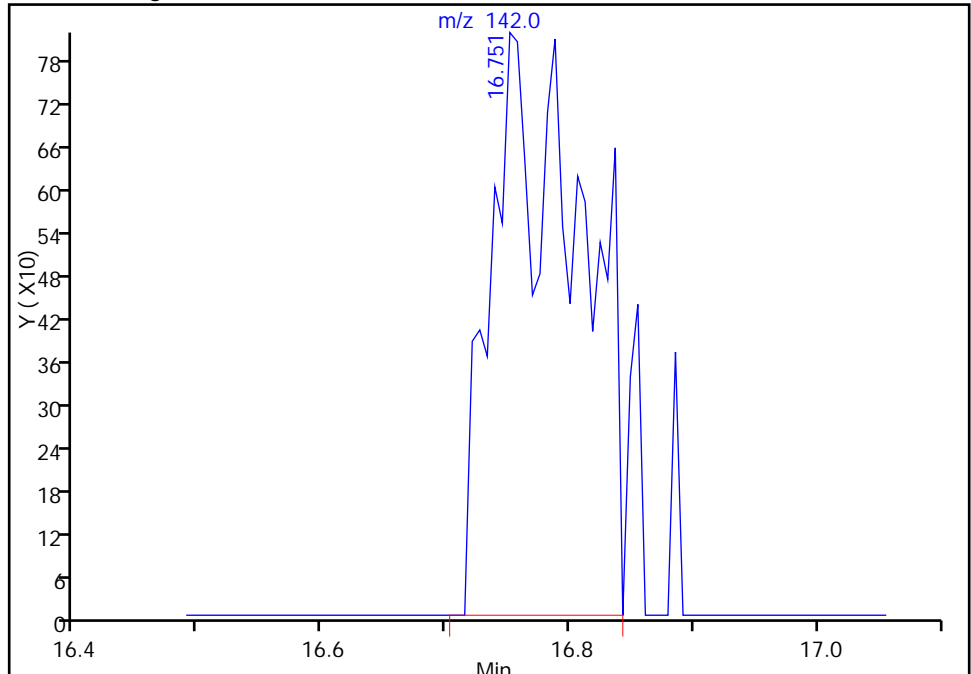
RT: 16.73
Response: 420
Amount: 30.278054

Processing Integration Results



RT: 16.75
Response: 4105
Amount: 55.526030

Manual Integration Results



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

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

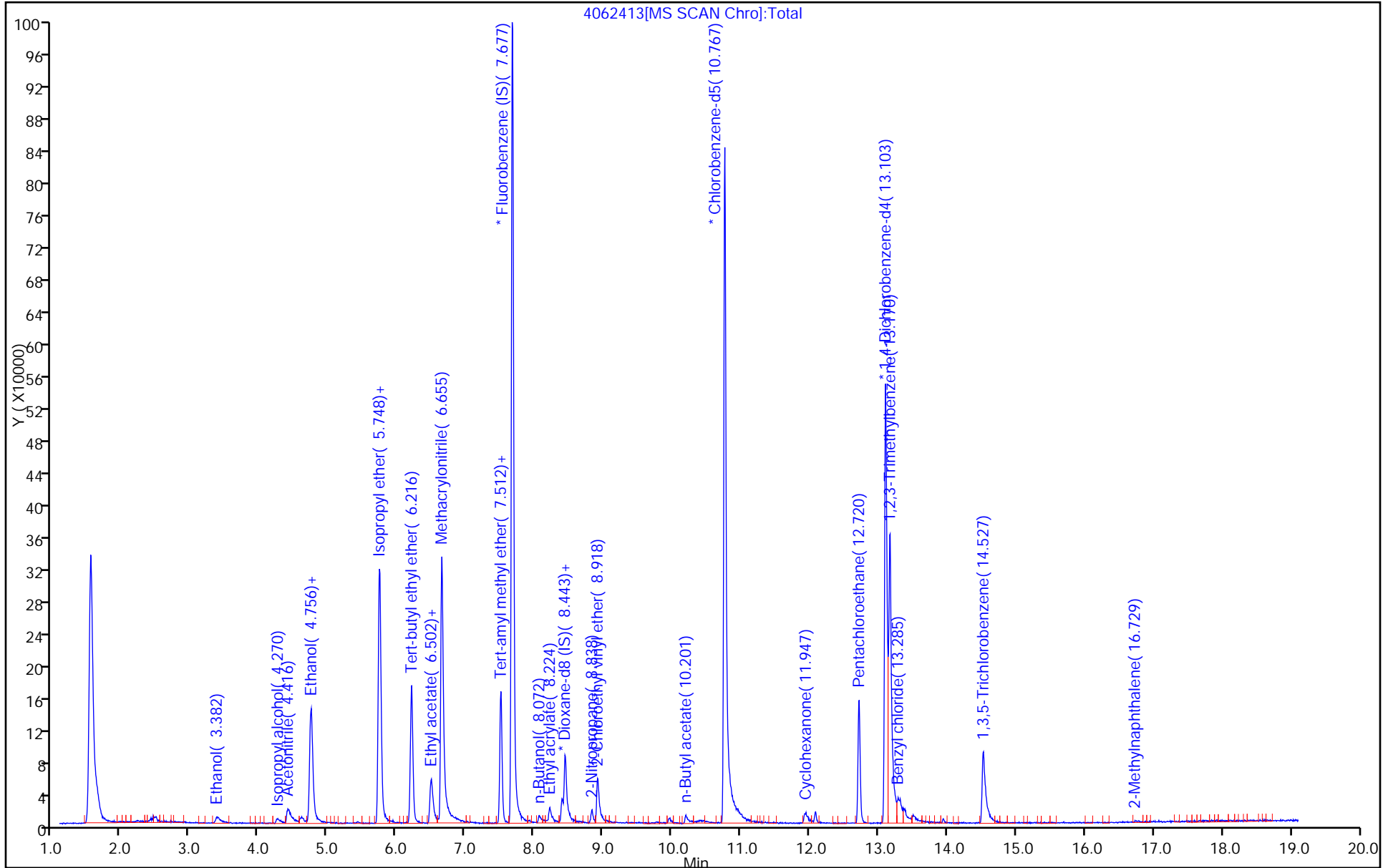
Dil. Factor: 1.0000

ALS Bottle#: 12

Method: MSVOA_CHHP4

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



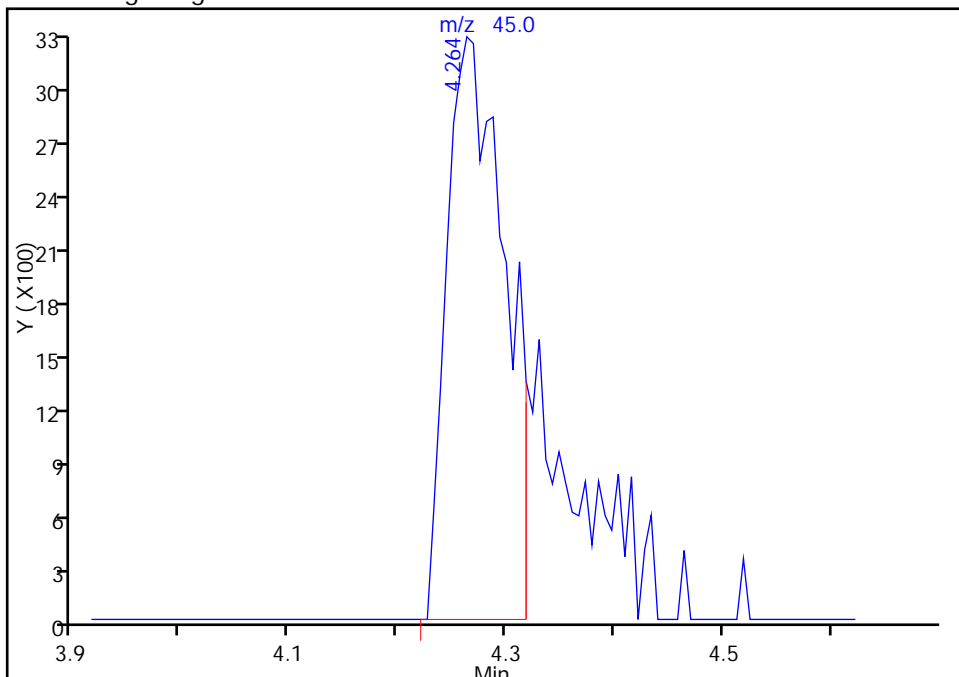
TestAmerica Pittsburgh

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

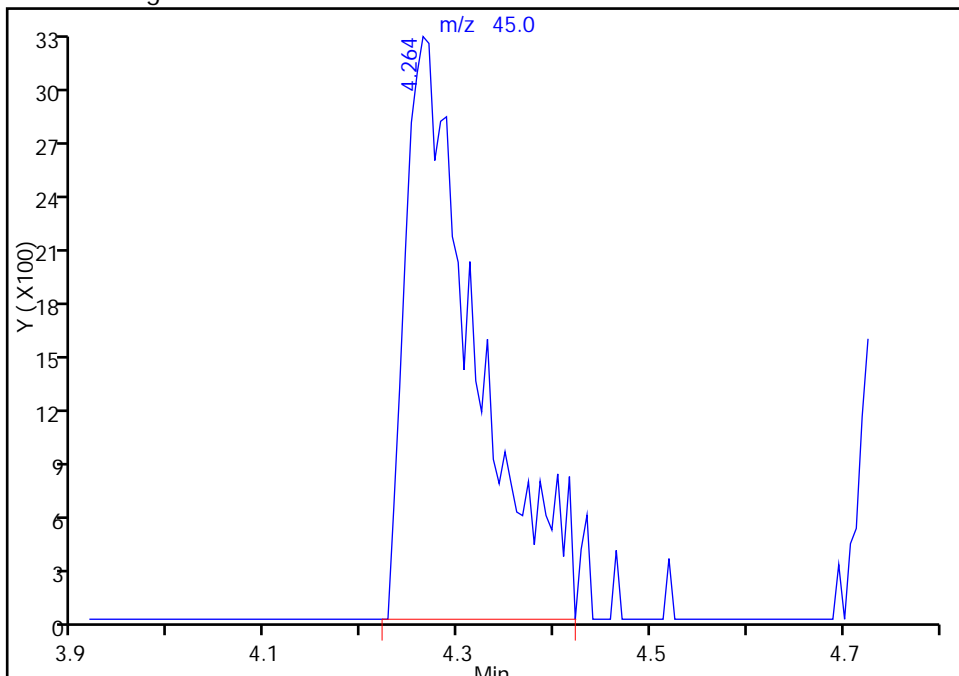
RT: 4.26
Response: 12092
Amount: 317.9627

Processing Integration Results



RT: 4.26
Response: 16538
Amount: 474.2876

Manual Integration Results



Reviewer: gordonk, 04-Mar-2014 12:18:14
Audit Action: Manually Integrated
Audit Reason: Peak Tail

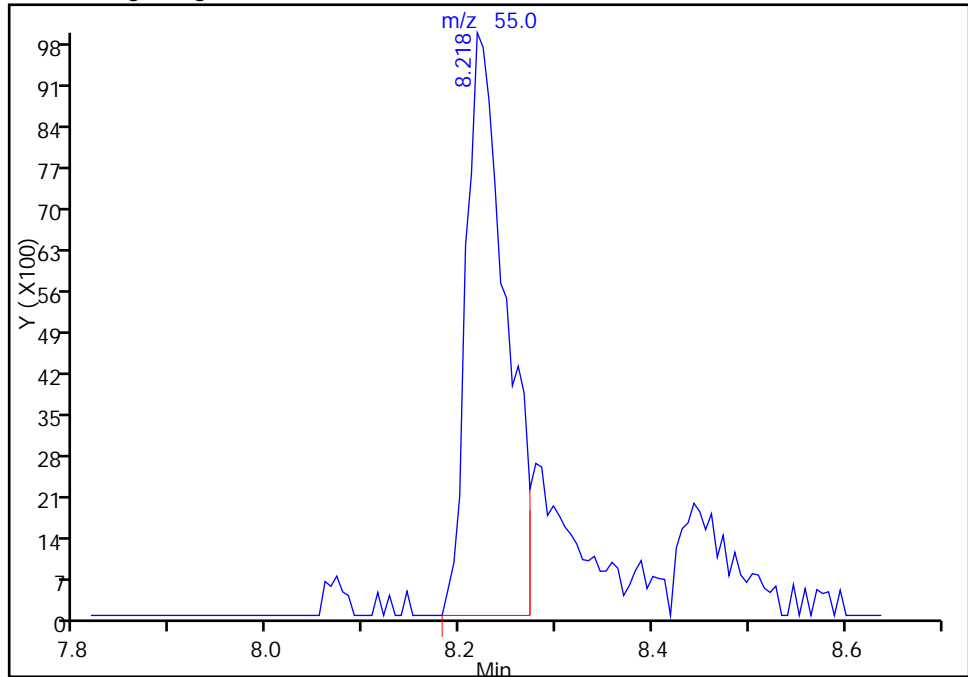
TestAmerica Pittsburgh

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

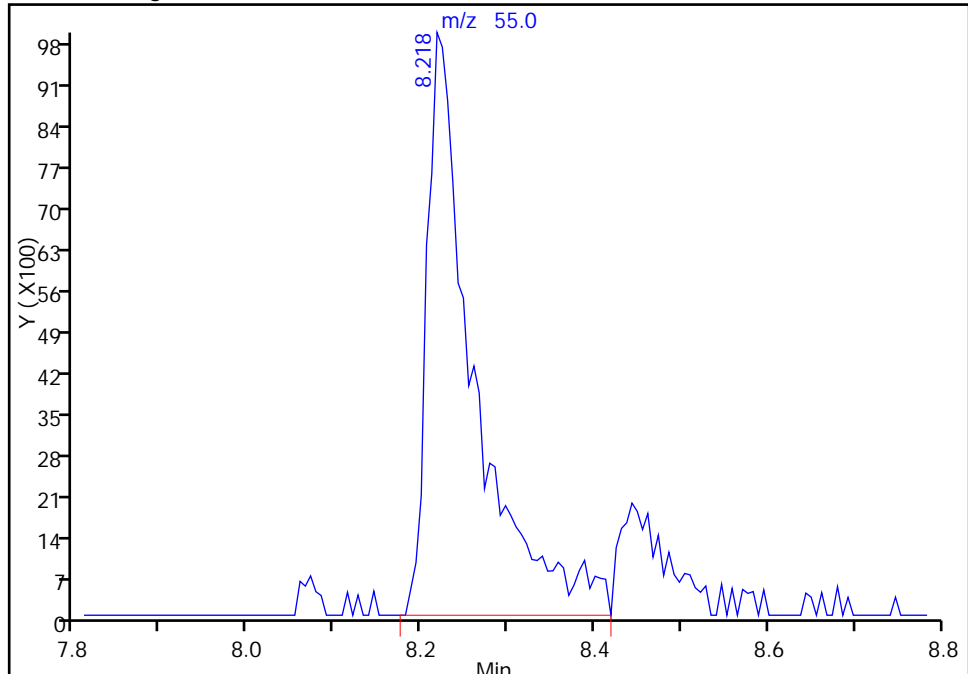
RT: 8.22
Response: 28503
Amount: 39.123427

Processing Integration Results



RT: 8.22
Response: 37811
Amount: 50.071857

Manual Integration Results



Reviewer: gordonk, 04-Mar-2014 12:18:14
Audit Action: Manually Integrated
Audit Reason: Peak Tail

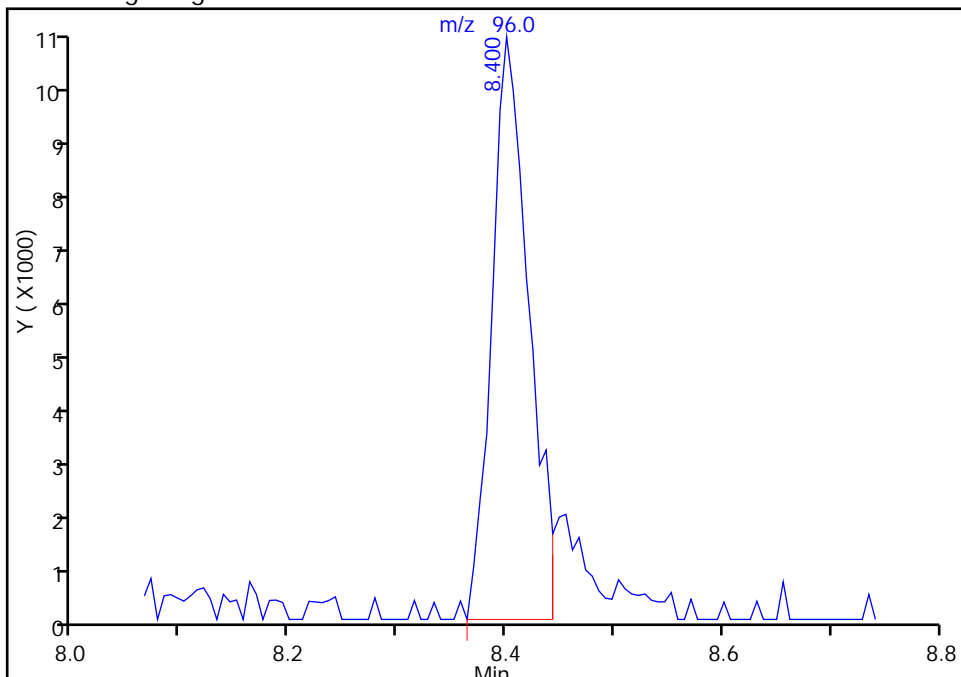
TestAmerica Pittsburgh

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

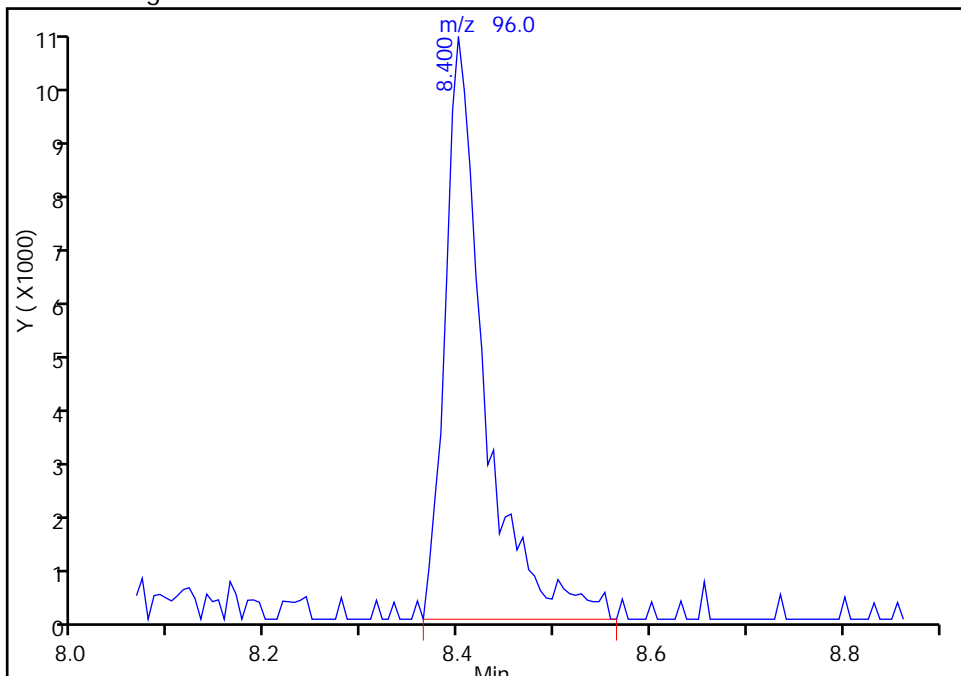
RT: 8.40
Response: 25755
Amount: 5000.0000

Processing Integration Results



RT: 8.40
Response: 30832
Amount: 5000.0000

Manual Integration Results



Reviewer: gordonk, 04-Mar-2014 12:18:14
Audit Action: Manually Integrated
Audit Reason: Peak Tail

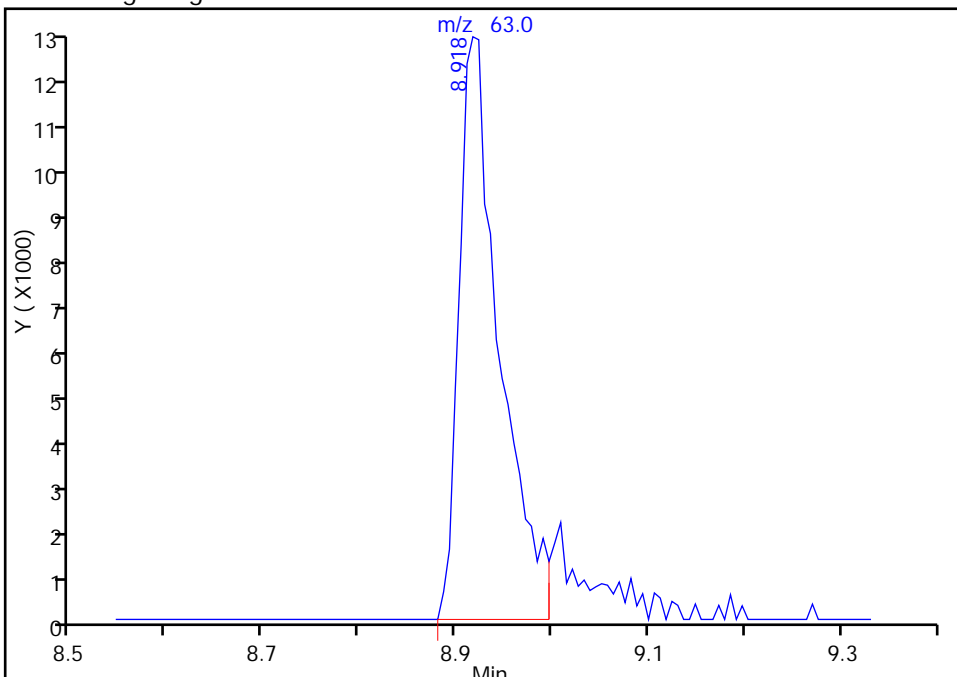
TestAmerica Pittsburgh

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

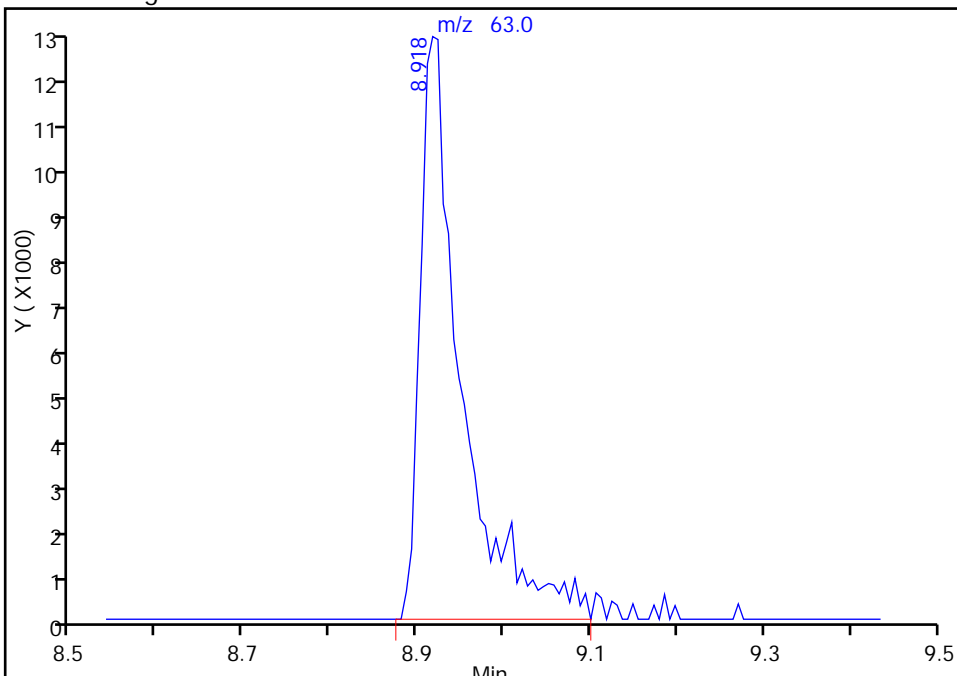
Processing Integration Results

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

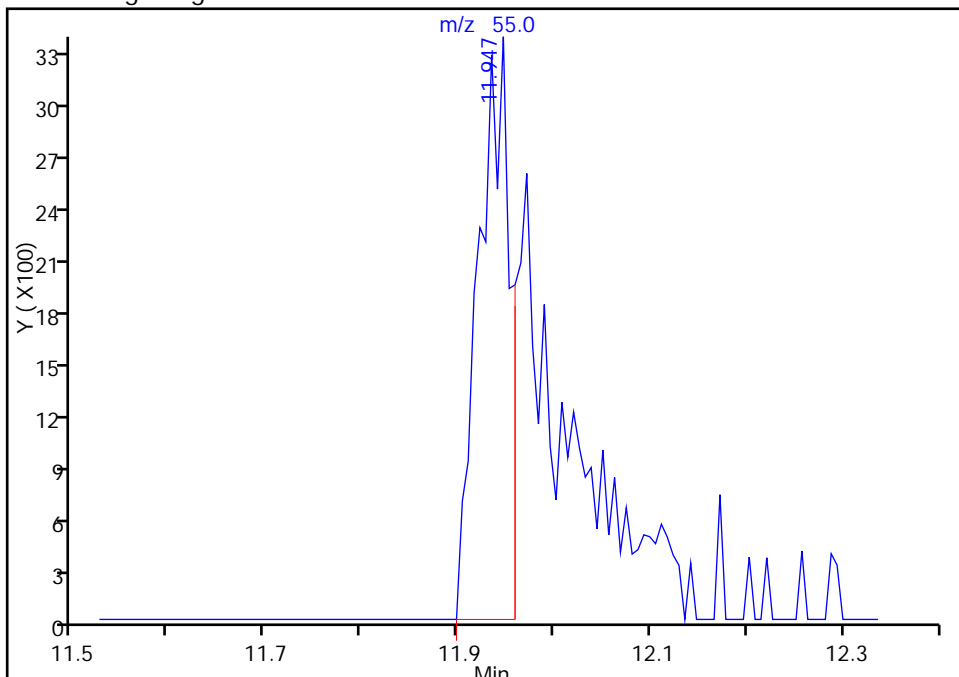
TestAmerica Pittsburgh

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

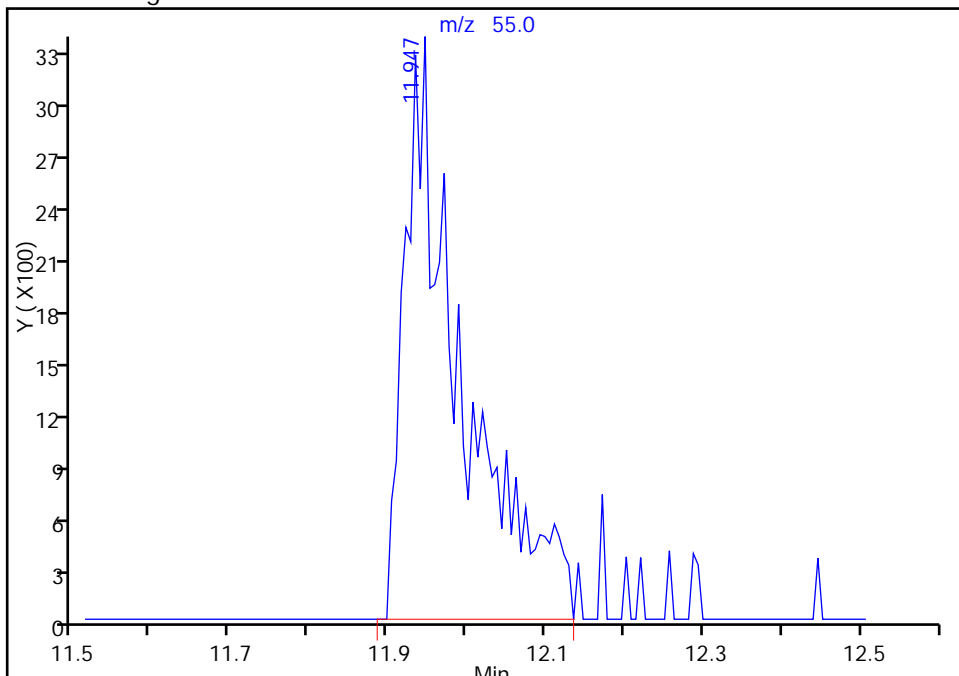
RT: 11.95
Response: 7596
Amount: 520.6181

Processing Integration Results



RT: 11.95
Response: 16567
Amount: 840.4512

Manual Integration Results



Reviewer: gordonk, 04-Mar-2014 12:18:14
Audit Action: Manually Integrated
Audit Reason: Peak Tail

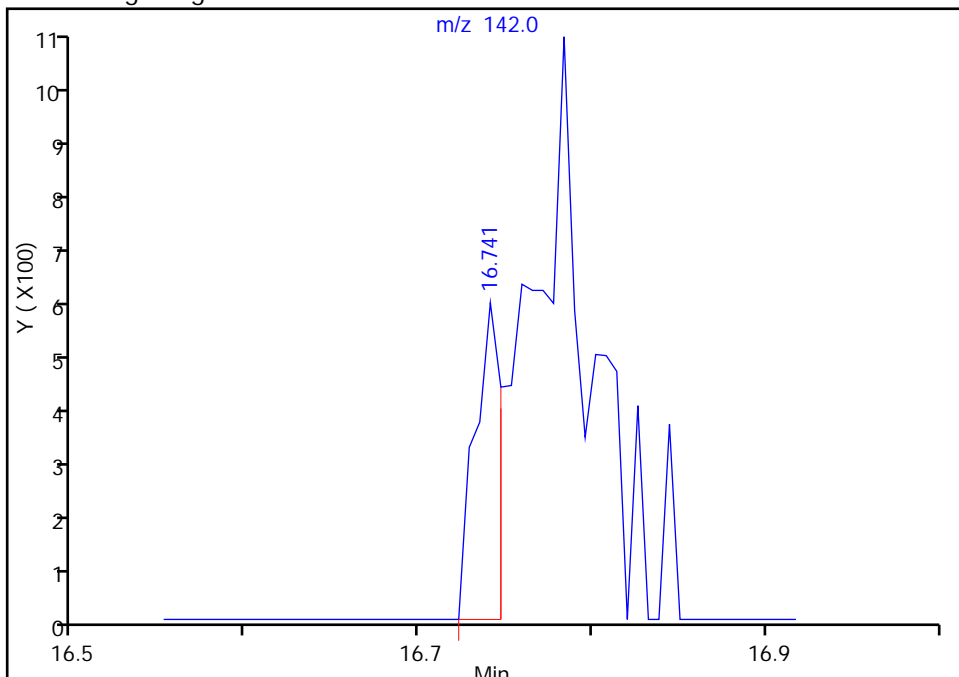
TestAmerica Pittsburgh

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

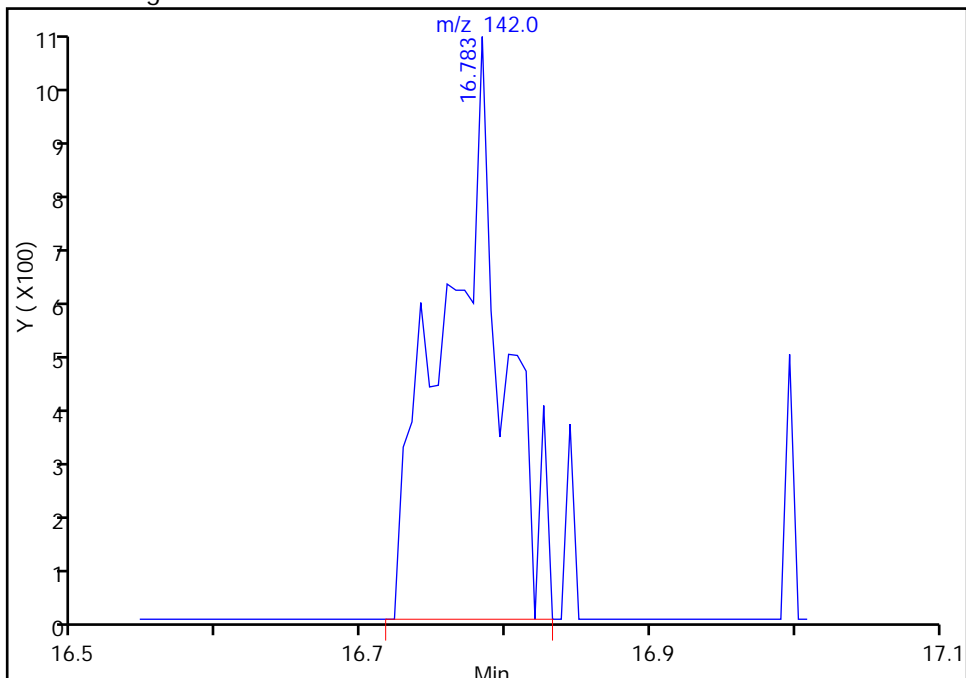
RT: 16.74
Response: 596
Amount: 10.164035

Processing Integration Results



RT: 16.78
Response: 2937
Amount: 32.989569

Manual Integration Results



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.)	Diff 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

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

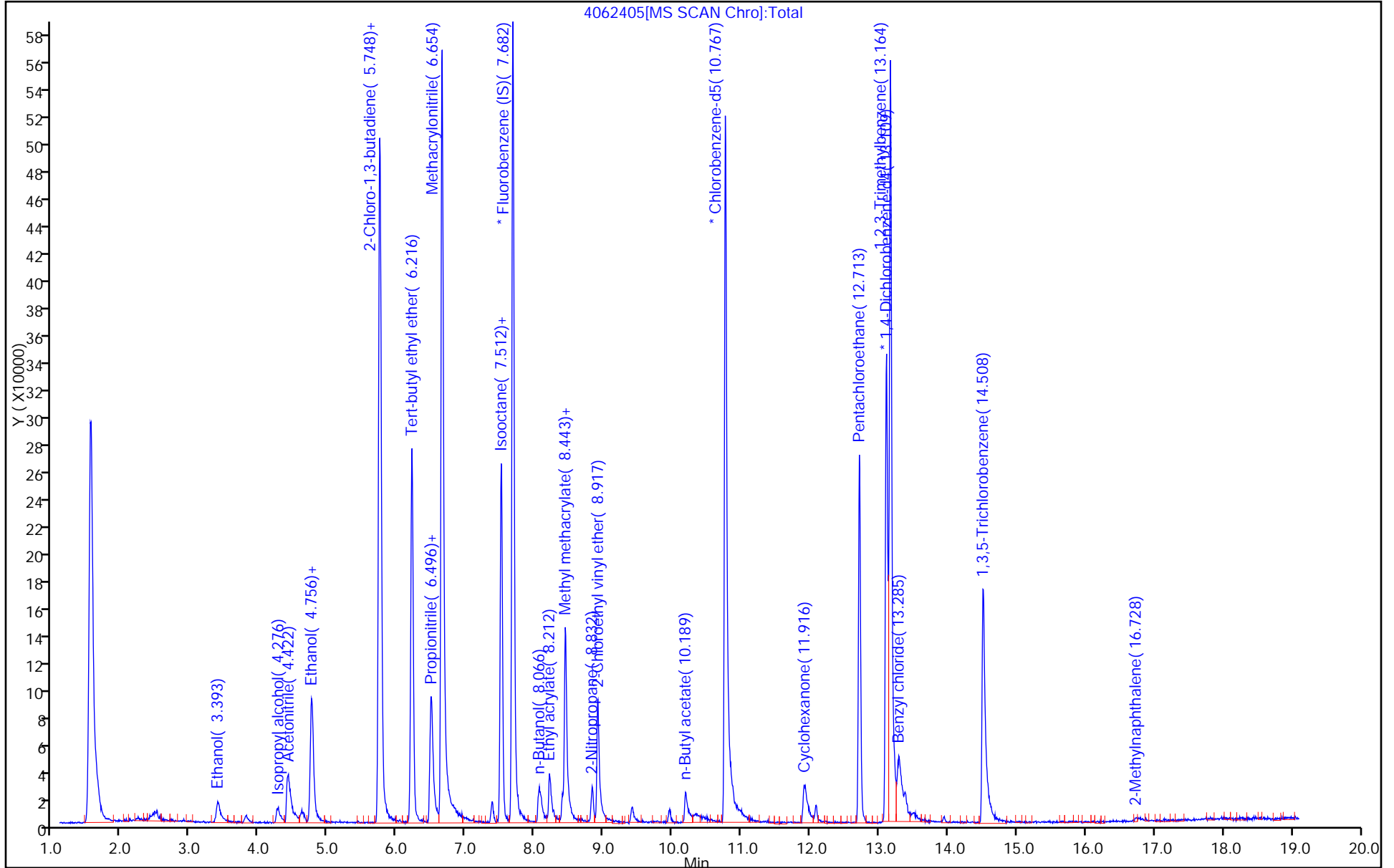
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: MSVOA_CHHP4

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



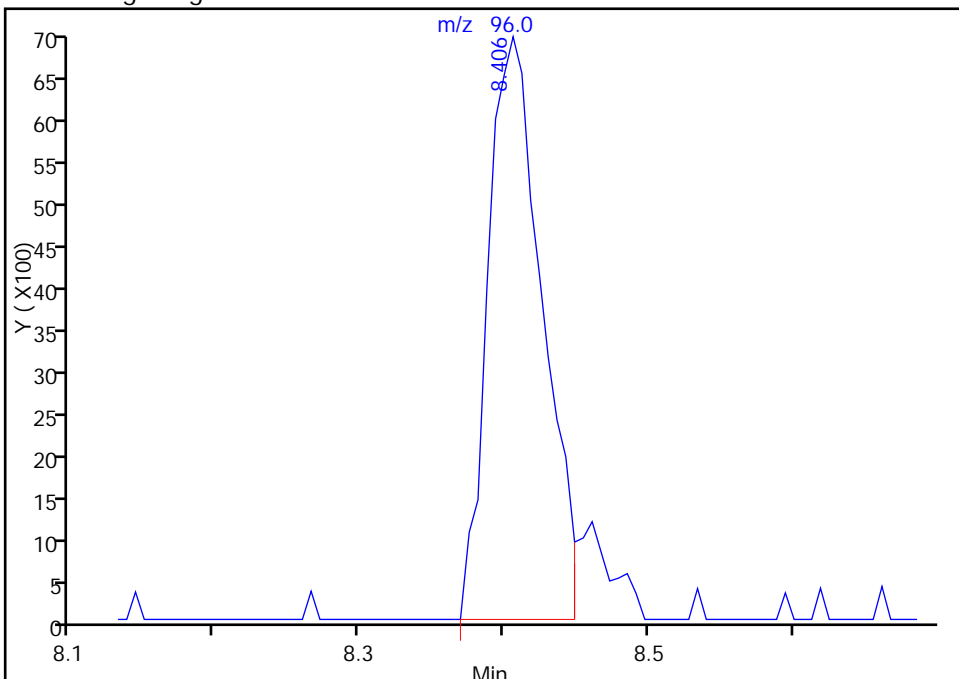
TestAmerica Pittsburgh

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

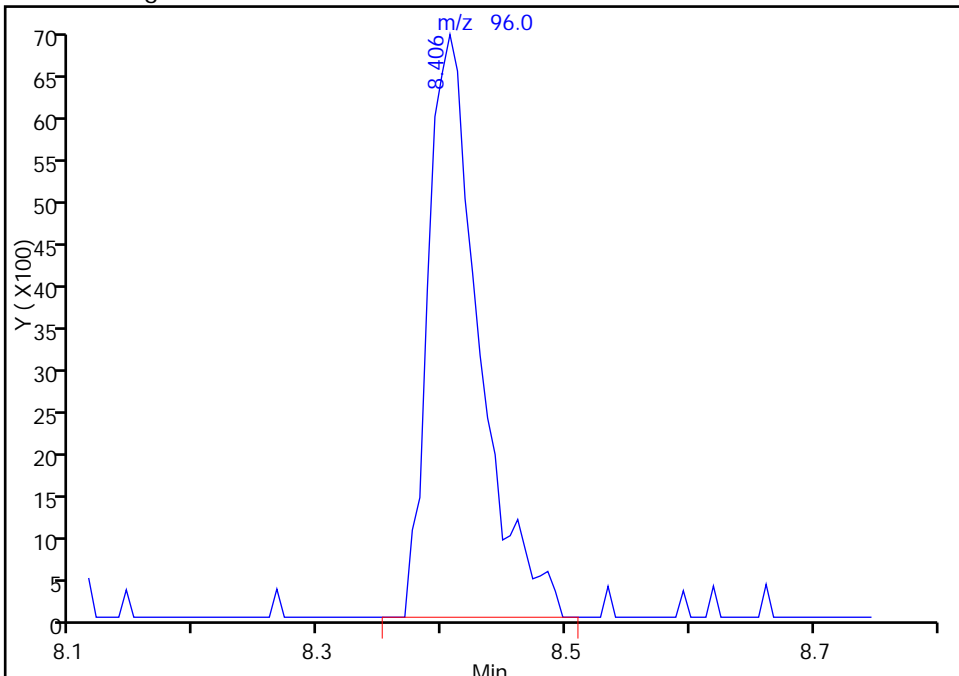
RT: 8.41
Response: 18161
Amount: 5000.0000

Processing Integration Results



RT: 8.41
Response: 19895
Amount: 5000.0000

Manual Integration Results



Reviewer: gordonk, 04-Mar-2014 12:08:08
Audit Action: Manually Integrated
Audit Reason: Peak Tail

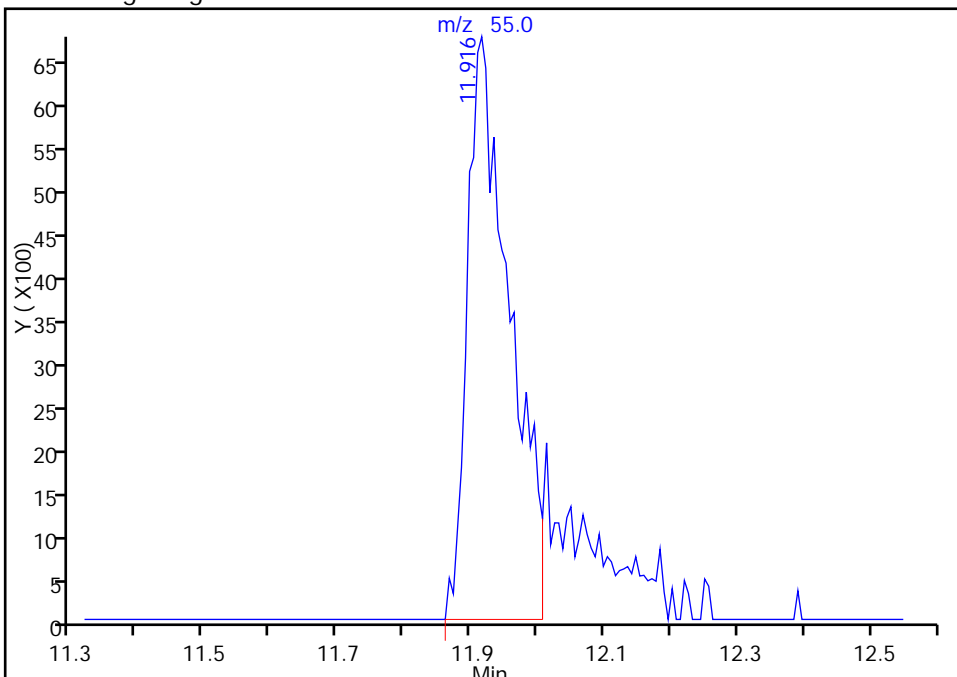
TestAmerica Pittsburgh

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

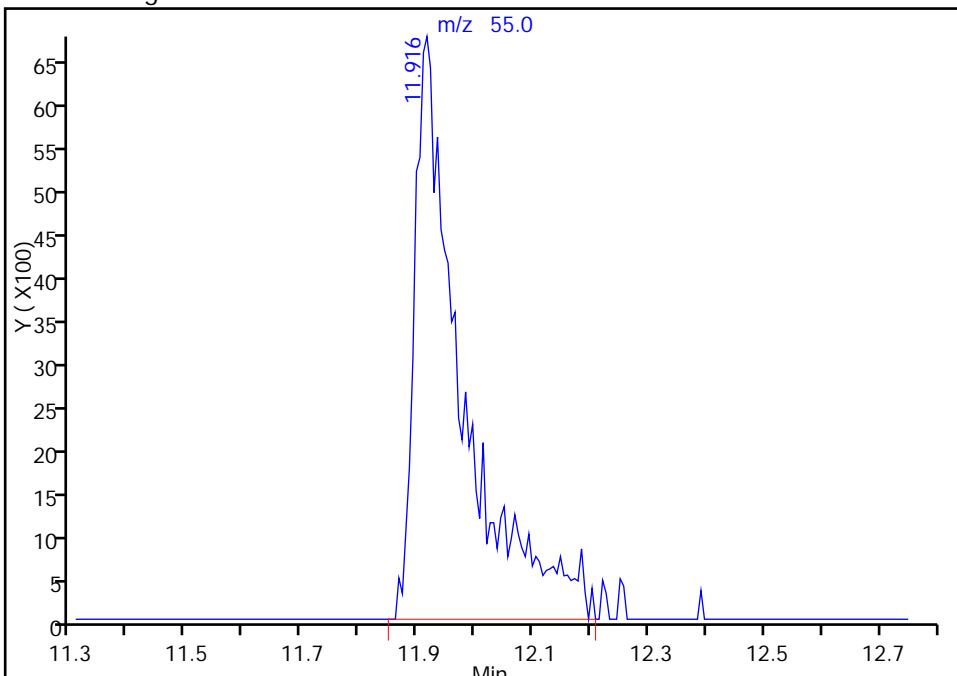
RT: 11.92
Response: 29824
Amount: 2903.7625

Processing Integration Results



RT: 11.92
Response: 38724
Amount: 3435.8889

Manual Integration Results



Reviewer: gordonk, 04-Mar-2014 12:08:08
Audit Action: Manually Integrated
Audit Reason: Peak Tail

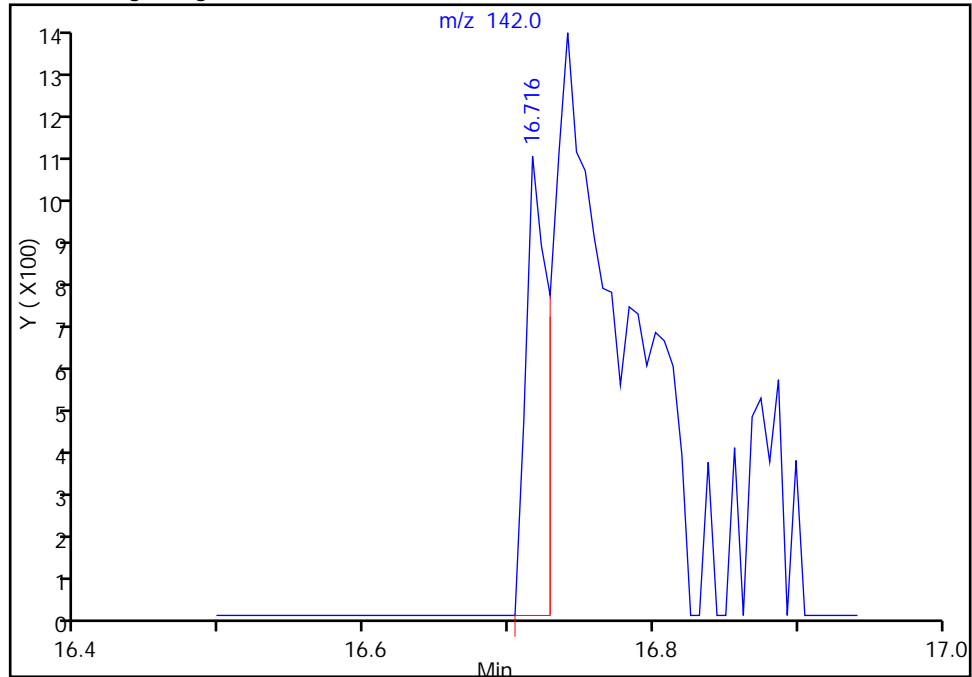
TestAmerica Pittsburgh

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

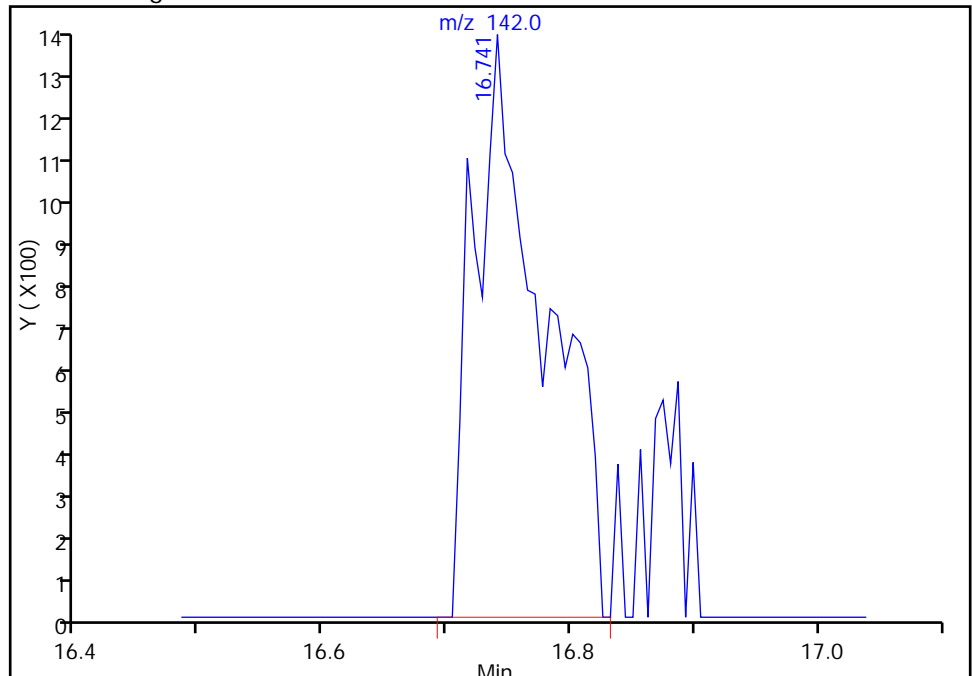
RT: 16.72
Response: 1111
Amount: 45.490915

Processing Integration Results



RT: 16.74
Response: 5278
Amount: 103.6354

Manual Integration Results



Reviewer: gordonk, 04-Mar-2014 12:08:08
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

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.)	Diff 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

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

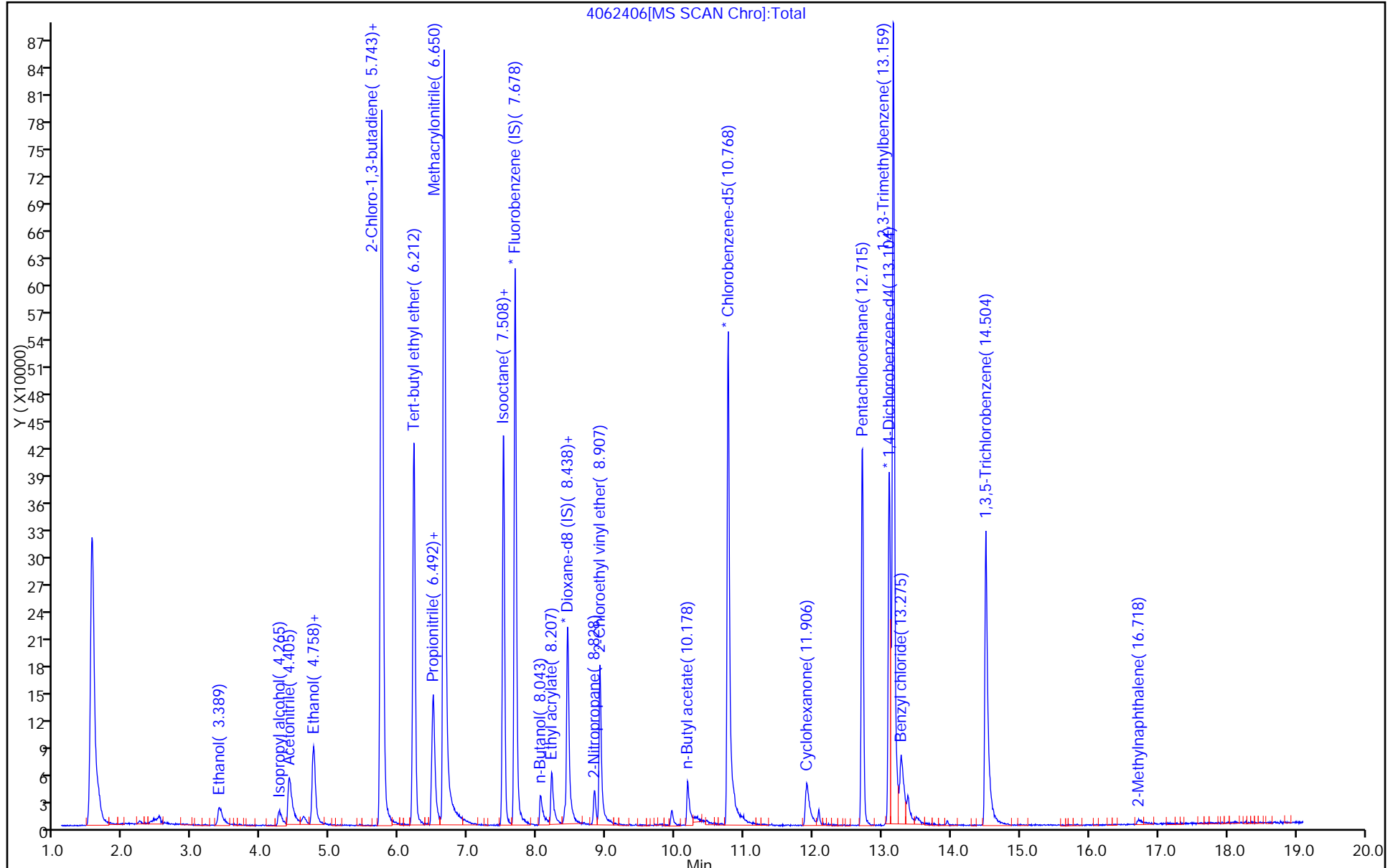
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MSVOA_CHHP4

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



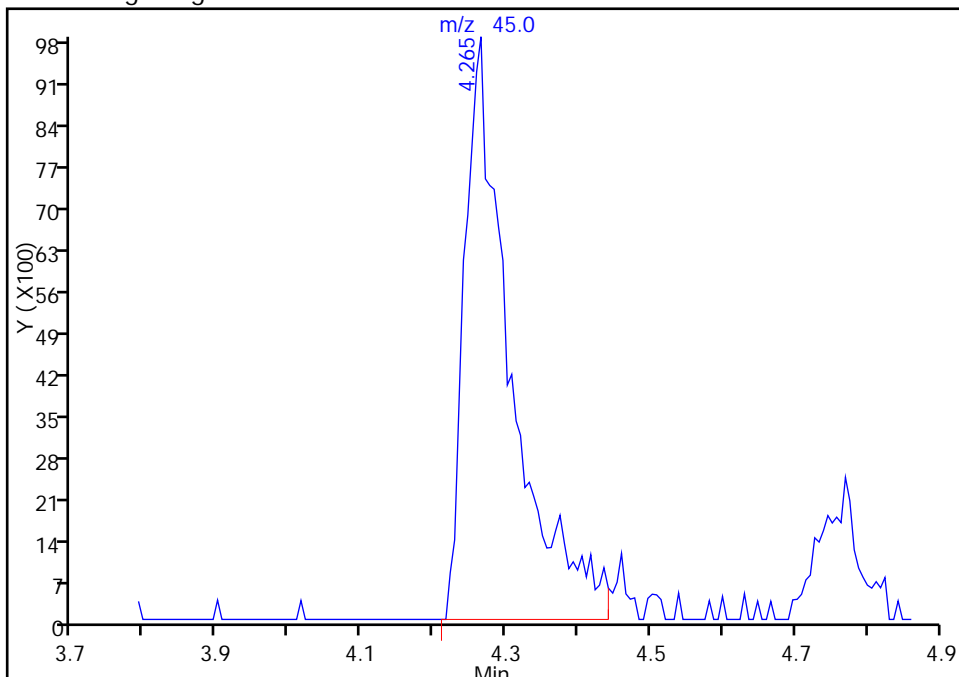
TestAmerica Pittsburgh

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

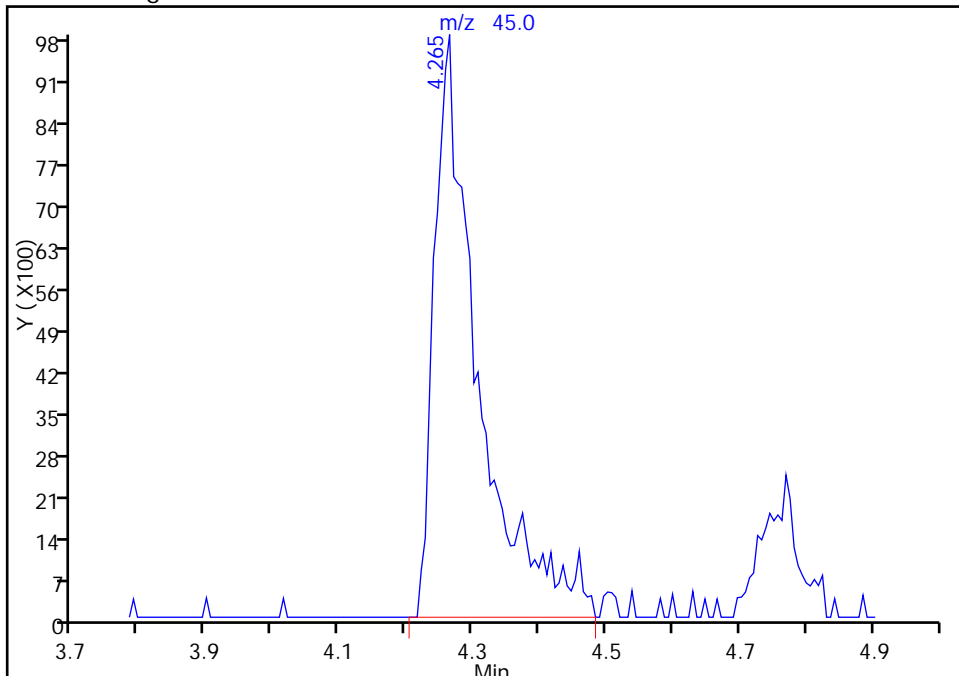
RT: 4.27
Response: 43824
Amount: 2098.1586

Processing Integration Results



RT: 4.27
Response: 45035
Amount: 2092.2827

Manual Integration Results



Reviewer: gordonk, 04-Mar-2014 12:05:57
Audit Action: Manually Integrated
Audit Reason: Peak Tail

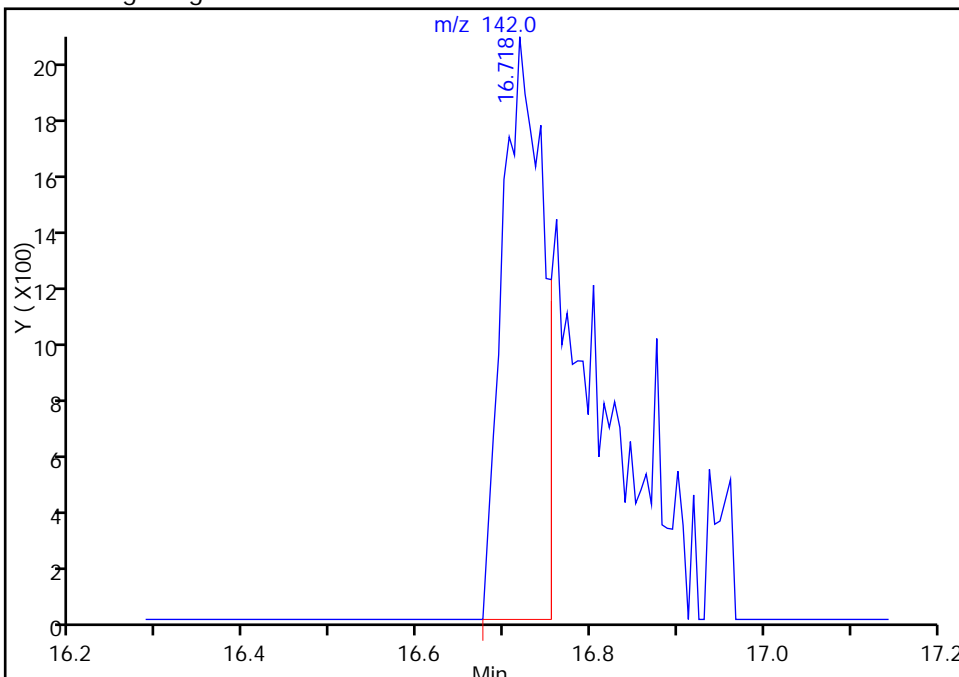
TestAmerica Pittsburgh

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

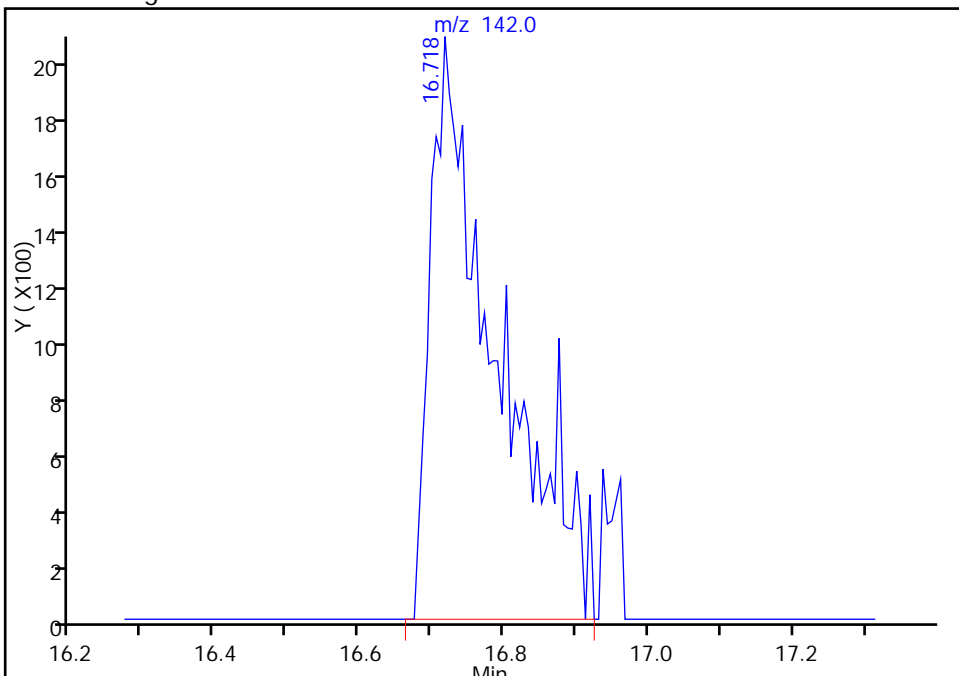
RT: 16.72
Response: 6483
Amount: 192.9351

Processing Integration Results



RT: 16.72
Response: 12768
Amount: 232.7614

Manual Integration Results



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.)	Diff 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

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

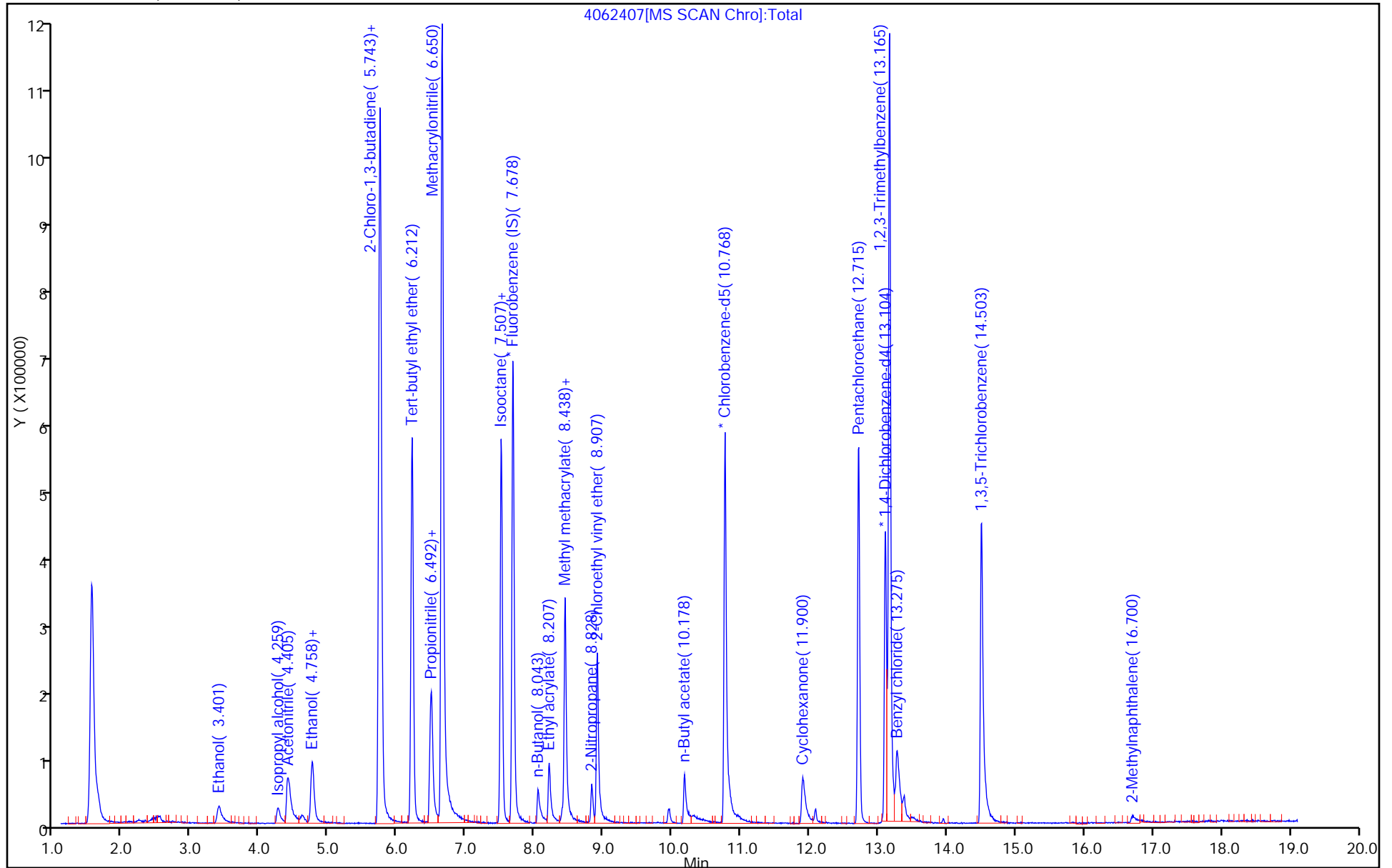
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: MSVOA_CHHP4

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



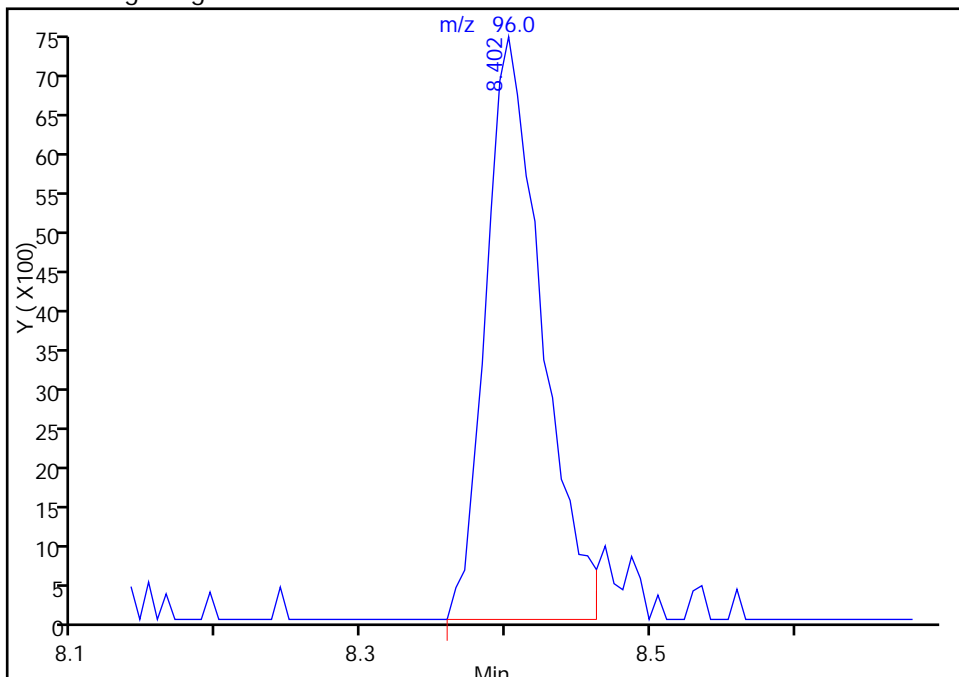
TestAmerica Pittsburgh

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

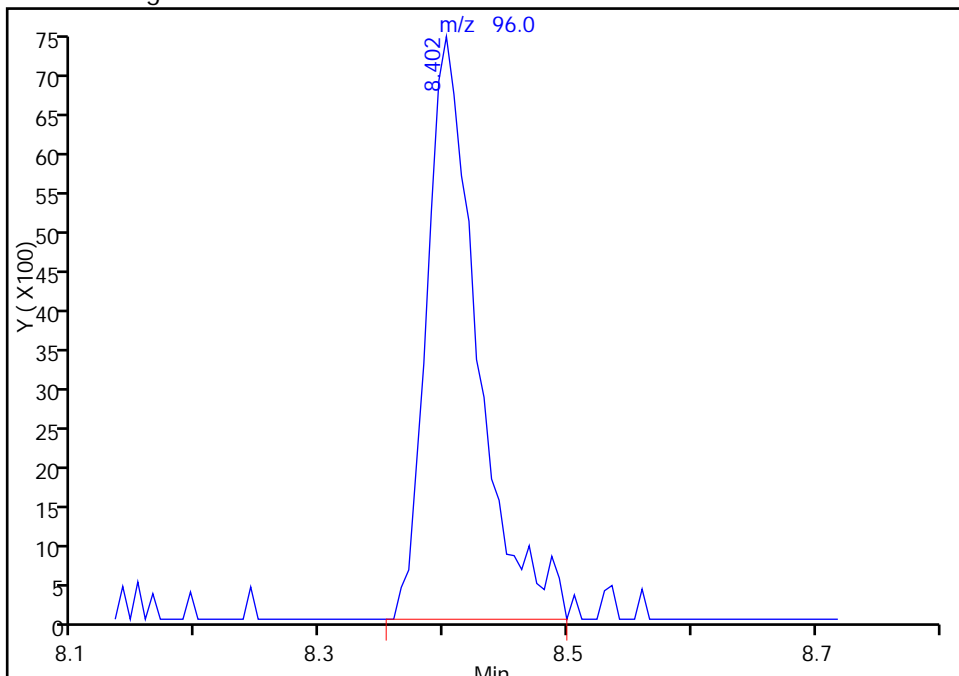
RT: 8.40
Response: 19964
Amount: 5000.0000

Processing Integration Results



RT: 8.40
Response: 21088
Amount: 5000.0000

Manual Integration Results



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

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

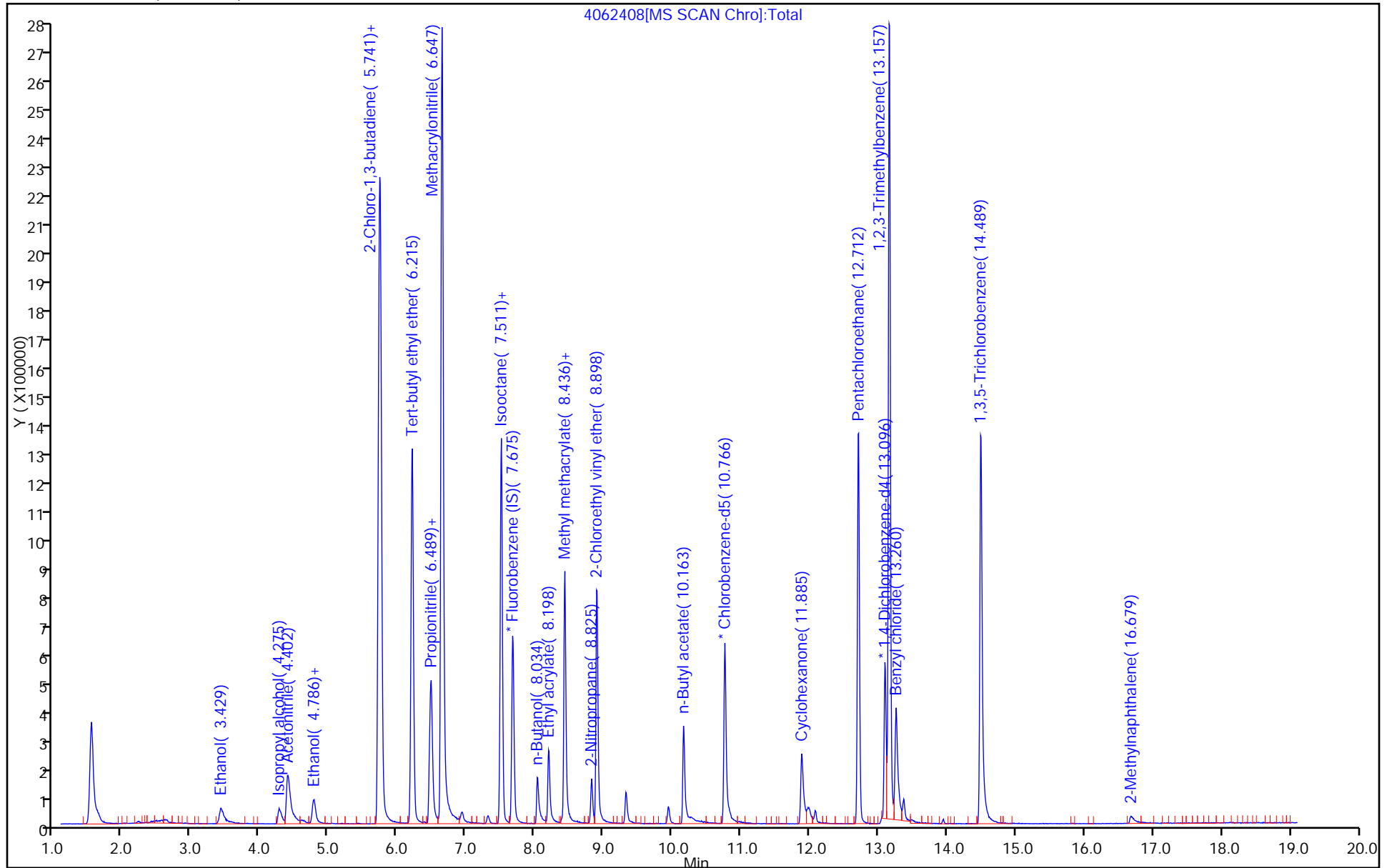
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: MSVOA_CHHP4

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



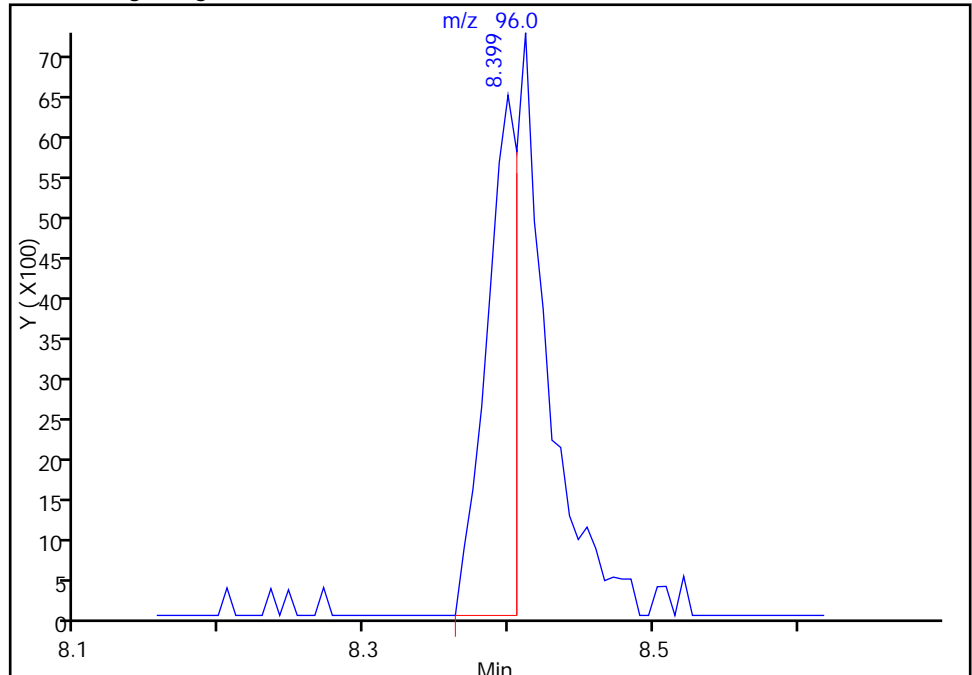
TestAmerica Pittsburgh

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

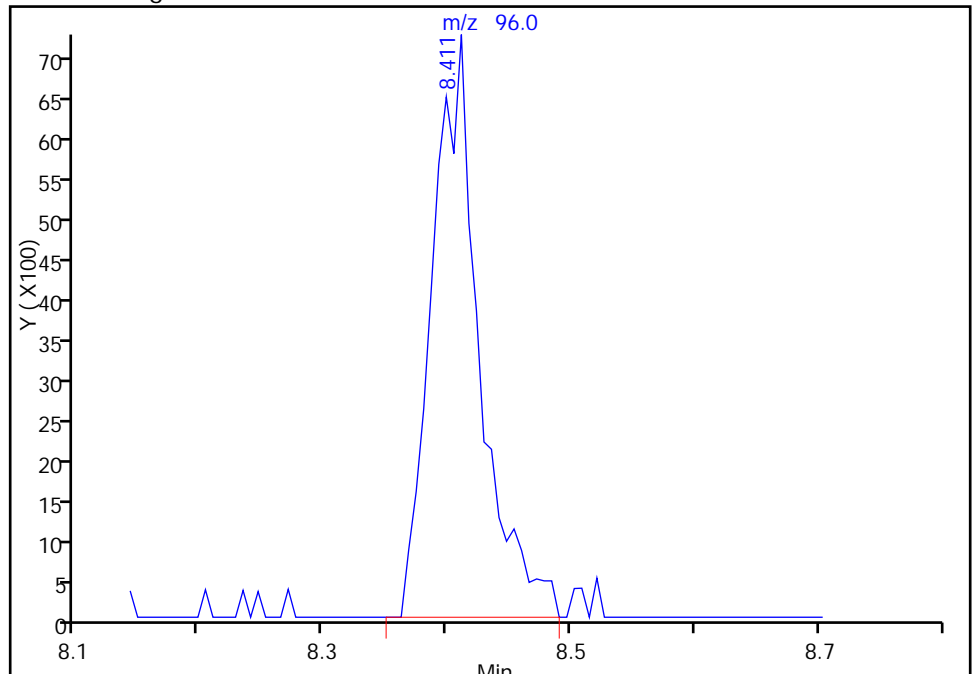
RT: 8.40
Response: 9829
Amount: 5000.0000

Processing Integration Results



RT: 8.41
Response: 19371
Amount: 5000.0000

Manual Integration Results



Reviewer: gordonk, 04-Mar-2014 12:10:24
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

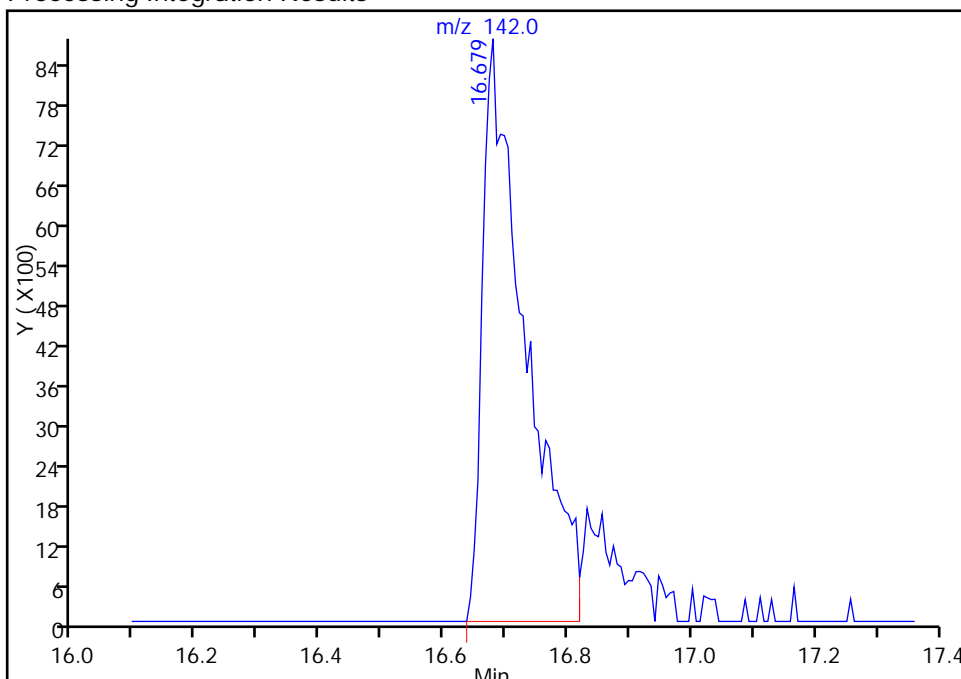
TestAmerica Pittsburgh

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

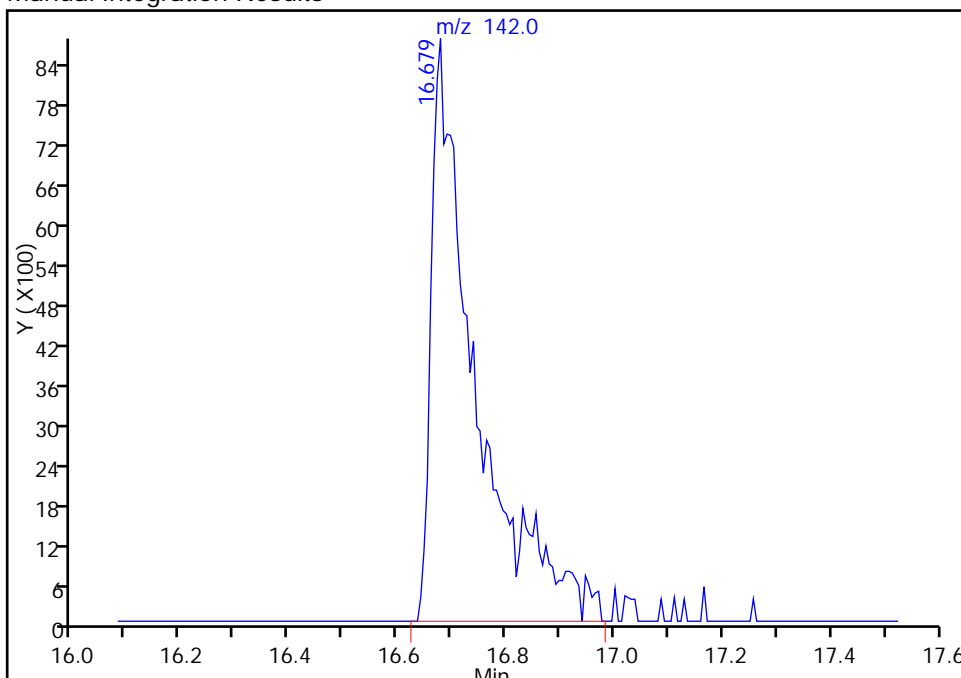
RT: 16.68
Response: 42018
Amount: 601.9641

Processing Integration Results



RT: 16.68
Response: 49559
Amount: 631.5903

Manual Integration Results



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.)	Diff 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	

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

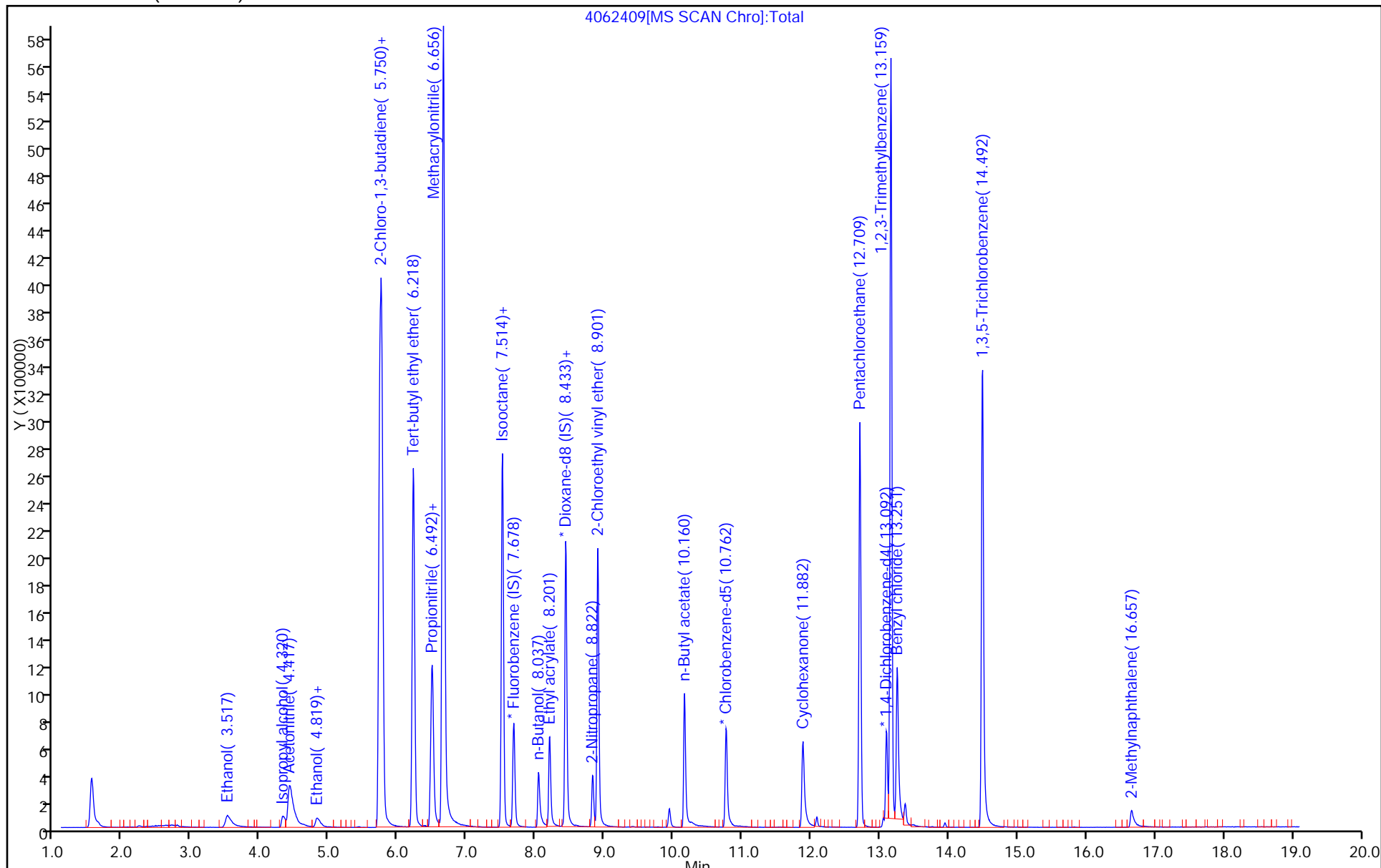
Dil. Factor: 1.0000

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.: 180-34298-1 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 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
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.: 180-34298-1

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 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
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.: 180-34298-1

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 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
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.: 180-34298-1

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 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
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.: 180-34298-1 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 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
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.: 180-34298-1 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-trifluoroethane	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.: 180-34298-1 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.: 180-34298-1 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.: 180-34298-1 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.: 180-34298-1 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

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: journeytj

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

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

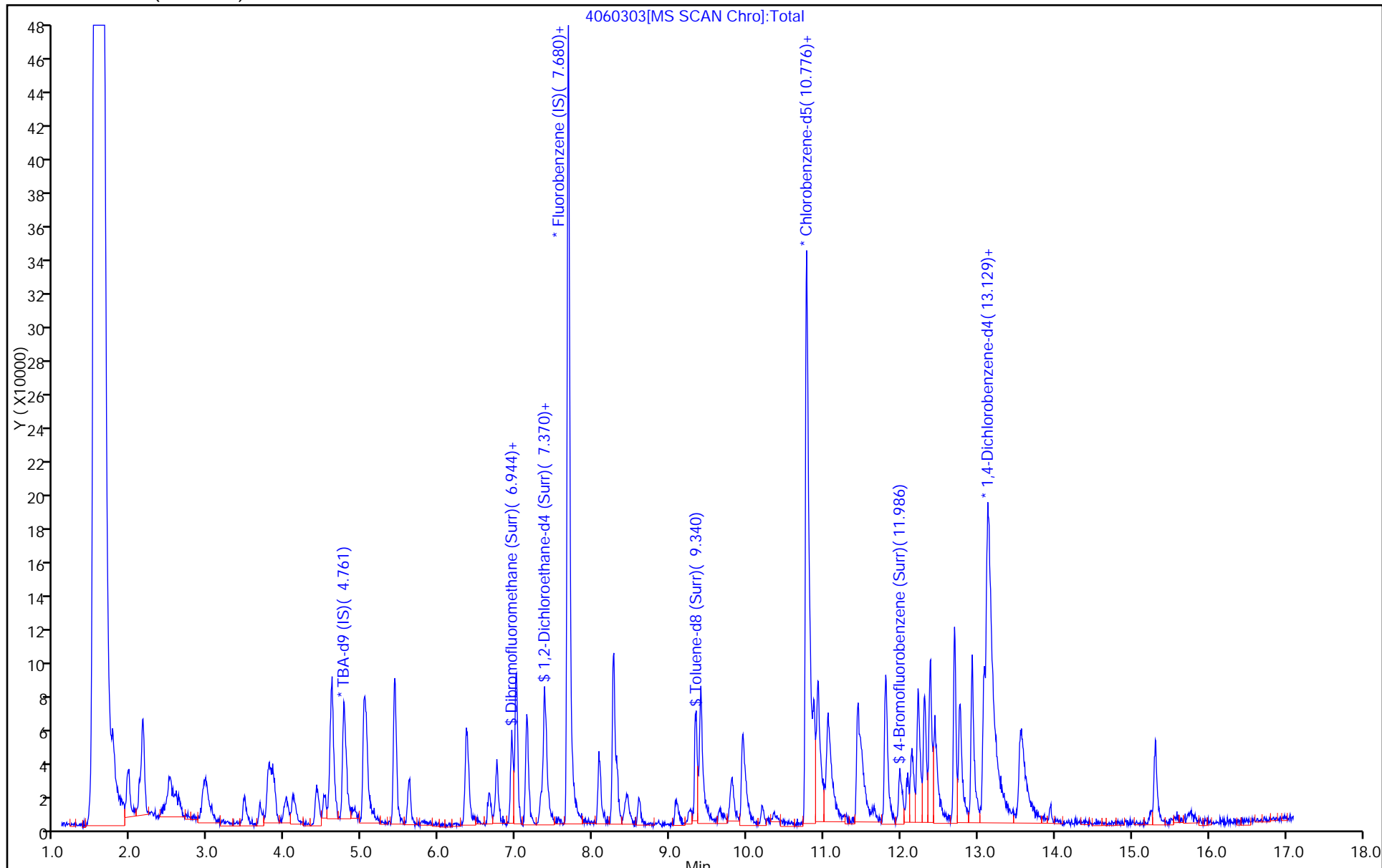
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: MSVOA_CHHP4

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



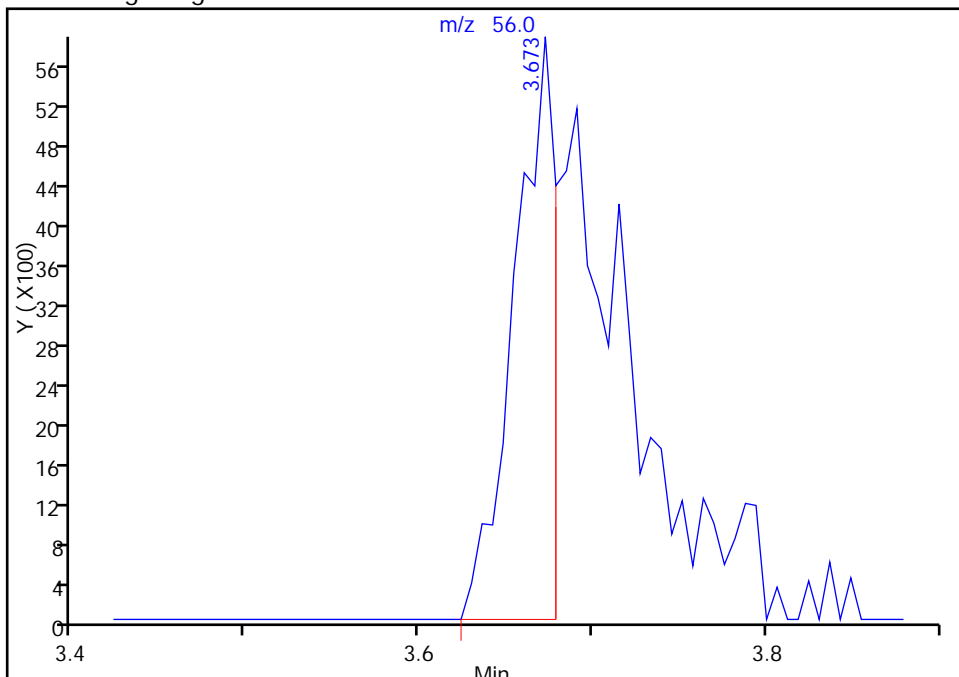
TestAmerica Pittsburgh

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

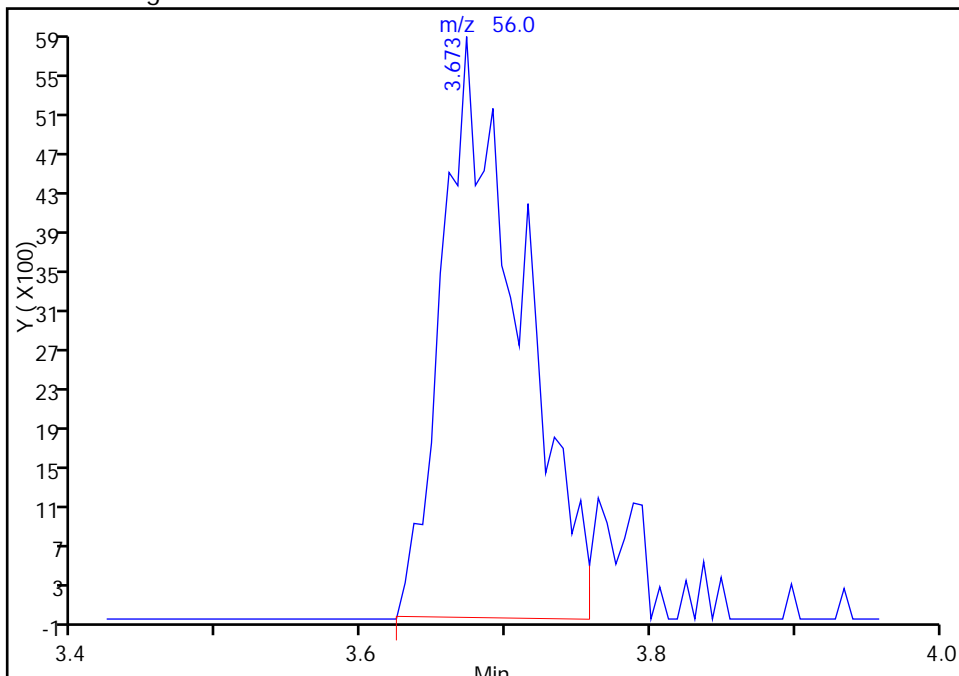
RT: 3.67
Response: 9757
Amount: 284.7544

Processing Integration Results



RT: 3.67
Response: 22060
Amount: 599.2580

Manual Integration Results



Reviewer: journept, 03-Jun-2014 13:59:16
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

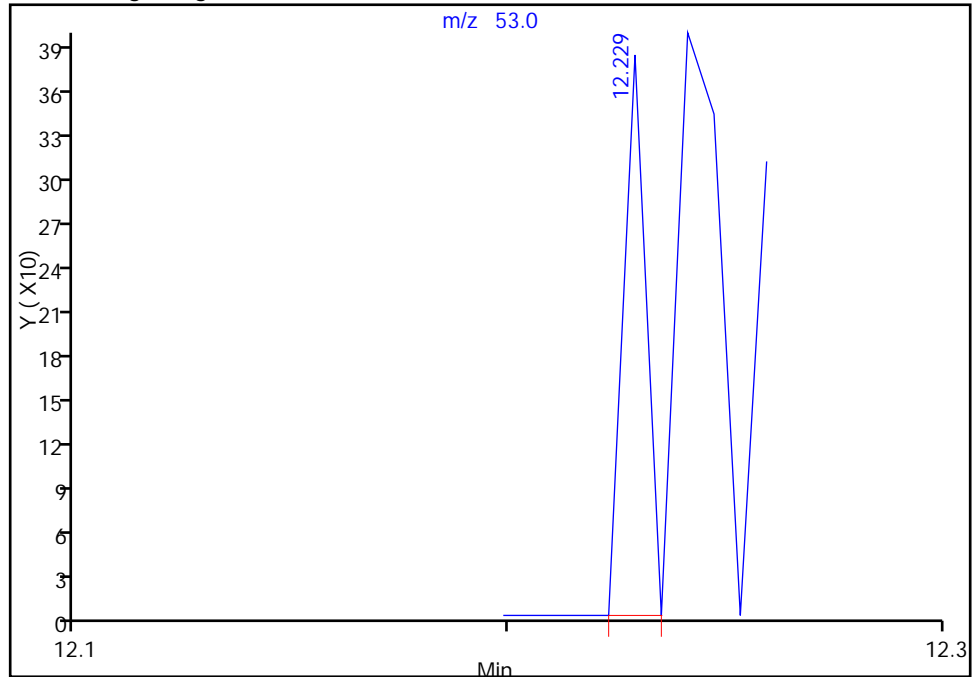
TestAmerica Pittsburgh

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

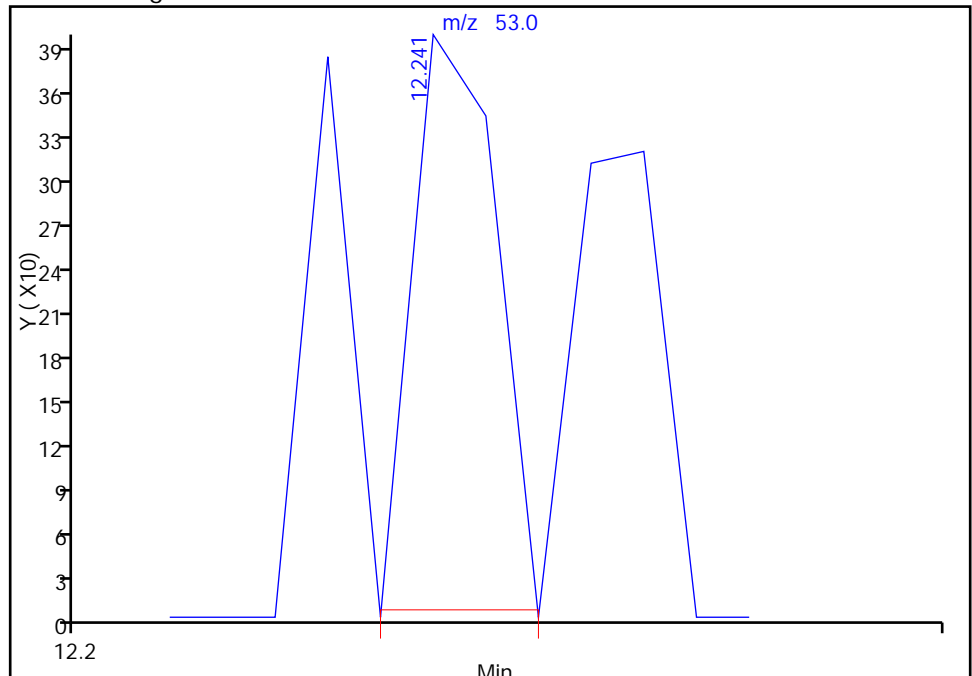
RT: 12.23
Response: 138
Amount: 3.653890

Processing Integration Results



RT: 12.24
Response: 260
Amount: 5.526277

Manual Integration Results



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

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

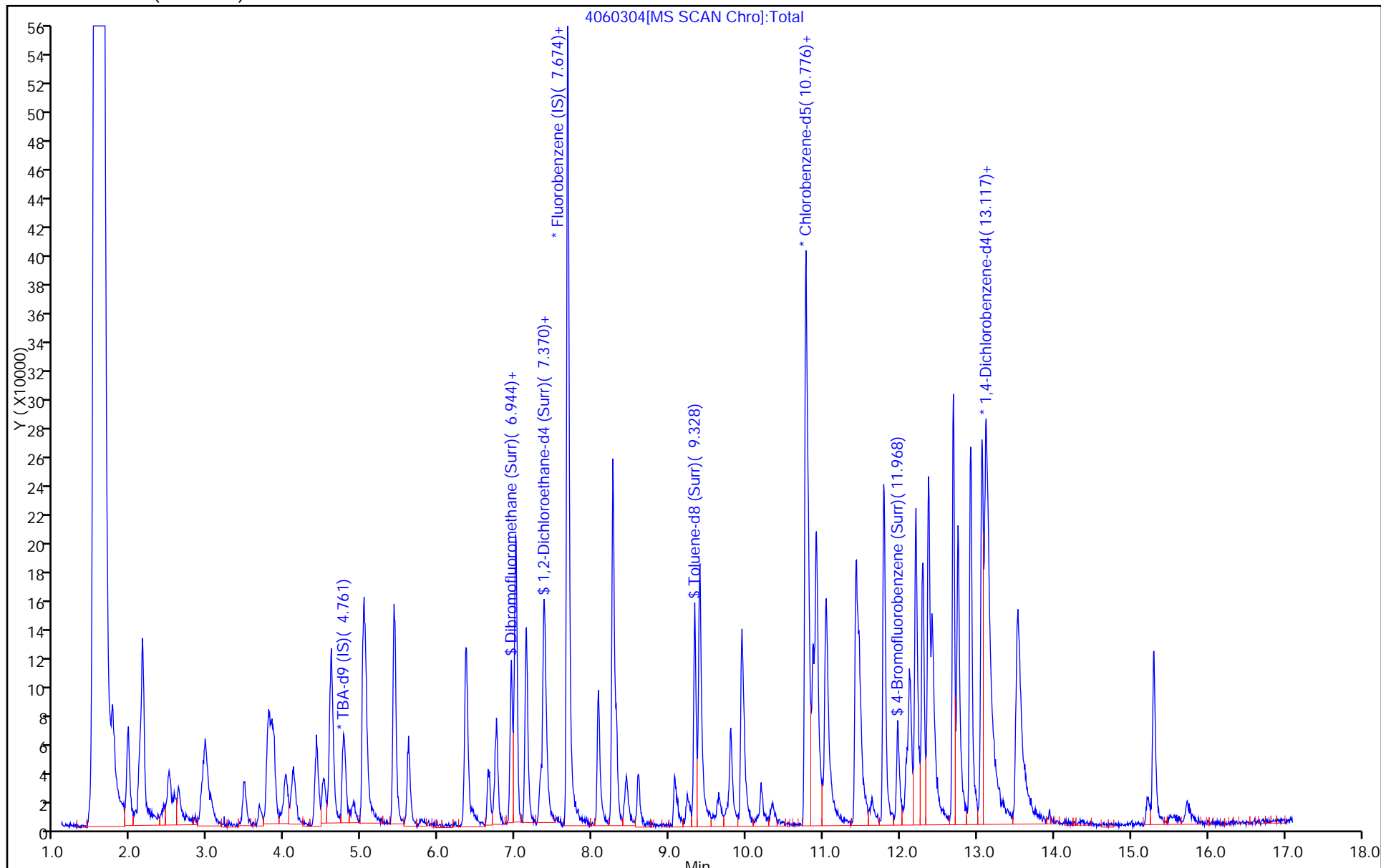
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: MSVOA_CHHP4

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



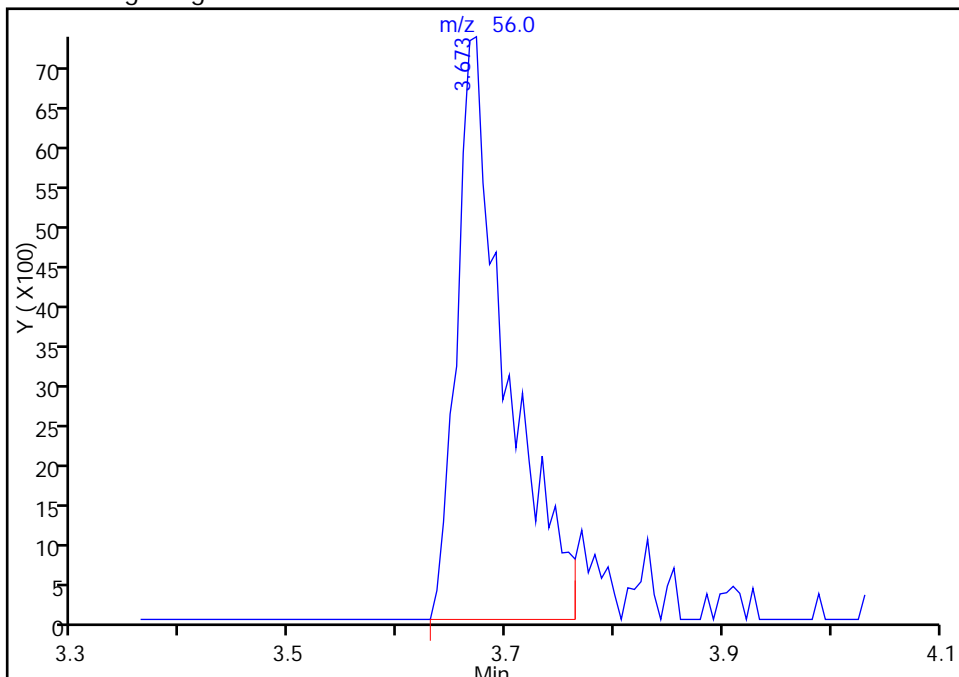
TestAmerica Pittsburgh

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

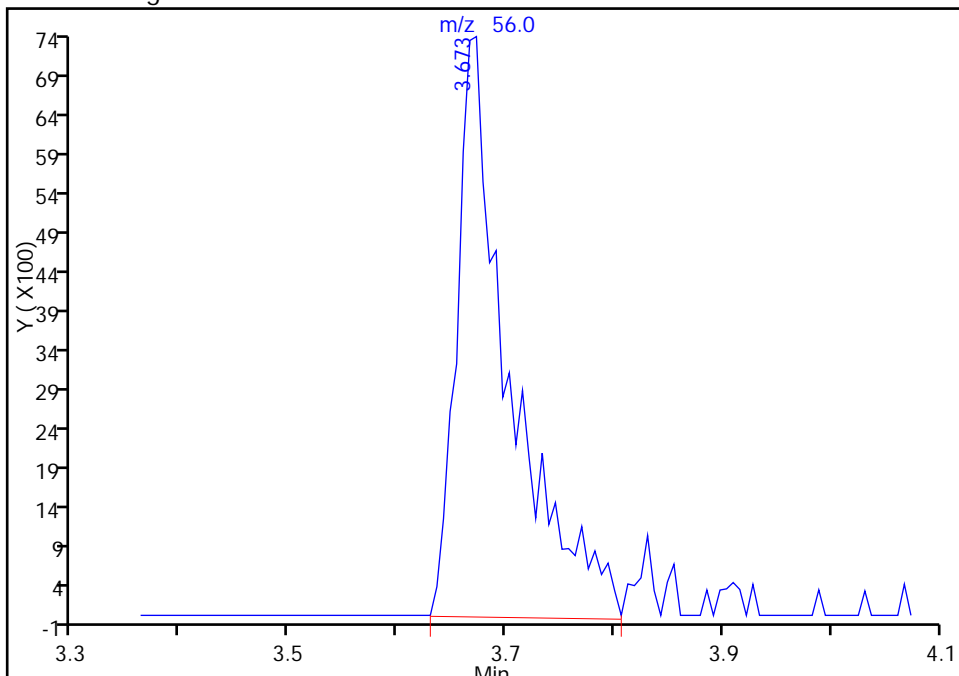
RT: 3.67
Response: 23198
Amount: 717.0719

Processing Integration Results



RT: 3.67
Response: 24998
Amount: 710.2042

Manual Integration Results



Reviewer: journetp, 03-Jun-2014 13:54:51
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

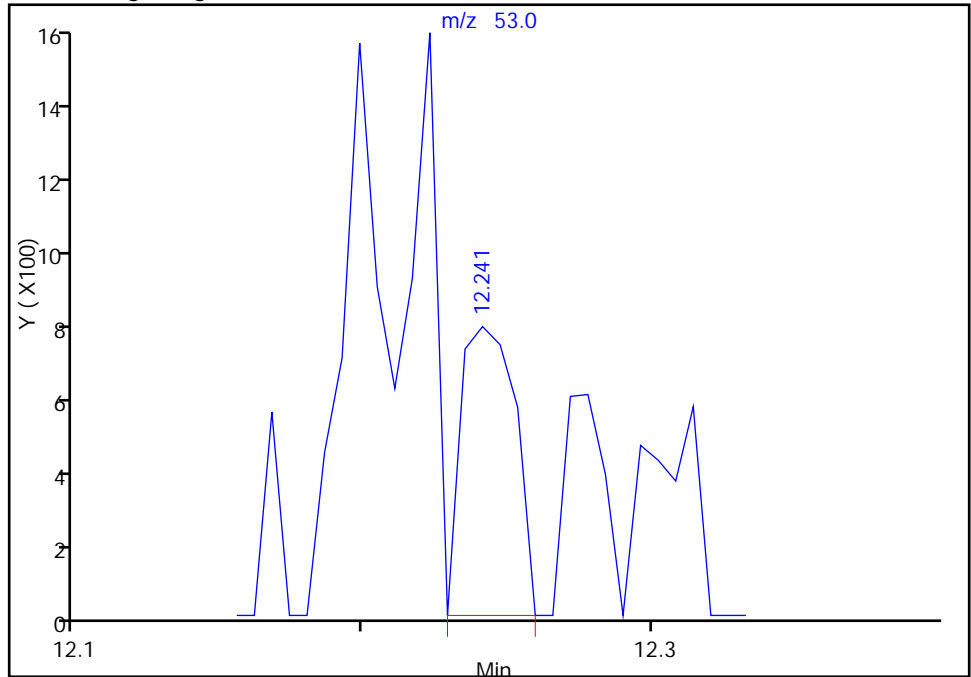
TestAmerica Pittsburgh

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

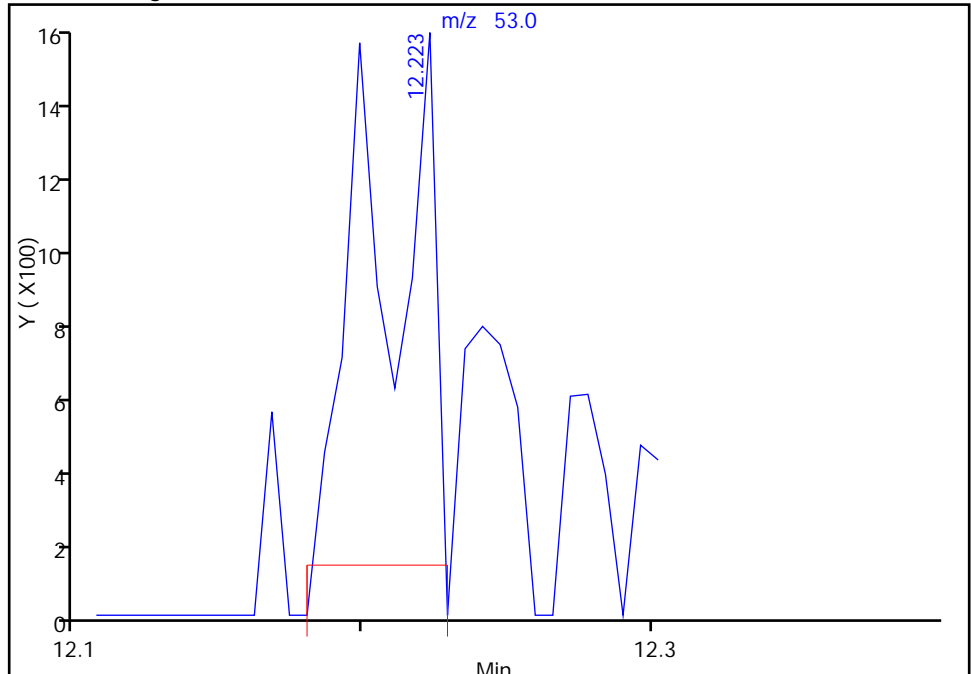
RT: 12.24
Response: 994
Amount: 23.303158

Processing Integration Results



RT: 12.22
Response: 1939
Amount: 37.434292

Manual Integration Results



Reviewer: journeyp, 03-Jun-2014 13:50:17
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

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

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

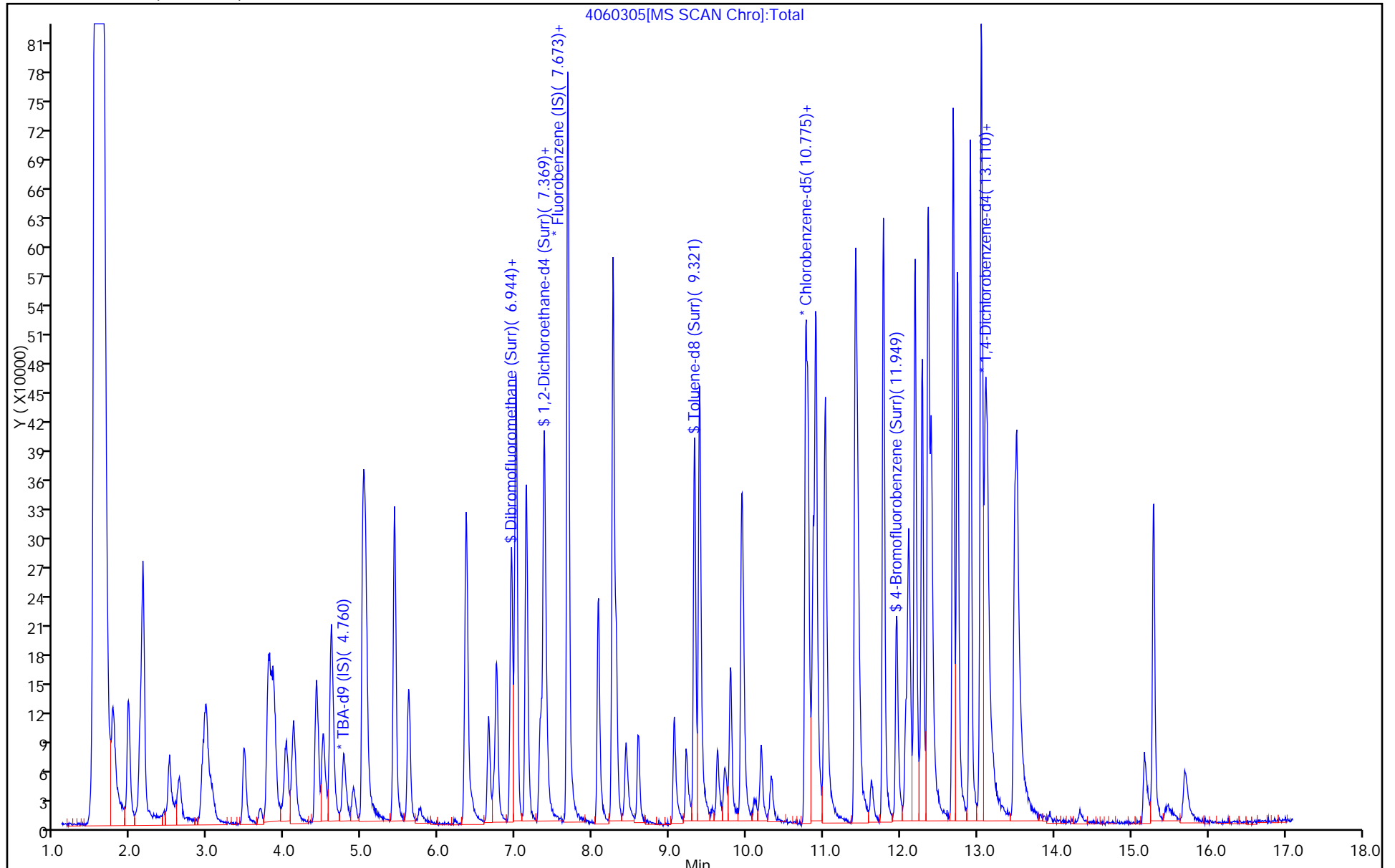
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MSVOA_CHHP4

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



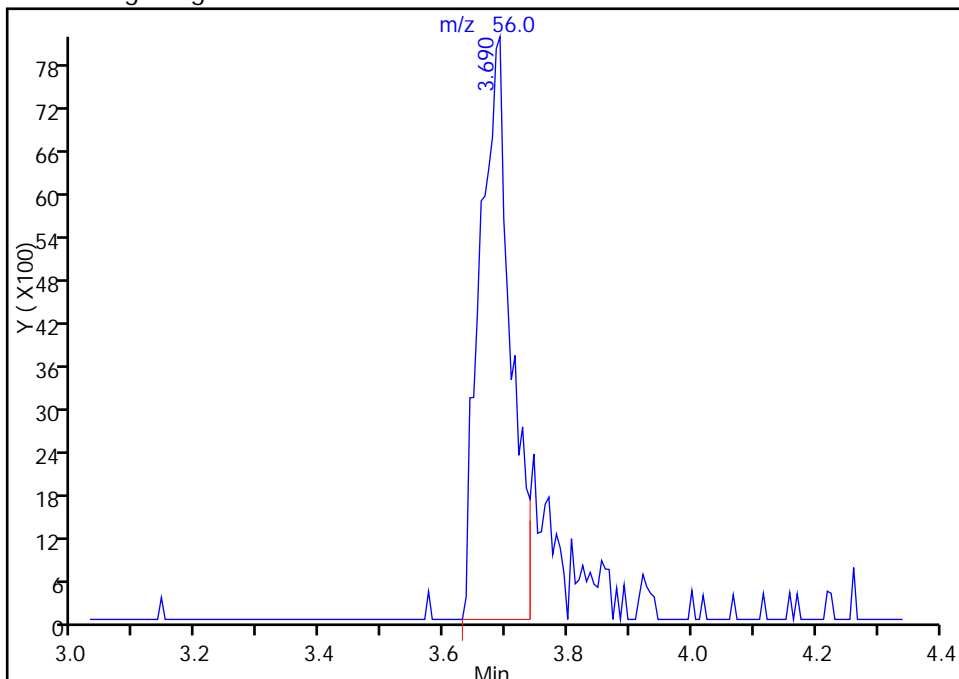
TestAmerica Pittsburgh

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

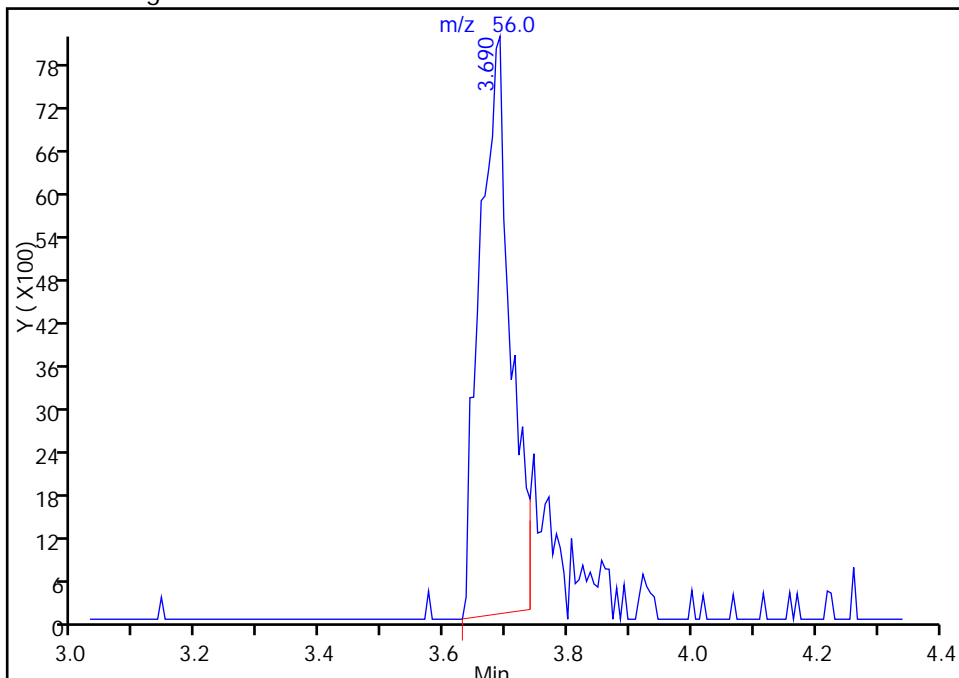
RT: 3.69
Response: 28240
Amount: 902.7796

Processing Integration Results



RT: 3.69
Response: 27751
Amount: 796.9424

Manual Integration Results



Reviewer: journept, 03-Jun-2014 14:07:08
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

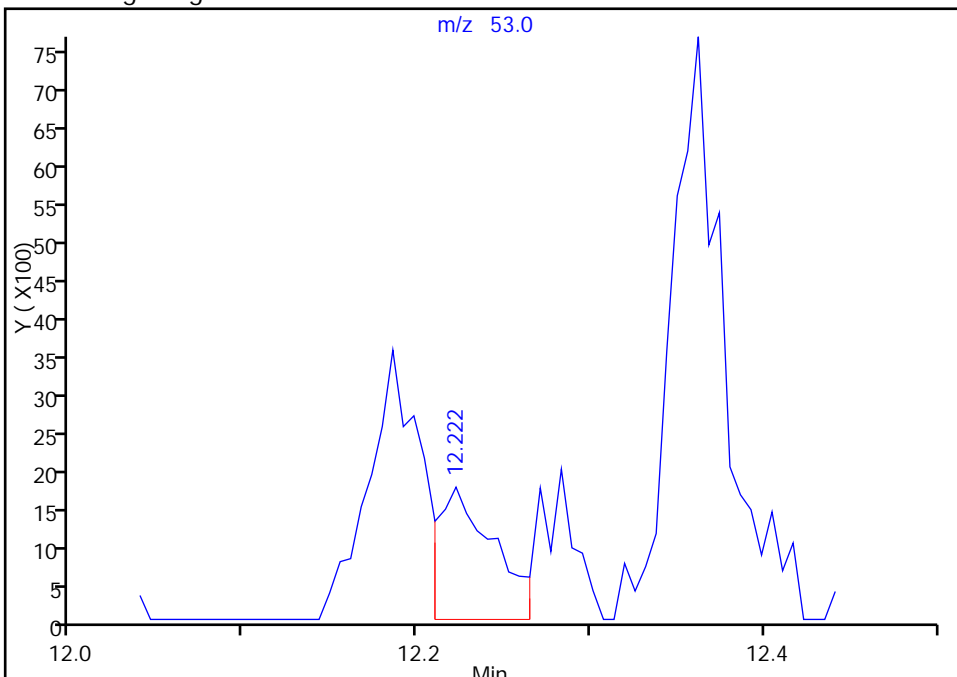
TestAmerica Pittsburgh

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

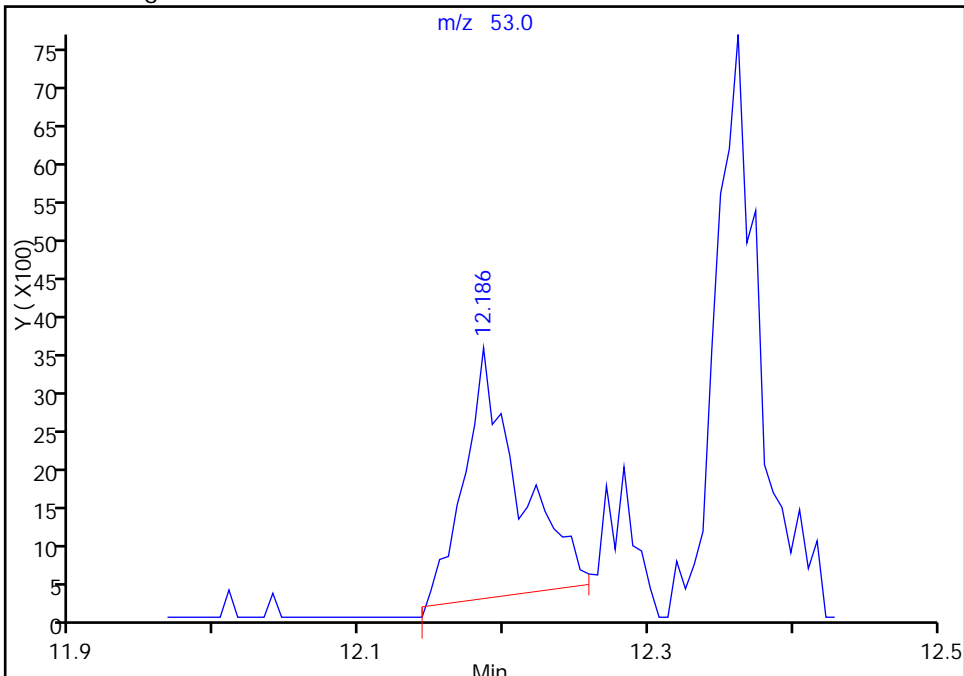
RT: 12.22
Response: 3958
Amount: 106.1036

Processing Integration Results



RT: 12.19
Response: 8481
Amount: 142.9927

Manual Integration Results



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

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

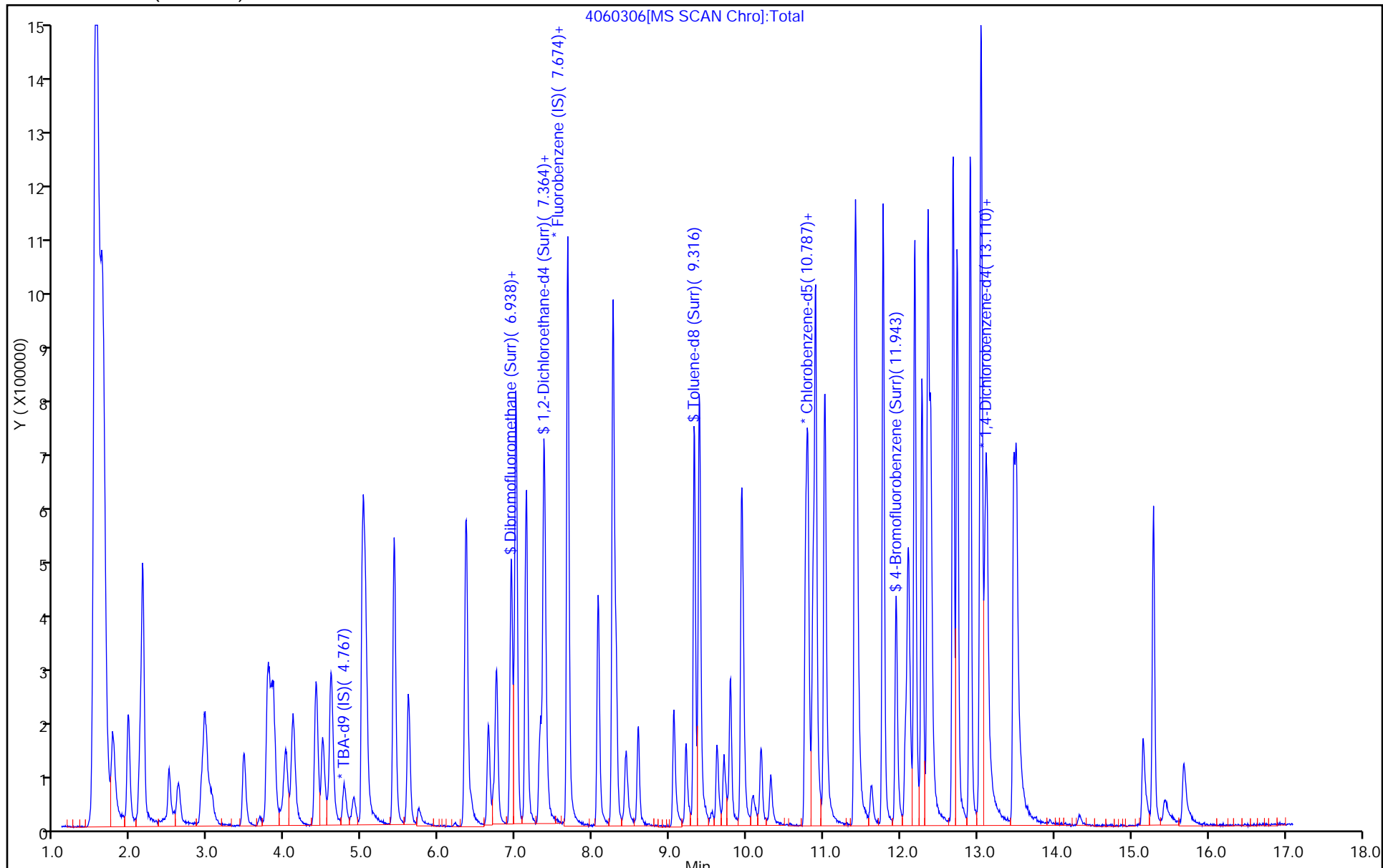
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: MSVOA_CHHP4

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



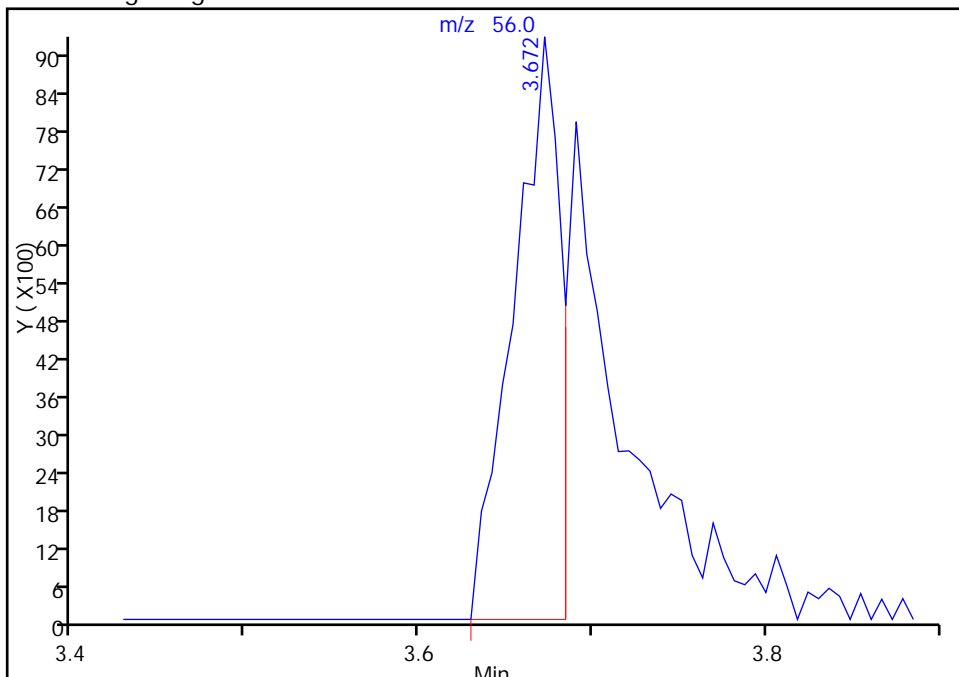
TestAmerica Pittsburgh

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

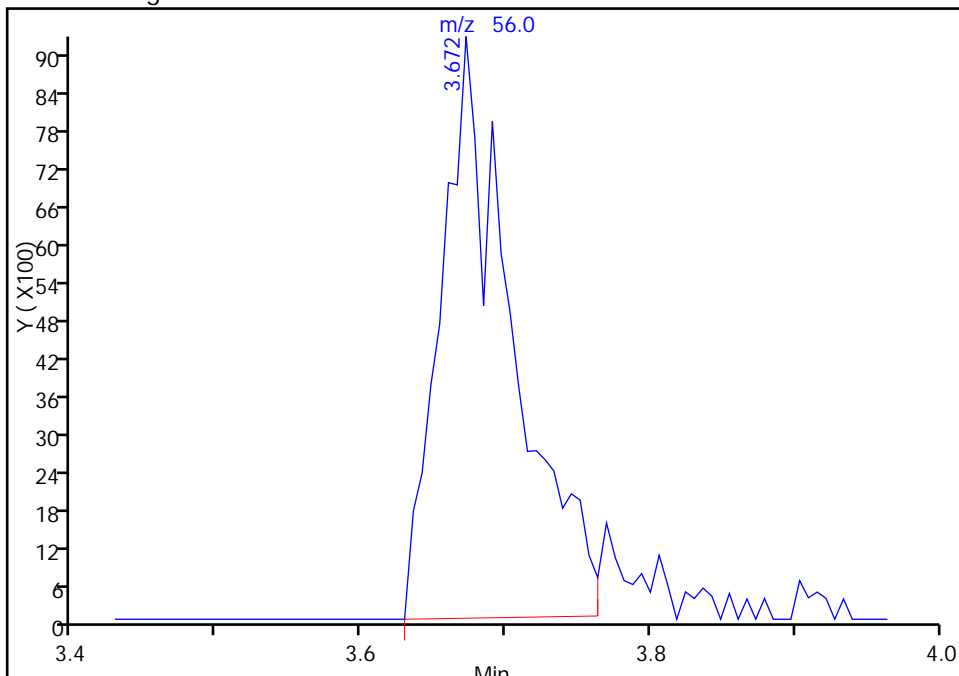
RT: 3.67
Response: 17606
Amount: 576.3315

Processing Integration Results



RT: 3.67
Response: 31949
Amount: 857.7562

Manual Integration Results



Reviewer: journetp, 03-Jun-2014 14:00:41
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

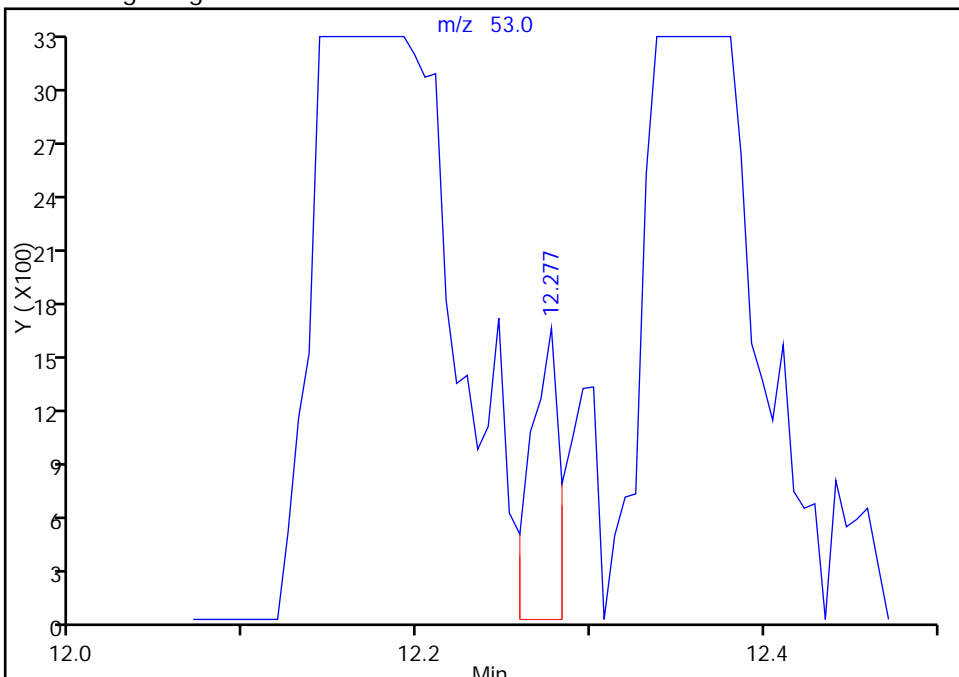
TestAmerica Pittsburgh

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

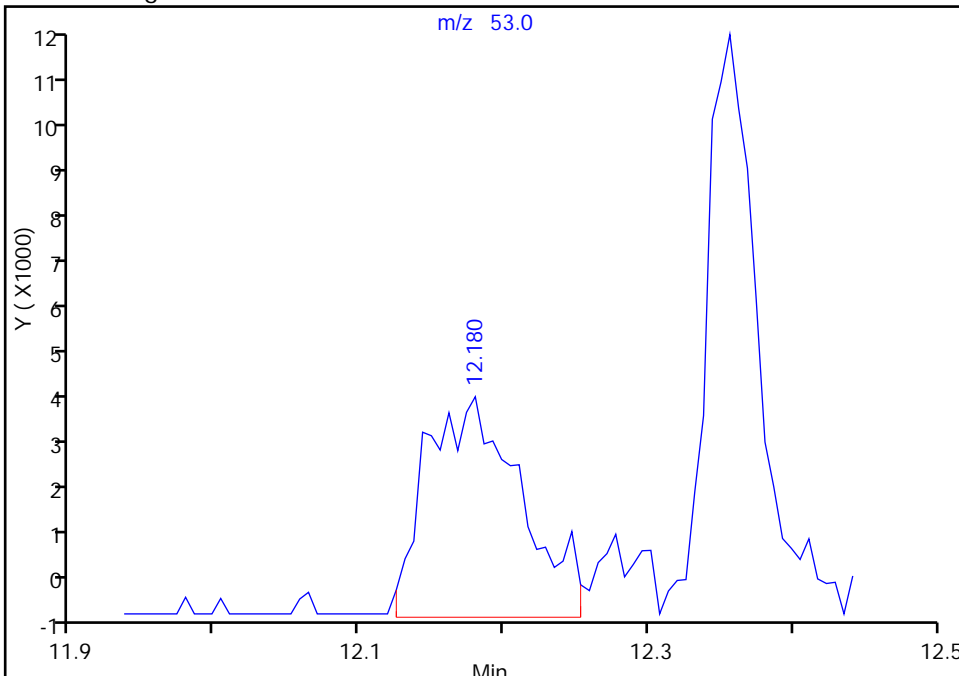
RT: 12.28
Response: 1870
Amount: 93.175600

Processing Integration Results



RT: 12.18
Response: 20483
Amount: 299.8553

Manual Integration Results



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

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

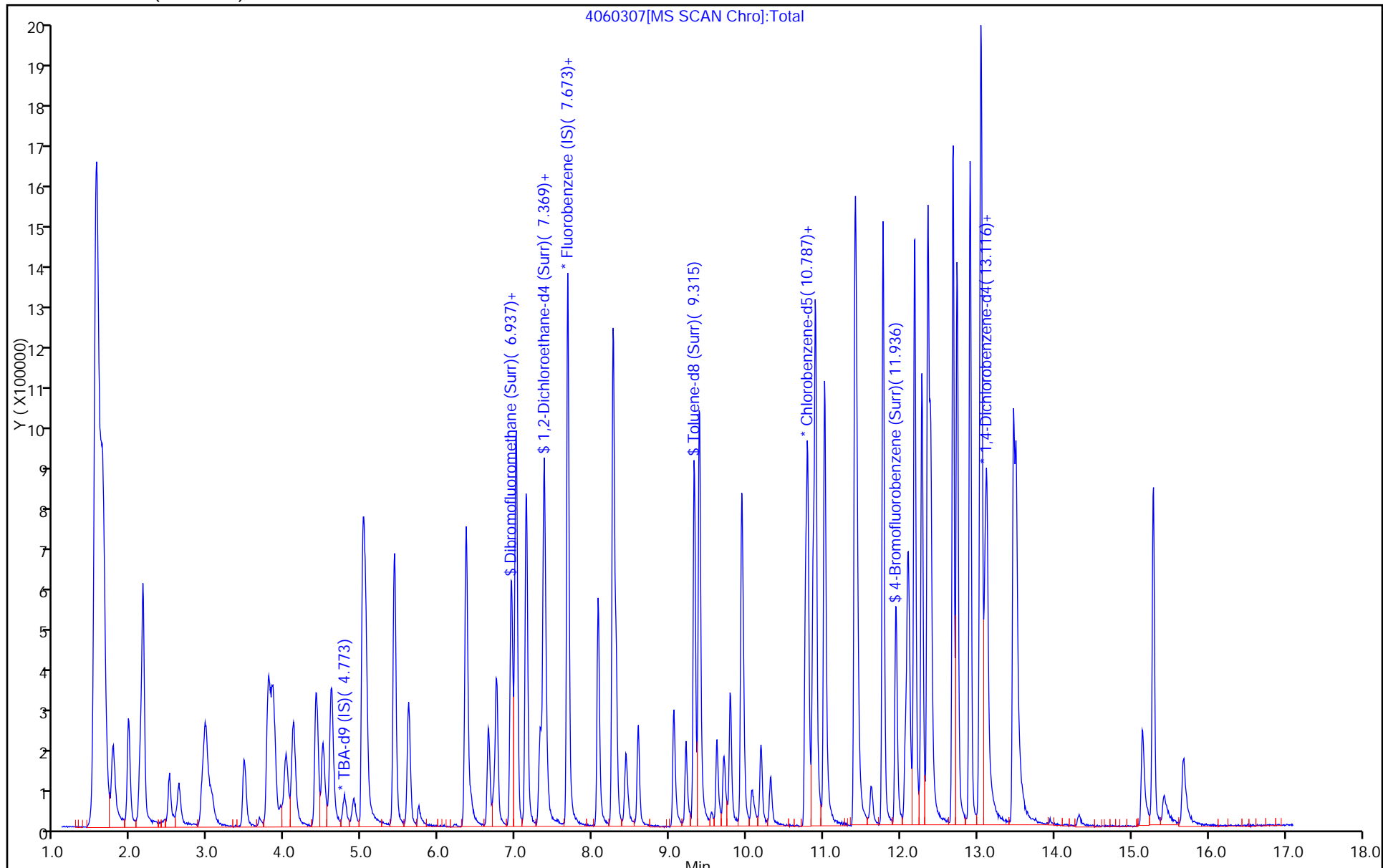
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: MSVOA_CHHP4

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



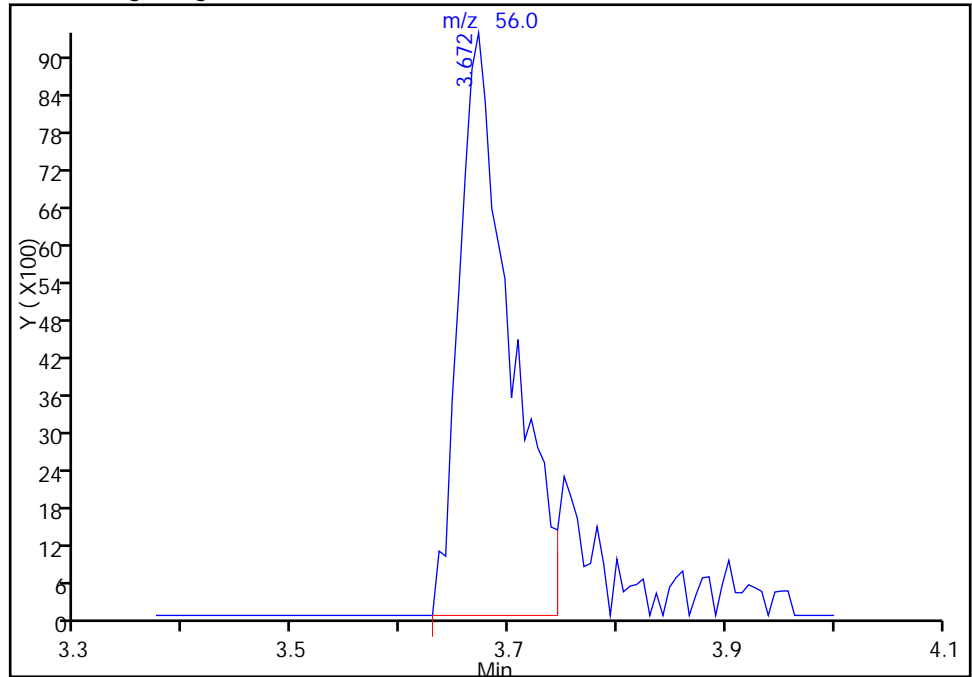
TestAmerica Pittsburgh

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

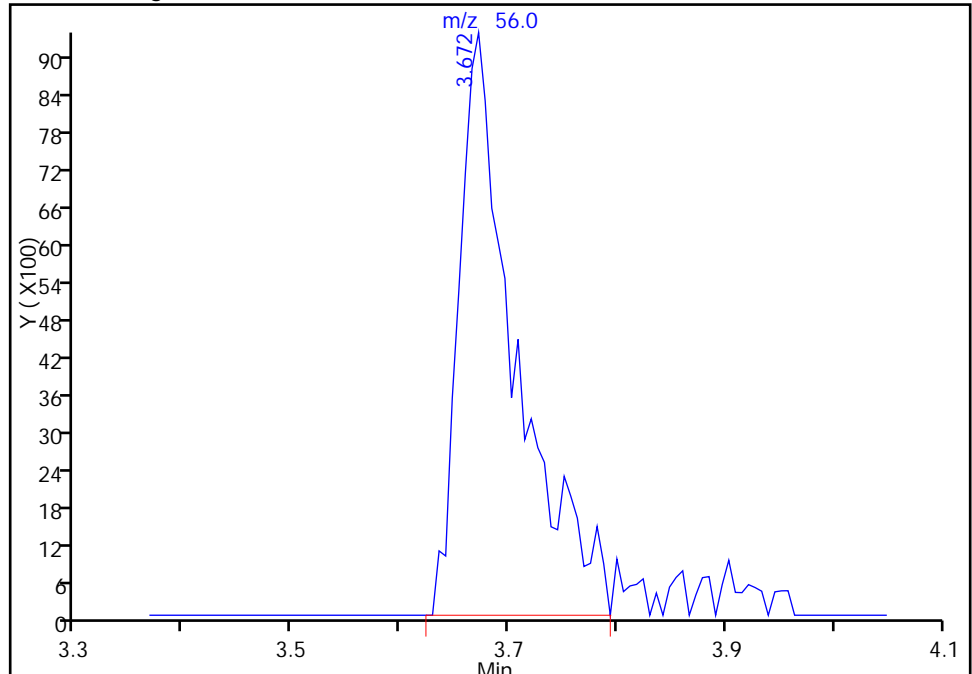
RT: 3.67
Response: 30656
Amount: 733.0451

Processing Integration Results



RT: 3.67
Response: 34150
Amount: 853.4896

Manual Integration Results



Reviewer: journetp, 03-Jun-2014 13:57:37
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

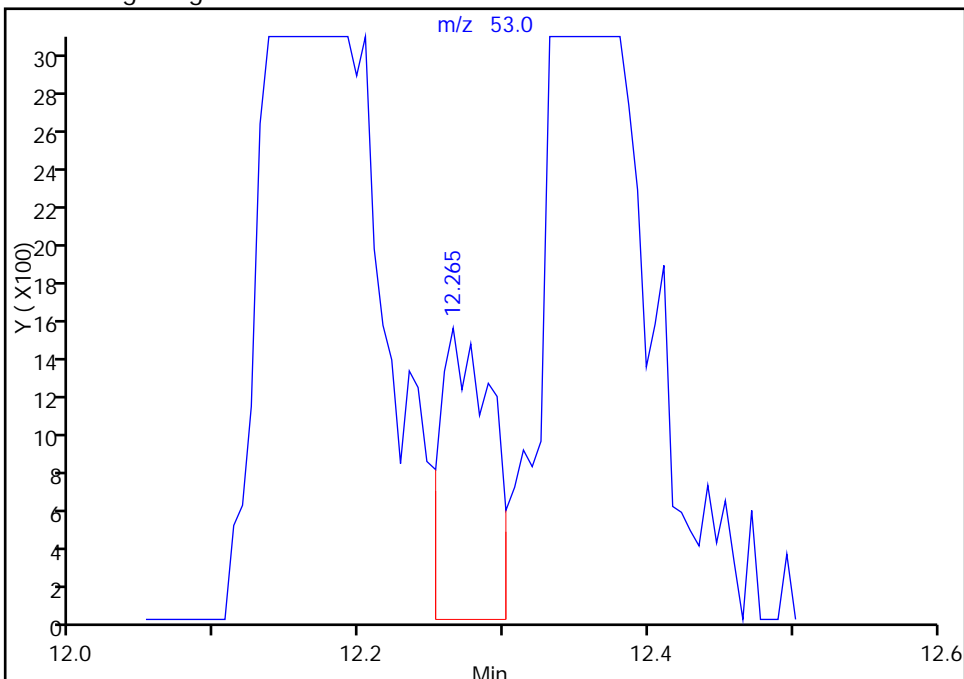
TestAmerica Pittsburgh

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

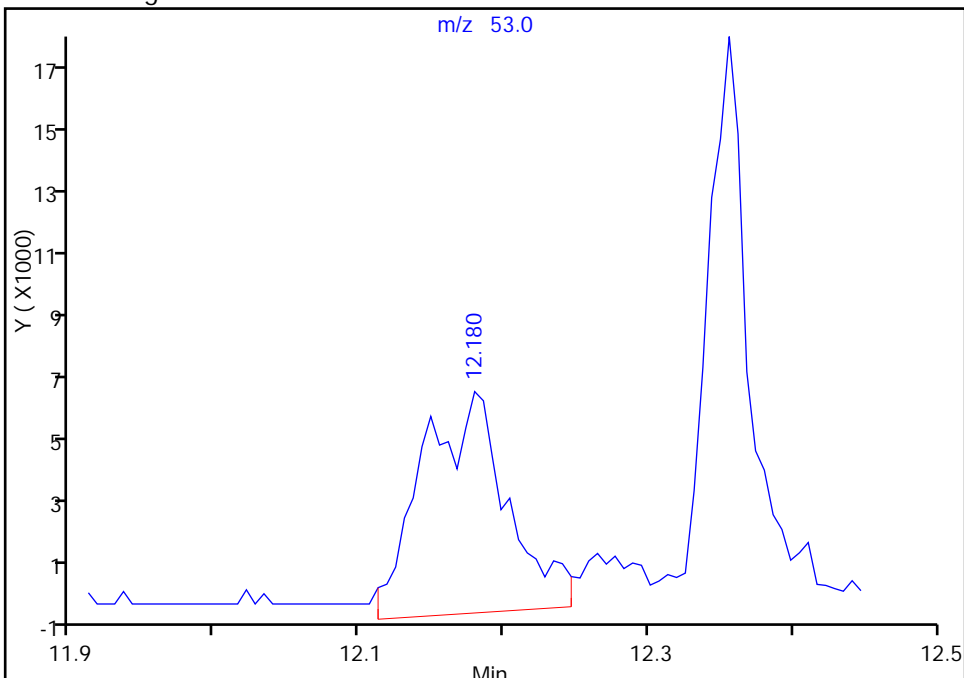
RT: 12.26
Response: 3766
Amount: 146.5829

Processing Integration Results



RT: 12.18
Response: 27710
Amount: 367.7452

Manual Integration Results



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.)	Diff 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

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

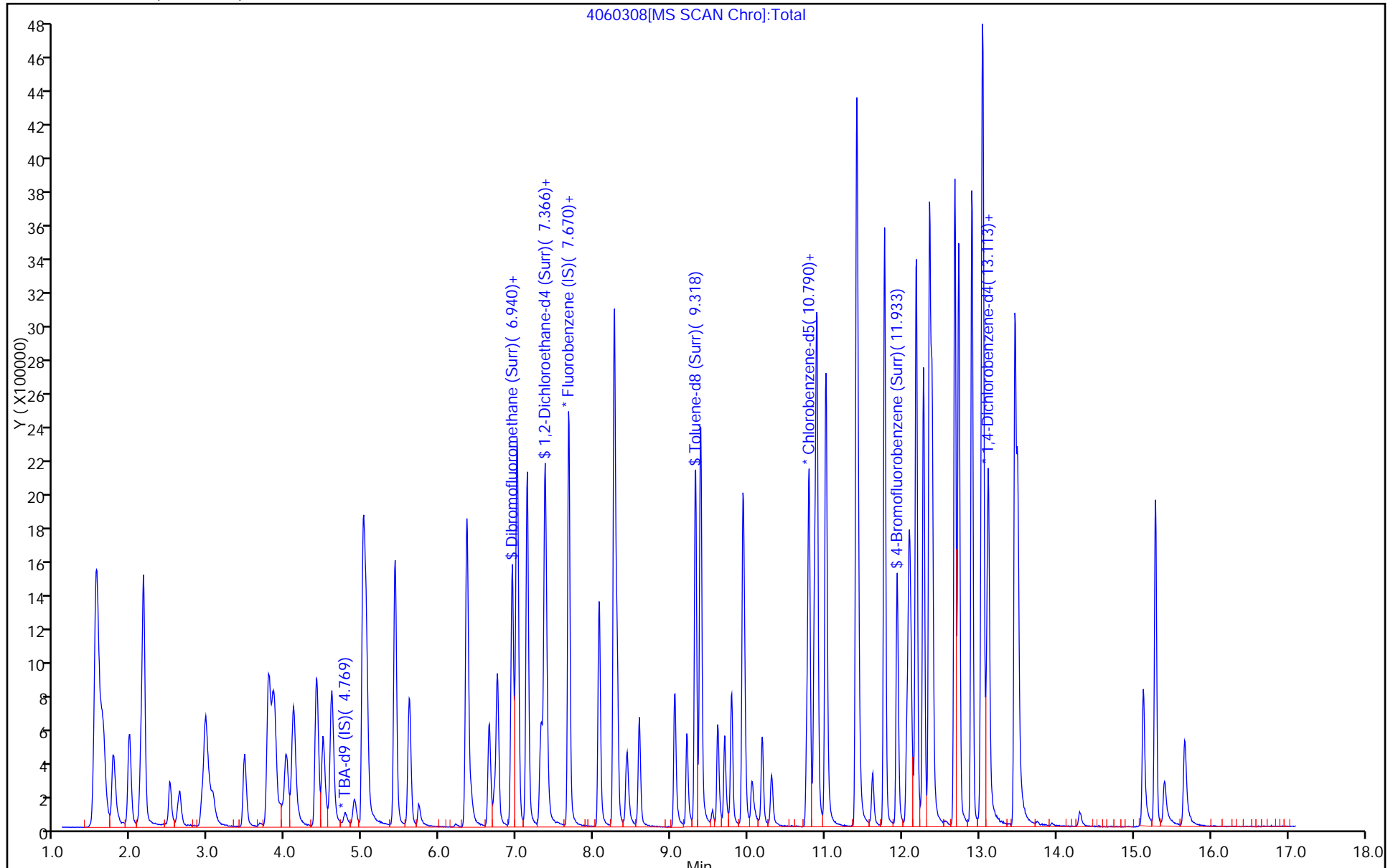
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MSVOA_CHHP4

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



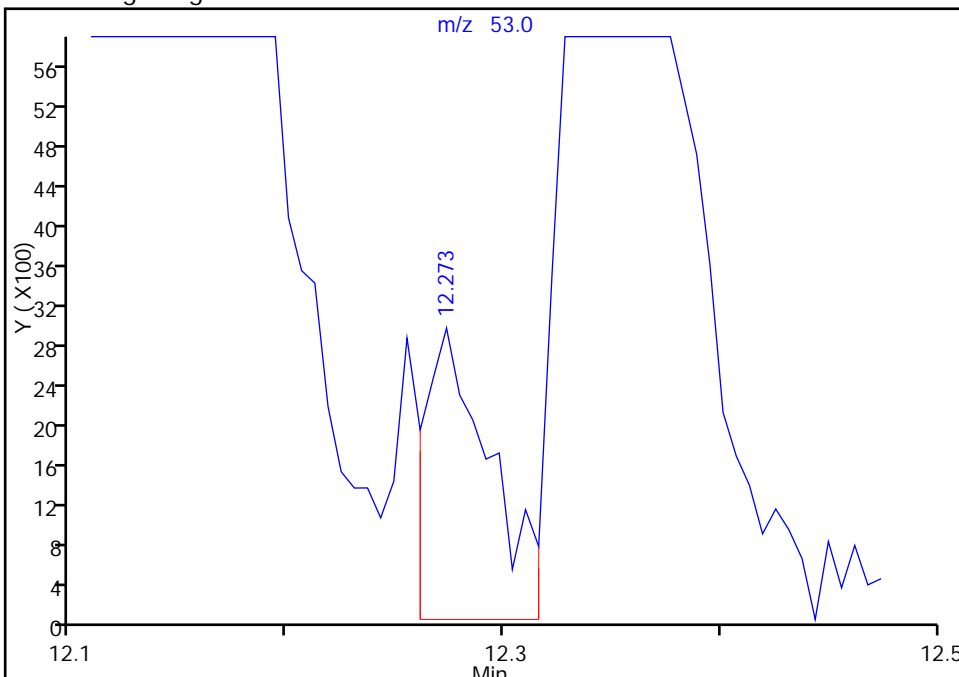
TestAmerica Pittsburgh

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

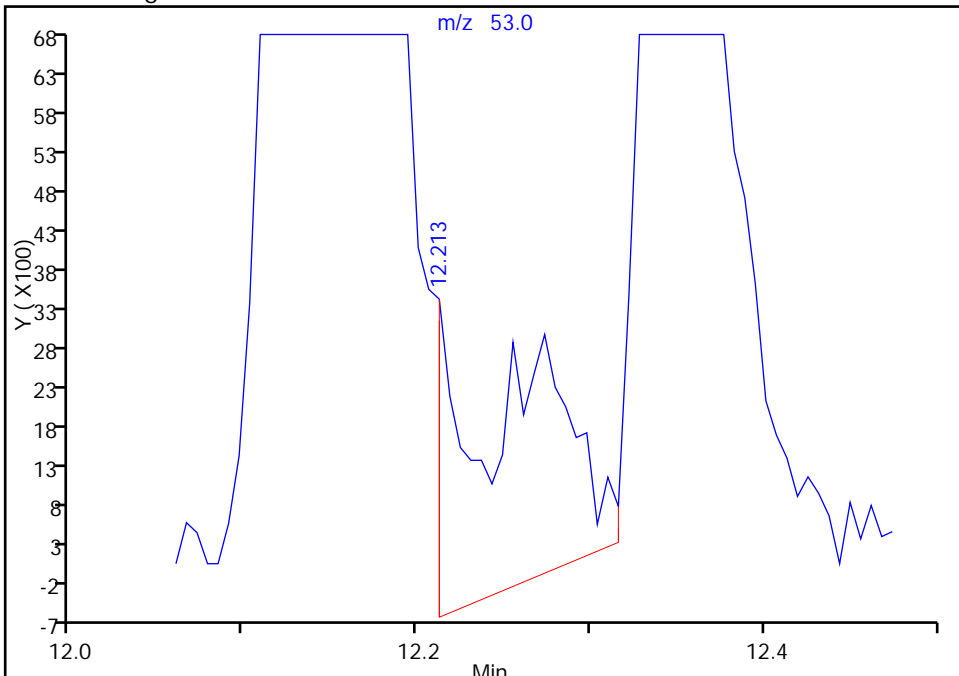
RT: 12.27
Response: 6257
Amount: 230.5732

Processing Integration Results



RT: 12.21
Response: 13039
Amount: 170.8302

Manual Integration Results



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	

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

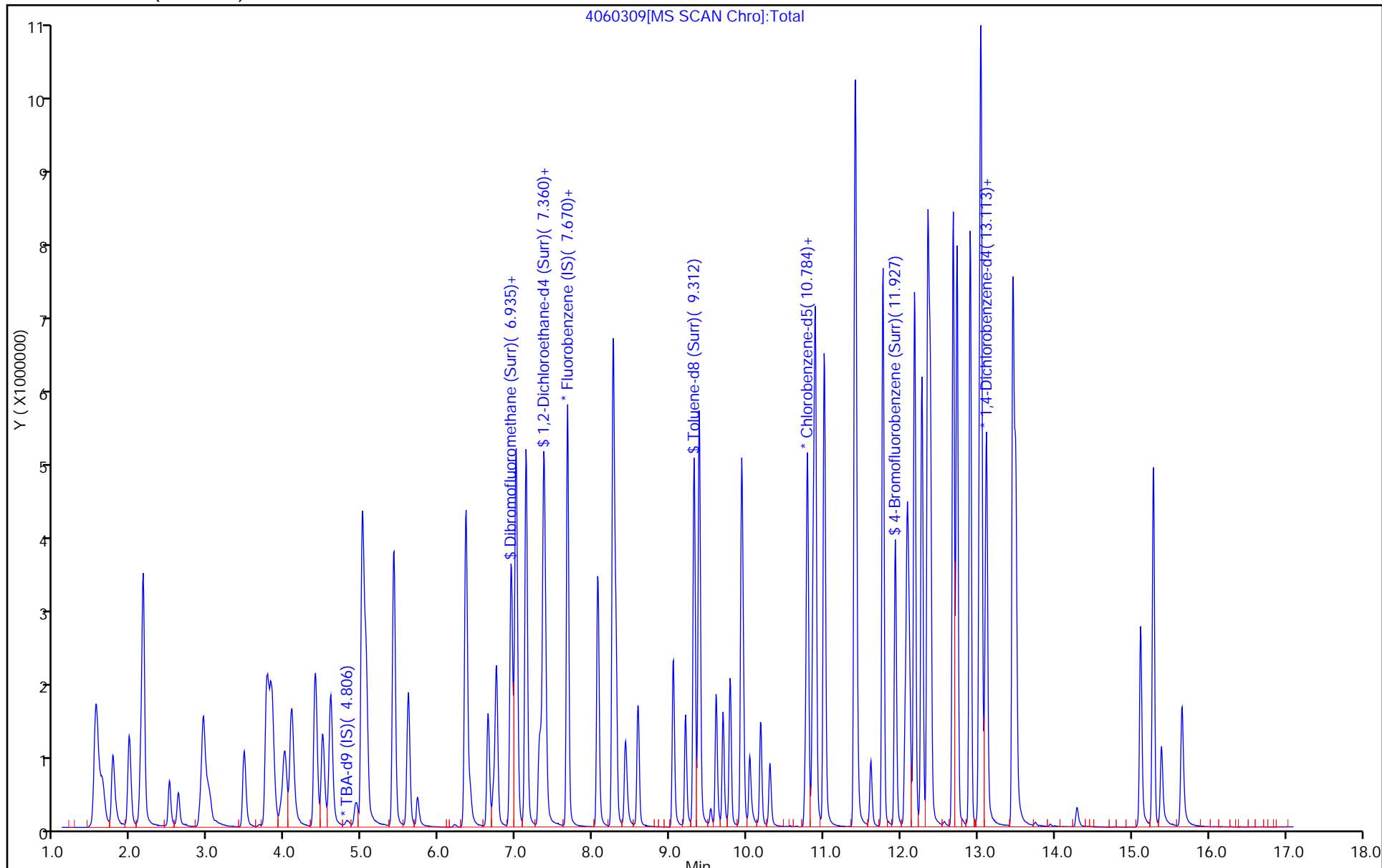
Dil. Factor: 1.0000

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.: 180-34298-1
 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-trifluoroethane	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.: 180-34298-1
 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.: 180-34298-1
 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
VOA8260SURRE_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

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

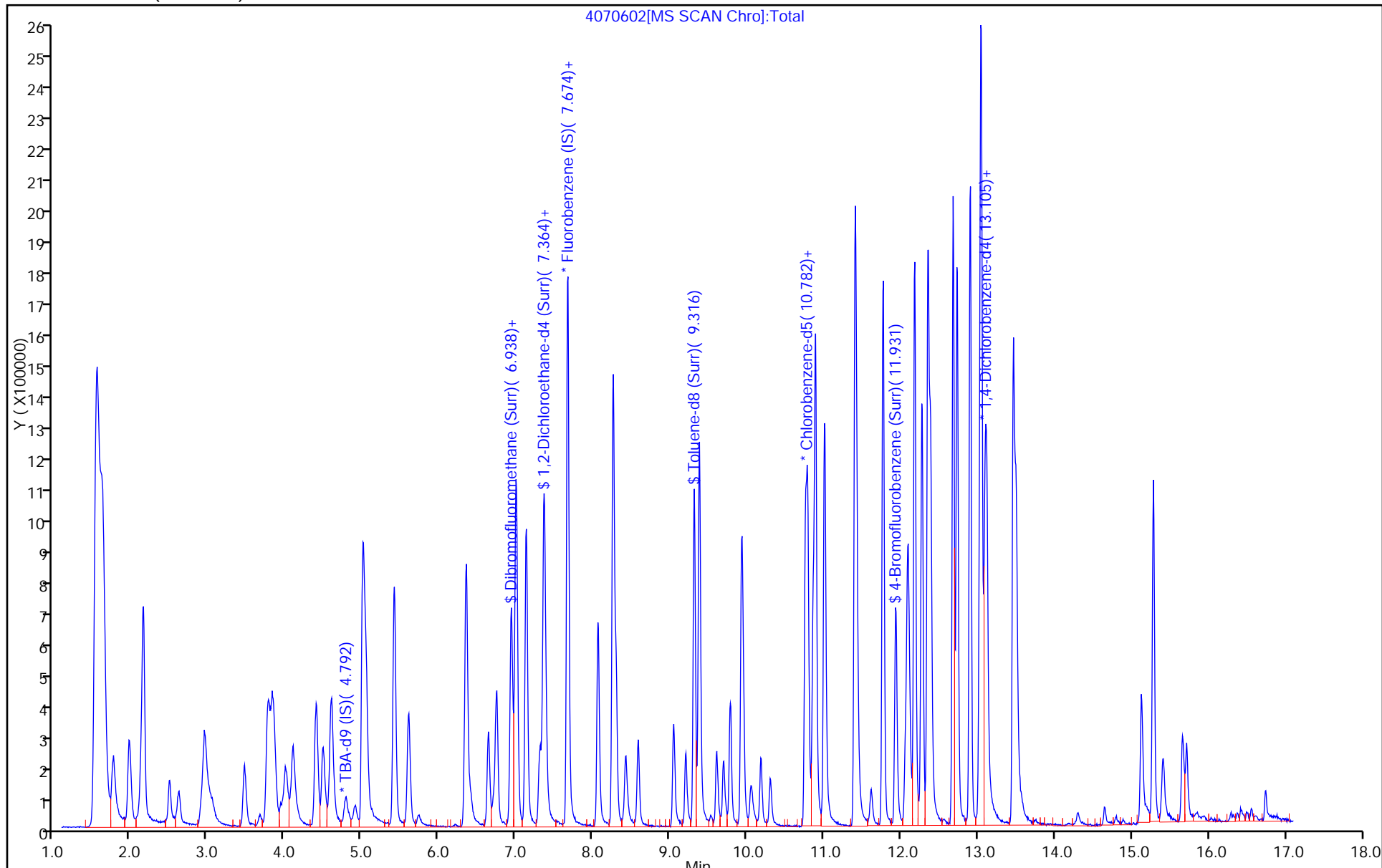
Dil. Factor: 1.0000

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.: 180-34298-1
 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

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

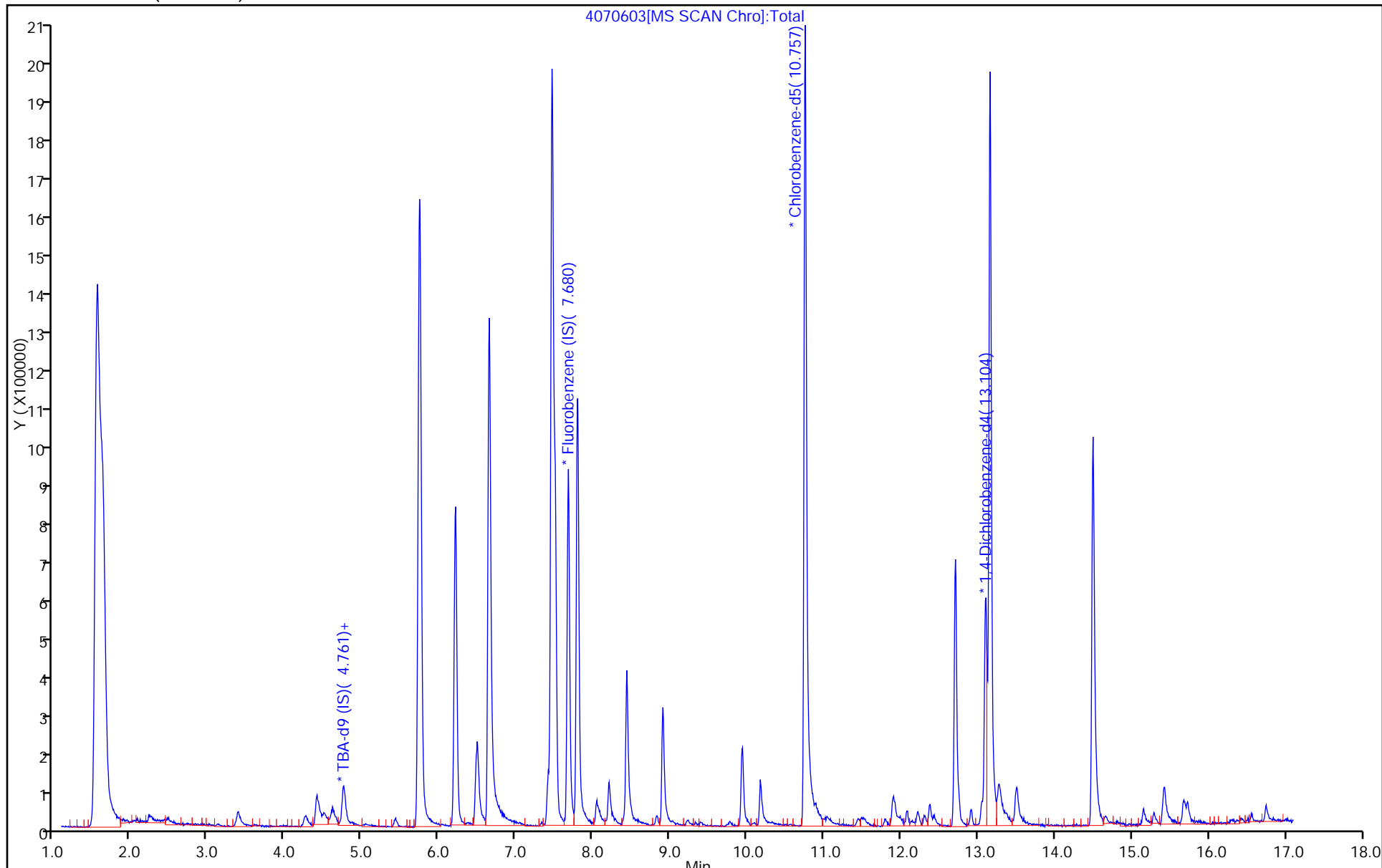
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MSVOA_CHHP4

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



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

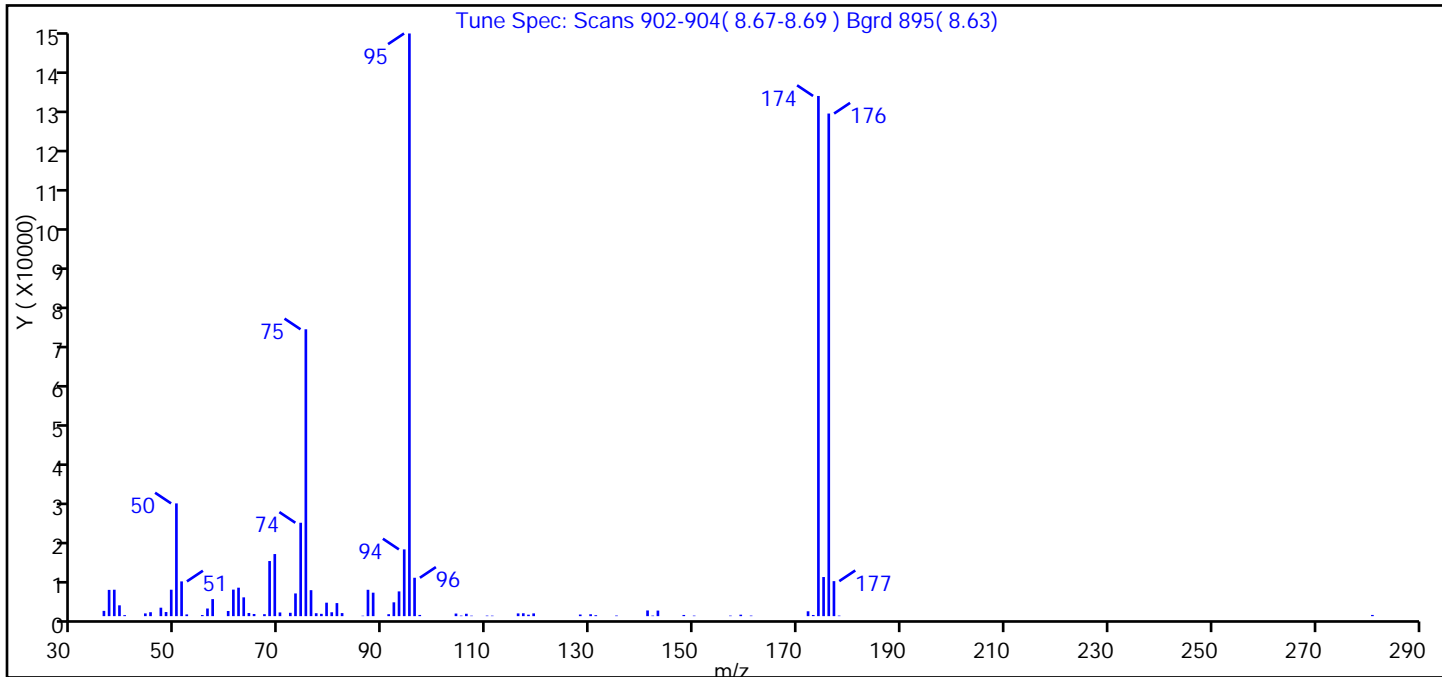
First Level Reviewer: gordonk Date: 04-Mar-2014 11:50:05

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	

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\MMSVOA_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
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\$ 9 BFB	95	8.691	8.691	0.000	0	635662	NR	NR	
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QC Flag Legend

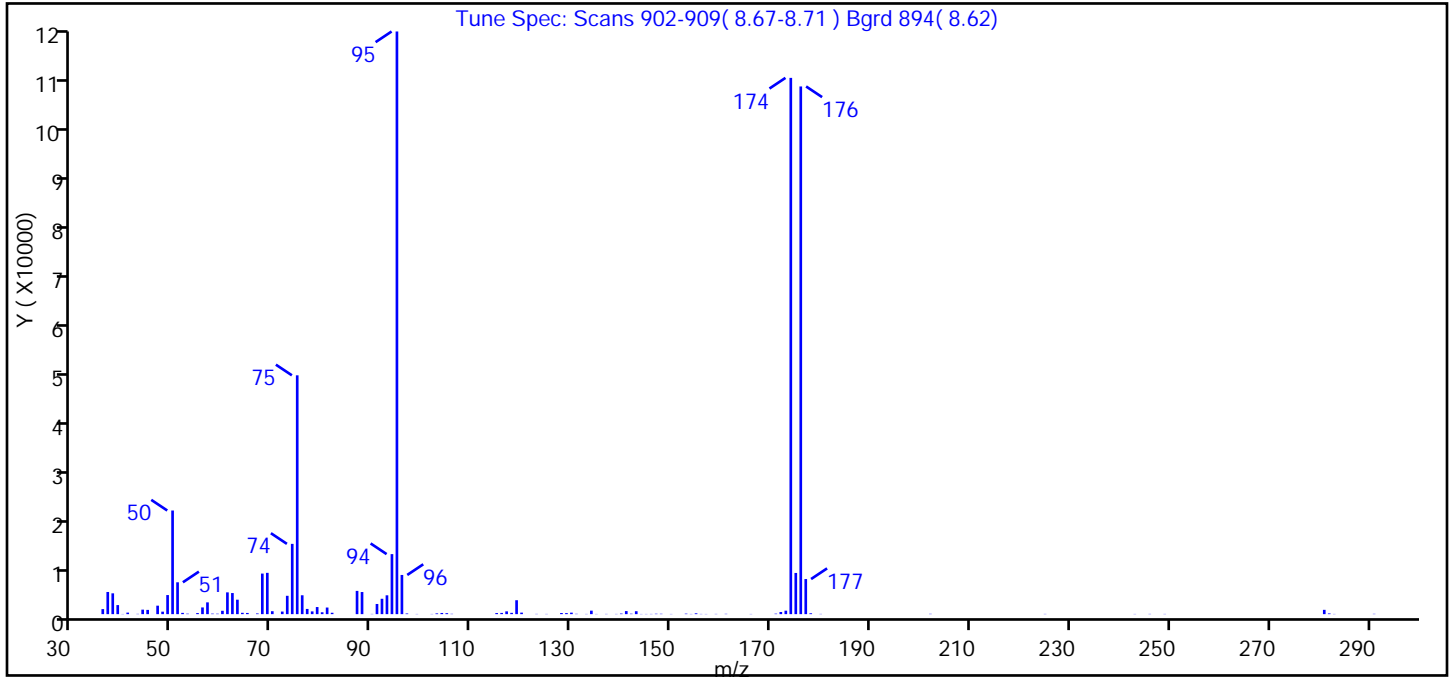
Processing Flags

NR - Missing Quant Standard

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\MMSVOA_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
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\$ 9 BFB	95	8.679	8.679	0.000	0	405055	NR	NR	
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QC Flag Legend

Processing Flags
NR - Missing Quant Standard

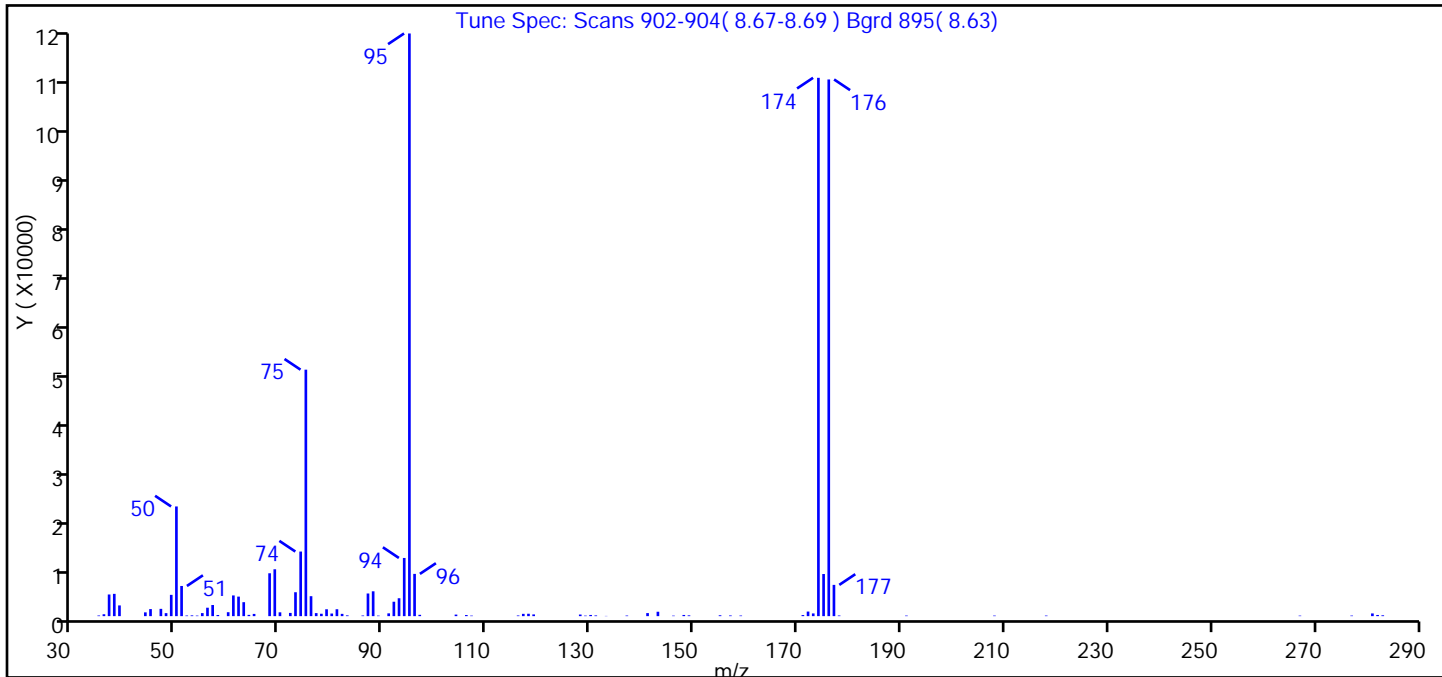
Reagents:

VOABFB50_00051 Amount Added: 1.00 Units: uL

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 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.: 180-34298-1
 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\MMSVOA_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-(trifluorom	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

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

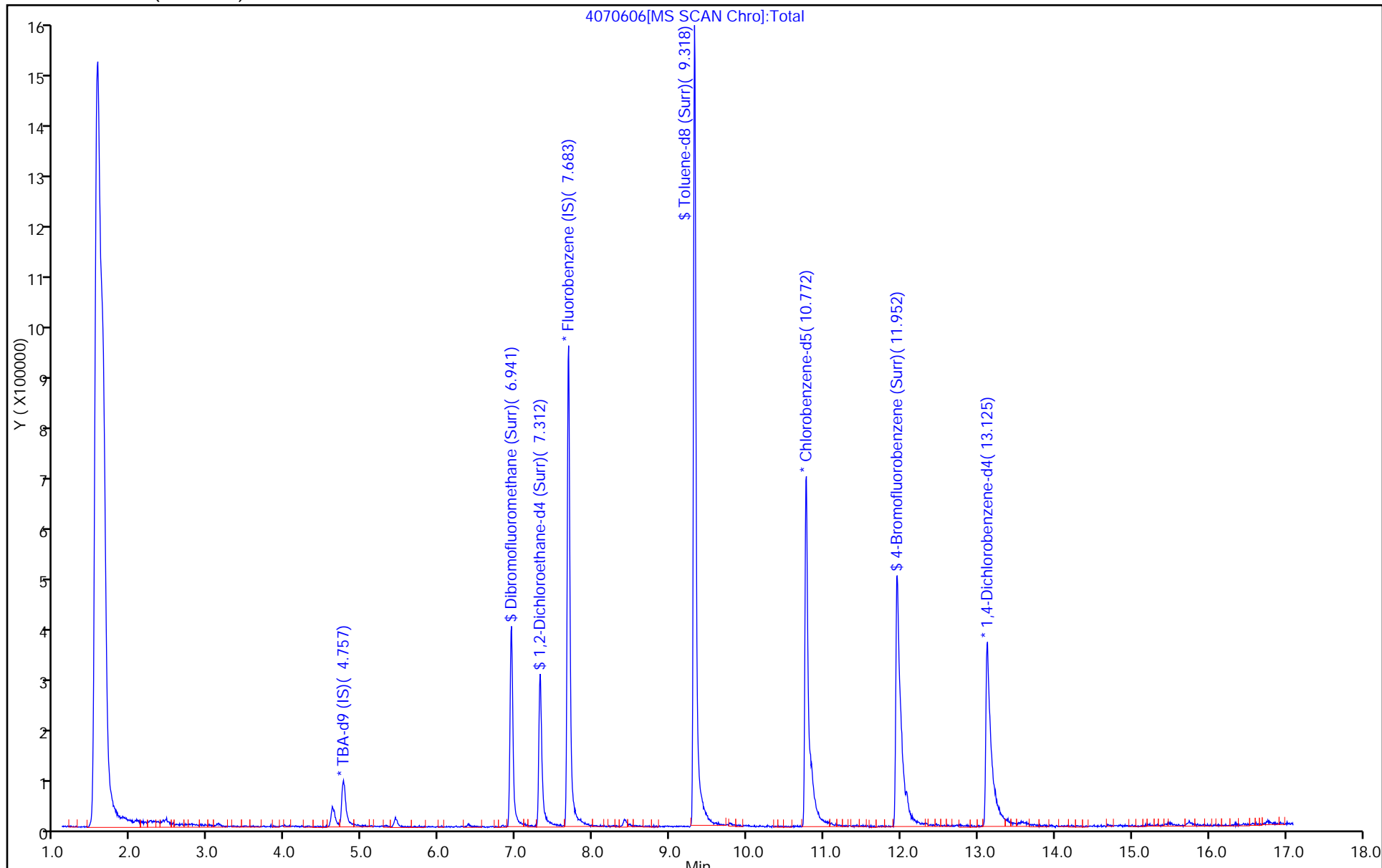
Dil. Factor: 1.0000

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.: 180-34298-1
 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.: 180-34298-1
 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

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

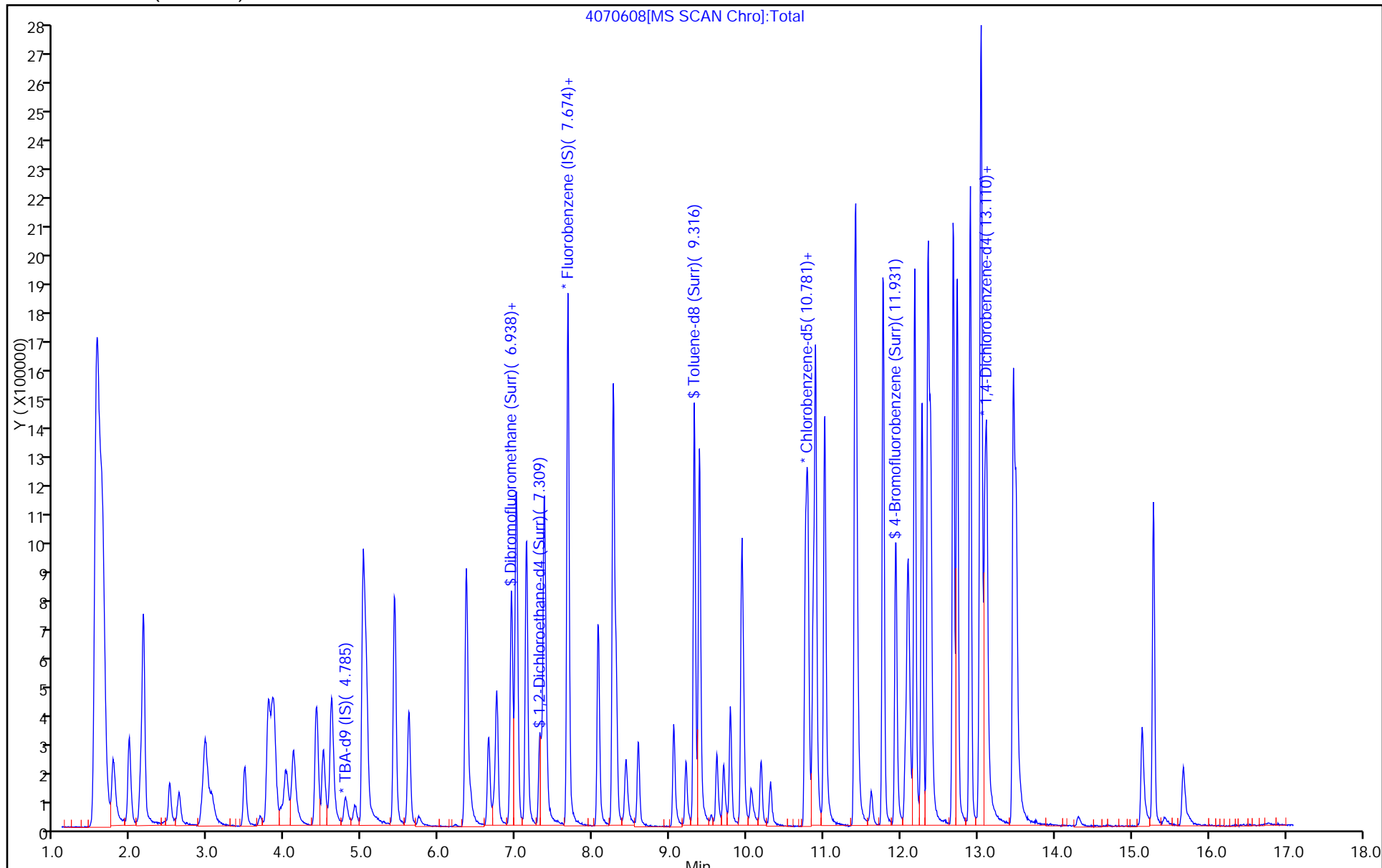
Dil. Factor: 1.0000

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.: 180-34298-1
 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.: 180-34298-1
 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

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.)	Diff 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

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

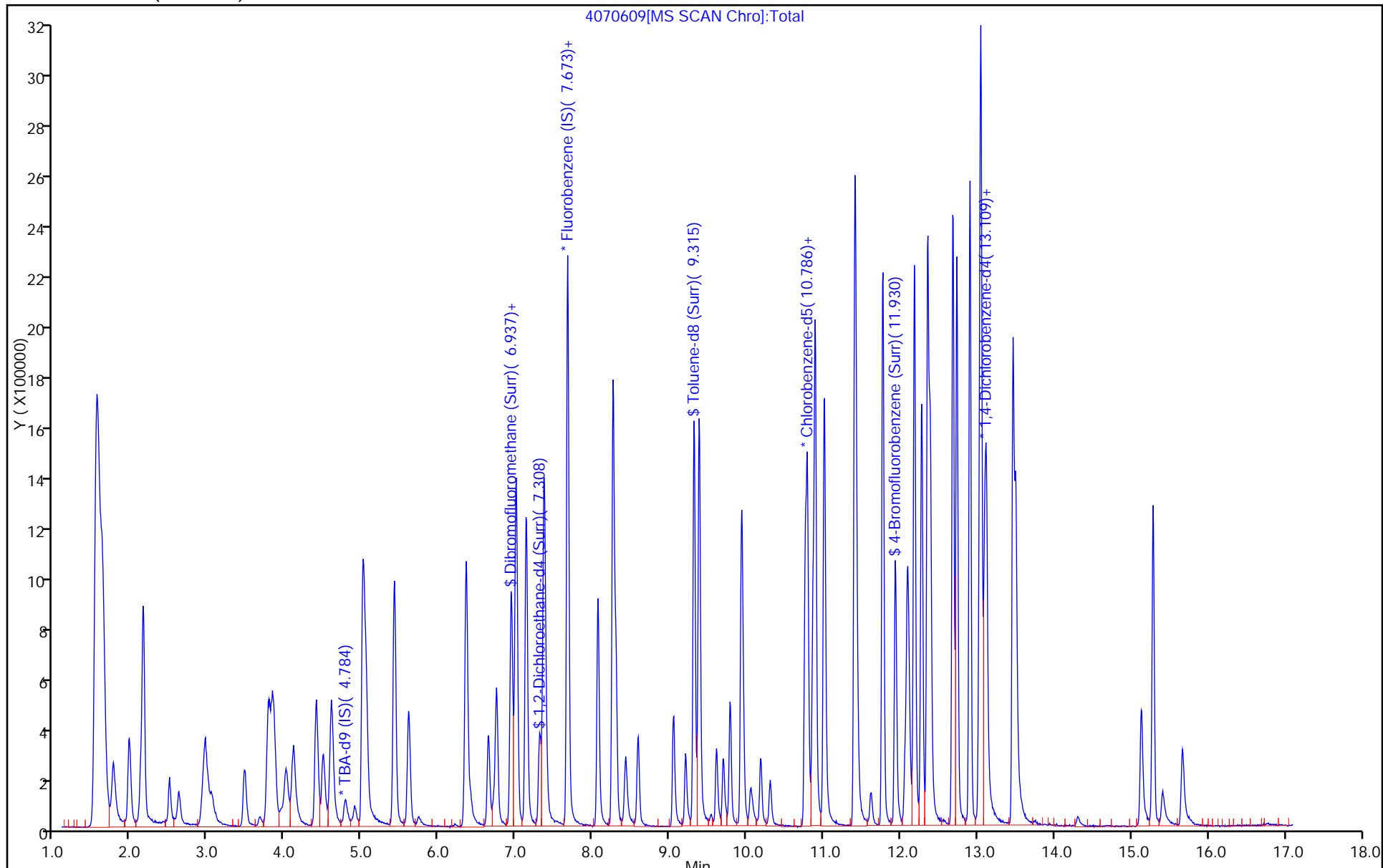
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MSVOA_CHHP4

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

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.: 180-34298-1

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.: 180-34298-1

SDG No.: _____

Instrument ID: CHHP4 Start Date: 07/07/2014 00:09Analysis 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)
180-34298-1	062514-TB	07/07/2014 03:45	1	4070607.D	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)
180-34298-2	062514-DP	07/07/2014 05:34	1	4070611.D	DB-624 0.18 (mm)
180-34298-3	TS04-PDM004	07/07/2014 06:01	1	4070612.D	DB-624 0.18 (mm)
180-34298-4	RW20-PZP000	07/07/2014 06:28	1	4070613.D	DB-624 0.18 (mm)
180-34298-5	RW20-PZM020	07/07/2014 06:55	1	4070614.D	DB-624 0.18 (mm)
ZZZZZ		07/07/2014 07:22	1		DB-624 0.18 (mm)
ZZZZZ		07/07/2014 07:49	1		DB-624 0.18 (mm)
ZZZZZ		07/07/2014 08:16	1		DB-624 0.18 (mm)
ZZZZZ		07/07/2014 08:44	1		DB-624 0.18 (mm)
ZZZZZ		07/07/2014 09:11	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.: 180-34298-1

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 #
062514-DP	180-34298-2	51	49	88	83	73	80
TS04-PDM004	180-34298-3	51	55	91	92	54	88
RW20-PZP000	180-34298-4	66	65	89	83	66	68
RW20-PZM020	180-34298-5	35	42	94	88	32	92
	MB 180-110164/1-A	62	54	67	61	60	85
	LCS 180-110164/2-A	56	54	62	63	63	75
	LCSD 180-110164/3-A	61	60	67	66	68	79

	<u>QC LIMITS</u>
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 III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: V0707010.D

Lab ID: LCS 180-110164/2-A

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acenaphthene	20.0	12.6	63	30-150	
Acenaphthylene	20.0	12.2	61	30-150	
Anthracene	20.0	12.7	64	30-150	
Benzidine	20.0	7.76 J	39	10-150	
Benzo[a]anthracene	20.0	12.7	64	30-150	
Benzo[b]fluoranthene	20.0	12.4	62	30-150	
Benzo[k]fluoranthene	20.0	12.6	63	30-150	
Benzoic acid	20.0	9.49	47	10-150	
Benzo[g,h,i]perylene	20.0	12.2	61	30-150	
Benzo[a]pyrene	20.0	13.0	65	30-150	
Bis(2-chloroethoxy)methane	20.0	11.3	56	30-150	
Bis(2-chloroethyl)ether	20.0	9.83	49	30-150	
Bis(2-ethylhexyl) phthalate	20.0	11.3	56	30-150	
2,2'-oxybis[1-chloropropane]	20.0	8.42	42	30-150	
4-Bromophenyl phenyl ether	20.0	14.3	72	30-150	
4-Chlorophenyl phenyl ether	20.0	13.6	68	30-150	
2-Chloronaphthalene	20.0	11.4	57	30-150	
Butyl benzyl phthalate	20.0	11.9	60	30-150	
Chrysene	20.0	13.0	65	30-150	
Dibenz(a,h)anthracene	20.0	12.2	61	30-150	
Di-n-butyl phthalate	20.0	12.4	62	30-150	
Di-n-octyl phthalate	20.0	11.7	59	10-150	
Diethyl phthalate	20.0	13.7	69	30-150	
Dimethyl phthalate	20.0	12.9	64	30-150	
3,3'-Dichlorobenzidine	20.0	11.6	58	10-150	
2,4-Dinitrotoluene	20.0	12.8	64	30-150	
2,6-Dinitrotoluene	20.0	12.7	63	30-150	
2-Chlorophenol	20.0	10.7	53	30-150	
2,4-Dichlorophenol	20.0	12.6	63	30-150	
2,4-Dimethylphenol	20.0	12.9	65	30-150	
2,4-Dinitrophenol	40.0	21.1	53	10-150	
2-Nitrophenol	20.0	12.1	60	30-150	
2,4,6-Trichlorophenol	20.0	13.7	68	30-150	
1,2-Diphenylhydrazine (as Azobenzene)	20.0	13.2	66	30-150	
1,2,4-Trichlorobenzene	20.0	12.8	64	30-150	
4-Chloro-3-methylphenol	20.0	11.6	58	30-150	
4-Nitrophenol	40.0	31.7	79	30-150	
4,6-Dinitro-2-methylphenol	40.0	26.1	65	30-150	
Fluoranthene	20.0	12.7	64	30-150	
Fluorene	20.0	12.7	64	30-150	
Hexachlorobenzene	20.0	14.2	71	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.: 180-34298-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: V0707010.D

Lab ID: LCS 180-110164/2-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Hexachlorobutadiene	20.0	13.8	69	30-150	
Hexachlorocyclopentadiene	20.0	16.1	81	30-150	
Hexachloroethane	20.0	10.9	54	30-150	
Indeno[1,2,3-cd]pyrene	20.0	12.5	63	30-150	
Isophorone	20.0	12.6	63	30-150	
Naphthalene	20.0	11.6	58	30-150	
Nitrobenzene	20.0	12.5	63	30-150	
N-Nitrosodi-n-propylamine	20.0	11.4	57	30-150	
N-Nitrosodimethylamine	20.0	13.1	65	30-150	
N-Nitrosodiphenylamine	20.0	12.7	63	30-150	
Phenanthrene	20.0	12.0	60	30-150	
Pyrene	20.0	12.6	63	30-150	
Pentachlorophenol	40.0	30.9	77	10-150	
Phenol	20.0	10.6	53	30-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: V0707011.D

Lab ID: LCSD 180-110164/3-A

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acenaphthene	20.0	13.3	66	5	35	30-150	
Acenaphthylene	20.0	12.6	63	4	35	30-150	
Anthracene	20.0	13.0	65	2	35	30-150	
Benzidine	20.0	6.82 J	34	13	35	10-150	
Benzo[a]anthracene	20.0	13.4	67	5	35	30-150	
Benzo[b]fluoranthene	20.0	13.2	66	7	35	30-150	
Benzo[k]fluoranthene	20.0	13.9	70	10	35	30-150	
Benzoic acid	20.0	10.7	54	12	35	10-150	
Benzo[g,h,i]perylene	20.0	12.8	64	5	35	30-150	
Benzo[a]pyrene	20.0	13.9	69	6	35	30-150	
Bis(2-chloroethoxy)methane	20.0	11.7	59	4	35	30-150	
Bis(2-chloroethyl)ether	20.0	10.5	53	7	35	30-150	
Bis(2-ethylhexyl) phthalate	20.0	12.2	61	8	35	30-150	
2,2'-oxybis[1-chloropropane]	20.0	9.58	48	13	35	30-150	
4-Bromophenyl phenyl ether	20.0	14.4	72	1	35	30-150	
4-Chlorophenyl phenyl ether	20.0	14.4	72	5	35	30-150	
2-Chloronaphthalene	20.0	11.9	59	4	35	30-150	
Butyl benzyl phthalate	20.0	12.7	63	6	35	30-150	
Chrysene	20.0	13.1	65	1	35	30-150	
Dibenz(a,h)anthracene	20.0	13.0	65	6	35	30-150	
Di-n-butyl phthalate	20.0	12.9	65	4	35	30-150	
Di-n-octyl phthalate	20.0	13.3	66	12	35	10-150	
Diethyl phthalate	20.0	14.9	75	9	35	30-150	
Dimethyl phthalate	20.0	13.6	68	5	35	30-150	
3,3'-Dichlorobenzidine	20.0	12.0	60	4	35	10-150	
2,4-Dinitrotoluene	20.0	13.9	70	9	35	30-150	
2,6-Dinitrotoluene	20.0	13.1	66	3	35	30-150	
2-Chlorophenol	20.0	11.8	59	10	35	30-150	
2,4-Dichlorophenol	20.0	13.7	68	8	35	30-150	
2,4-Dimethylphenol	20.0	13.4	67	4	35	30-150	
2,4-Dinitrophenol	40.0	23.6	59	11	35	10-150	
2-Nitrophenol	20.0	12.7	63	5	35	30-150	
2,4,6-Trichlorophenol	20.0	14.8	74	8	35	30-150	
1,2-Diphenylhydrazine (as Azobenzene)	20.0	13.0	65	2	35	30-150	
1,2,4-Trichlorobenzene	20.0	13.5	68	6	35	30-150	
4-Chloro-3-methylphenol	20.0	13.2	66	13	35	30-150	
4-Nitrophenol	40.0	35.9	90	12	35	30-150	
4,6-Dinitro-2-methylphenol	40.0	27.3	68	4	35	30-150	
Fluoranthene	20.0	13.5	67	6	35	30-150	
Fluorene	20.0	13.5	68	6	35	30-150	
Hexachlorobenzene	20.0	14.4	72	1	35	30-150	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: V0707011.D

Lab ID: LCS D 180-110164/3-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS D CONCENTRATION (ug/L)	LCS D % REC	% RPD	QC LIMITS		#
					RPD	REC	
Hexachlorobutadiene	20.0	14.1	70	2	35	30-150	
Hexachlorocyclopentadiene	20.0	15.9	79	2	35	30-150	
Hexachloroethane	20.0	12.1	60	10	35	30-150	
Indeno[1,2,3-cd]pyrene	20.0	13.2	66	5	35	30-150	
Isophorone	20.0	13.5	67	6	35	30-150	
Naphthalene	20.0	12.3	61	6	35	30-150	
Nitrobenzene	20.0	12.9	65	3	35	30-150	
N-Nitrosodi-n-propylamine	20.0	12.5	62	9	35	30-150	
N-Nitrosodimethylamine	20.0	14.1	71	8	35	30-150	
N-Nitrosodiphenylamine	20.0	12.7	63	0	35	30-150	
Phenanthrene	20.0	12.7	64	6	35	30-150	
Pyrene	20.0	12.9	64	2	35	30-150	
Pentachlorophenol	40.0	33.2	83	7	35	10-150	
Phenol	20.0	11.4	57	7	35	30-150	

Column to be used to flag recovery and RPD values

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 SDG No.: _____
 Lab File ID: V0707006.D Lab Sample ID: MB 180-110164/1-A
 Matrix: Water Date Extracted: 07/01/2014 10:46
 Instrument ID: CH731 Date Analyzed: 07/07/2014 12:30
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-110164/2-A	V0707010.D	07/07/2014 14:23
	LCSD 180-110164/3-A	V0707011.D	07/07/2014 14:52
062514-DP	180-34298-2	V0708015.D	07/08/2014 19:43
TS04-PDM004	180-34298-3	V0708016.D	07/08/2014 20:12
RW20-PZP000	180-34298-4	V0708017.D	07/08/2014 20:40
RW20-PZM020	180-34298-5	V0708018.D	07/08/2014 21:08

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 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.: 180-34298-1
 SDG No.: _____
 Lab File ID: V0707002.D DFTPP Injection Date: 07/07/2014
 Instrument ID: CH731 DFTPP Injection Time: 10:48
 Analysis Batch No.: 110612

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0 % of mass 198	55.3
68	Less than 2.0 % of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	64.5
70	Less than 2.0 % of mass 69	0.6 (1.0)1
127	40.0 - 60.0 % of mass 198	47.7
197	Less than 1.0 % of mass 198	1.0
198	Base Peak, 100 % relative abundance	100.0
199	5.0- 9.0 % of mass 198	7.1
275	10.0 - 30.0 % of mass 198	26.8
365	Greater than 1.0 % of mass 198	3.9
441	Present but less than mass 443	6.8 (81.1)3
442	Greater than 40.0 % of mass 198	47.6
443	17.0 - 23.0 % of mass 442	8.4 (17.7)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 180-110612/3	V0707003.D	07/07/2014	11:06
	MB 180-110164/1-A	V0707006.D	07/07/2014	12:30
	LCS 180-110164/2-A	V0707010.D	07/07/2014	14:23
	LCSD 180-110164/3-A	V0707011.D	07/07/2014	14:52

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 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
062514-DP	180-34298-2	V0708015.D	07/08/2014	19:43
TS04-PDM004	180-34298-3	V0708016.D	07/08/2014	20:12
RW20-PZP000	180-34298-4	V0708017.D	07/08/2014	20:40
RW20-PZM020	180-34298-5	V0708018.D	07/08/2014	21:08

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 SDG No.: _____
 Sample No.: CCVIS 180-110612/3 Date Analyzed: 07/07/2014 11:06
 Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32 (mm)
 Lab File ID (Standard): V0707003.D Heated Purge: (Y/N) N
 Calibration ID: 16153

	DCB		NPT		ANT	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	171193	6.27	638454	7.48	402886	9.09
UPPER LIMIT	342386	6.77	1276908	7.98	805772	9.59
LOWER LIMIT	85597	5.77	319227	6.98	201443	8.59
LAB SAMPLE ID	CLIENT SAMPLE ID					
MB 180-110164/1-A	181210	6.28	604736	7.48	380977	9.09
LCS 180-110164/2-A	205220	6.28	710000	7.49	447246	9.09
LCSD 180-110164/3-A	187859	6.28	678951	7.48	447104	9.10

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

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

Column used to flag values outside QC limits

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 SDG No.: _____
 Sample No.: CCVIS 180-110612/3 Date Analyzed: 07/07/2014 11:06
 Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32 (mm)
 Lab File ID (Standard): V0707003.D Heated Purge: (Y/N) N
 Calibration ID: 16153

	PHN		CRY		PRY	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	721442	10.45	755261	13.93	581280	16.83
UPPER LIMIT	1442884	10.95	1510522	14.43	1162560	17.33
LOWER LIMIT	360721	9.95	377631	13.43	290640	16.33
LAB SAMPLE ID	CLIENT SAMPLE ID					
MB 180-110164/1-A	669042	10.45	665784	13.92	502279	16.83
LCS 180-110164/2-A	834759	10.46	858965	13.94	678783	16.85
LCSD 180-110164/3-A	888992	10.46	932298	13.95	674675	16.85

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 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							
180-34298-2	062514-DP		142572	6.25	462181	7.44	270292	9.06
180-34298-3	TS04-PDM004		144294	6.25	476537	7.45	269040	9.06
180-34298-4	RW20-PZP000		190382	6.25	615397	7.45	366209	9.06
180-34298-5	RW20-PZM020		156765	6.24	502047	7.44	287563	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
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 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							
180-34298-2	062514-DP		497440	10.42	608214	13.89	601604	16.79
180-34298-3	TS04-PDM004		473329	10.42	579367	13.89	553380	16.79
180-34298-4	RW20-PZP000		653049	10.42	706849	13.89	612748	16.79
180-34298-5	RW20-PZM020		498639	10.42	606452	13.89	605812	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 I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 SDG No.: _____
 Client Sample ID: 062514-DP Lab Sample ID: 180-34298-2
 Matrix: Water Lab File ID: V0708015.D
 Analysis Method: 8270D LL Date Collected: 06/25/2014 00:00
 Extract. Method: 3520C Date Extracted: 07/01/2014 10:47
 Sample wt/vol: 240 (mL) Date Analyzed: 07/08/2014 19:43
 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		0.21	0.030
208-96-8	Acenaphthylene	ND		0.21	0.022
120-12-7	Anthracene	0.062	J	0.21	0.020
92-87-5	Benzidine	ND		21	4.9
56-55-3	Benzo[a]anthracene	ND		0.21	0.038
205-99-2	Benzo[b]fluoranthene	ND		0.21	0.051
207-08-9	Benzo[k]fluoranthene	ND		0.21	0.031
65-85-0	Benzoic acid	ND		5.2	1.7
191-24-2	Benzo[g,h,i]perylene	ND		0.21	0.030
50-32-8	Benzo[a]pyrene	ND		0.21	0.029
111-91-1	Bis(2-chloroethoxy)methane	ND		1.0	0.14
111-44-4	Bis(2-chloroethyl)ether	ND		1.0	0.033
117-81-7	Bis(2-ethylhexyl) phthalate	19		2.1	0.46
108-60-1	2,2'-oxybis[1-chloropropane]	ND		1.0	0.025
101-55-3	4-Bromophenyl phenyl ether	ND		1.0	0.12
7005-72-3	4-Chlorophenyl phenyl ether	ND		1.0	0.083
91-58-7	2-Chloronaphthalene	ND		0.21	0.032
85-68-7	Butyl benzyl phthalate	0.26	J	1.0	0.22
218-01-9	Chrysene	ND		0.21	0.032
53-70-3	Dibenz(a,h)anthracene	ND		0.21	0.028
84-74-2	Di-n-butyl phthalate	ND		1.0	0.25
117-84-0	Di-n-octyl phthalate	ND		1.0	0.21
84-66-2	Diethyl phthalate	ND		1.0	0.31
131-11-3	Dimethyl phthalate	ND		1.0	0.19
91-94-1	3,3'-Dichlorobenzidine	ND		1.0	0.15
121-14-2	2,4-Dinitrotoluene	ND		1.0	0.22
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	0.070
105-67-9	2,4-Dimethylphenol	ND		1.0	0.18
51-28-5	2,4-Dinitrophenol	ND		5.2	2.6
88-75-5	2-Nitrophenol	ND		1.0	0.12
88-06-2	2,4,6-Trichlorophenol	ND		1.0	0.31
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.: 180-34298-1
 SDG No.: _____
 Client Sample ID: 062514-DP Lab Sample ID: 180-34298-2
 Matrix: Water Lab File ID: V0708015.D
 Analysis Method: 8270D LL Date Collected: 06/25/2014 00:00
 Extract. Method: 3520C Date Extracted: 07/01/2014 10:47
 Sample wt/vol: 240 (mL) Date Analyzed: 07/08/2014 19:43
 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	0.089
59-50-7	4-Chloro-3-methylphenol	ND		1.0	0.18
100-02-7	4-Nitrophenol	ND		5.2	0.84
534-52-1	4,6-Dinitro-2-methylphenol	ND		5.2	1.6
206-44-0	Fluoranthene	0.12	J	0.21	0.022
86-73-7	Fluorene	0.12	J	0.21	0.025
118-74-1	Hexachlorobenzene	ND		1.0	0.064
87-68-3	Hexachlorobutadiene	ND		1.0	0.098
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		0.21	0.045
78-59-1	Isophorone	ND		1.0	0.077
91-20-3	Naphthalene	ND		0.21	0.024
98-95-3	Nitrobenzene	ND		2.1	0.16
621-64-7	N-Nitrosodi-n-propylamine	ND		1.0	0.052
62-75-9	N-Nitrosodimethylamine	ND		1.0	0.12
86-30-6	N-Nitrosodiphenylamine	ND		1.0	0.13
85-01-8	Phenanthrene	0.50		0.21	0.043
129-00-0	Pyrene	0.052	J	0.21	0.024
87-86-5	Pentachlorophenol	ND		1.0	0.52
108-95-2	Phenol	ND		1.0	0.058

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	73		30-150
321-60-8	2-Fluorobiphenyl	83		30-150
367-12-4	2-Fluorophenol (Surr)	51		30-150
4165-60-0	Nitrobenzene-d5 (Surr)	88		30-150
4165-62-2	Phenol-d5 (Surr)	49		30-150
1718-51-0	Terphenyl-d14 (Surr)	80		10-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708015.D
 Lims ID: 180-34298-A-2-A Lab Sample ID: 180-34298-2
 Client ID: 062514-DP
 Sample Type: Client
 Inject. Date: 08-Jul-2014 19:43:30 ALS Bottle#: 14 Worklist Smp#: 15
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0002096-015
 Misc. Info.: 180-34298-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-5SiIMS (0.32 mm) Det: MS SCAN
 Process Host: XAWRK026

First Level Reviewer: piccolinov

Date: 09-Jul-2014 03:01:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.247	6.237	0.010	85	142572	8.00	
* 2 Naphthalene-d8	136	7.444	7.444	0.000	97	462181	8.00	
* 3 Acenaphthene-d10	164	9.057	9.063	-0.006	92	270292	8.00	
* 4 Phenanthrene-d10	188	10.420	10.430	-0.010	97	497440	8.00	
* 5 Chrysene-d12	240	13.892	13.903	-0.011	95	608214	8.00	
* 6 Perylene-d12	264	16.793	16.809	-0.016	97	601604	8.00	
\$ 7 2-Fluorophenol	112	4.907	4.896	0.011	90	536361	20.4	
\$ 8 Phenol-d5	99	5.900	5.895	0.005	82	625790	19.7	
\$ 9 Nitrobenzene-d5	82	6.766	6.766	0.000	92	1064113	35.3	
\$ 10 2-Fluorobiphenyl	172	8.427	8.427	0.000	98	1643424	33.2	
\$ 11 2,4,6-Tribromophenol	330	9.779	9.784	-0.005	78	209618	29.4	
\$ 12 Terphenyl-d14	244	12.167	12.172	-0.006	98	2388436	32.2	
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.)	Diff 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		9.415				ND	
100 4-Chlorophenyl phenyl ether	204		9.544				ND	
103 Fluorene	166	9.560	9.565	-0.005	94	11452	0.2341	
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	10.446	10.452	-0.006	95	71163	0.9513	
122 Anthracene	178	10.500	10.500	0.000	24	8862	0.1195	
126 Di-n-butyl phthalate	149	10.916	10.927	-0.011	94	30462	0.3813	
131 Fluoranthene	202	11.728	11.723	0.005	92	18365	0.2352	
132 Benzidine	184		11.851				ND	
133 Pyrene	202	12.012	12.022	-0.010	42	9497	0.0995	
138 Butyl benzyl phthalate	149	12.840	12.850	-0.010	91	18872	0.4905	
144 3,3'-Dichlorobenzidine	252		13.807				ND	
145 Bis(2-ethylhexyl) phthalat	149	13.828	13.839	-0.011	95	1978501	37.0	
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

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708015.D

Injection Date: 08-Jul-2014 19:43:30

Instrument ID: CH731

Operator ID: 003200

Lims ID: 180-34298-A-2-A

Lab Sample ID: 180-34298-2

Worklist Smp#: 15

Client ID: 062514-DP

Injection Vol: 2.0 ul

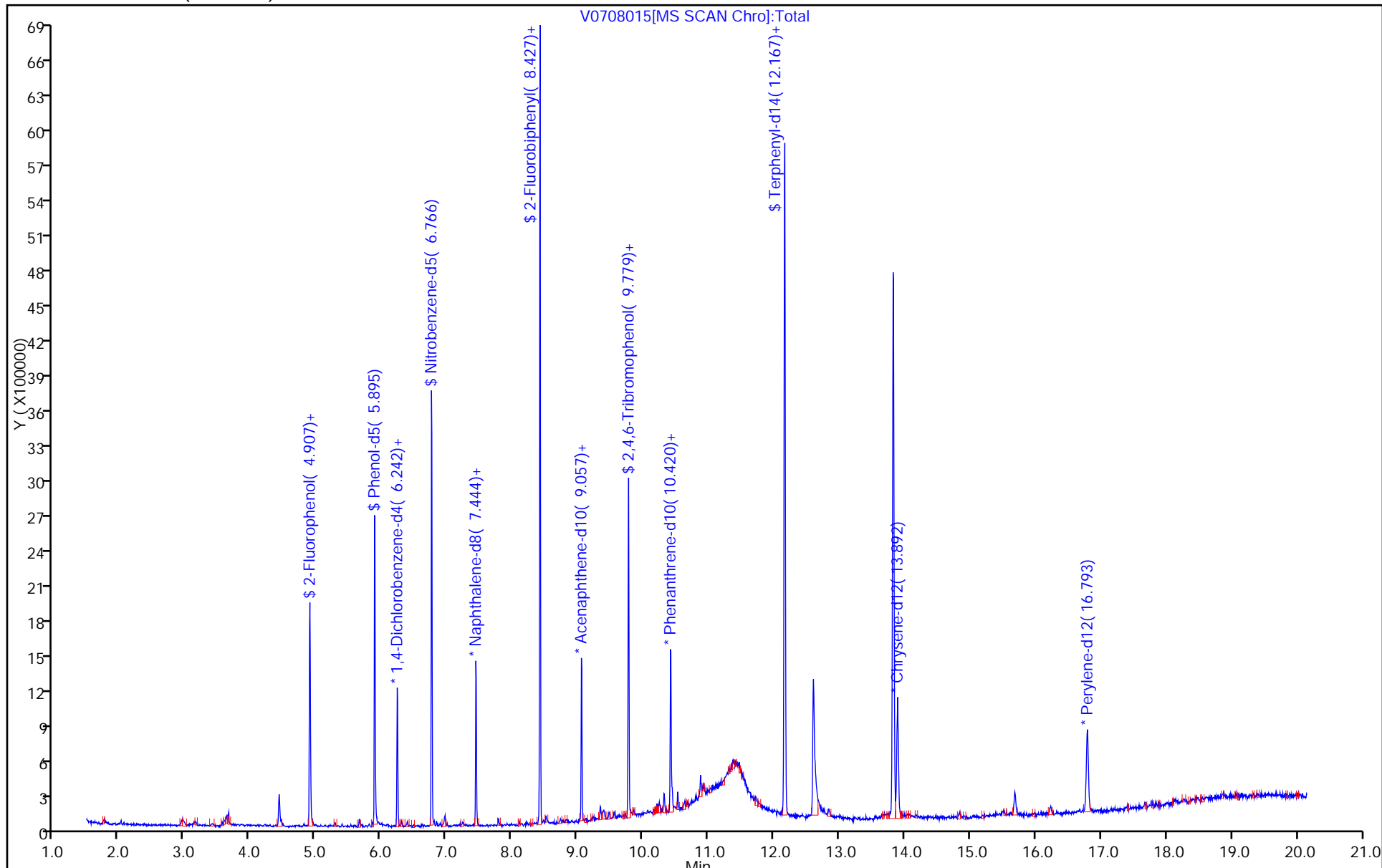
Dil. Factor: 1.0000

ALS Bottle#: 14

Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708015.D

Injection Date: 08-Jul-2014 19:43:30

Instrument ID: CH731

Lims ID: 180-34298-A-2-A

Lab Sample ID: 180-34298-2

Client ID: 062514-DP

Operator ID: 003200

ALS Bottle#: 14

Worklist Smp#: 15

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

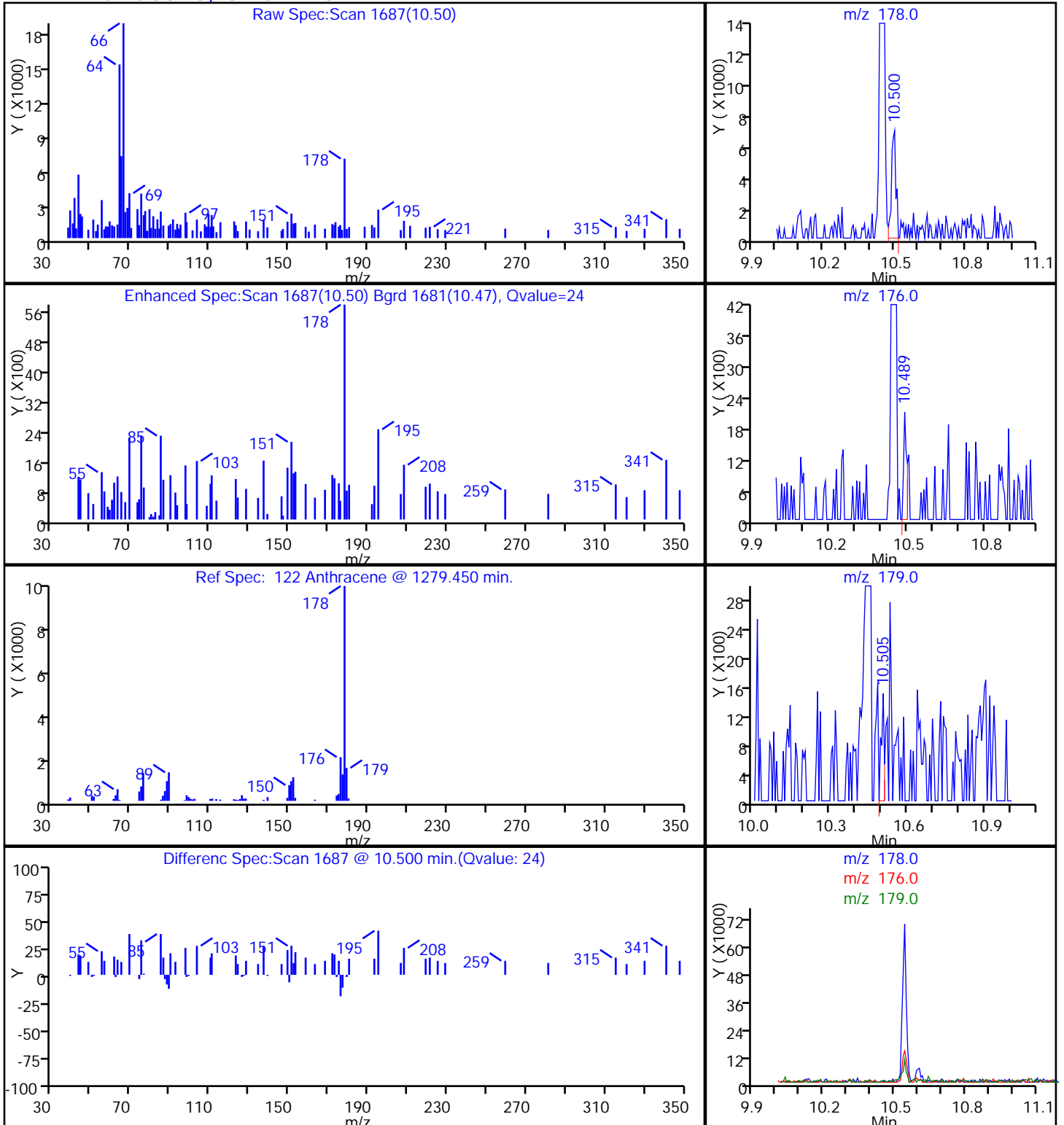
Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

122 Anthracene, CAS: 120-12-7



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708015.D

Injection Date: 08-Jul-2014 19:43:30

Instrument ID: CH731

Lims ID: 180-34298-A-2-A

Lab Sample ID: 180-34298-2

Client ID: 062514-DP

Operator ID: 003200

ALS Bottle#: 14

Worklist Smp#: 15

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

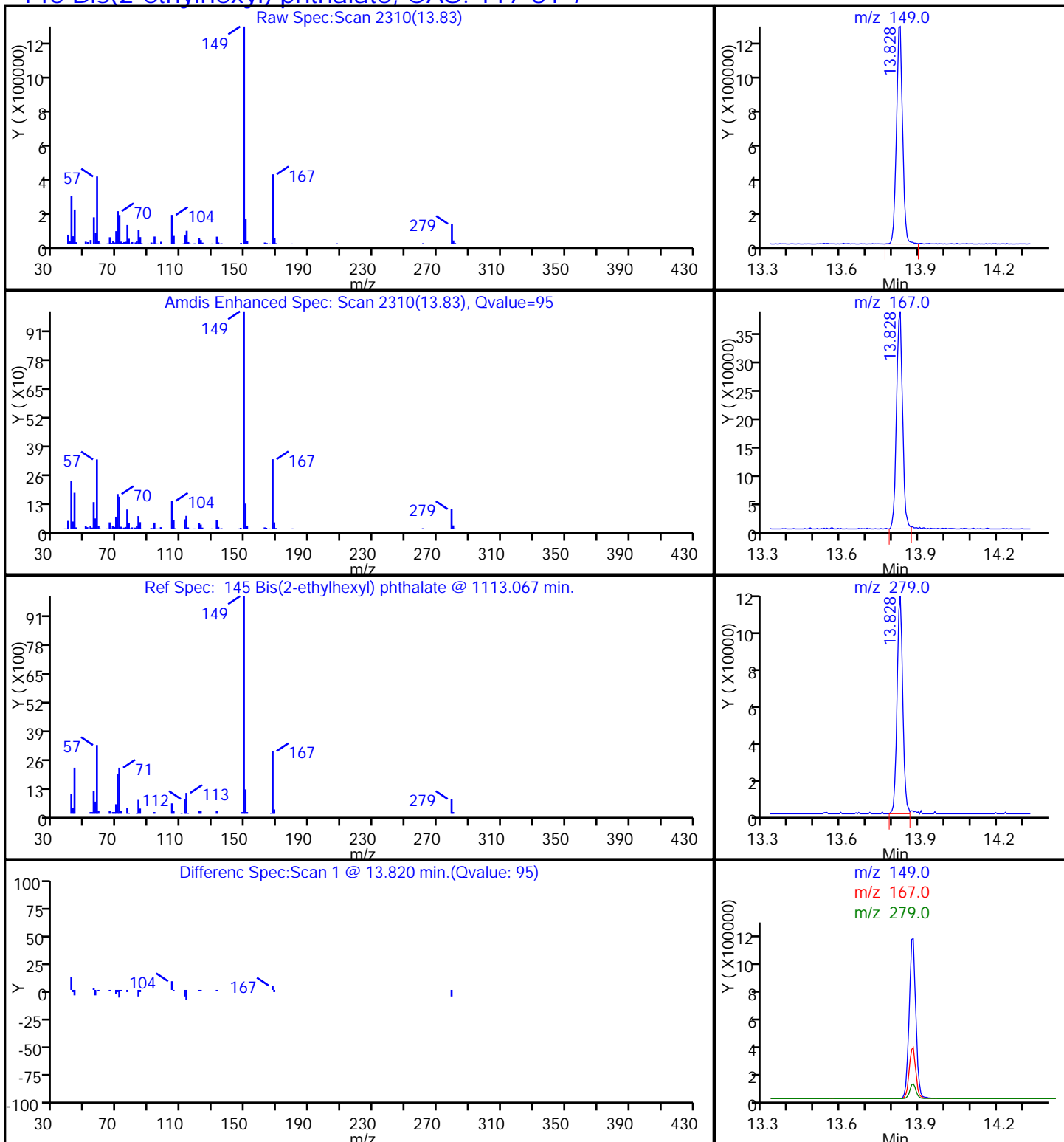
Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

145 Bis(2-ethylhexyl) phthalate, CAS: 117-81-7



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708015.D

Injection Date: 08-Jul-2014 19:43:30

Instrument ID: CH731

Lims ID: 180-34298-A-2-A

Lab Sample ID: 180-34298-2

Client ID: 062514-DP

Operator ID: 003200

ALS Bottle#: 14

Worklist Smp#: 15

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

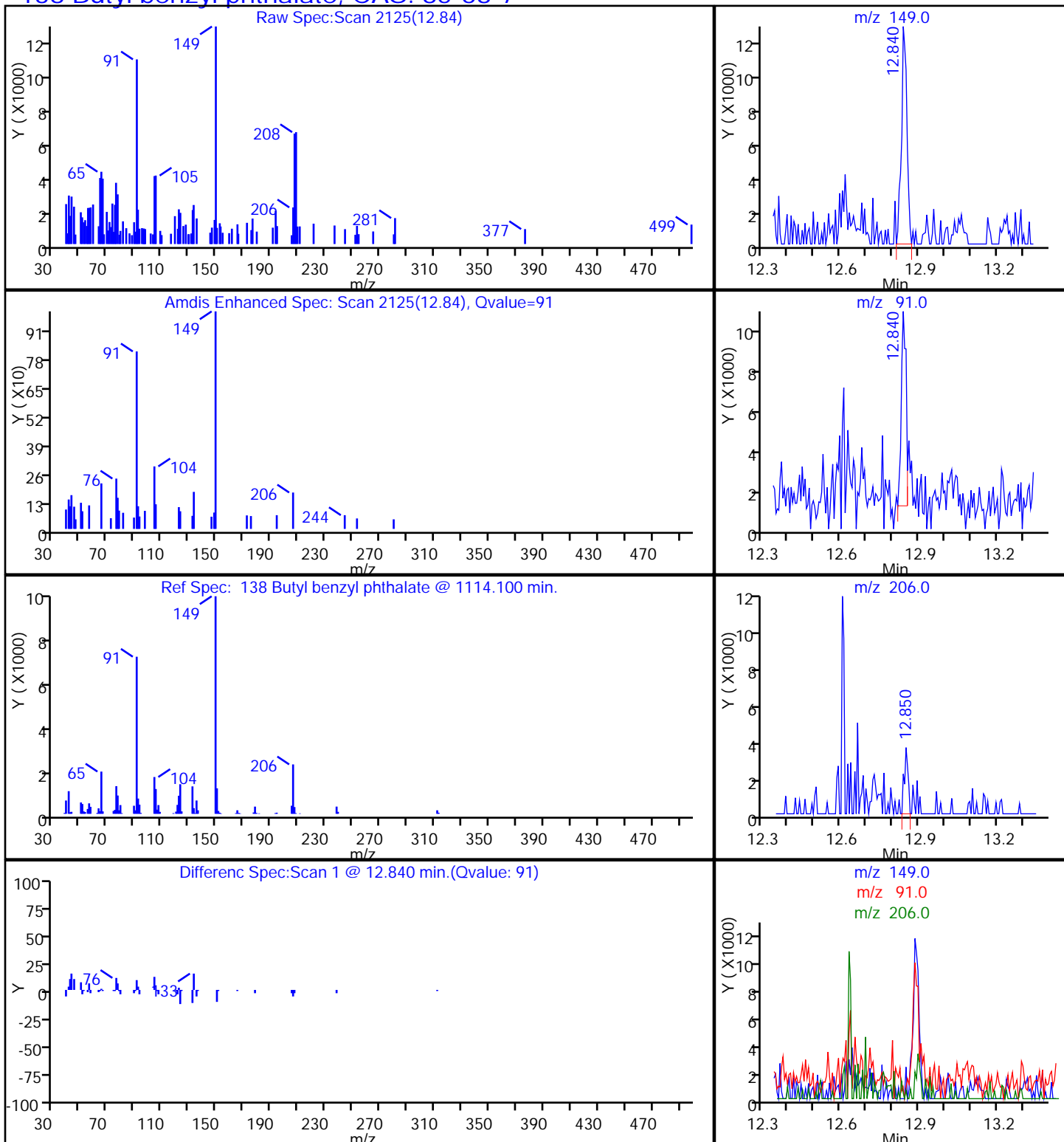
Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

138 Butyl benzyl phthalate, CAS: 85-68-7



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708015.D

Injection Date: 08-Jul-2014 19:43:30

Instrument ID: CH731

Lims ID: 180-34298-A-2-A

Lab Sample ID: 180-34298-2

Client ID: 062514-DP

Operator ID: 003200

ALS Bottle#: 14

Worklist Smp#: 15

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

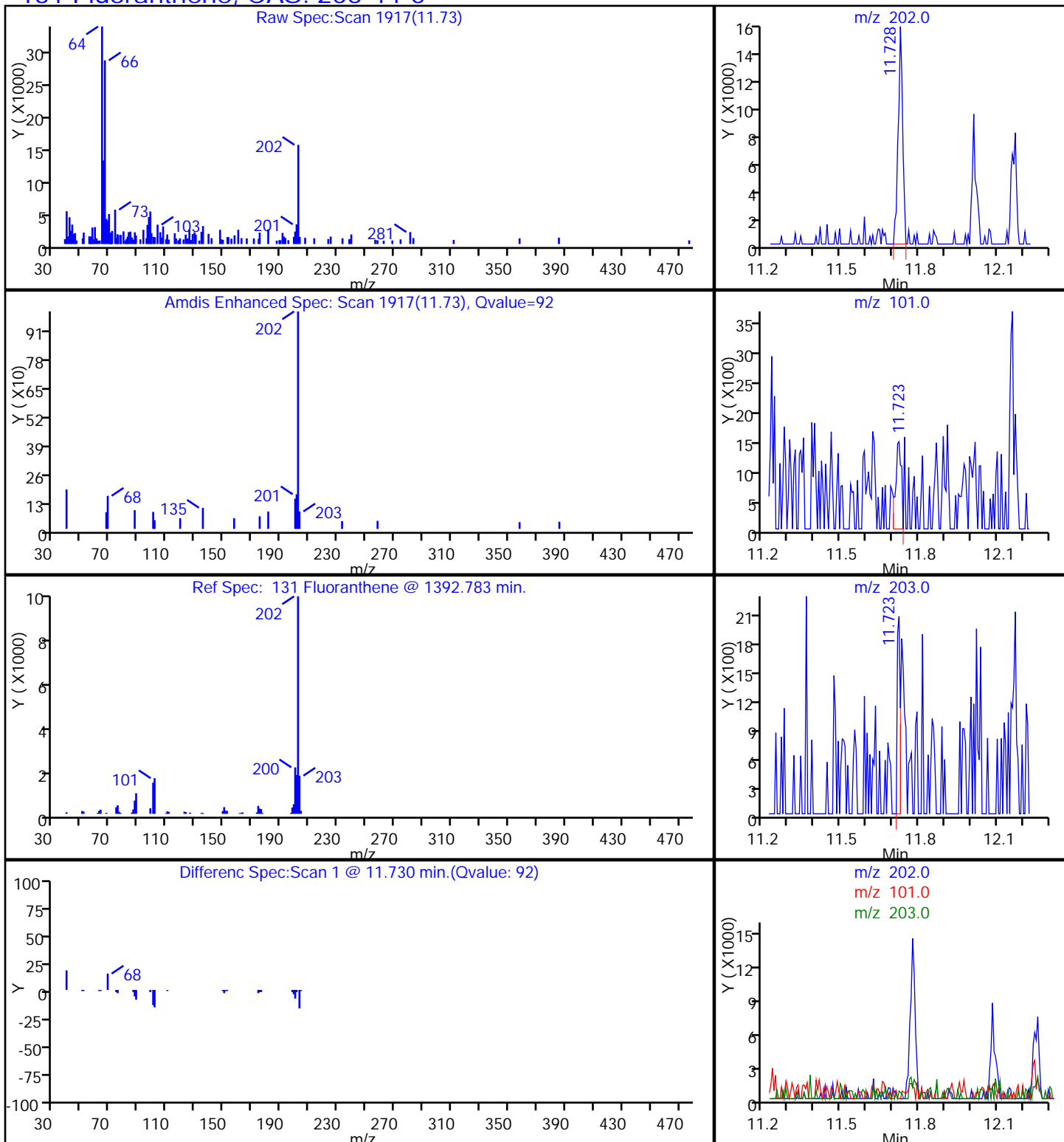
Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

131 Fluoranthene, CAS: 206-44-0



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708015.D

Injection Date: 08-Jul-2014 19:43:30

Instrument ID: CH731

Lims ID: 180-34298-A-2-A

Lab Sample ID: 180-34298-2

Client ID: 062514-DP

Operator ID: 003200

ALS Bottle#: 14

Worklist Smp#: 15

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

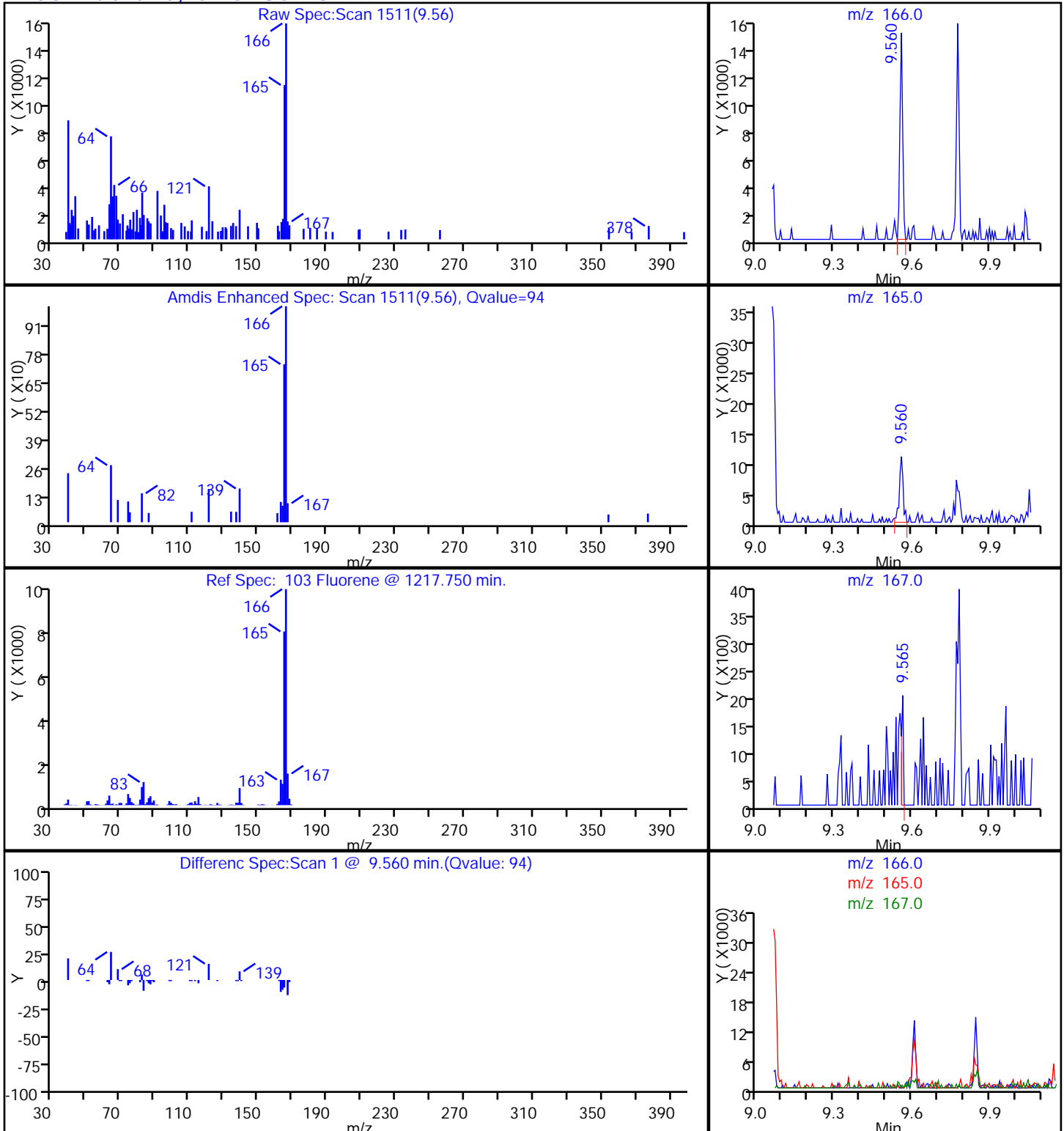
Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

103 Fluorene, CAS: 86-73-7



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708015.D

Injection Date: 08-Jul-2014 19:43:30

Instrument ID: CH731

Lims ID: 180-34298-A-2-A

Lab Sample ID: 180-34298-2

Client ID: 062514-DP

Operator ID: 003200

ALS Bottle#: 14

Worklist Smp#: 15

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

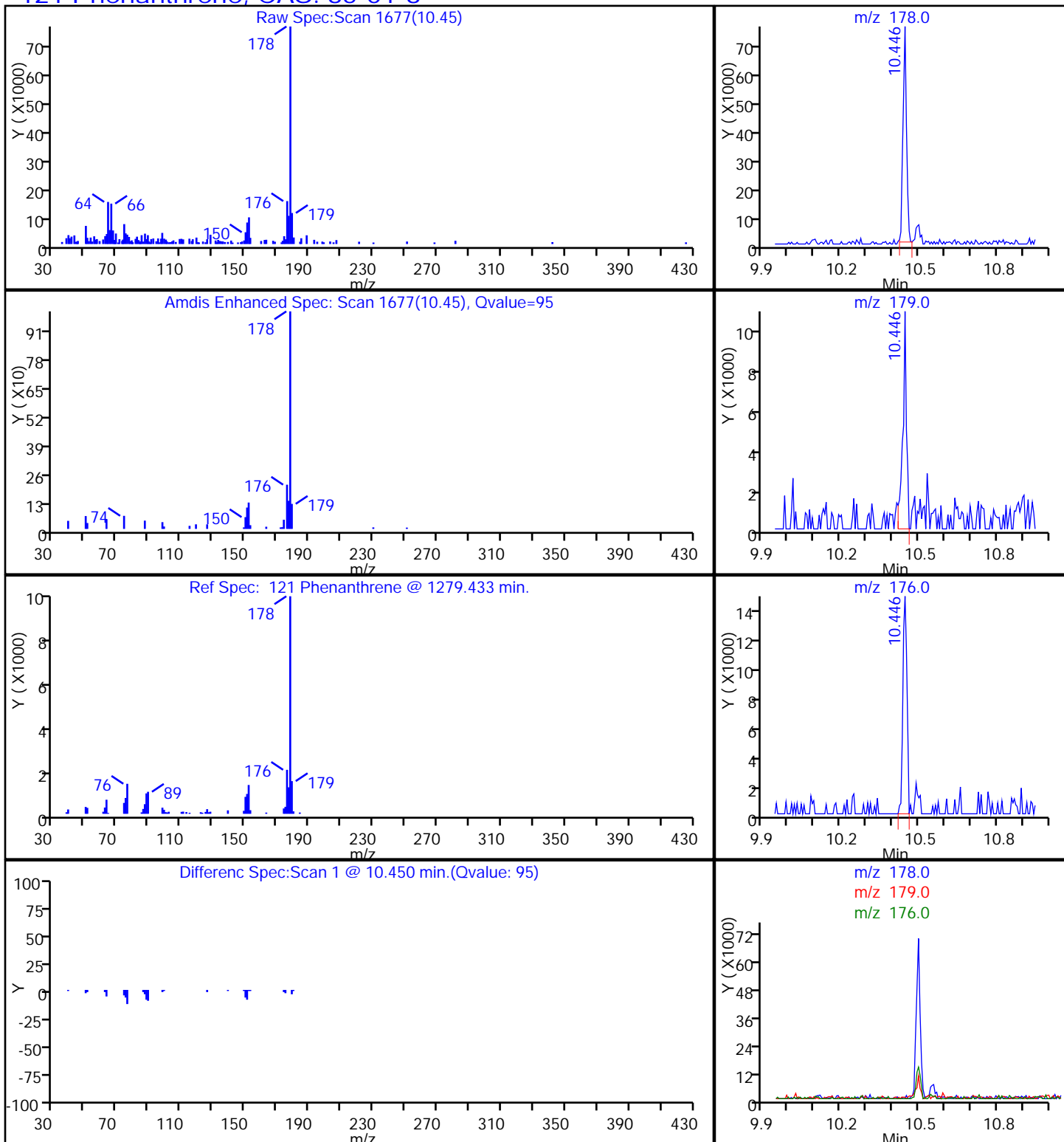
Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

121 Phenanthrene, CAS: 85-01-8



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708015.D

Injection Date: 08-Jul-2014 19:43:30

Instrument ID: CH731

Lims ID: 180-34298-A-2-A

Lab Sample ID: 180-34298-2

Client ID: 062514-DP

Operator ID: 003200

ALS Bottle#: 14

Worklist Smp#: 15

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

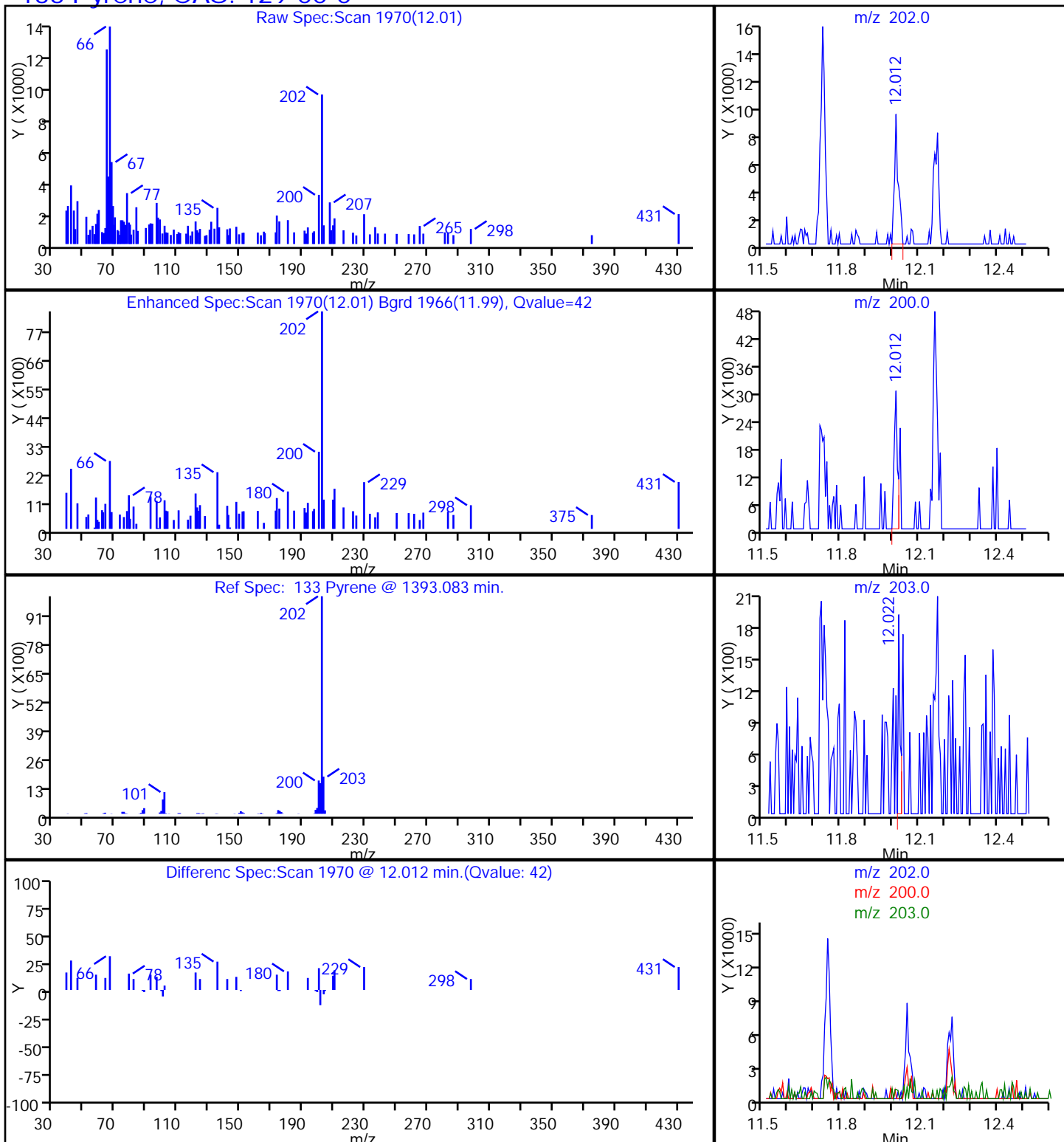
Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

133 Pyrene, CAS: 129-00-0



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 SDG No.: _____
 Client Sample ID: TS04-PDM004 Lab Sample ID: 180-34298-3
 Matrix: Water Lab File ID: V0708016.D
 Analysis Method: 8270D LL Date Collected: 06/25/2014 13:40
 Extract. Method: 3520C Date Extracted: 07/01/2014 10:47
 Sample wt/vol: 260(mL) Date Analyzed: 07/08/2014 20:12
 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	1.6	J	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	0.24	J	0.96	0.21
218-01-9	Chrysene	ND		0.19	0.030
53-70-3	Dibenz(a,h)anthracene	ND		0.19	0.026
84-74-2	Di-n-butyl phthalate	ND		0.96	0.23
117-84-0	Di-n-octyl phthalate	ND		0.96	0.20
84-66-2	Diethyl phthalate	ND		0.96	0.29
131-11-3	Dimethyl phthalate	ND		0.96	0.18
91-94-1	3,3'-Dichlorobenzidine	ND		0.96	0.14
121-14-2	2,4-Dinitrotoluene	ND		0.96	0.21
606-20-2	2,6-Dinitrotoluene	ND		0.96	0.13
95-57-8	2-Chlorophenol	ND		0.96	0.22
120-83-2	2,4-Dichlorophenol	ND		0.96	0.065
105-67-9	2,4-Dimethylphenol	ND		0.96	0.16
51-28-5	2,4-Dinitrophenol	ND		4.8	2.4
88-75-5	2-Nitrophenol	ND		0.96	0.11
88-06-2	2,4,6-Trichlorophenol	ND		0.96	0.29
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		0.96	0.11

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 SDG No.: _____
 Client Sample ID: TS04-PDM004 Lab Sample ID: 180-34298-3
 Matrix: Water Lab File ID: V0708016.D
 Analysis Method: 8270D LL Date Collected: 06/25/2014 13:40
 Extract. Method: 3520C Date Extracted: 07/01/2014 10:47
 Sample wt/vol: 260 (mL) Date Analyzed: 07/08/2014 20:12
 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)	54		30-150
321-60-8	2-Fluorobiphenyl	92		30-150
367-12-4	2-Fluorophenol (Surr)	51		30-150
4165-60-0	Nitrobenzene-d5 (Surr)	91		30-150
4165-62-2	Phenol-d5 (Surr)	55		30-150
1718-51-0	Terphenyl-d14 (Surr)	88		10-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708016.D
 Lims ID: 180-34298-A-3-A Lab Sample ID: 180-34298-3
 Client ID: TS04-PDM004
 Sample Type: Client
 Inject. Date: 08-Jul-2014 20:12:30 ALS Bottle#: 15 Worklist Smp#: 16
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0002096-016
 Misc. Info.: 180-34298-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-5SiIMS (0.32 mm) Det: MS SCAN
 Process Host: XAWRK026

First Level Reviewer: piccolinov

Date: 09-Jul-2014 03:01:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.246	6.237	0.009	89	144294	8.00	
* 2 Naphthalene-d8	136	7.448	7.444	0.004	97	476537	8.00	
* 3 Acenaphthene-d10	164	9.061	9.063	-0.002	92	269040	8.00	
* 4 Phenanthrene-d10	188	10.424	10.430	-0.006	96	473329	8.00	
* 5 Chrysene-d12	240	13.891	13.903	-0.012	95	579367	8.00	
* 6 Perylene-d12	264	16.786	16.809	-0.023	97	553380	8.00	
\$ 7 2-Fluorophenol	112	4.905	4.896	0.009	90	545305	20.5	
\$ 8 Phenol-d5	99	5.899	5.895	0.004	83	710894	22.2	
\$ 9 Nitrobenzene-d5	82	6.769	6.766	0.003	92	1136635	36.5	
\$ 10 2-Fluorobiphenyl	172	8.426	8.427	-0.001	99	1808720	36.7	
\$ 11 2,4,6-Tribromophenol	330	9.777	9.784	-0.007	80	145871	21.5	
\$ 12 Terphenyl-d14	244	12.165	12.172	-0.007	98	2503721	35.4	
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		9.415				ND	
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	10.920	10.927	-0.007	97	31402	0.4131	
131 Fluoranthene	202		11.723				ND	
132 Benzidine	184		11.851				ND	
133 Pyrene	202		12.022				ND	
138 Butyl benzyl phthalate	149	12.849	12.850	-0.001	88	18503	0.5048	
144 3,3'-Dichlorobenzidine	252		13.807				ND	
145 Bis(2-ethylhexyl) phthalat	149	13.821	13.839	-0.018	95	172165	3.38	
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

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708016.D

Injection Date: 08-Jul-2014 20:12:30

Instrument ID: CH731

Operator ID: 003200

Lims ID: 180-34298-A-3-A

Lab Sample ID: 180-34298-3

Worklist Smp#: 16

Client ID: TS04-PDM004

Injection Vol: 2.0 ul

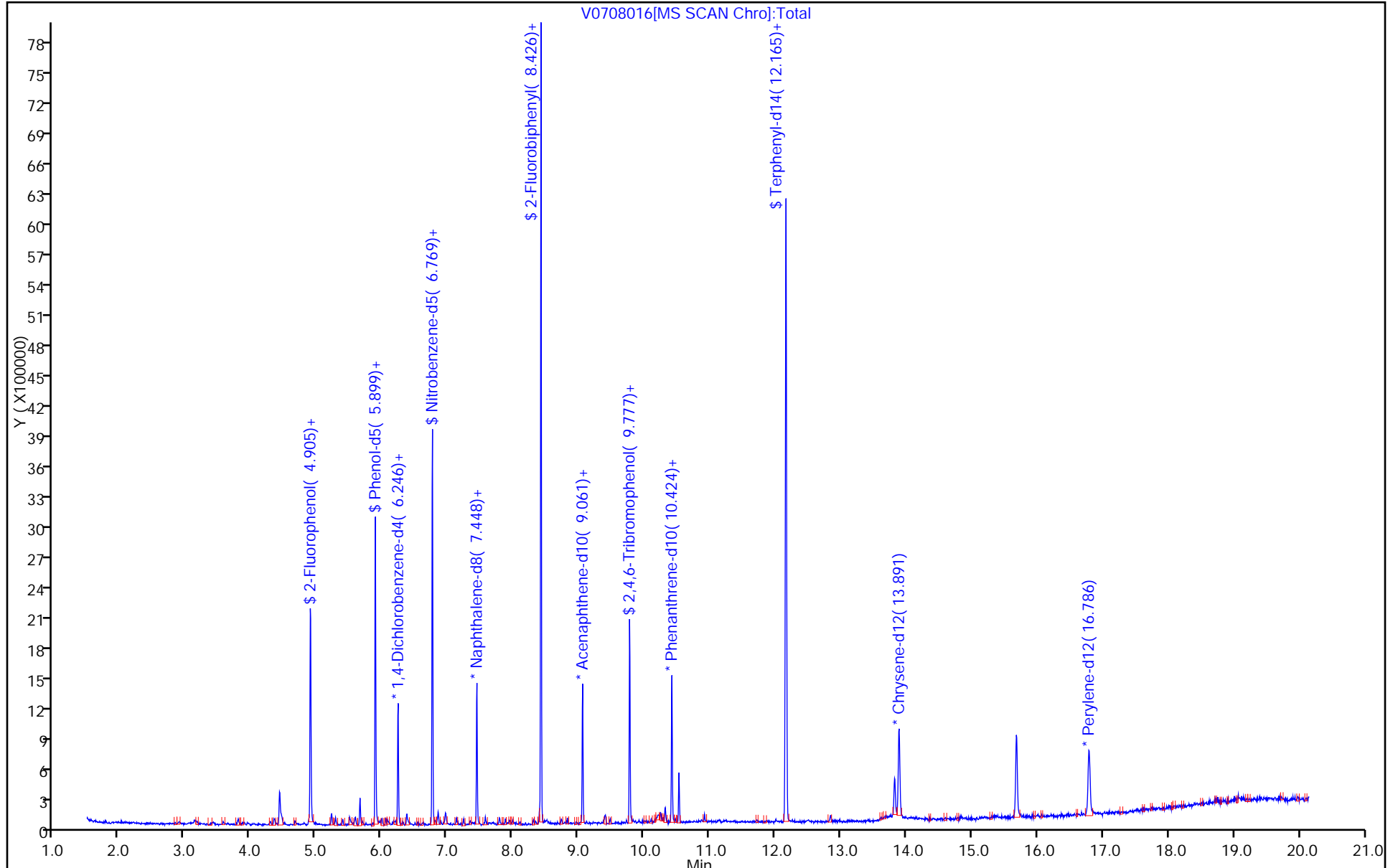
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708016.D

Injection Date: 08-Jul-2014 20:12:30

Instrument ID: CH731

Lims ID: 180-34298-A-3-A

Lab Sample ID: 180-34298-3

Client ID: TS04-PDM004

Operator ID: 003200

ALS Bottle#: 15

Worklist Smp#: 16

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

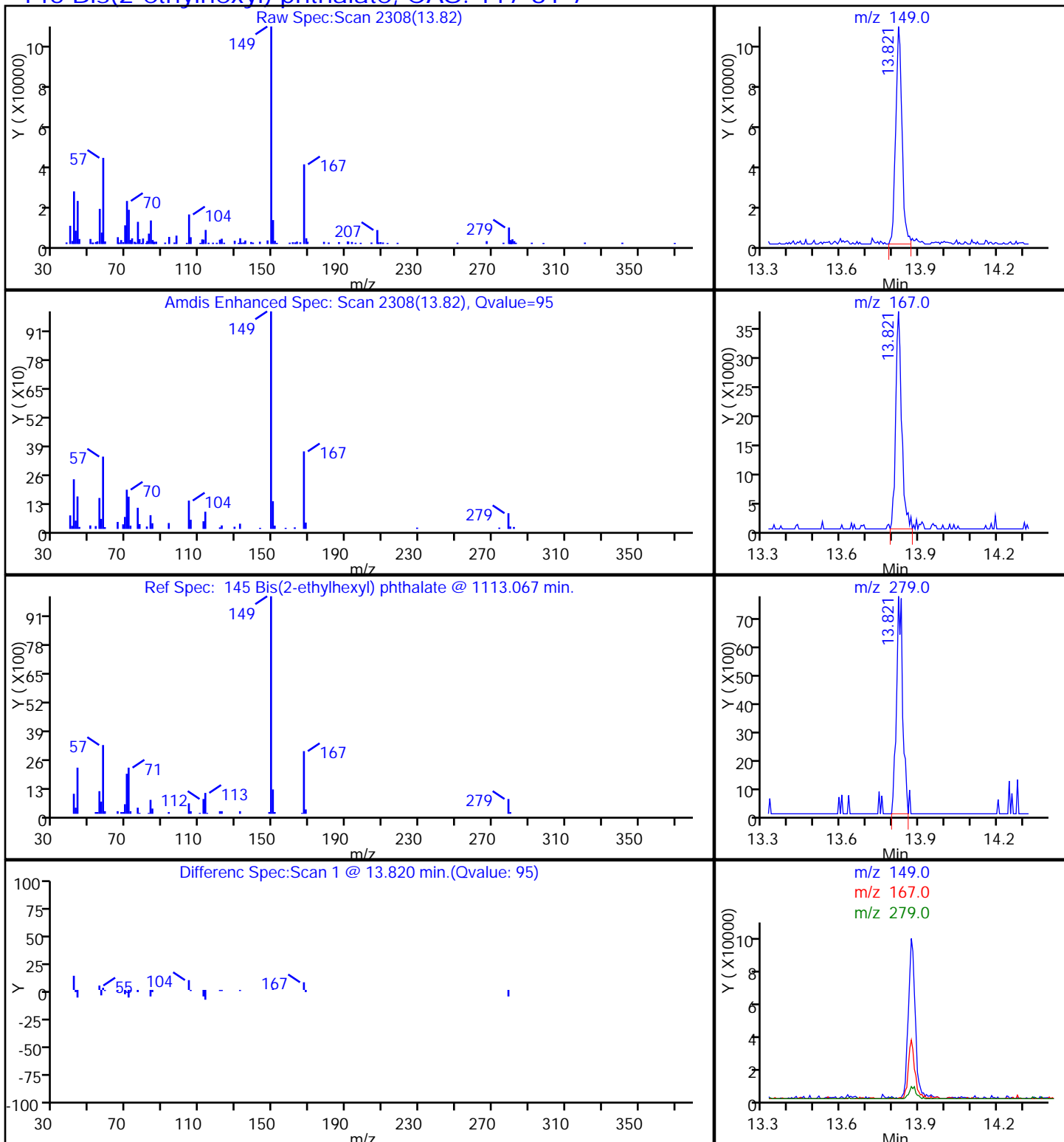
Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

145 Bis(2-ethylhexyl) phthalate, CAS: 117-81-7



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\0708016.D

Injection Date: 08-Jul-2014 20:12:30

Instrument ID: CH731

Lims ID: 180-34298-A-3-A

Lab Sample ID: 180-34298-3

Client ID: TS04-PDM004

Operator ID: 003200

ALS Bottle#: 15

Worklist Smp#: 16

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

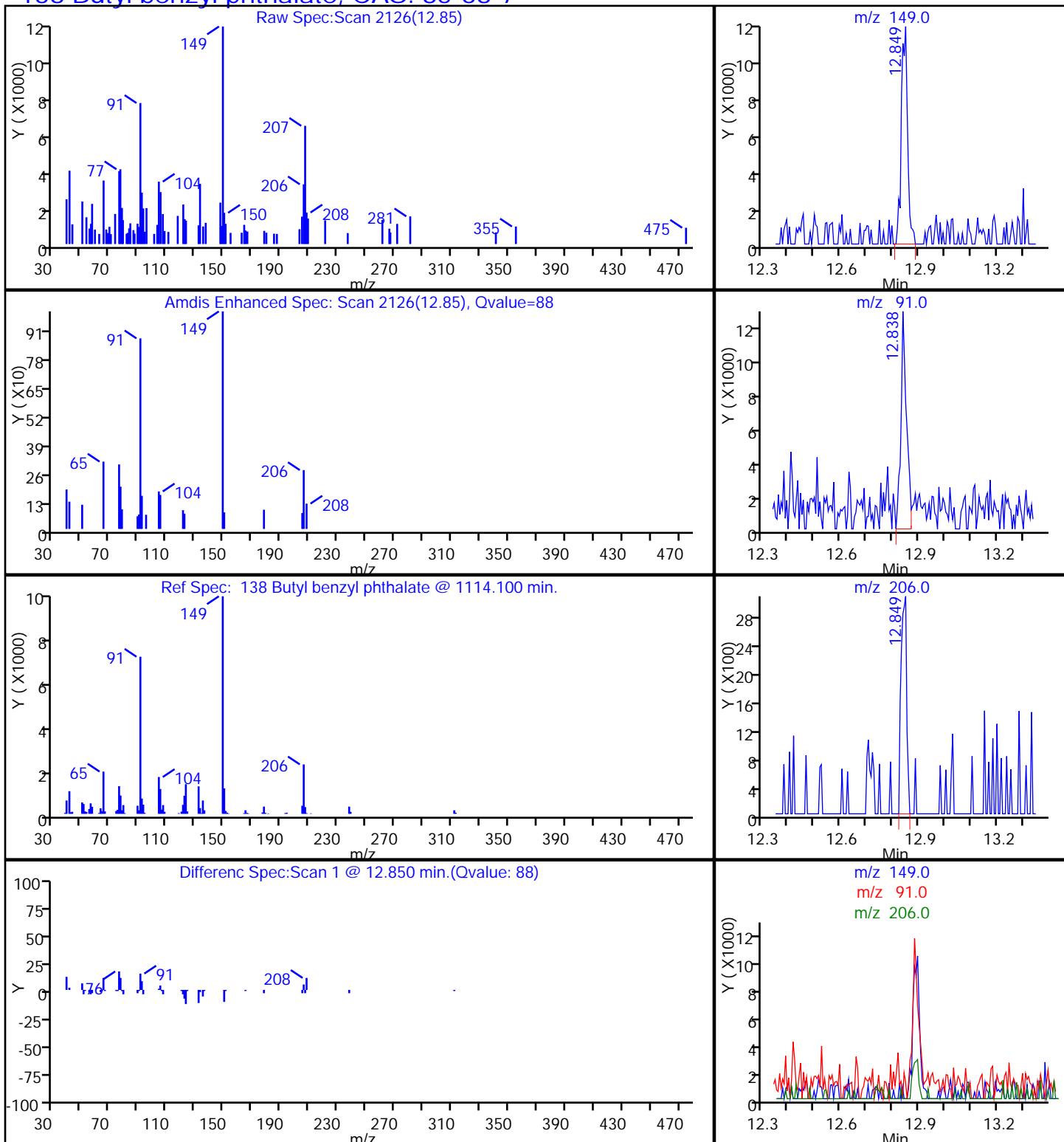
Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

138 Butyl benzyl phthalate, CAS: 85-68-7



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 SDG No.: _____
 Client Sample ID: RW20-PZP000 Lab Sample ID: 180-34298-4
 Matrix: Water Lab File ID: V0708017.D
 Analysis Method: 8270D LL Date Collected: 06/25/2014 12:50
 Extract. Method: 3520C Date Extracted: 07/01/2014 10:47
 Sample wt/vol: 250 (mL) Date Analyzed: 07/08/2014 20:40
 Con. Extract Vol.: 0.25 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 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	0.064	J	0.20	0.019
92-87-5	Benzidine	ND		20	4.7
56-55-3	Benzo[a]anthracene	0.16	J	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	5.5		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	0.71	J	1.0	0.21
218-01-9	Chrysene	0.26		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.: 180-34298-1
 SDG No.: _____
 Client Sample ID: RW20-PZP000 Lab Sample ID: 180-34298-4
 Matrix: Water Lab File ID: V0708017.D
 Analysis Method: 8270D LL Date Collected: 06/25/2014 12:50
 Extract. Method: 3520C Date Extracted: 07/01/2014 10:47
 Sample wt/vol: 250 (mL) Date Analyzed: 07/08/2014 20:40
 Con. Extract Vol.: 0.25 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 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	0.11	J	0.20	0.021
86-73-7	Fluorene	0.084	J	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	0.39		0.20	0.042
129-00-0	Pyrene	0.063	J	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)	66		30-150
321-60-8	2-Fluorobiphenyl	83		30-150
367-12-4	2-Fluorophenol (Surr)	66		30-150
4165-60-0	Nitrobenzene-d5 (Surr)	89		30-150
4165-62-2	Phenol-d5 (Surr)	65		30-150
1718-51-0	Terphenyl-d14 (Surr)	68		10-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708017.D
 Lims ID: 180-34298-A-4-A Lab Sample ID: 180-34298-4
 Client ID: RW20-PZP000
 Sample Type: Client
 Inject. Date: 08-Jul-2014 20:40:30 ALS Bottle#: 16 Worklist Smp#: 17
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0002096-017
 Misc. Info.: 180-34298-A-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 03:02:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.245	6.237	0.008	87	190382	8.00	
* 2 Naphthalene-d8	136	7.447	7.444	0.003	97	615397	8.00	
* 3 Acenaphthene-d10	164	9.060	9.063	-0.003	92	366209	8.00	
* 4 Phenanthrene-d10	188	10.423	10.430	-0.007	96	653049	8.00	
* 5 Chrysene-d12	240	13.890	13.903	-0.013	96	706849	8.00	
* 6 Perylene-d12	264	16.790	16.809	-0.019	98	612748	8.00	
\$ 7 2-Fluorophenol	112	4.904	4.896	0.008	91	925531	26.4	
\$ 8 Phenol-d5	99	5.898	5.895	0.003	84	1097514	25.9	
\$ 9 Nitrobenzene-d5	82	6.769	6.766	0.003	92	1431773	35.6	
\$ 10 2-Fluorobiphenyl	172	8.425	8.427	-0.002	98	2233004	33.3	
\$ 11 2,4,6-Tribromophenol	330	9.782	9.784	-0.002	85	247281	26.4	
\$ 12 Terphenyl-d14	244	12.164	12.172	-0.008	98	2347613	27.2	
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.)	Diff 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		9.415				ND	
100 4-Chlorophenyl phenyl ether	204		9.544				ND	
103 Fluorene	166	9.557	9.565	-0.008	86	11169	0.1685	
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	95	76414	0.7781	
122 Anthracene	178	10.497	10.500	-0.003	49	12488	0.1283	
126 Di-n-butyl phthalate	149	10.919	10.927	-0.008	96	35335	0.3369	
131 Fluoranthene	202	11.721	11.723	-0.002	94	22949	0.2239	
132 Benzidine	184		11.851				ND	
133 Pyrene	202	12.015	12.022	-0.007	97	13914	0.1254	
138 Butyl benzyl phthalate	149	12.843	12.850	-0.007	90	63401	1.42	
144 3,3'-Dichlorobenzidine	252		13.807				ND	
145 Bis(2-ethylhexyl) phthalat	149	13.826	13.839	-0.013	96	679157	10.9	
146 Benzo[a]anthracene	228	13.868	13.881	-0.013	92	33884	0.3224	
147 Chrysene	228	13.943	13.951	-0.008	93	51723	0.5266	
150 Di-n-octyl phthalate	149	15.108	15.126	-0.018	95	38346	0.3704	
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

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708017.D

Injection Date: 08-Jul-2014 20:40:30

Instrument ID: CH731

Operator ID: 003200

Lims ID: 180-34298-A-4-A

Lab Sample ID: 180-34298-4

Worklist Smp#: 17

Client ID: RW20-PZP000

Injection Vol: 2.0 ul

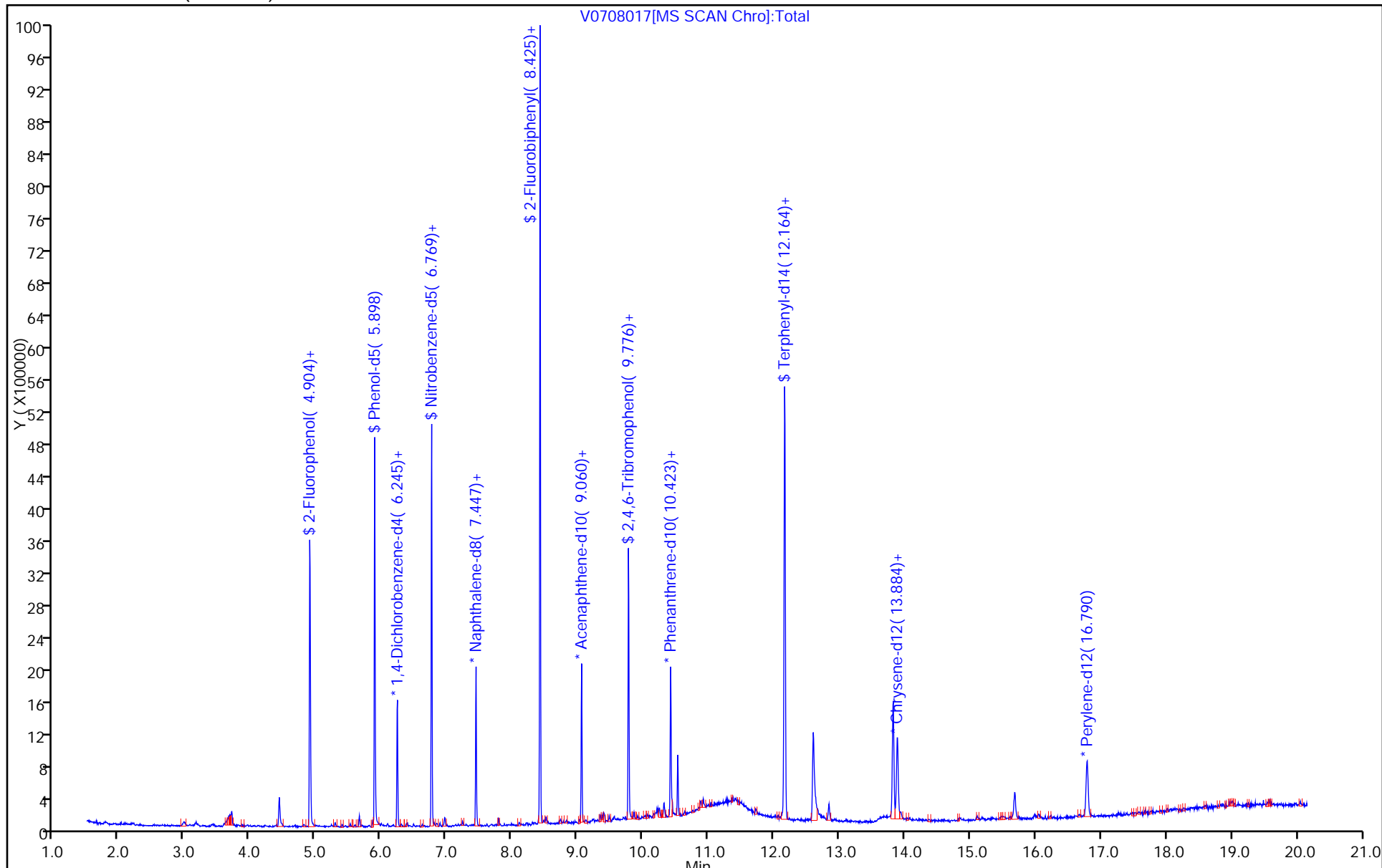
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708017.D

Injection Date: 08-Jul-2014 20:40:30

Instrument ID: CH731

Lims ID: 180-34298-A-4-A

Lab Sample ID: 180-34298-4

Client ID: RW20-PZP000

Operator ID: 003200

ALS Bottle#: 16

Worklist Smp#: 17

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

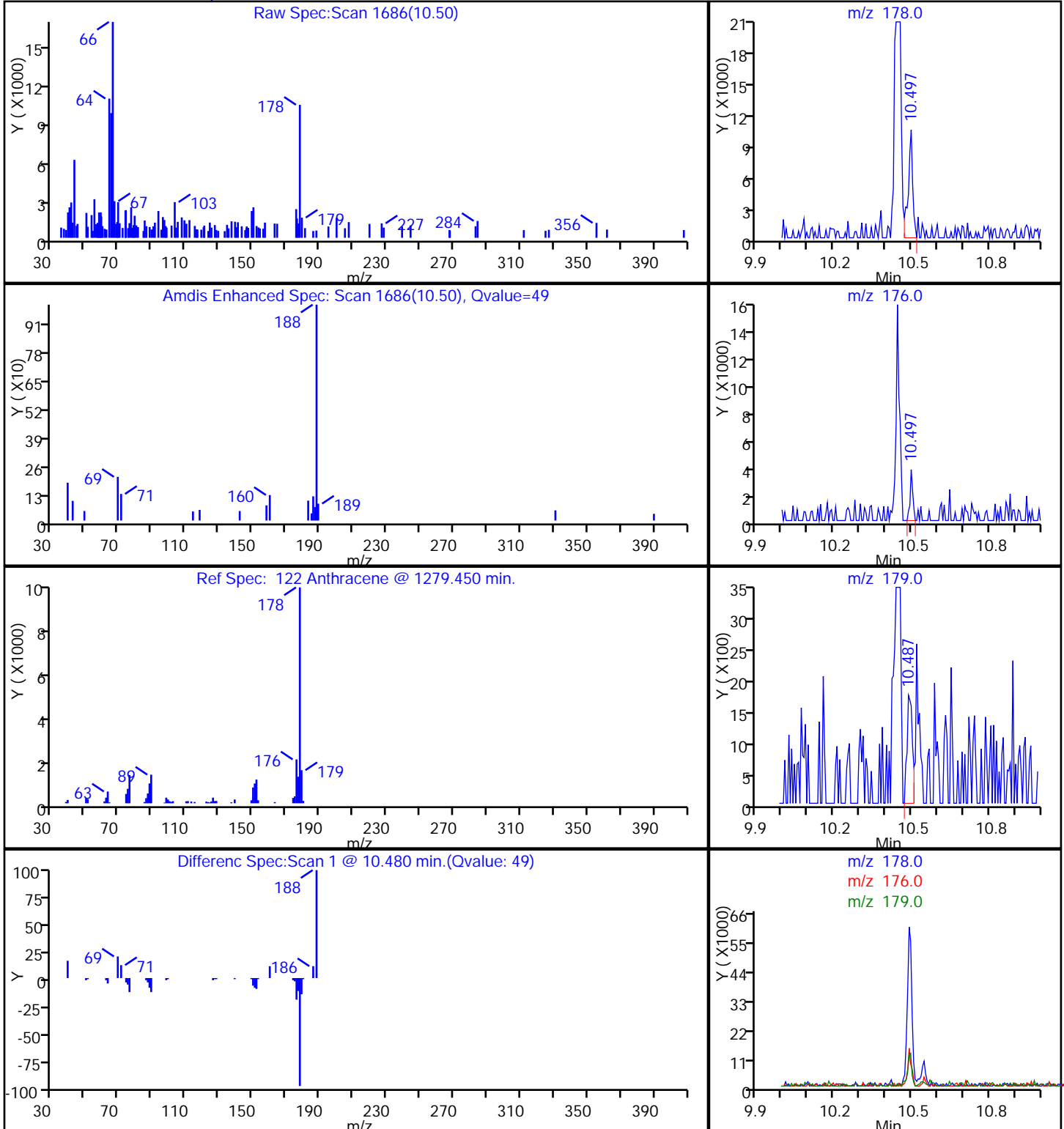
Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

122 Anthracene, CAS: 120-12-7



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708017.D

Injection Date: 08-Jul-2014 20:40:30

Instrument ID: CH731

Lims ID: 180-34298-A-4-A

Lab Sample ID: 180-34298-4

Client ID: RW20-PZP000

Operator ID: 003200

ALS Bottle#: 16

Worklist Smp#: 17

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

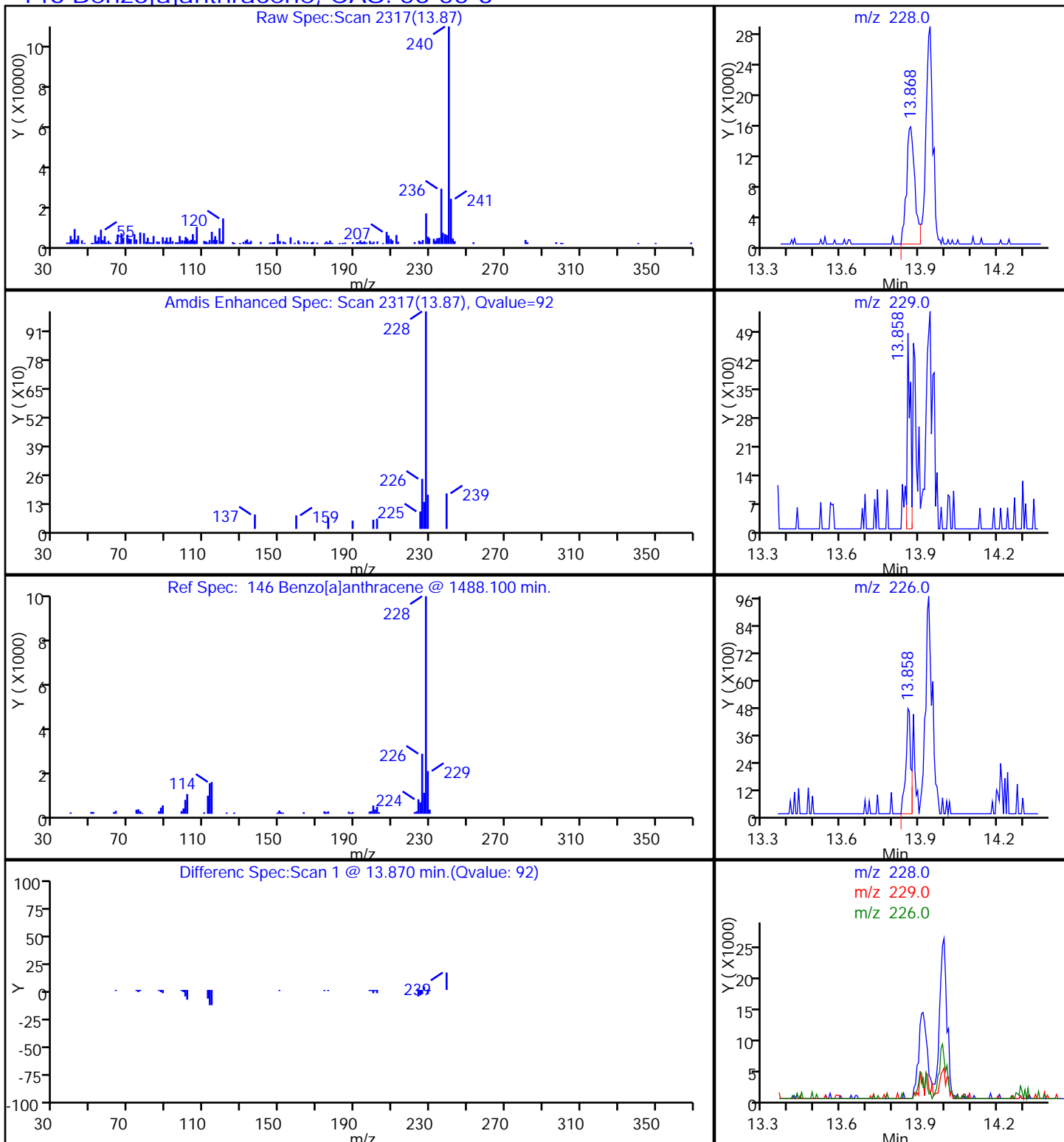
Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

146 Benzo[a]anthracene, CAS: 56-55-3



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708017.D

Injection Date: 08-Jul-2014 20:40:30

Instrument ID: CH731

Lims ID: 180-34298-A-4-A

Lab Sample ID: 180-34298-4

Client ID: RW20-PZP000

Operator ID: 003200

ALS Bottle#: 16

Worklist Smp#: 17

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

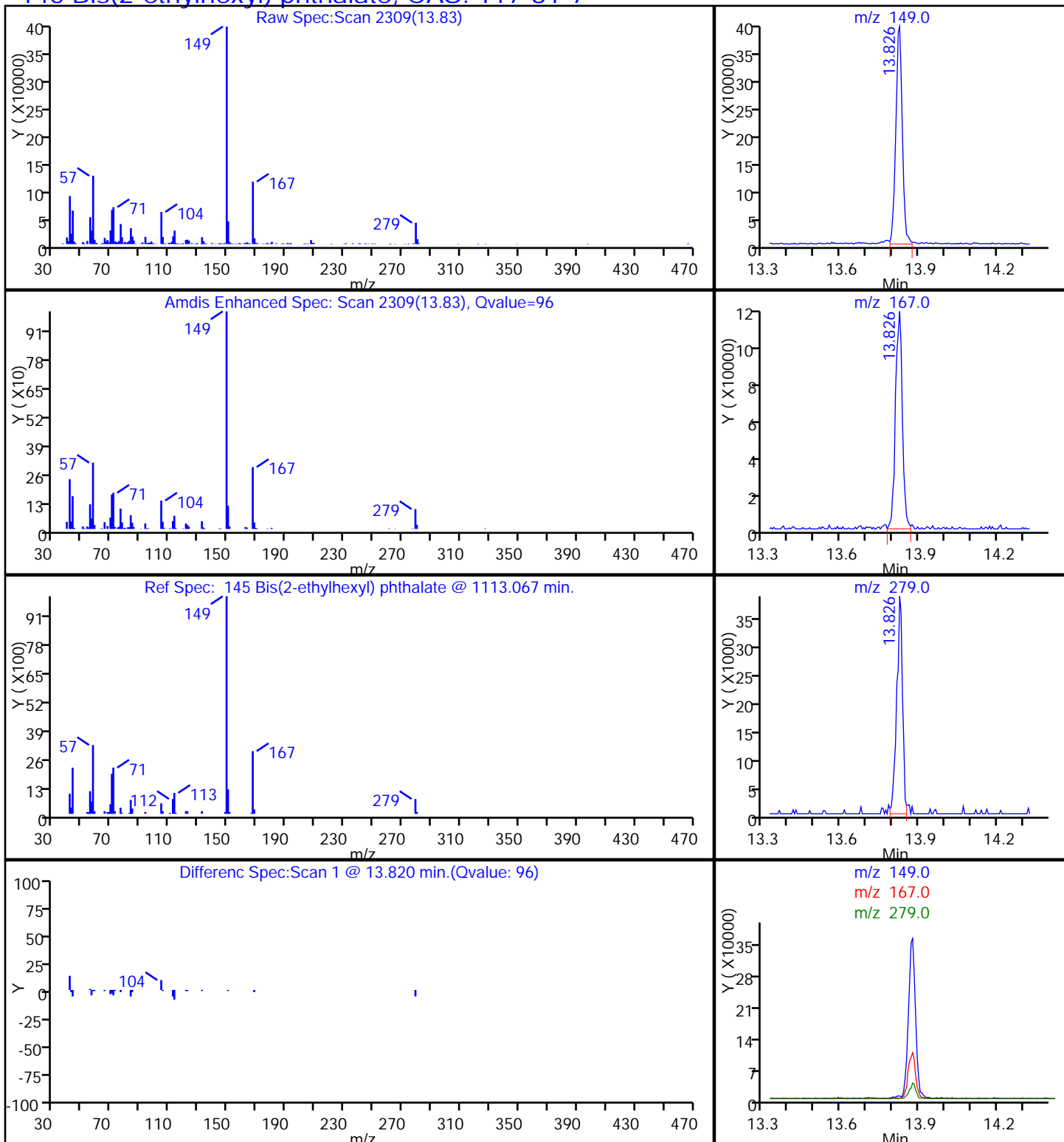
Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

145 Bis(2-ethylhexyl) phthalate, CAS: 117-81-7



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708017.D

Injection Date: 08-Jul-2014 20:40:30

Instrument ID: CH731

Lims ID: 180-34298-A-4-A

Lab Sample ID: 180-34298-4

Client ID: RW20-PZP000

Operator ID: 003200

ALS Bottle#: 16

Worklist Smp#: 17

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

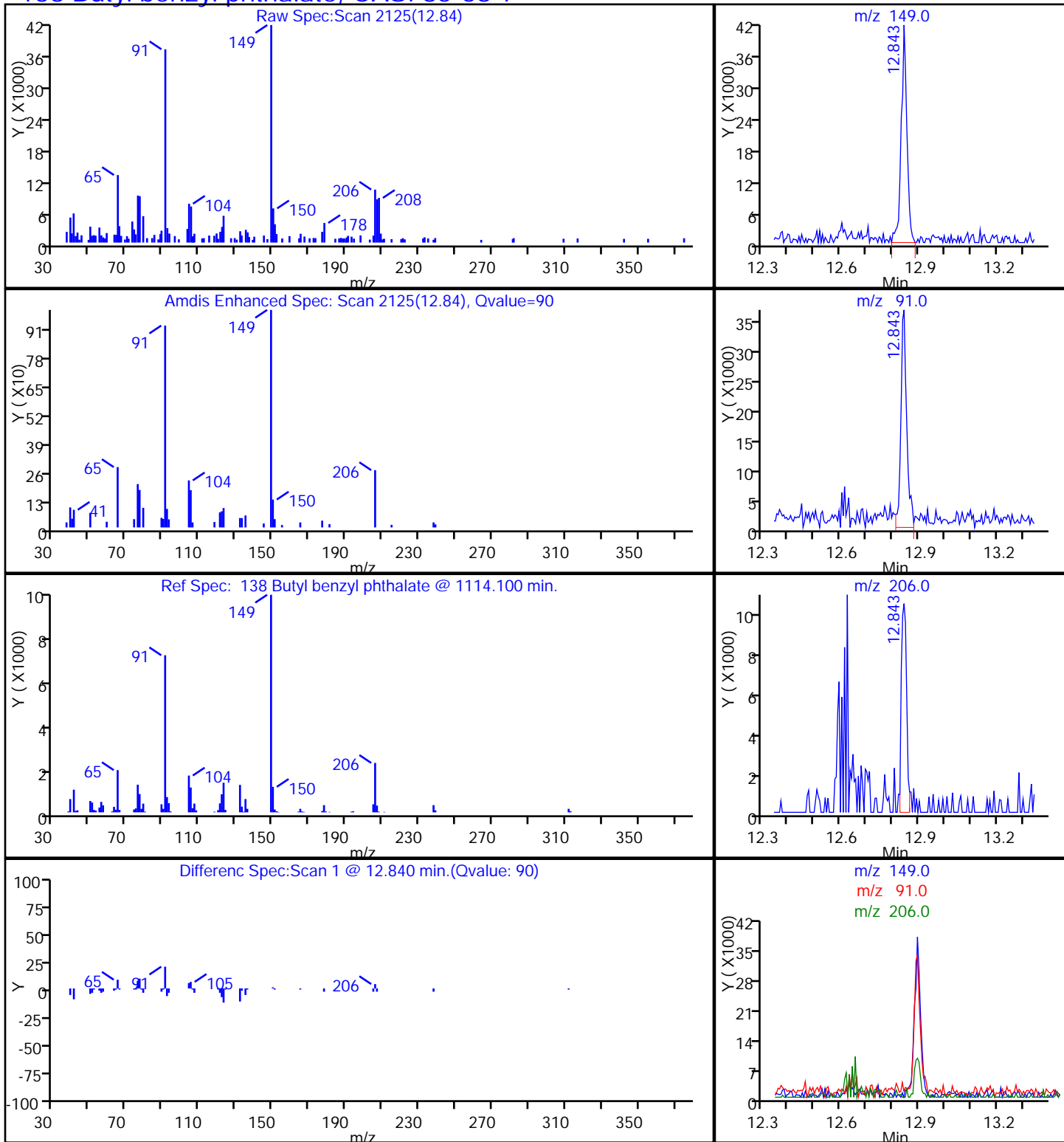
Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

138 Butyl benzyl phthalate, CAS: 85-68-7



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708017.D

Injection Date: 08-Jul-2014 20:40:30

Instrument ID: CH731

Lims ID: 180-34298-A-4-A

Lab Sample ID: 180-34298-4

Client ID: RW20-PZP000

Operator ID: 003200

ALS Bottle#: 16

Worklist Smp#: 17

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

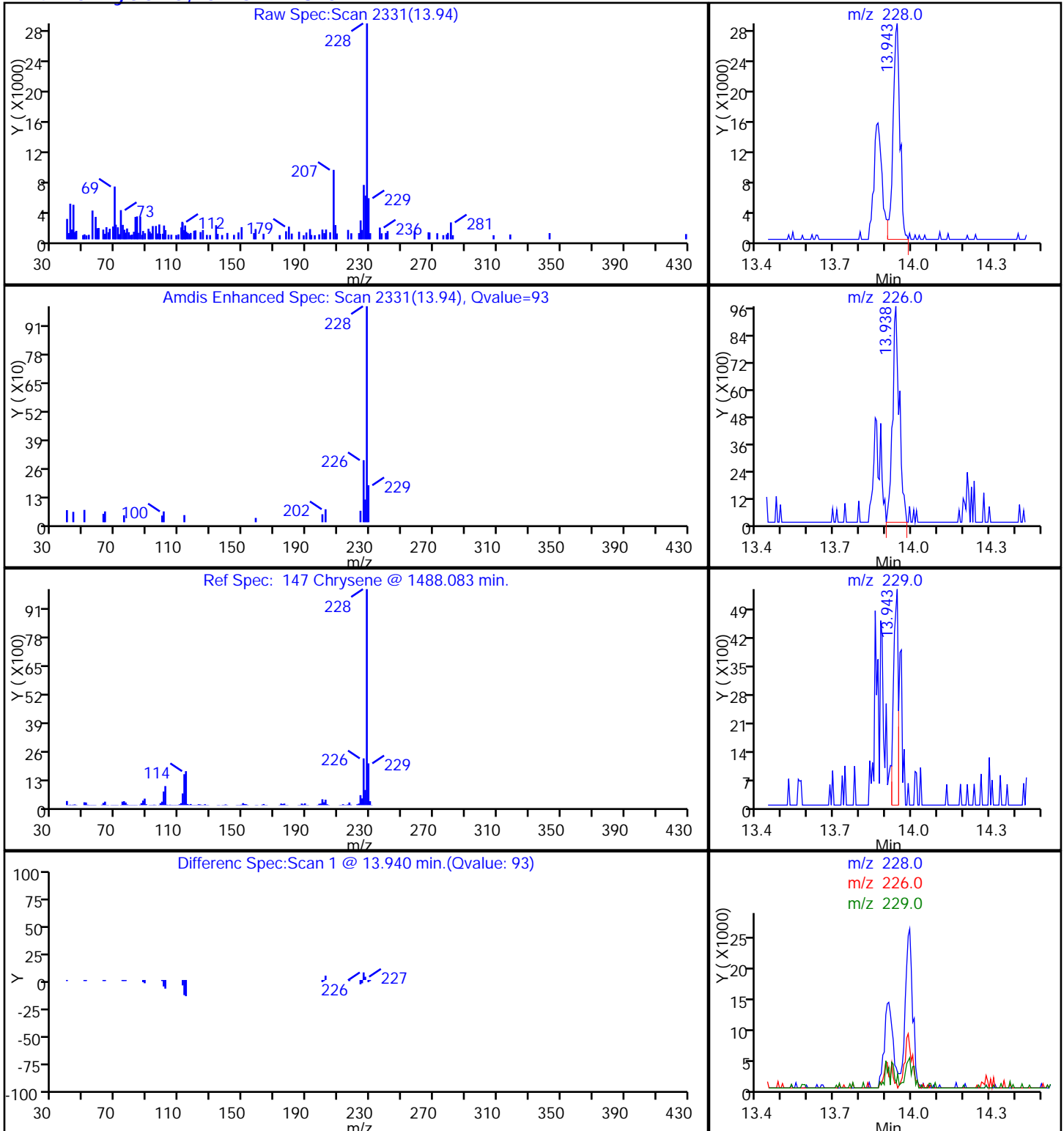
Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

147 Chrysene, CAS: 218-01-9



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708017.D

Injection Date: 08-Jul-2014 20:40:30

Instrument ID: CH731

Lims ID: 180-34298-A-4-A

Lab Sample ID: 180-34298-4

Client ID: RW20-PZP000

Operator ID: 003200

ALS Bottle#: 16

Worklist Smp#: 17

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

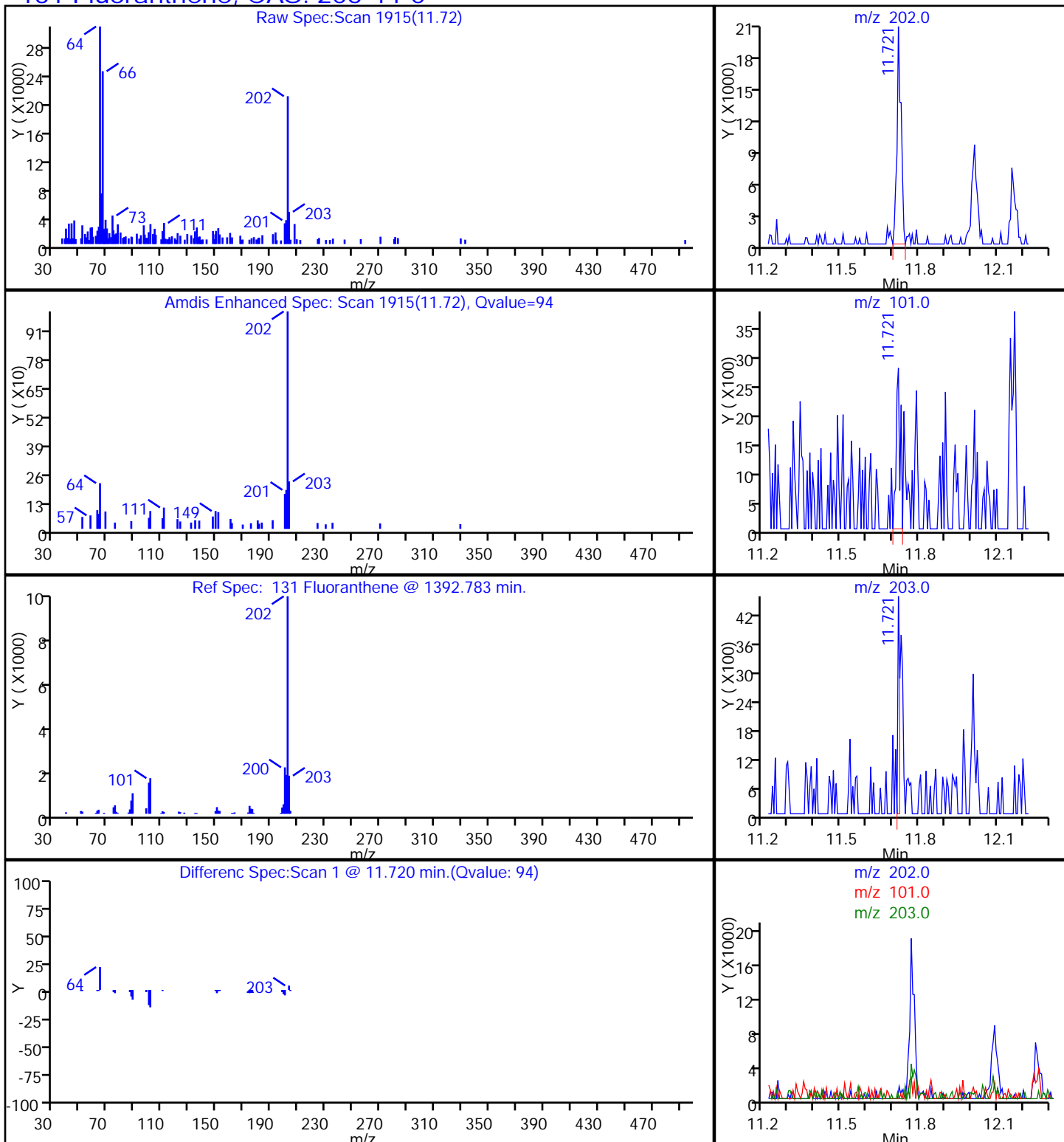
Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

131 Fluoranthene, CAS: 206-44-0



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708017.D

Injection Date: 08-Jul-2014 20:40:30

Instrument ID: CH731

Lims ID: 180-34298-A-4-A

Lab Sample ID: 180-34298-4

Client ID: RW20-PZP000

Operator ID: 003200

ALS Bottle#: 16

Worklist Smp#: 17

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

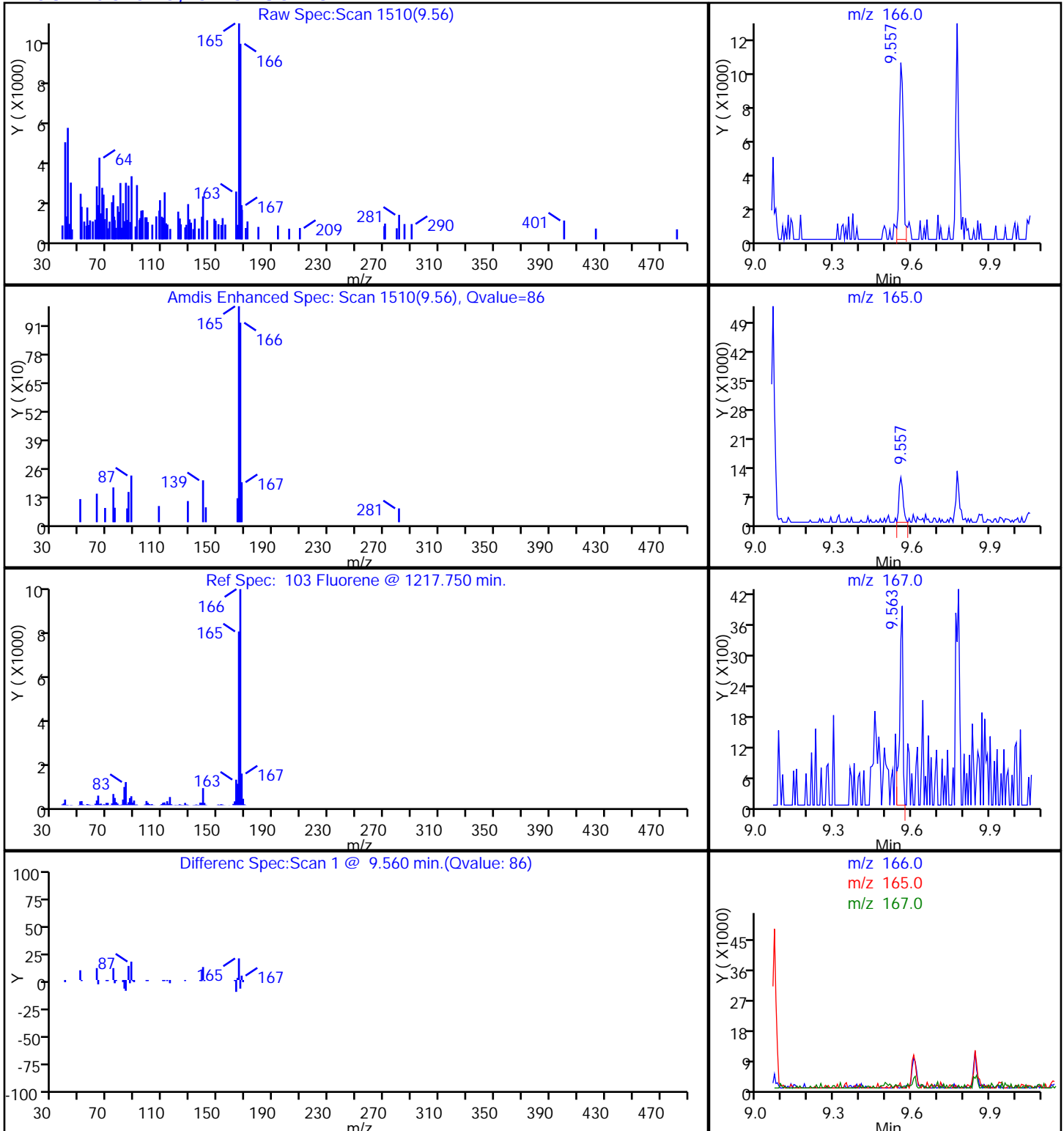
Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

103 Fluorene, CAS: 86-73-7



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708017.D

Injection Date: 08-Jul-2014 20:40:30

Instrument ID: CH731

Lims ID: 180-34298-A-4-A

Lab Sample ID: 180-34298-4

Client ID: RW20-PZP000

Operator ID: 003200

ALS Bottle#: 16

Worklist Smp#: 17

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

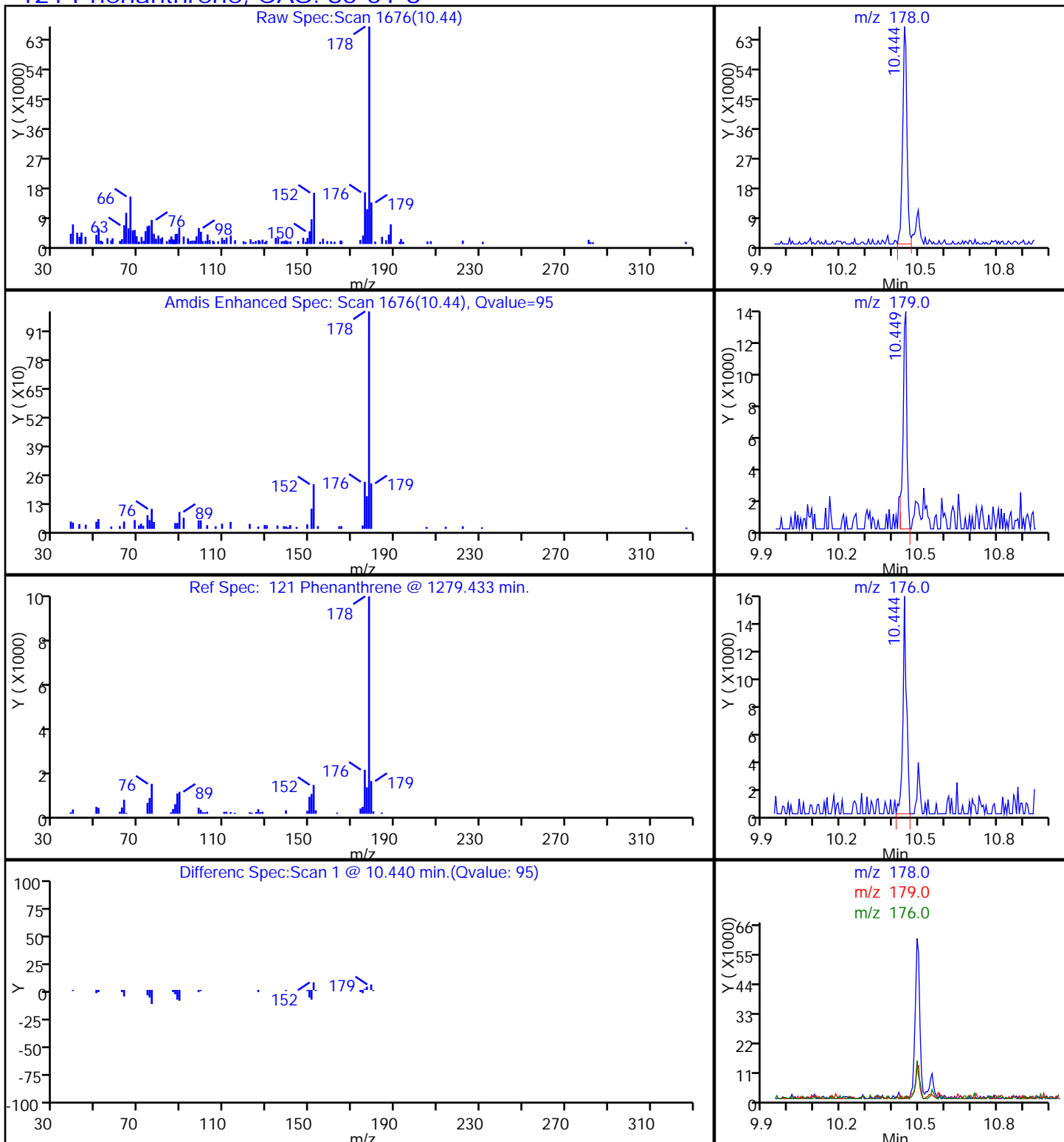
Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

121 Phenanthrene, CAS: 85-01-8



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708017.D

Injection Date: 08-Jul-2014 20:40:30

Instrument ID: CH731

Lims ID: 180-34298-A-4-A

Lab Sample ID: 180-34298-4

Client ID: RW20-PZP000

Operator ID: 003200

ALS Bottle#: 16

Worklist Smp#: 17

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

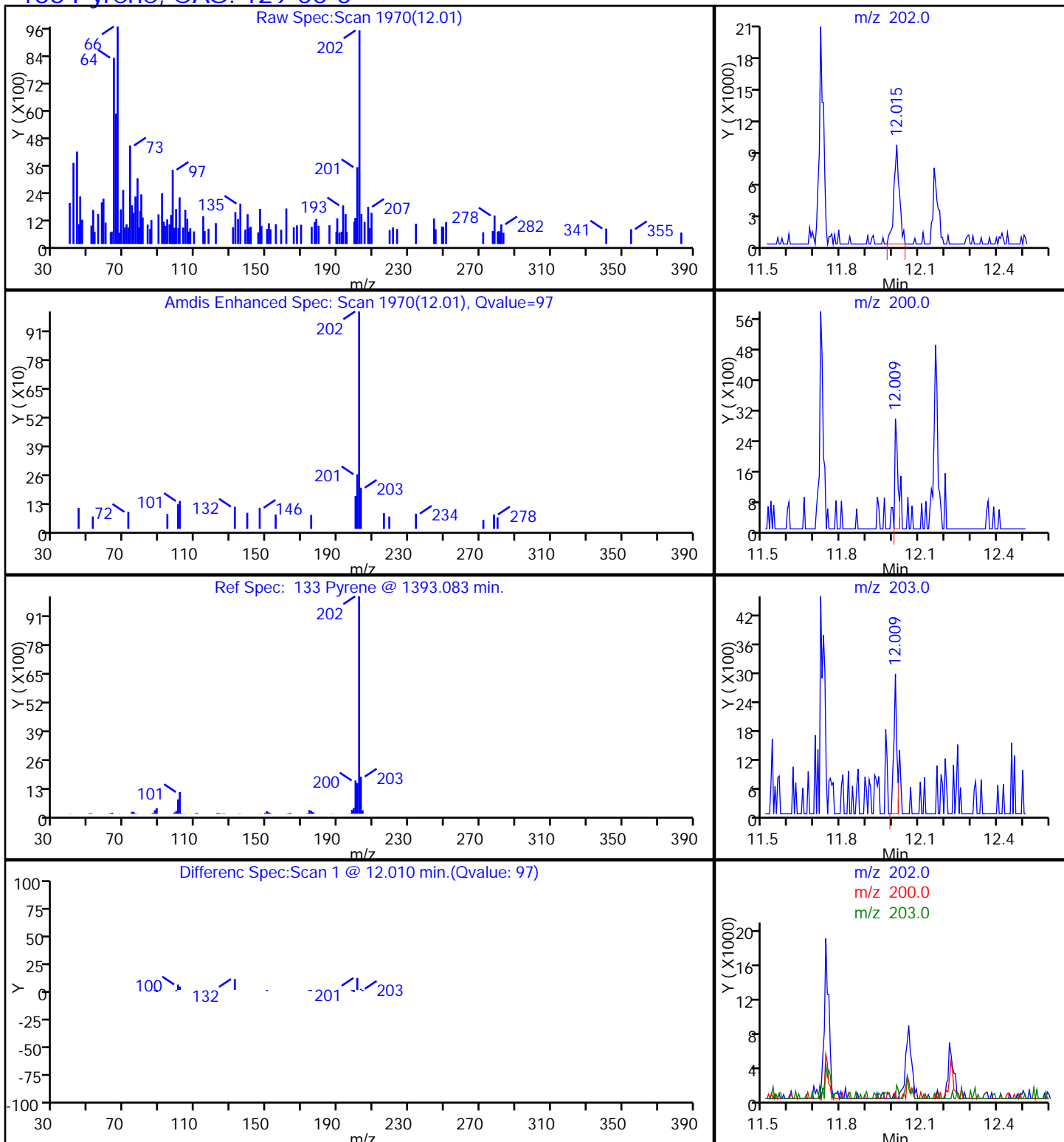
Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

133 Pyrene, CAS: 129-00-0



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 SDG No.: _____
 Client Sample ID: RW20-PZM020 Lab Sample ID: 180-34298-5
 Matrix: Water Lab File ID: V0708018.D
 Analysis Method: 8270D LL Date Collected: 06/25/2014 10:05
 Extract. Method: 3520C Date Extracted: 07/01/2014 10:47
 Sample wt/vol: 250 (mL) Date Analyzed: 07/08/2014 21:08
 Con. Extract Vol.: 0.25 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 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	1.3	J	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	0.28	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.: 180-34298-1
 SDG No.: _____
 Client Sample ID: RW20-PZM020 Lab Sample ID: 180-34298-5
 Matrix: Water Lab File ID: V0708018.D
 Analysis Method: 8270D LL Date Collected: 06/25/2014 10:05
 Extract. Method: 3520C Date Extracted: 07/01/2014 10:47
 Sample wt/vol: 250 (mL) Date Analyzed: 07/08/2014 21:08
 Con. Extract Vol.: 0.25 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 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)	32		30-150
321-60-8	2-Fluorobiphenyl	88		30-150
367-12-4	2-Fluorophenol (Surr)	35		30-150
4165-60-0	Nitrobenzene-d5 (Surr)	94		30-150
4165-62-2	Phenol-d5 (Surr)	42		30-150
1718-51-0	Terphenyl-d14 (Surr)	92		10-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708018.D
 Lims ID: 180-34298-C-5-A Lab Sample ID: 180-34298-5
 Client ID: RW20-PZM020
 Sample Type: Client
 Inject. Date: 08-Jul-2014 21:08:30 ALS Bottle#: 17 Worklist Smp#: 18
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0002096-018
 Misc. Info.: 180-34298-C-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-5SiIMS (0.32 mm) Det: MS SCAN
 Process Host: XAWRK026

First Level Reviewer: piccolinov

Date: 09-Jul-2014 03:03:32

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.241	6.237	0.004	85	156765	8.00	
* 2 Naphthalene-d8	136	7.443	7.444	-0.001	97	502047	8.00	
* 3 Acenaphthene-d10	164	9.056	9.063	-0.007	93	287563	8.00	
* 4 Phenanthrene-d10	188	10.419	10.430	-0.011	96	498639	8.00	
* 5 Chrysene-d12	240	13.886	13.903	-0.017	95	606452	8.00	
* 6 Perylene-d12	264	16.781	16.809	-0.028	97	605812	8.00	
\$ 7 2-Fluorophenol	112	4.906	4.896	0.010	91	405427	14.1	
\$ 8 Phenol-d5	99	5.894	5.895	-0.001	83	579798	16.6	
\$ 9 Nitrobenzene-d5	82	6.765	6.766	-0.001	92	1230681	37.6	
\$ 10 2-Fluorobiphenyl	172	8.426	8.427	-0.001	98	1847226	35.0	
\$ 11 2,4,6-Tribromophenol	330	9.778	9.784	-0.006	78	91948	12.8	
\$ 12 Terphenyl-d14	244	12.160	12.172	-0.012	98	2722681	36.8	
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		9.415				ND	
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	10.921	10.927	-0.006	97	29069	0.3630	
131 Fluoranthene	202		11.723				ND	
132 Benzidine	184		11.851				ND	
133 Pyrene	202		12.022				ND	
138 Butyl benzyl phthalate	149	12.833	12.850	-0.017	91	21583	0.5626	
144 3,3'-Dichlorobenzidine	252		13.807				ND	
145 Bis(2-ethylhexyl) phthalat	149	13.816	13.839	-0.023	95	136684	2.56	
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

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708018.D

Injection Date: 08-Jul-2014 21:08:30

Instrument ID: CH731

Operator ID: 003200

Lims ID: 180-34298-C-5-A

Lab Sample ID: 180-34298-5

Worklist Smp#: 18

Client ID: RW20-PZM020

Injection Vol: 2.0 ul

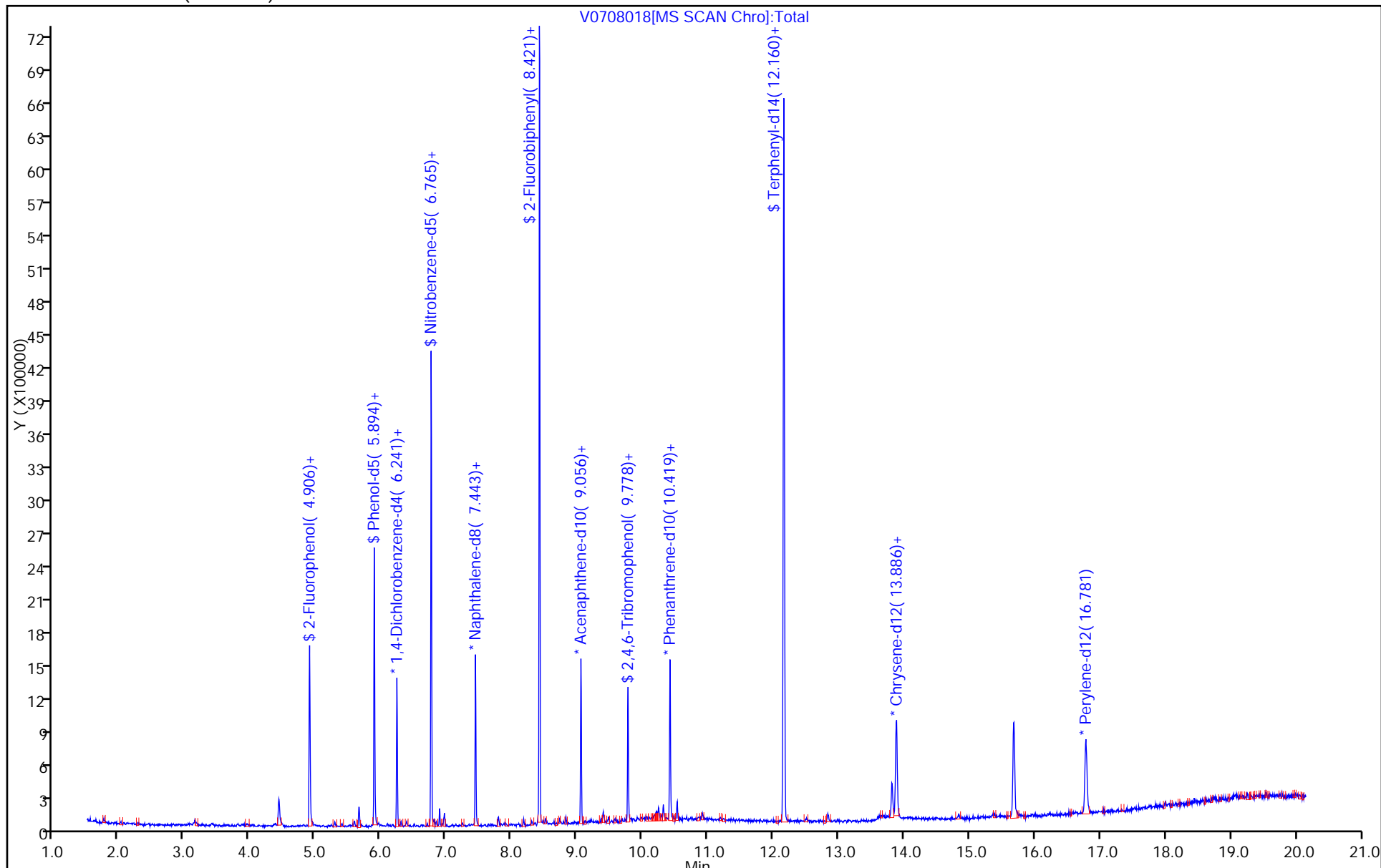
Dil. Factor: 1.0000

ALS Bottle#: 17

Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708018.D

Injection Date: 08-Jul-2014 21:08:30

Instrument ID: CH731

Lims ID: 180-34298-C-5-A

Lab Sample ID: 180-34298-5

Client ID: RW20-PZM020

Operator ID: 003200

ALS Bottle#: 17

Worklist Smp#: 18

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

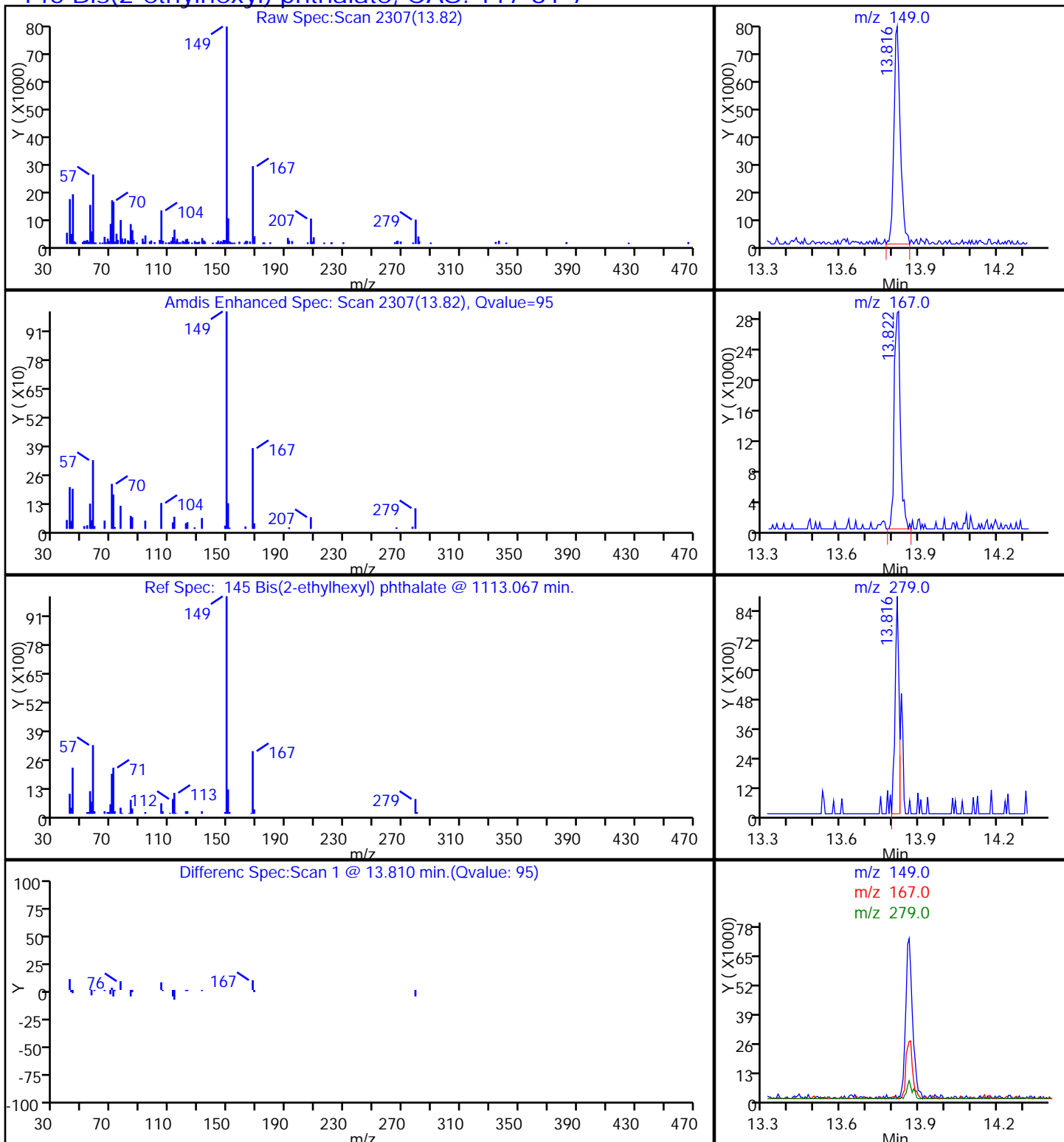
Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

145 Bis(2-ethylhexyl) phthalate, CAS: 117-81-7



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708018.D

Injection Date: 08-Jul-2014 21:08:30

Instrument ID: CH731

Lims ID: 180-34298-C-5-A

Lab Sample ID: 180-34298-5

Client ID: RW20-PZM020

Operator ID: 003200

ALS Bottle#: 17

Worklist Smp#: 18

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

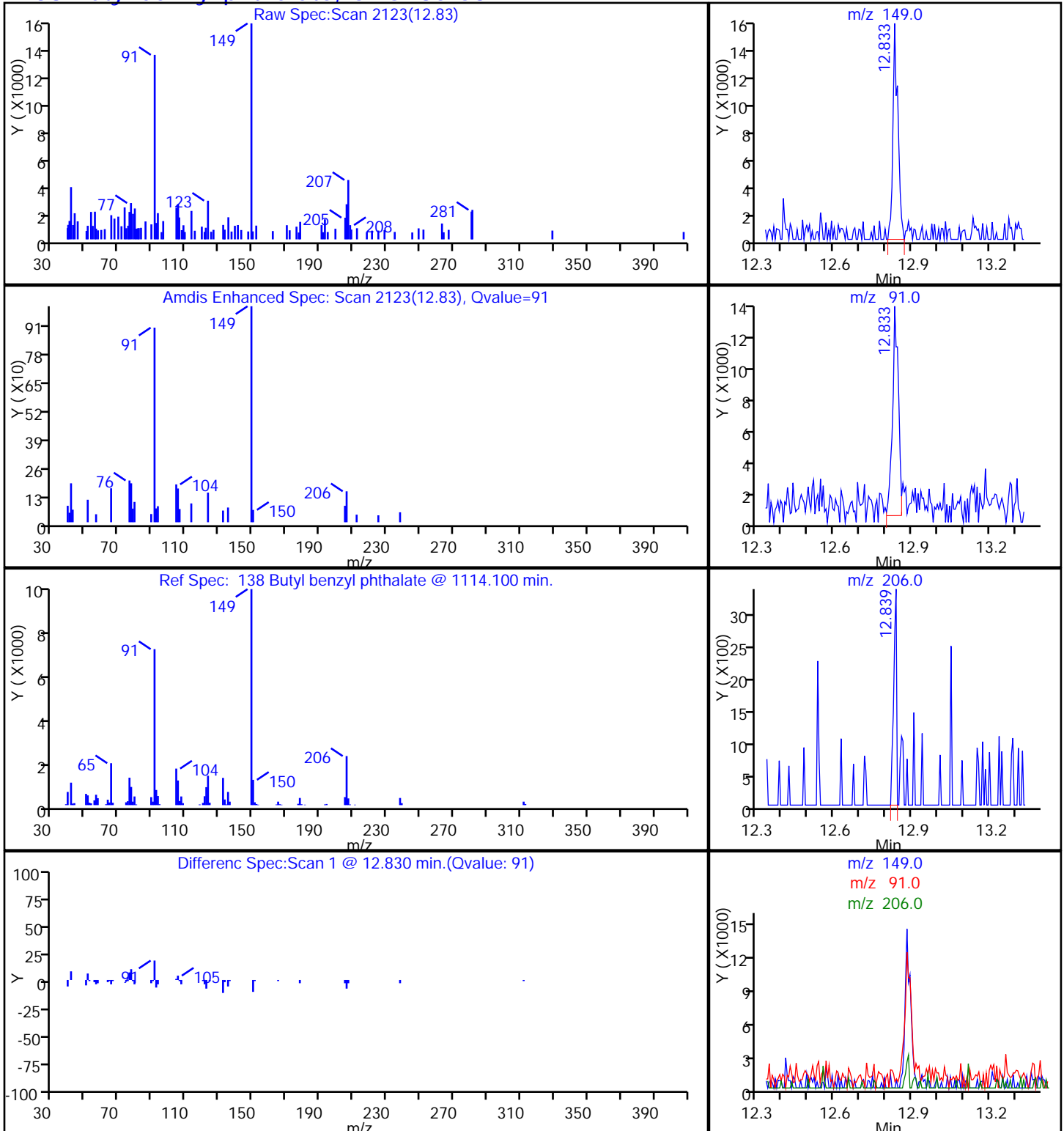
Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

138 Butyl benzyl phthalate, CAS: 85-68-7



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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1 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 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
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.: 180-34298-1

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 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
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.: 180-34298-1

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 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
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.: 180-34298-1 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 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
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.: 180-34298-1

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 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
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.: 180-34298-1 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 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
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.: 180-34298-1 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 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8			LVL 6	LVL 7	LVL 8		
1,4-Dioxane	DCB	Ave	7247	29859	63569	146931	318559	0.400	2.00	4.00	10.0	20.0
			580983	823905	1096150			40.0	60.0	80.0		
N-Nitrosodimethylamine	DCB	Ave	7454	41438	84098	206028	498476	0.400	2.00	4.00	10.0	20.0
			873555	1287851	1756989			40.0	60.0	80.0		
Pyridine	DCB	Ave	14081	72772	153428	378460	824653	0.400	2.00	4.00	10.0	20.0
			1491259	2163223	2885670			40.0	60.0	80.0		
Methyl methanesulfonate	DCB	Ave	8330	47345	85684	210904	478414	0.400	2.00	4.00	10.0	20.0
			843582	1255323	1638628			40.0	60.0	80.0		
Benzaldehyde	DCB	Ave	8026	33204	71936	246710	576090	0.400	2.00	4.00	10.0	20.0
			972133	1342379	1673715			40.0	60.0	80.0		
Phenol	DCB	Ave	17177	79713	161012	402886	955863	0.400	2.00	4.00	10.0	20.0
			1762830	2774038	3895931			40.0	60.0	80.0		
Aniline	DCB	Ave	15557	75339	157256	393715	932304	0.400	2.00	4.00	10.0	20.0
			1745816	2618514	3605615			40.0	60.0	80.0		
Bis(2-chloroethyl)ether	DCB	Ave	10752	53843	119185	268584	625082	0.400	2.00	4.00	10.0	20.0
			1154924	1750792	2391839			40.0	60.0	80.0		
2-Chlorophenol	DCB	Ave	10932	54390	112415	283926	676562	0.400	2.00	4.00	10.0	20.0
			1188204	1847521	2519935			40.0	60.0	80.0		
n-Decane	DCB	Ave	10772	49754	103646	254546	596313	0.400	2.00	4.00	10.0	20.0
			1137262	1827009	2558299			40.0	60.0	80.0		
1,3-Dichlorobenzene	DCB	Ave	14995	66689	129735	328837	760680	0.400	2.00	4.00	10.0	20.0
			1374093	2071235	2897708			40.0	60.0	80.0		
1,4-Dichlorobenzene	DCB	Ave	14235	65303	134420	336100	752002	0.400	2.00	4.00	10.0	20.0
			1372351	2142481	2901626			40.0	60.0	80.0		
Benzyl alcohol	DCB	Ave	6476	30787	68972	183984	438488	0.400	2.00	4.00	10.0	20.0
			789124	1225463	1688333			40.0	60.0	80.0		
1,2-Dichlorobenzene	DCB	Ave	12091	67659	125907	320492	715251	0.400	2.00	4.00	10.0	20.0
			1310185	2018236	2761496			40.0	60.0	80.0		
2-Methylphenol	DCB	Ave	11659	50442	105858	287346	660554	0.400	2.00	4.00	10.0	20.0
			1276560	2005962	2729222			40.0	60.0	80.0		

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1 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 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8			LVL 6	LVL 7	LVL 8		
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.: 180-34298-1

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.: 180-34298-1 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.: 180-34298-1 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 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8			LVL 6	LVL 7	LVL 8		
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.: 180-34298-1 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-5SiIMS (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.)	Diff 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

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

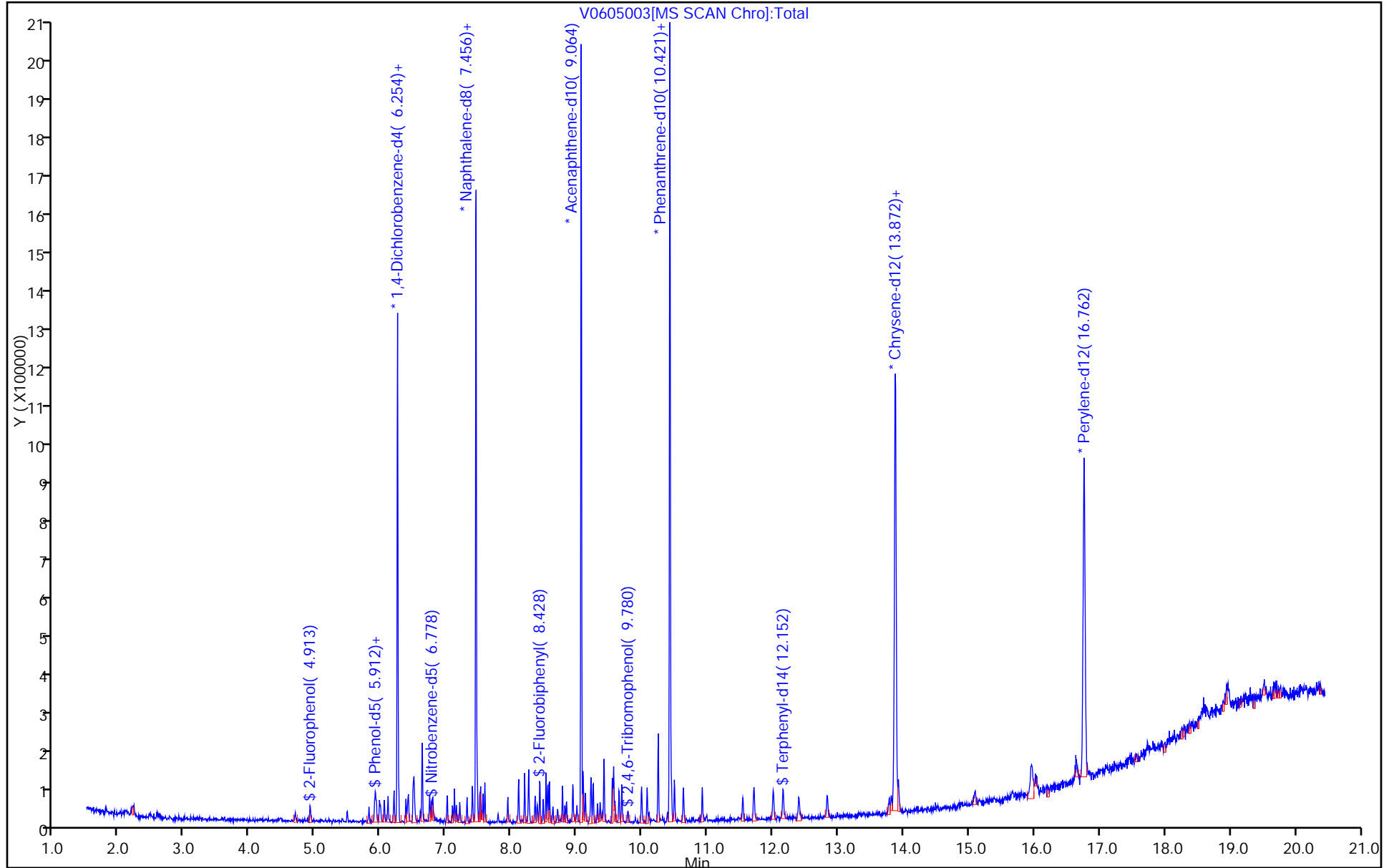
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



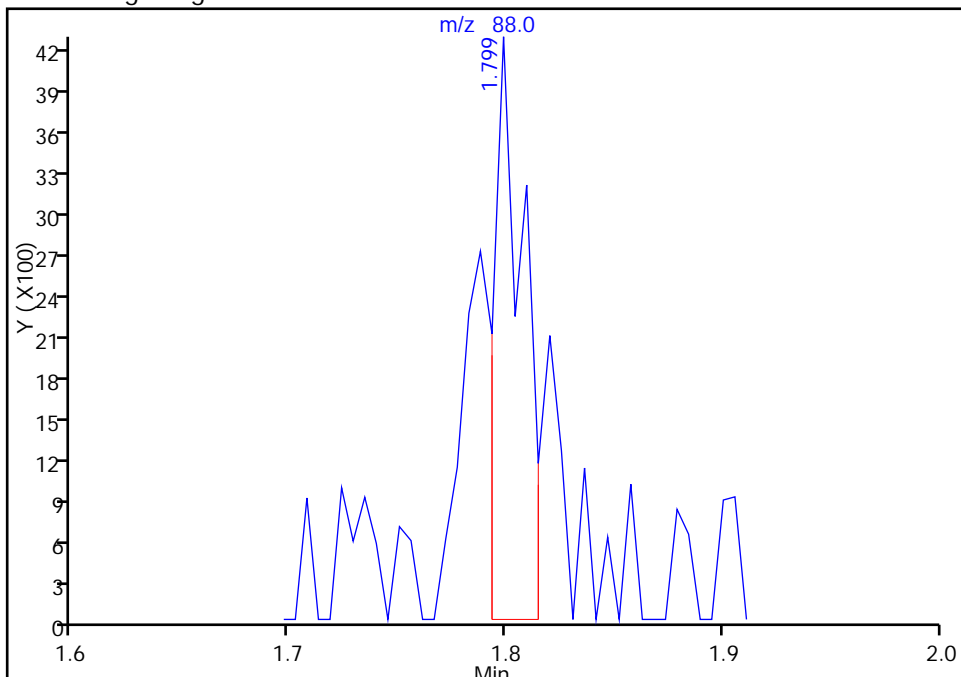
TestAmerica Pittsburgh

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

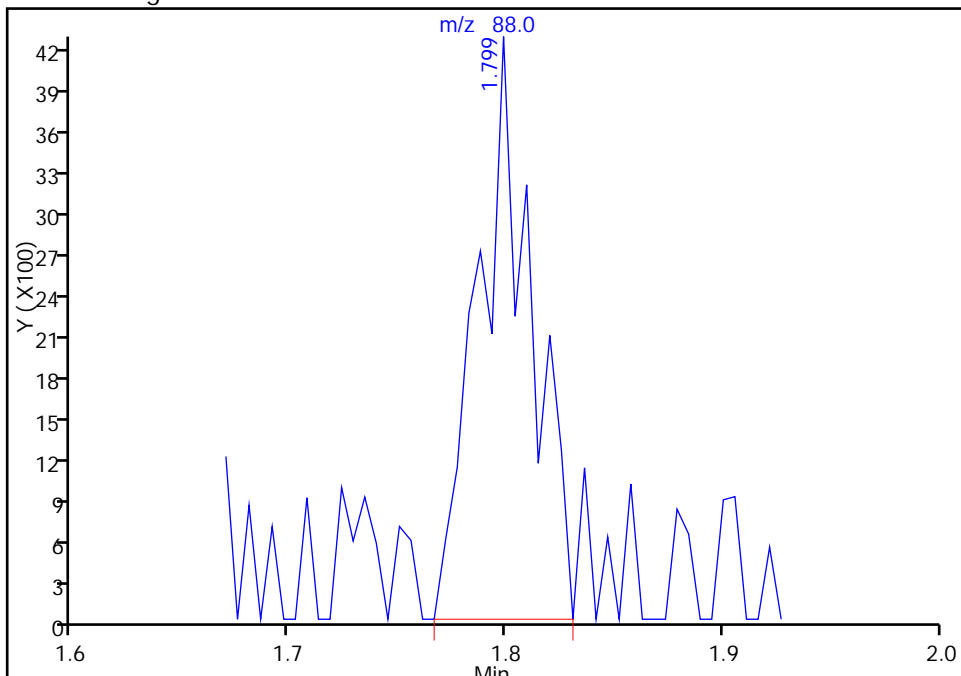
RT: 1.80
Response: 4090
Amount: 0.297511

Processing Integration Results



RT: 1.80
Response: 7247
Amount: 0.492933

Manual Integration Results



Reviewer: piccolinov, 05-Jun-2014 10:20:22
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

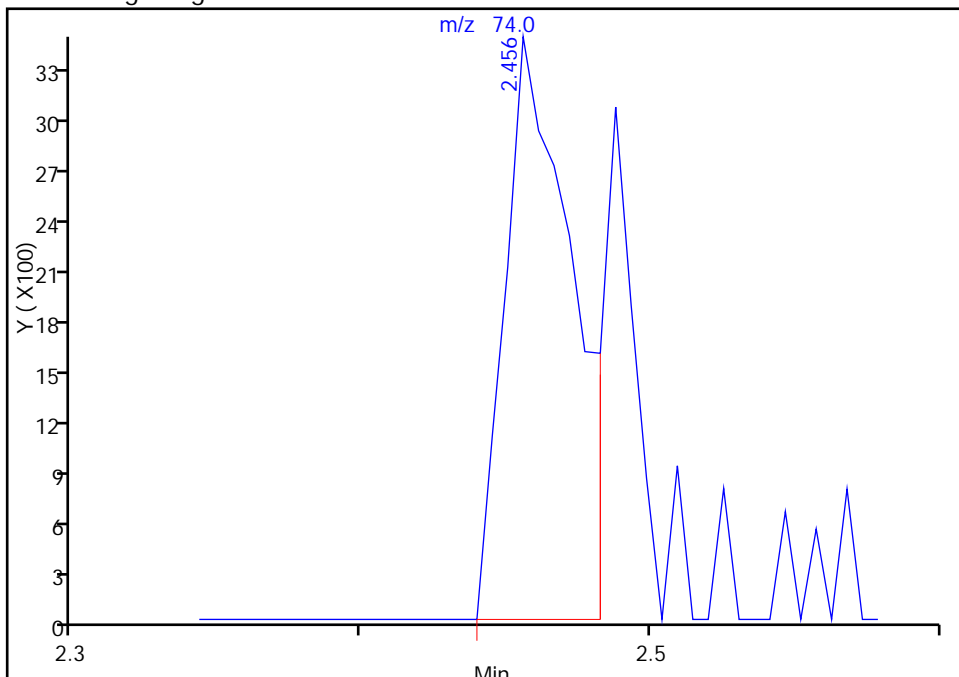
TestAmerica Pittsburgh

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-5SiIMS (0.32 mm) Detector: MS SCAN

14 N-Nitrosodimethylamine, CAS: 62-75-9

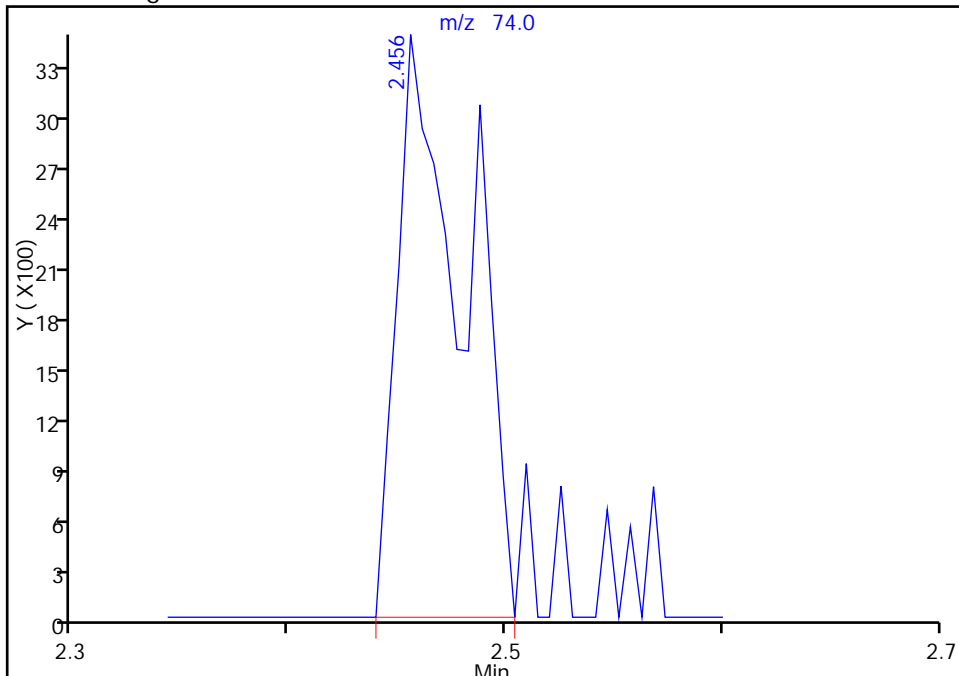
RT: 2.46
Response: 5626
Amount: 0.298310

Processing Integration Results



RT: 2.46
Response: 7454
Amount: 0.360966

Manual Integration Results



Reviewer: piccolinov, 05-Jun-2014 10:20:22
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

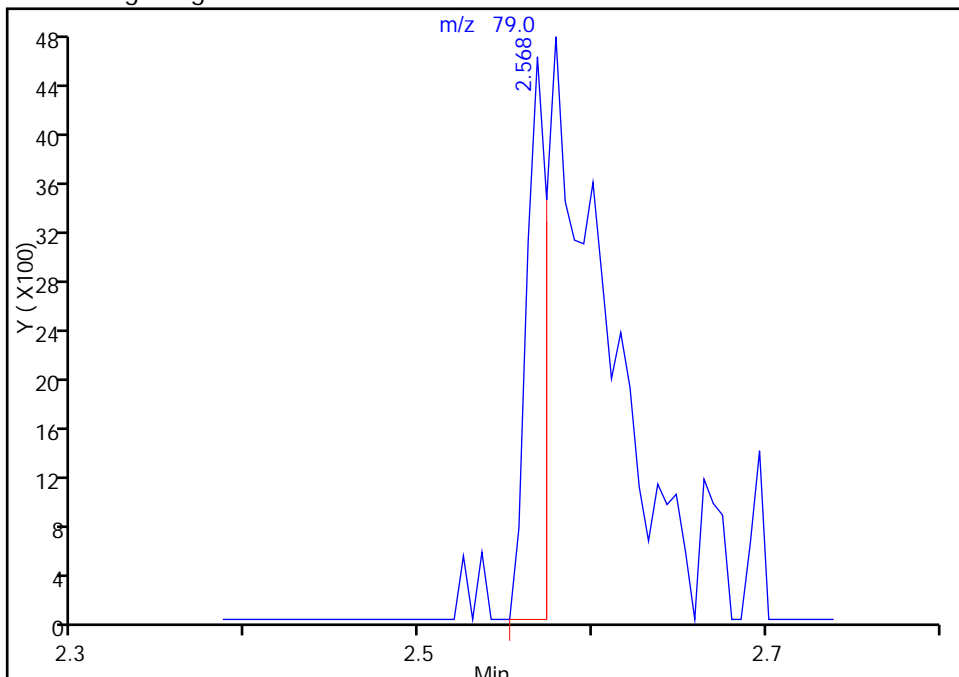
TestAmerica Pittsburgh

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

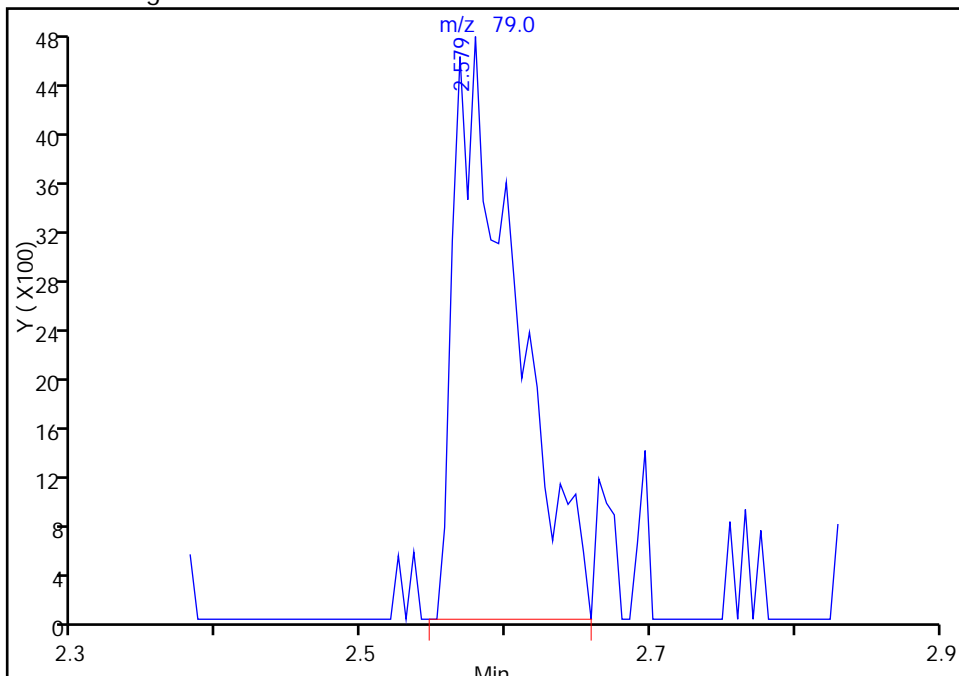
RT: 2.57
Response: 3788
Amount: 0.104591

Processing Integration Results



RT: 2.58
Response: 14081
Amount: 0.390621

Manual Integration Results



Reviewer: piccolinov, 05-Jun-2014 10:20:22
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

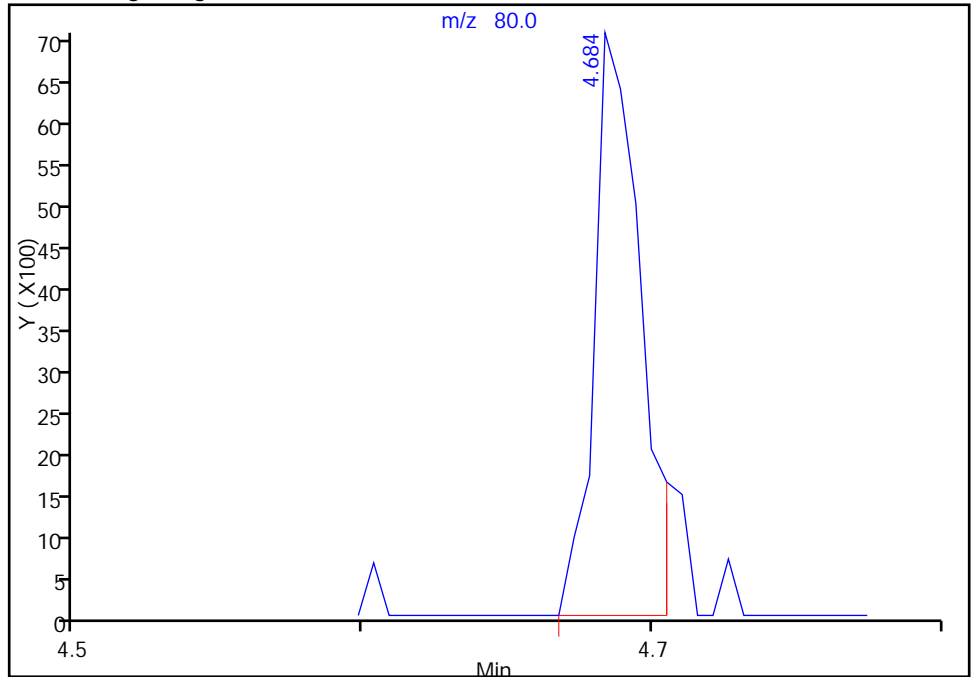
TestAmerica Pittsburgh

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-5SiIMS (0.32 mm) Detector: MS SCAN

21 Methyl methanesulfonate, CAS: 66-27-3

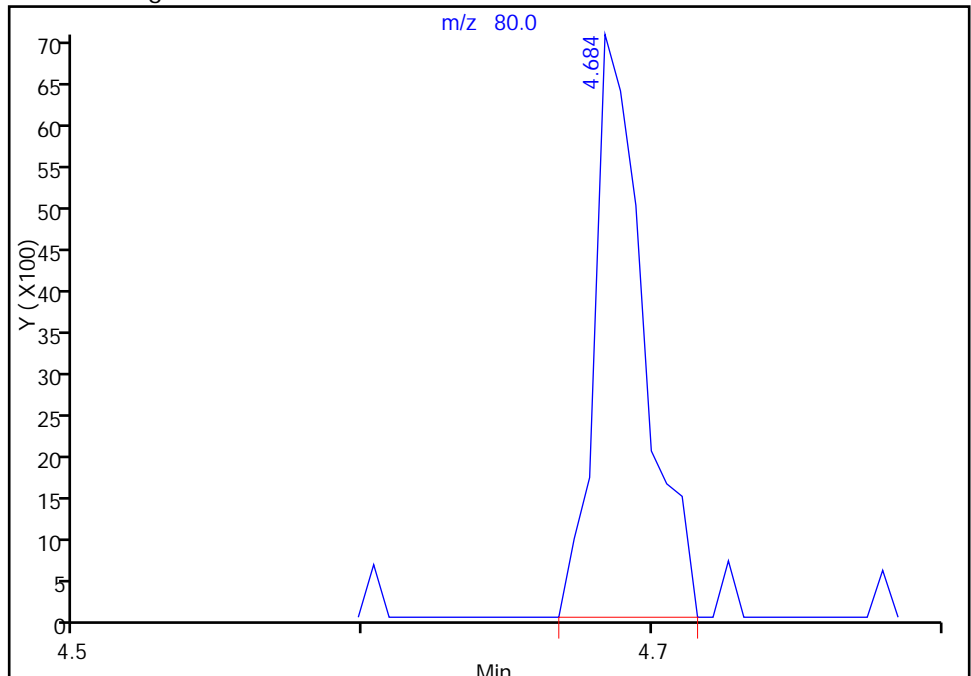
RT: 4.68
Response: 7864
Amount: 0.375786

Processing Integration Results



RT: 4.68
Response: 8330
Amount: 0.397636

Manual Integration Results



Reviewer: piccolinov, 05-Jun-2014 10:20:22
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

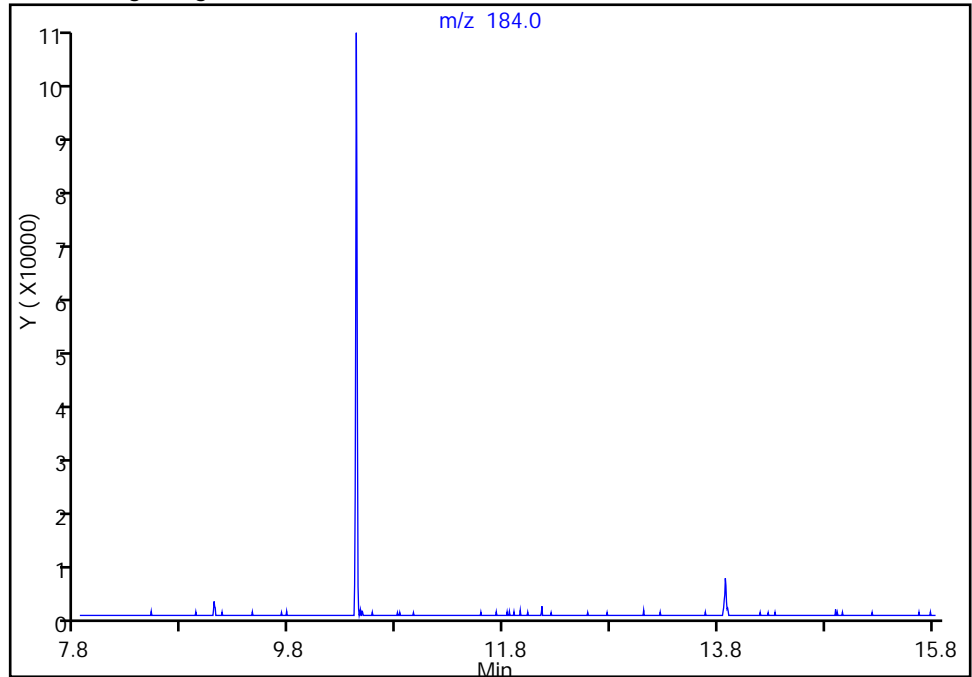
TestAmerica Pittsburgh

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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-5SiIMS (0.32 mm) Detector: MS SCAN

132 Benzidine, CAS: 92-87-5

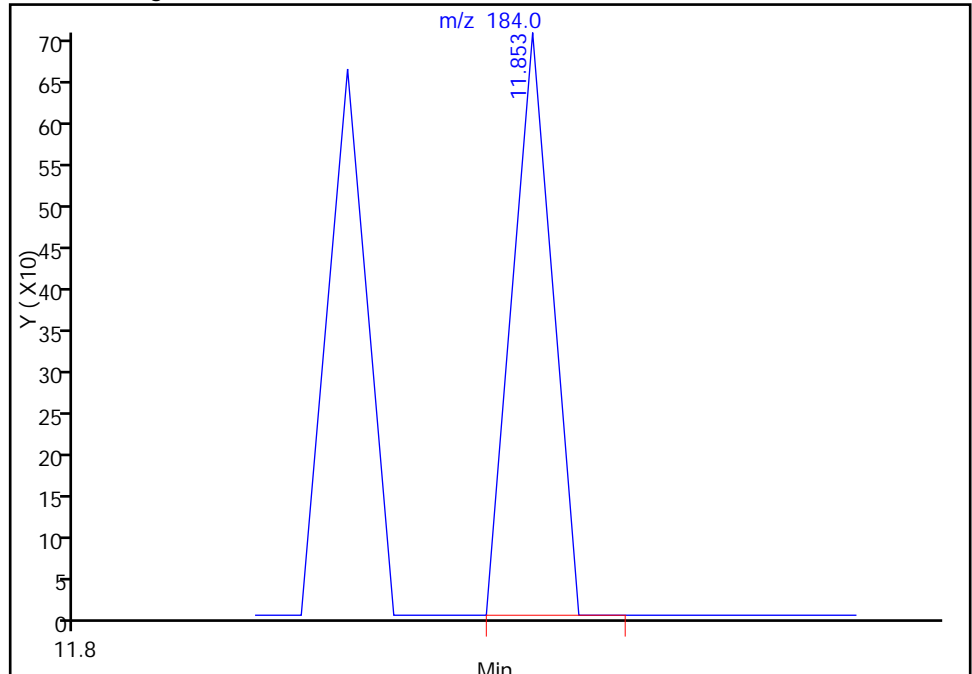
Not Detected
Expected RT: 11.84

Processing Integration Results



RT: 11.85
Response: 226
Amount: 2.181861

Manual Integration Results



Reviewer: piccolinov, 05-Jun-2014 10:20:22
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

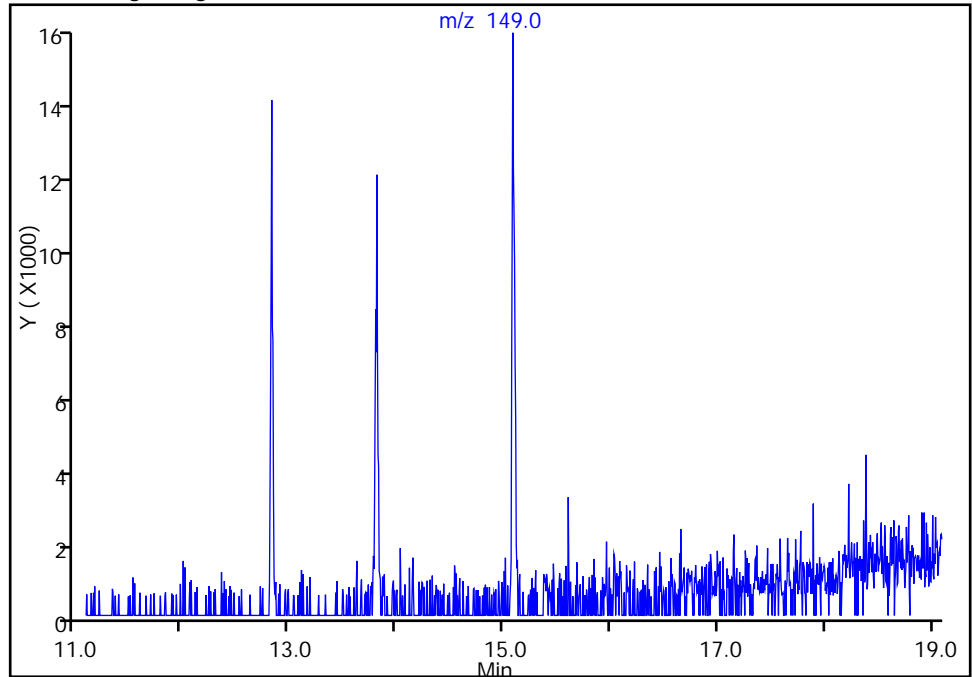
TestAmerica Pittsburgh

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

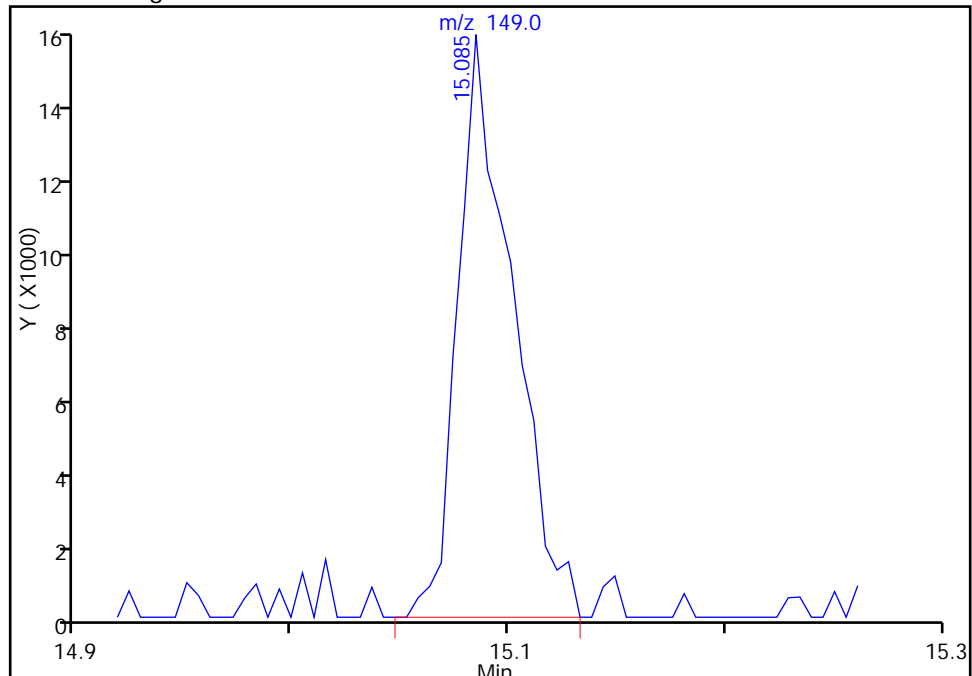
Not Detected
Expected RT: 15.10

Processing Integration Results



RT: 15.08
Response: 27044
Amount: 0.246948

Manual Integration Results



Reviewer: piccolinov, 05-Jun-2014 10:20:22
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

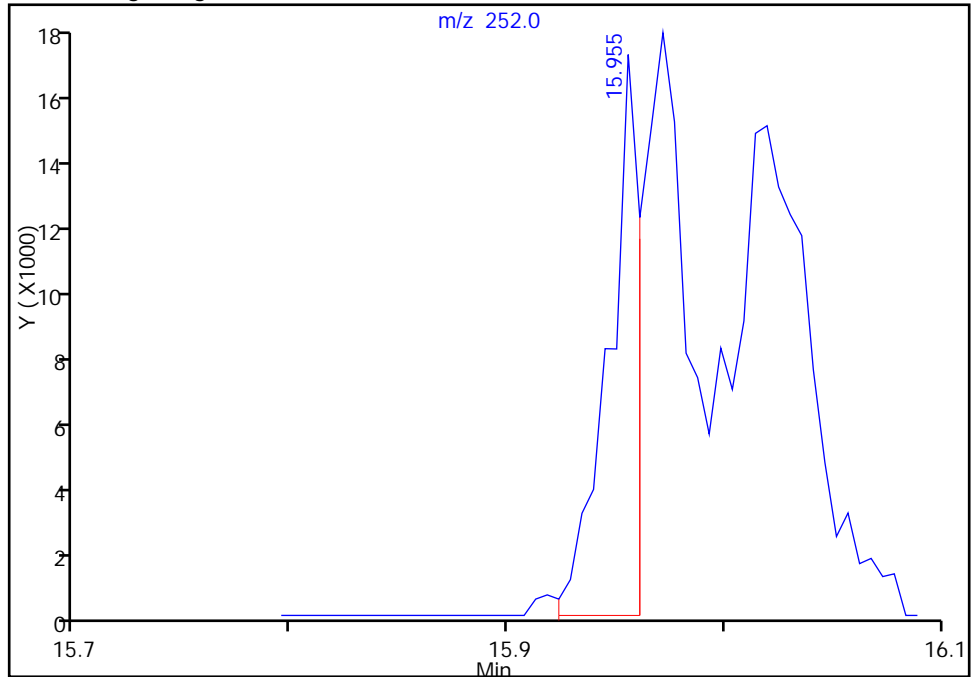
TestAmerica Pittsburgh

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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-5SiIMS (0.32 mm) Detector: MS SCAN

152 Benzo[b]fluoranthene, CAS: 205-99-2

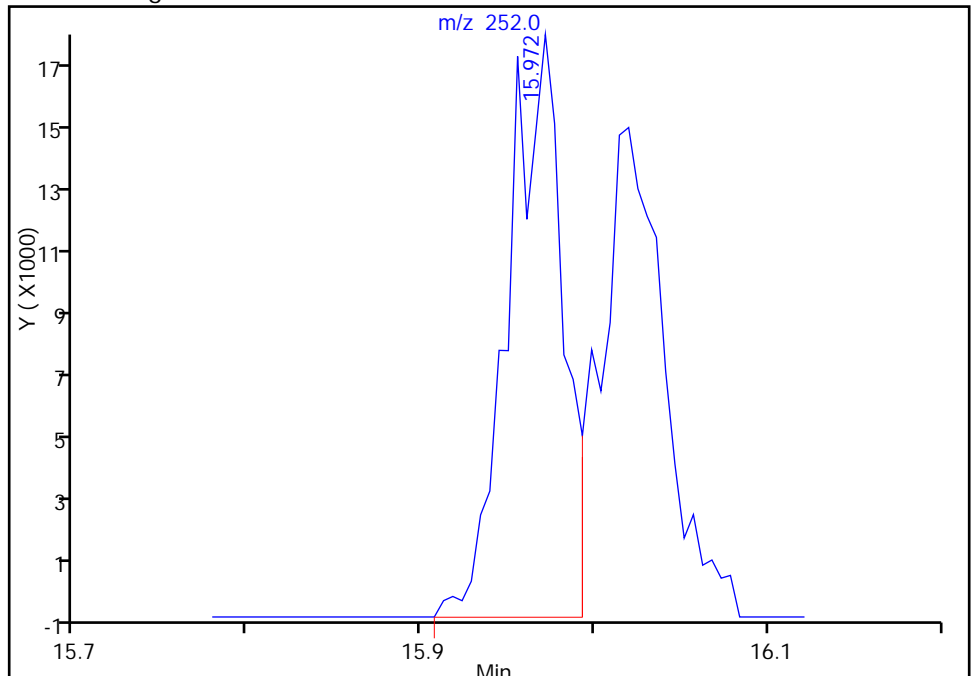
RT: 15.96
Response: 17511
Amount: 0.180749

Processing Integration Results



RT: 15.97
Response: 40110
Amount: 0.353779

Manual Integration Results



Reviewer: piccolinov, 05-Jun-2014 10:20:22
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

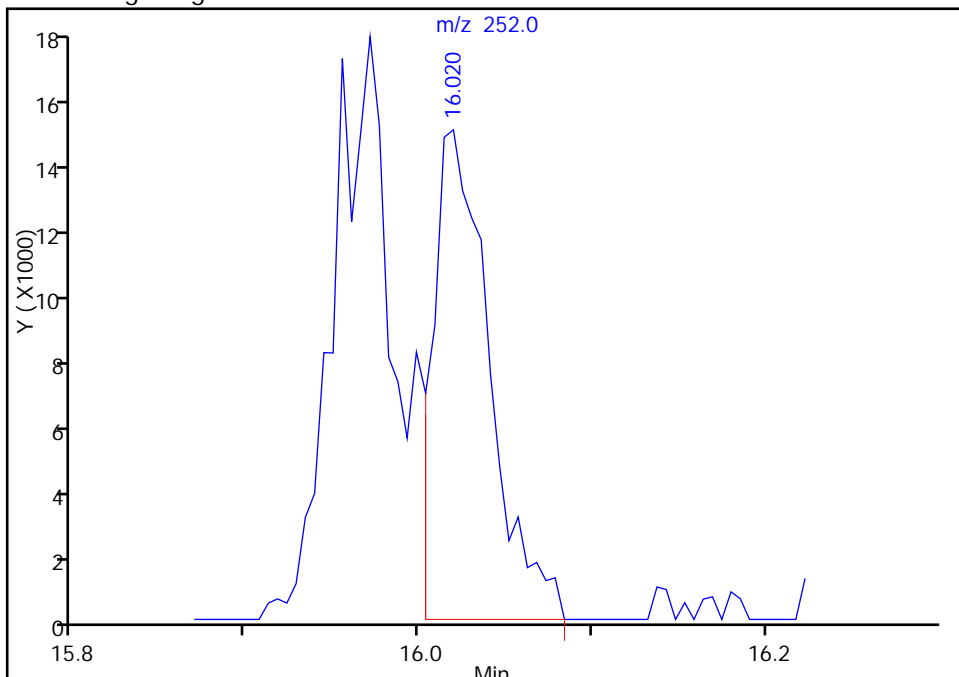
TestAmerica Pittsburgh

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-5SiIMS (0.32 mm) Detector: MS SCAN

153 Benzo[k]fluoranthene, CAS: 207-08-9

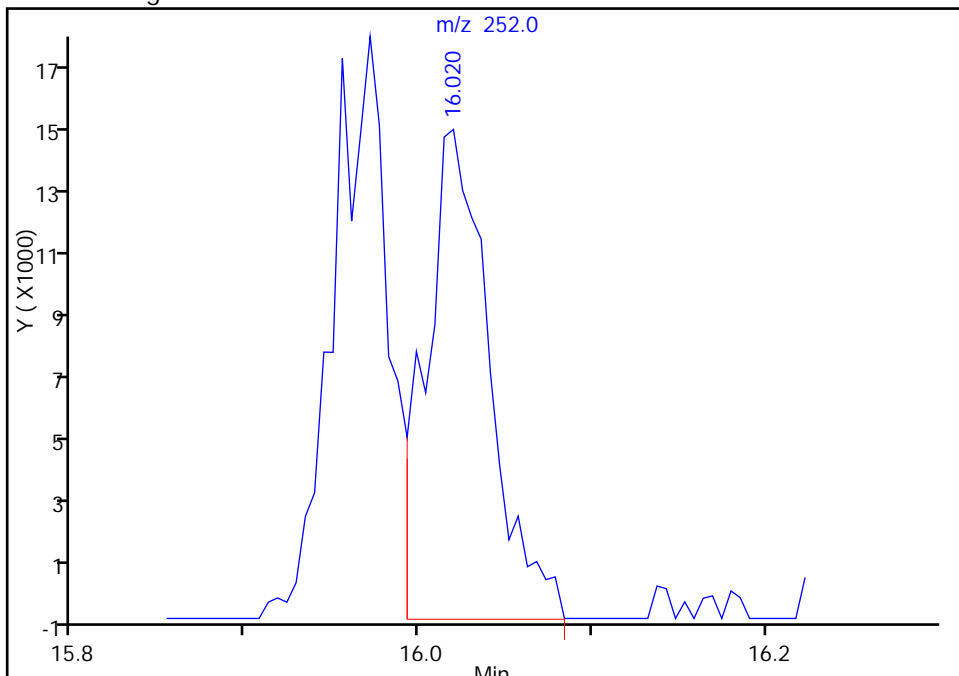
RT: 16.02
Response: 34293
Amount: 0.305146

Processing Integration Results



RT: 16.02
Response: 38864
Amount: 0.349790

Manual Integration Results



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-5SiIMS (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

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

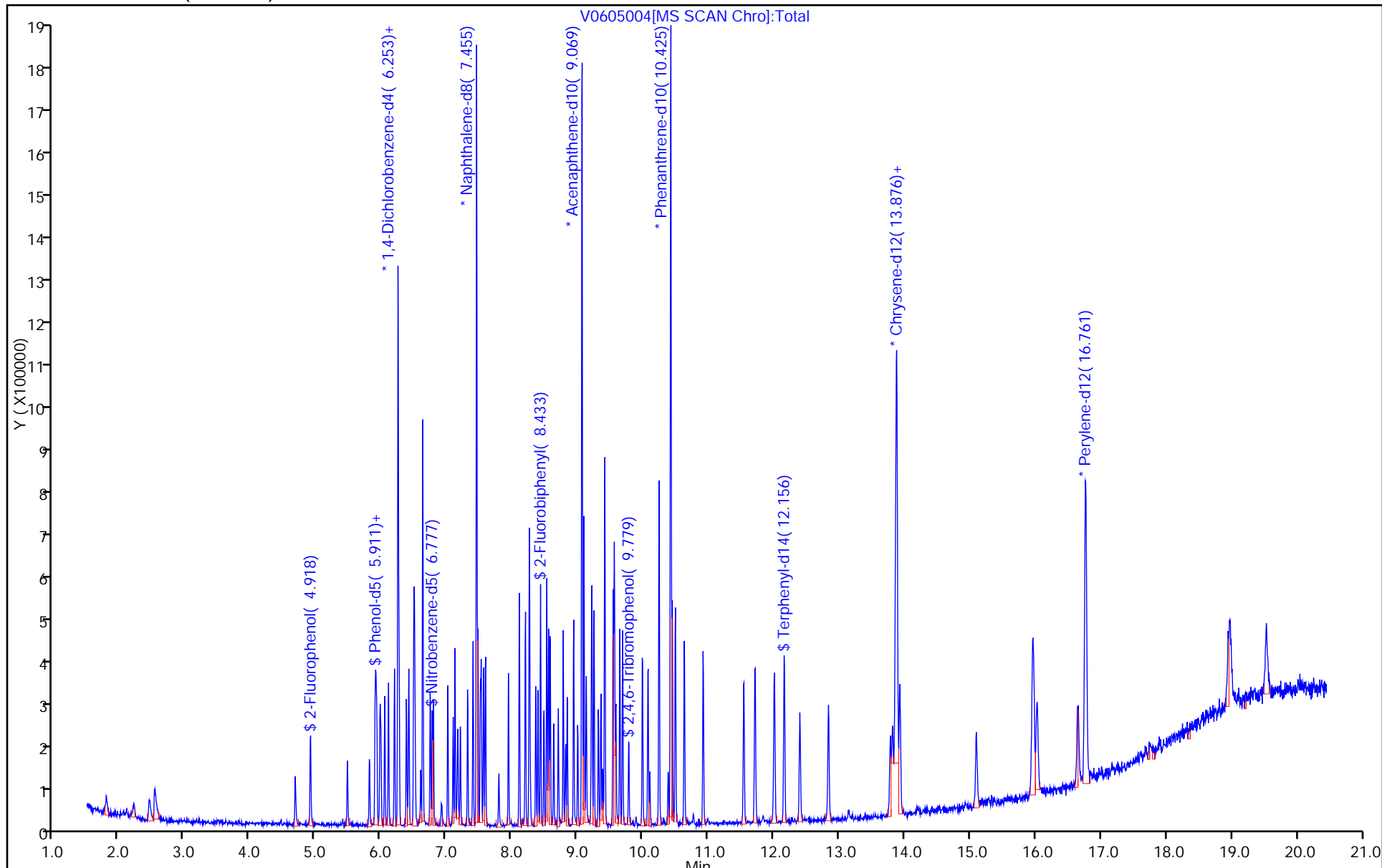
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



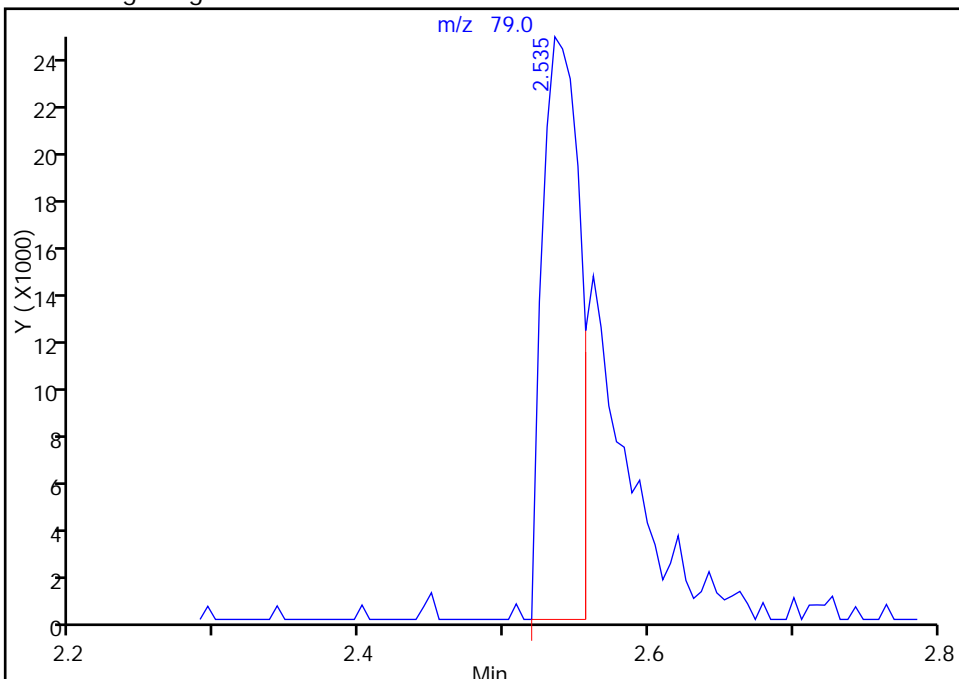
TestAmerica Pittsburgh

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-5SiIMS (0.32 mm) Detector: MS SCAN

15 Pyridine, CAS: 110-86-1

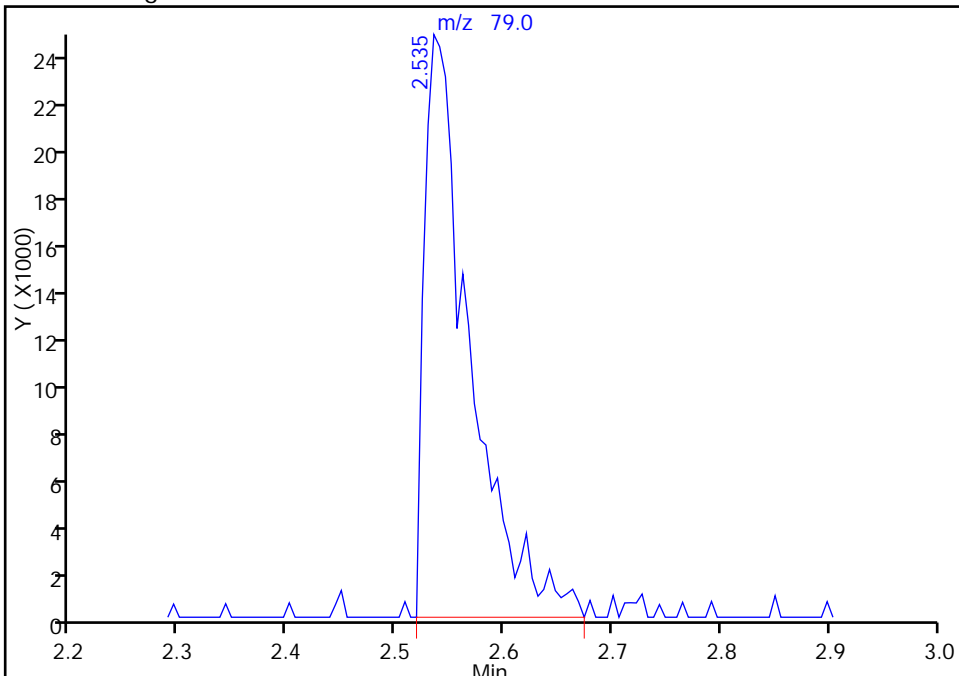
RT: 2.54
Response: 44491
Amount: 1.464554

Processing Integration Results



RT: 2.54
Response: 72772
Amount: 1.977329

Manual Integration Results



Reviewer: piccolinov, 05-Jun-2014 10:38:10
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

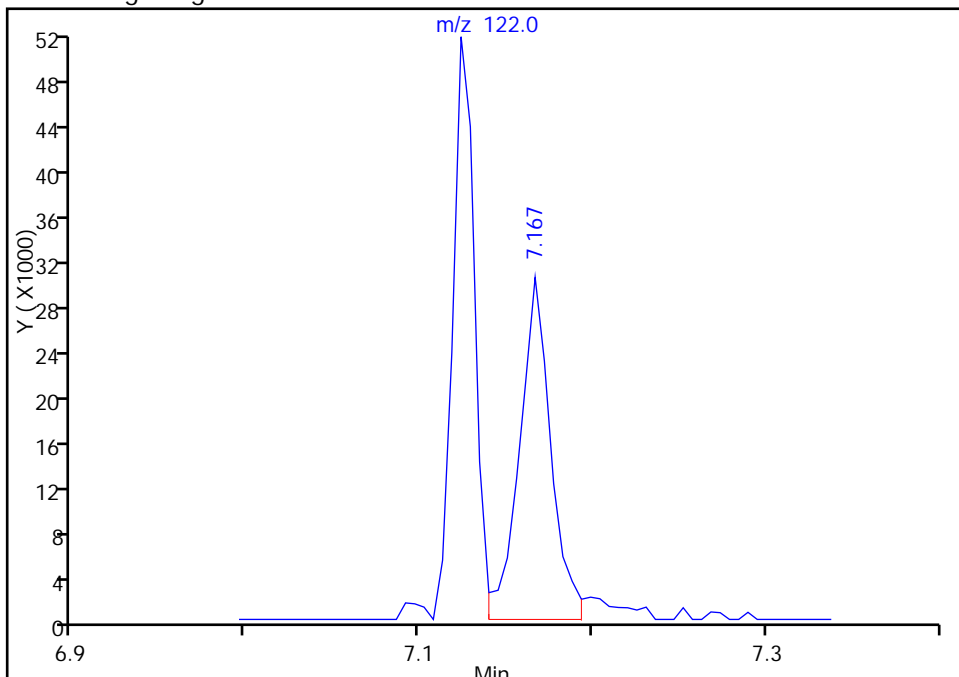
TestAmerica Pittsburgh

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-5SiIMS (0.32 mm) Detector: MS SCAN

52 Benzoic acid, CAS: 65-85-0

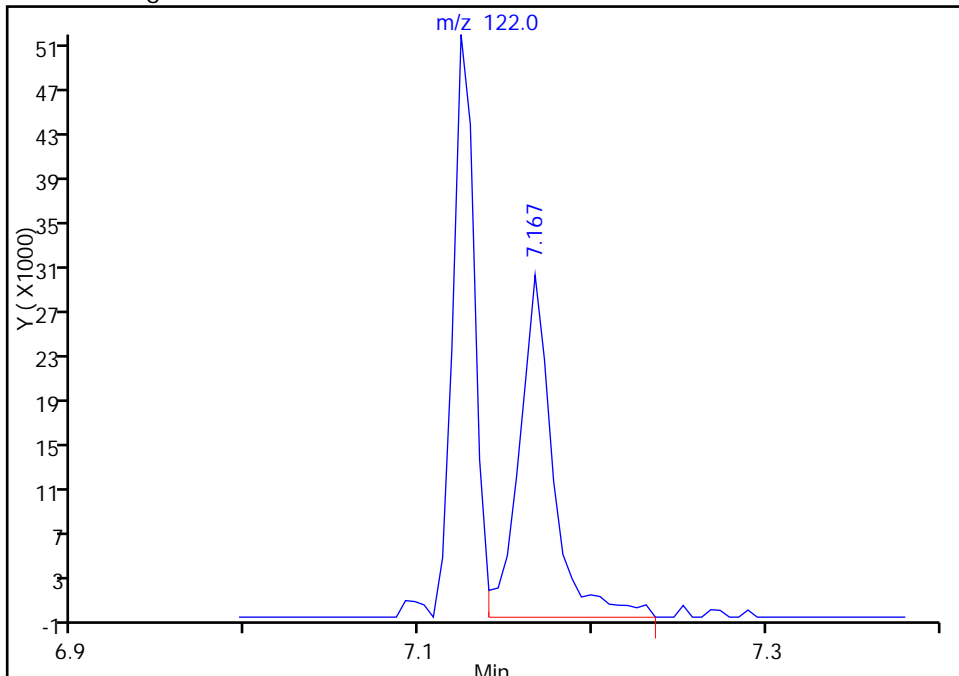
RT: 7.17
Response: 38281
Amount: 3.523795

Processing Integration Results



RT: 7.17
Response: 41192
Amount: 2.760282

Manual Integration Results



Reviewer: piccolinov, 05-Jun-2014 10:38:10
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

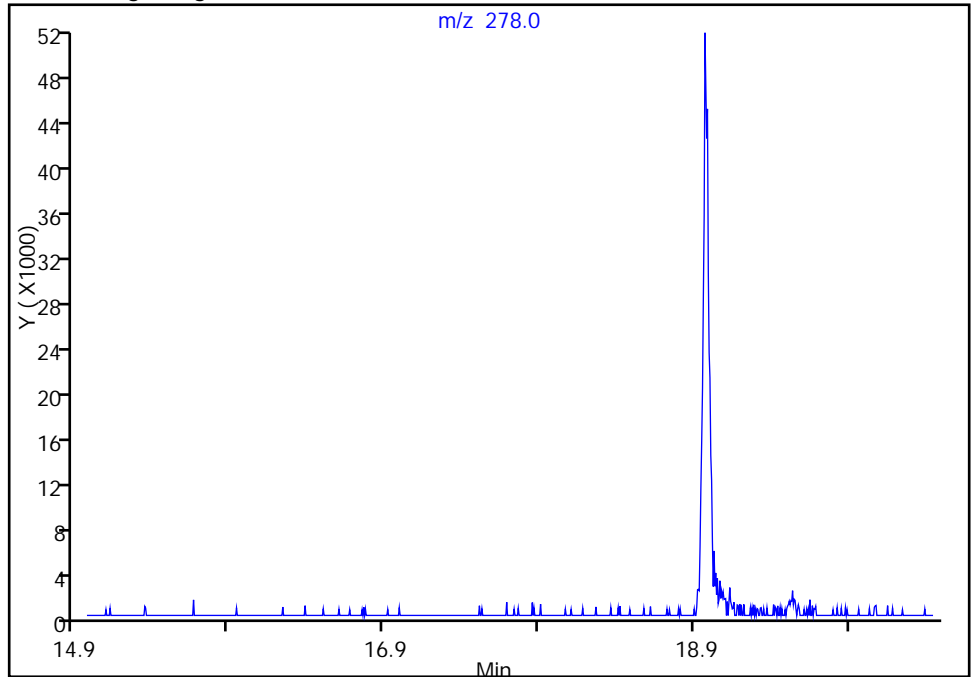
TestAmerica Pittsburgh

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-5SiIMS (0.32 mm) Detector: MS SCAN

158 Dibenz(a,h)anthracene, CAS: 53-70-3

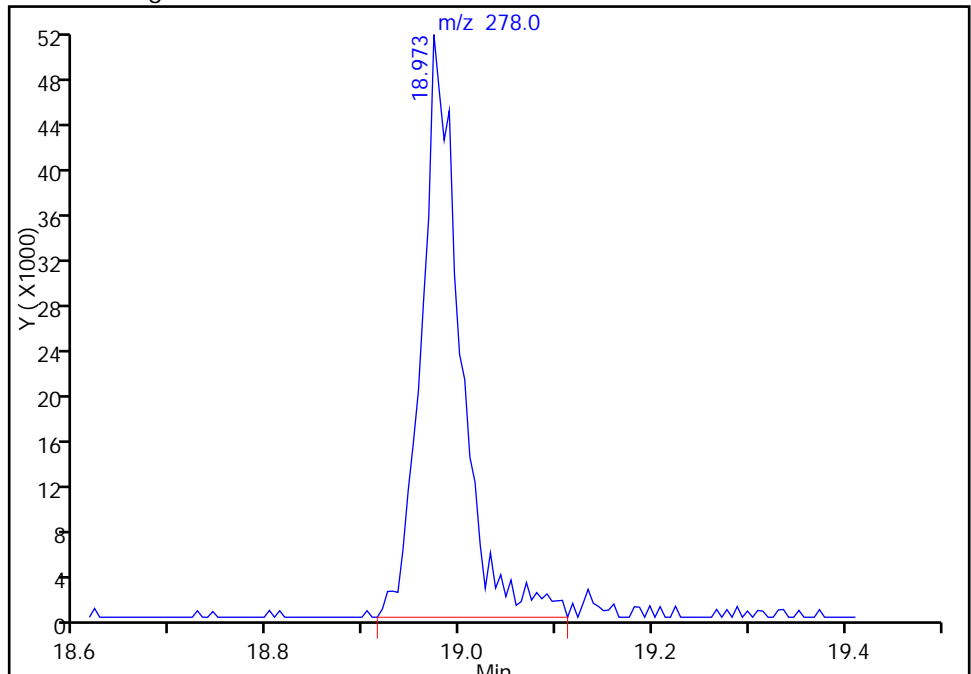
Not Detected
Expected RT: 18.98

Processing Integration Results



RT: 18.97
Response: 145822
Amount: 1.845213

Manual Integration Results



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-5SiIMS (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

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

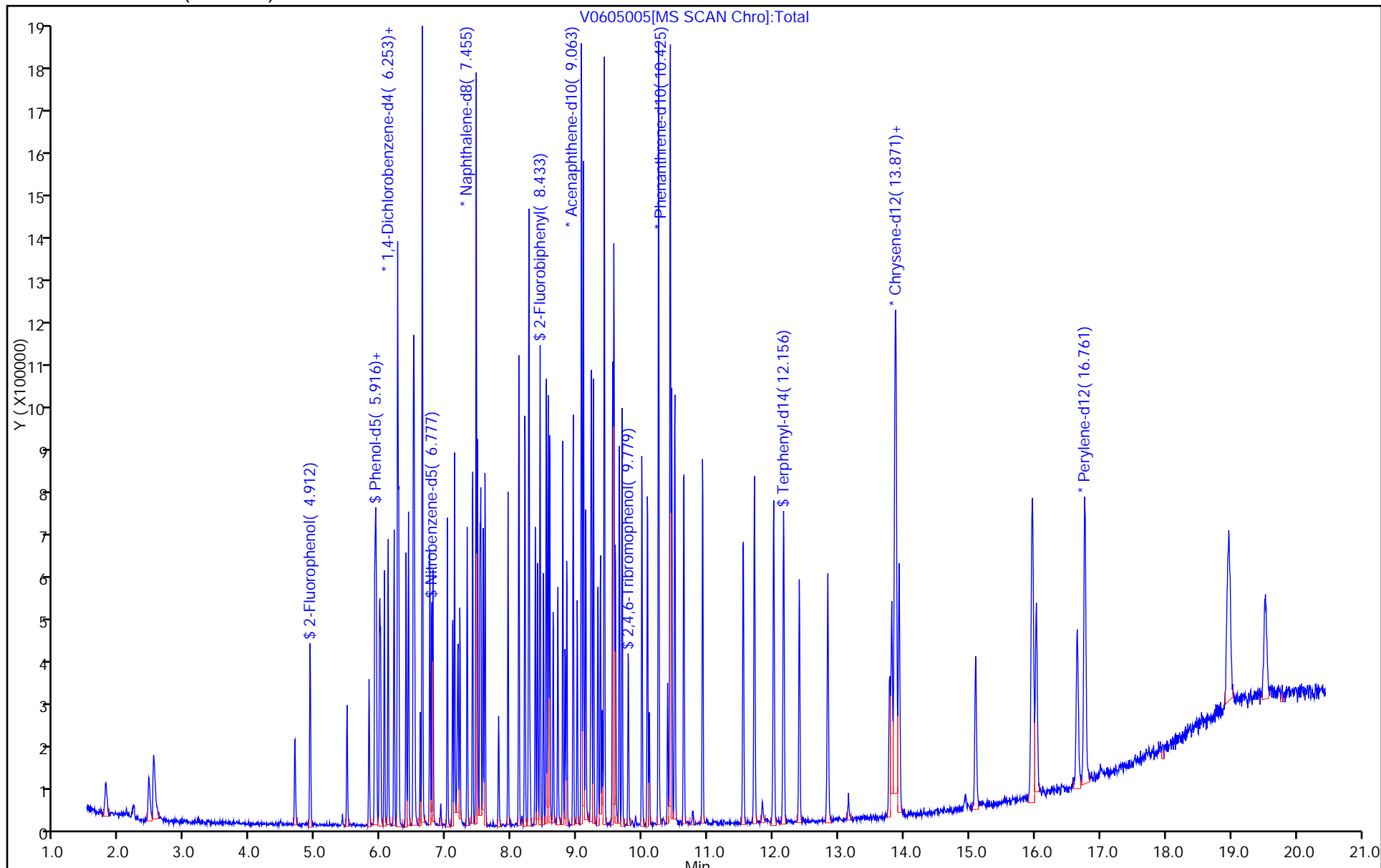
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



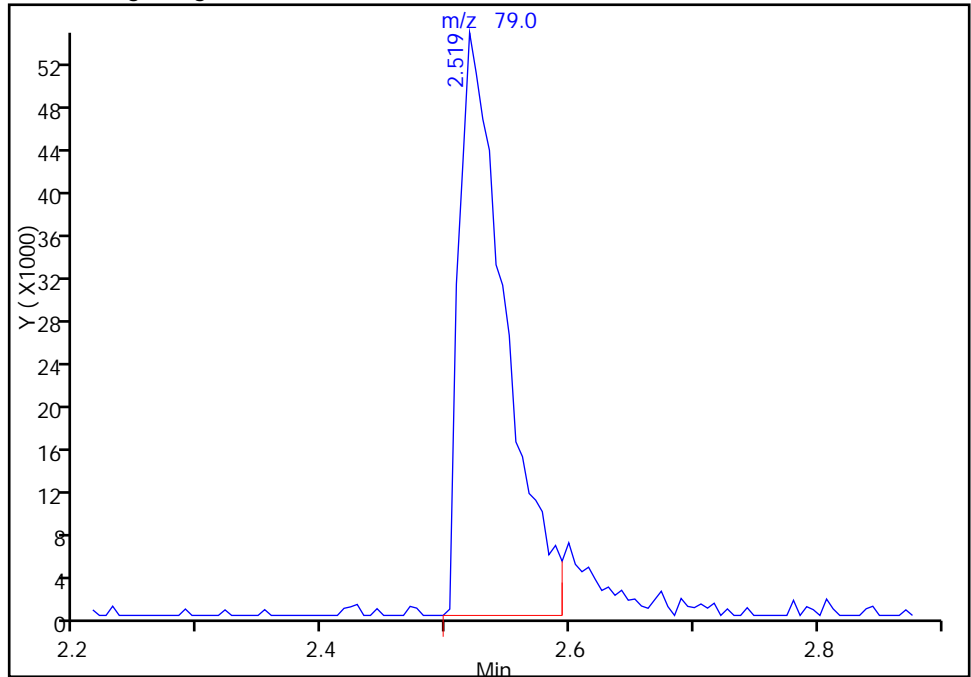
TestAmerica Pittsburgh

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

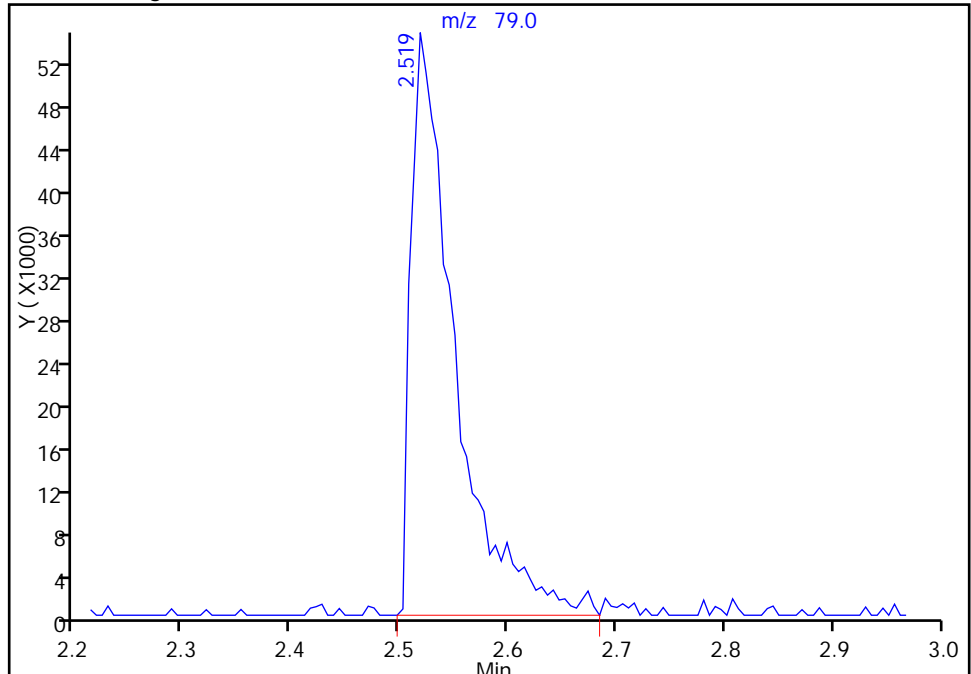
RT: 2.52
Response: 140070
Amount: 3.888028

Processing Integration Results



RT: 2.52
Response: 153428
Amount: 4.194307

Manual Integration Results



Reviewer: piccolinov, 05-Jun-2014 12:01:20
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

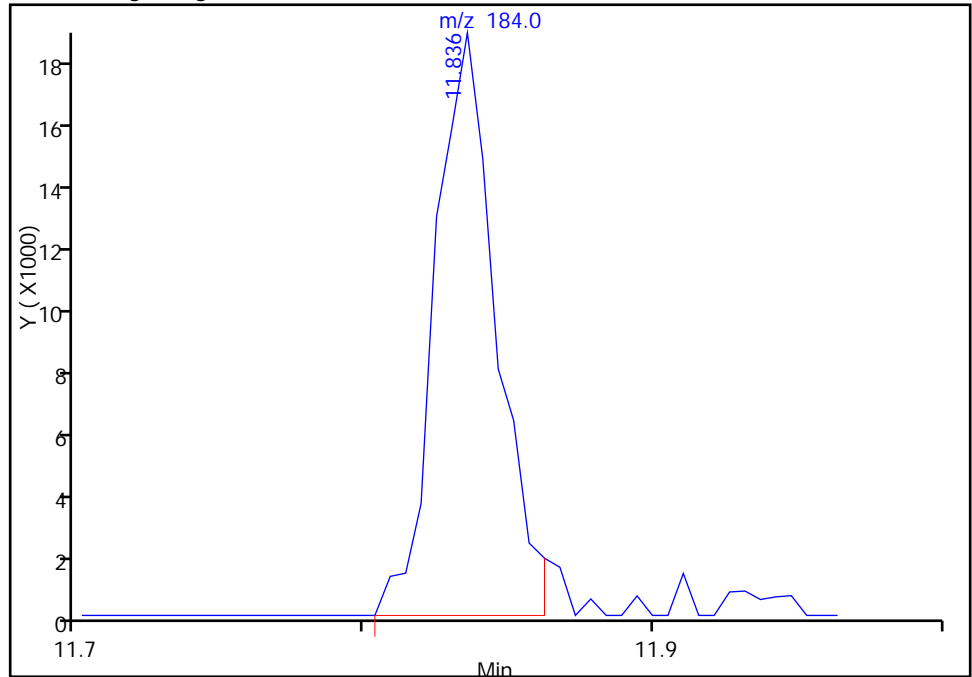
TestAmerica Pittsburgh

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

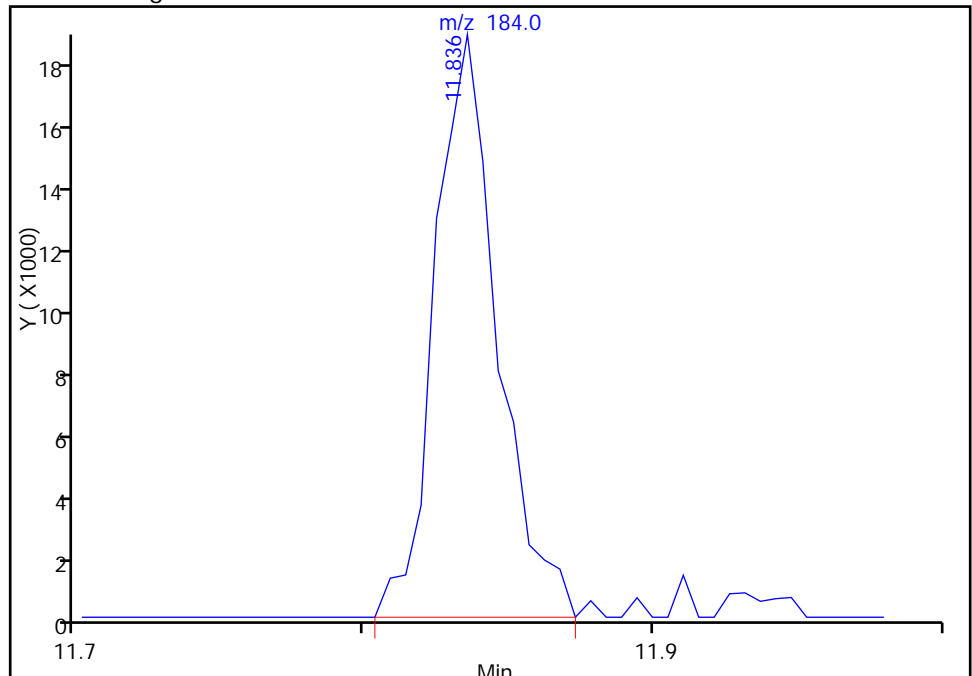
RT: 11.84
Response: 27638
Amount: 3.595535

Processing Integration Results



RT: 11.84
Response: 28139
Amount: 3.970359

Manual Integration Results



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-5SiIMS (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

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

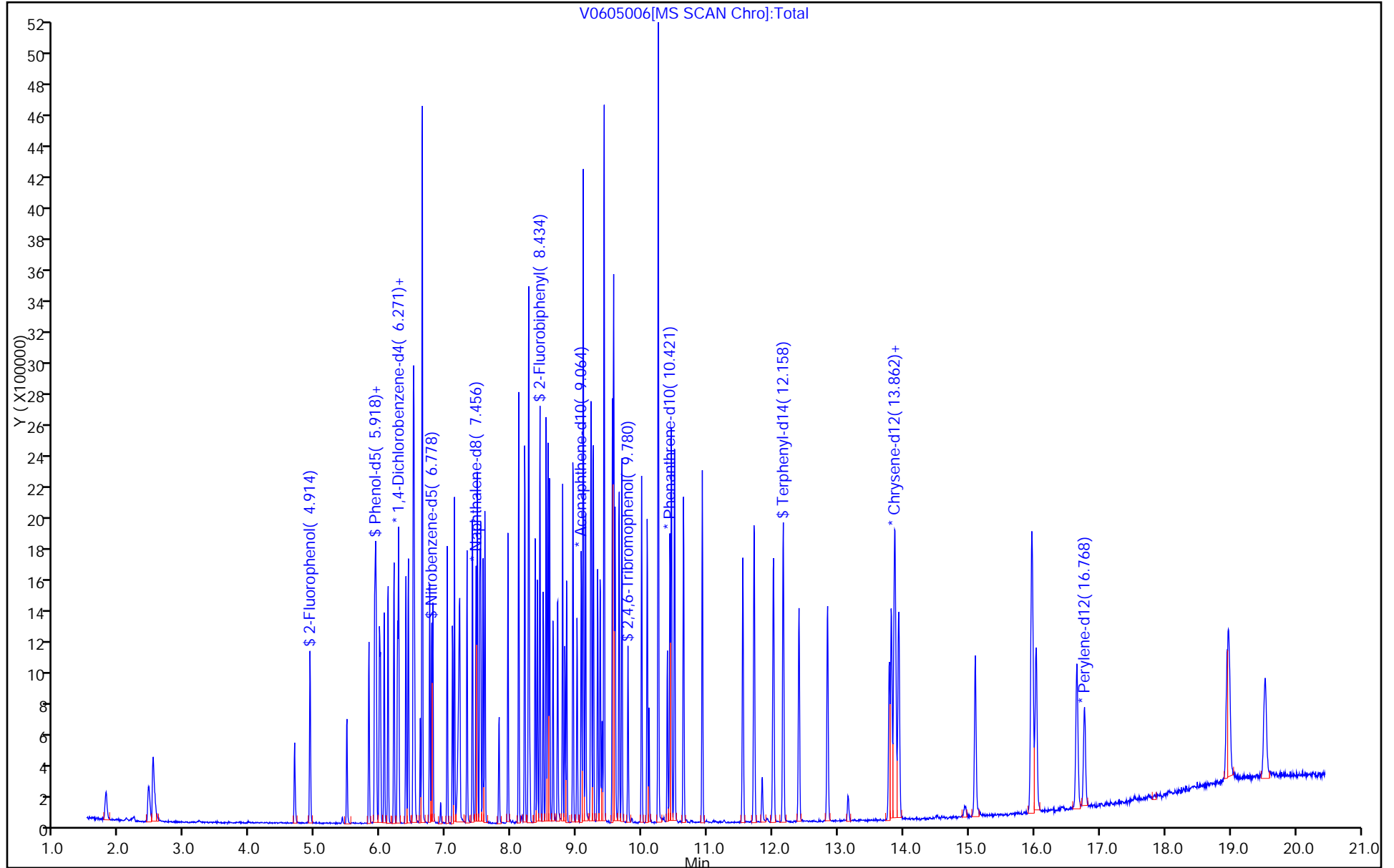
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



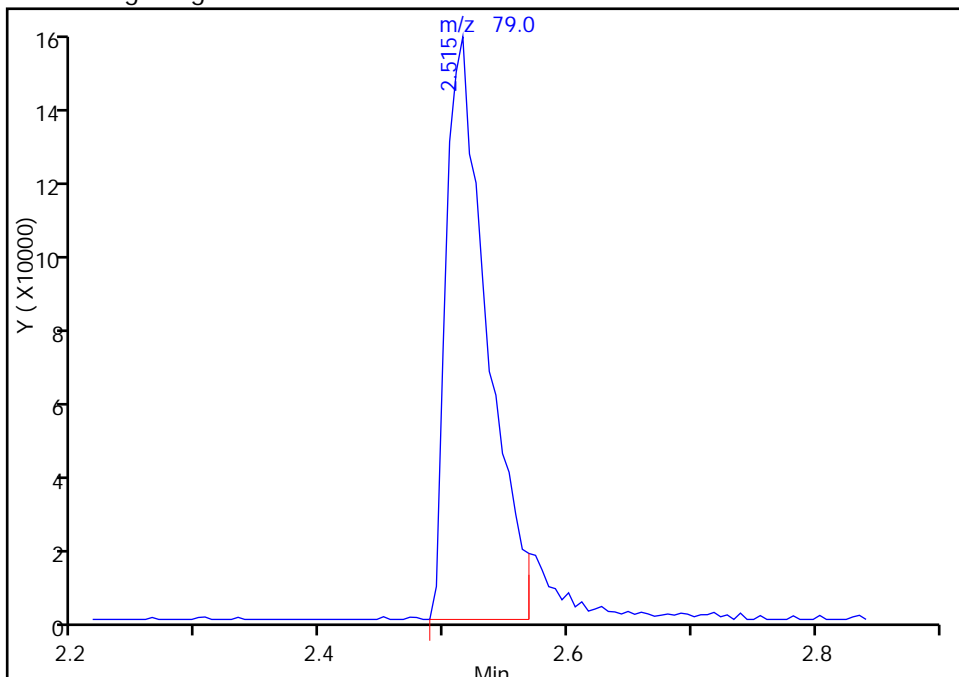
TestAmerica Pittsburgh

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-5SiIMS (0.32 mm) Detector: MS SCAN

15 Pyridine, CAS: 110-86-1

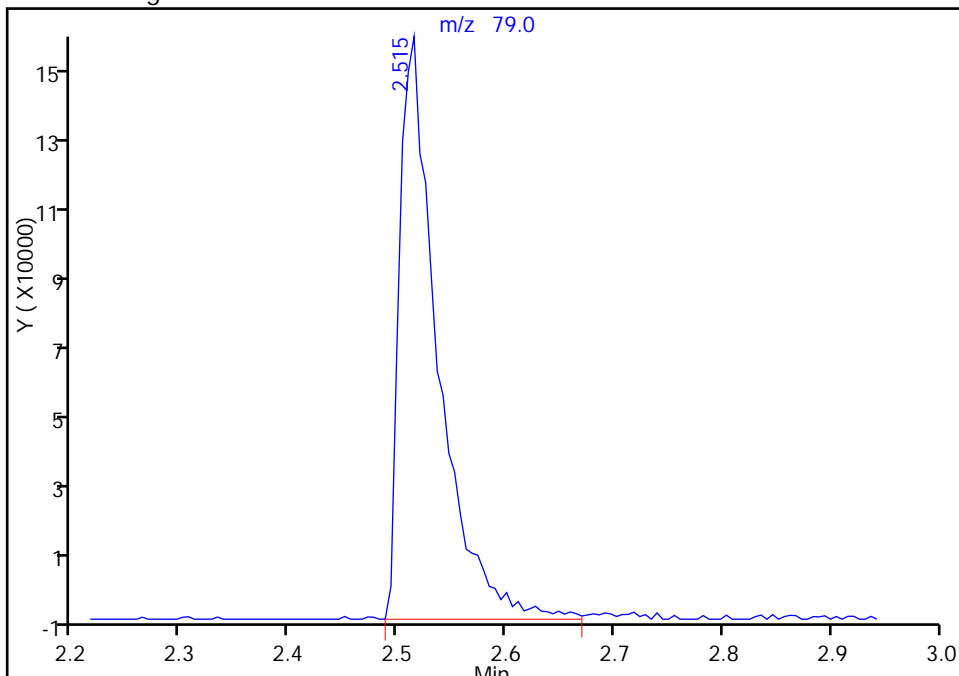
RT: 2.52
Response: 350232
Amount: 9.615565

Processing Integration Results



RT: 2.52
Response: 378460
Amount: 10.470319

Manual Integration Results



Reviewer: piccolinov, 05-Jun-2014 12:02:37
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

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-5SiIMS (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

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

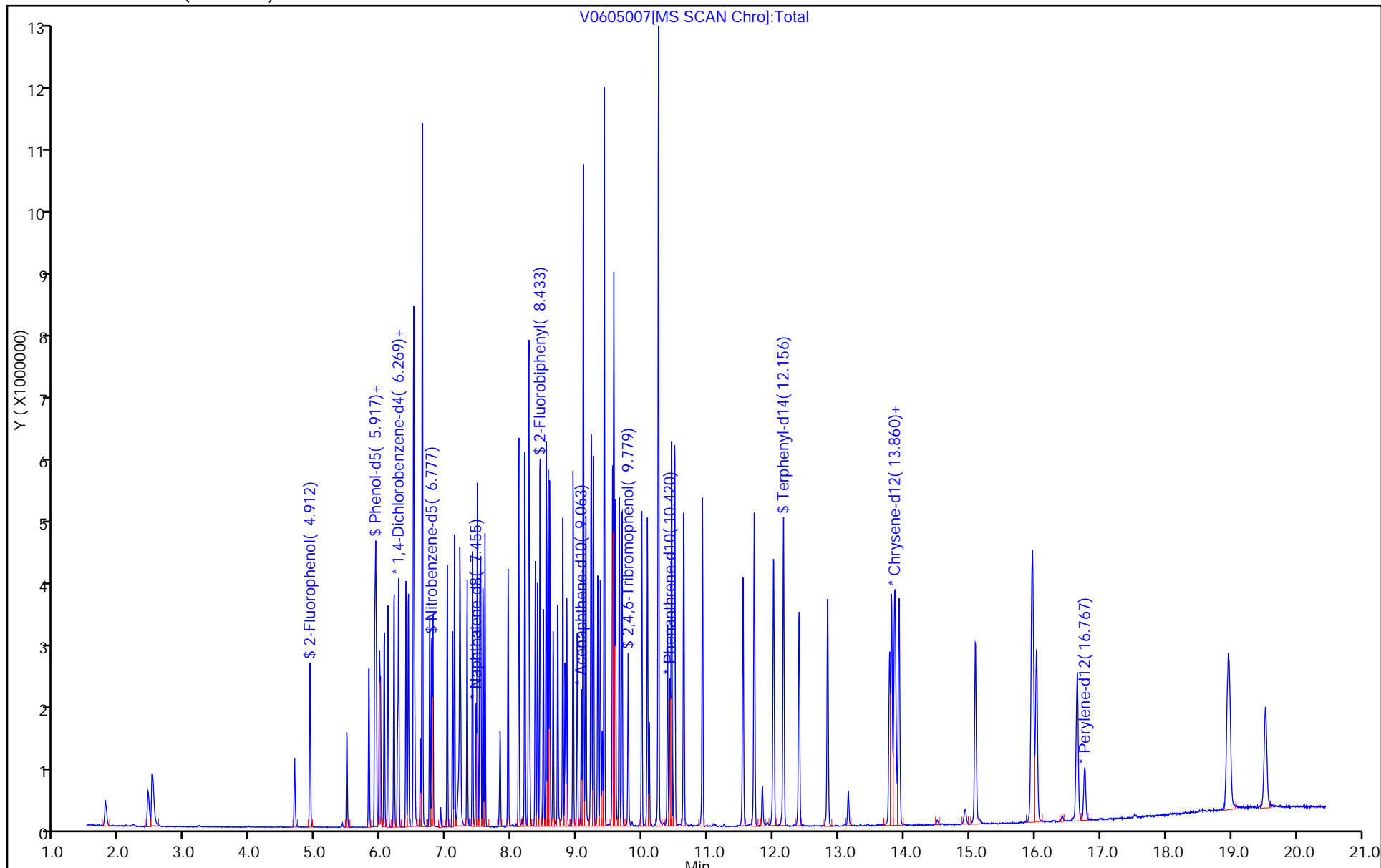
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (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-5SiIMS (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.)	Diff 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

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

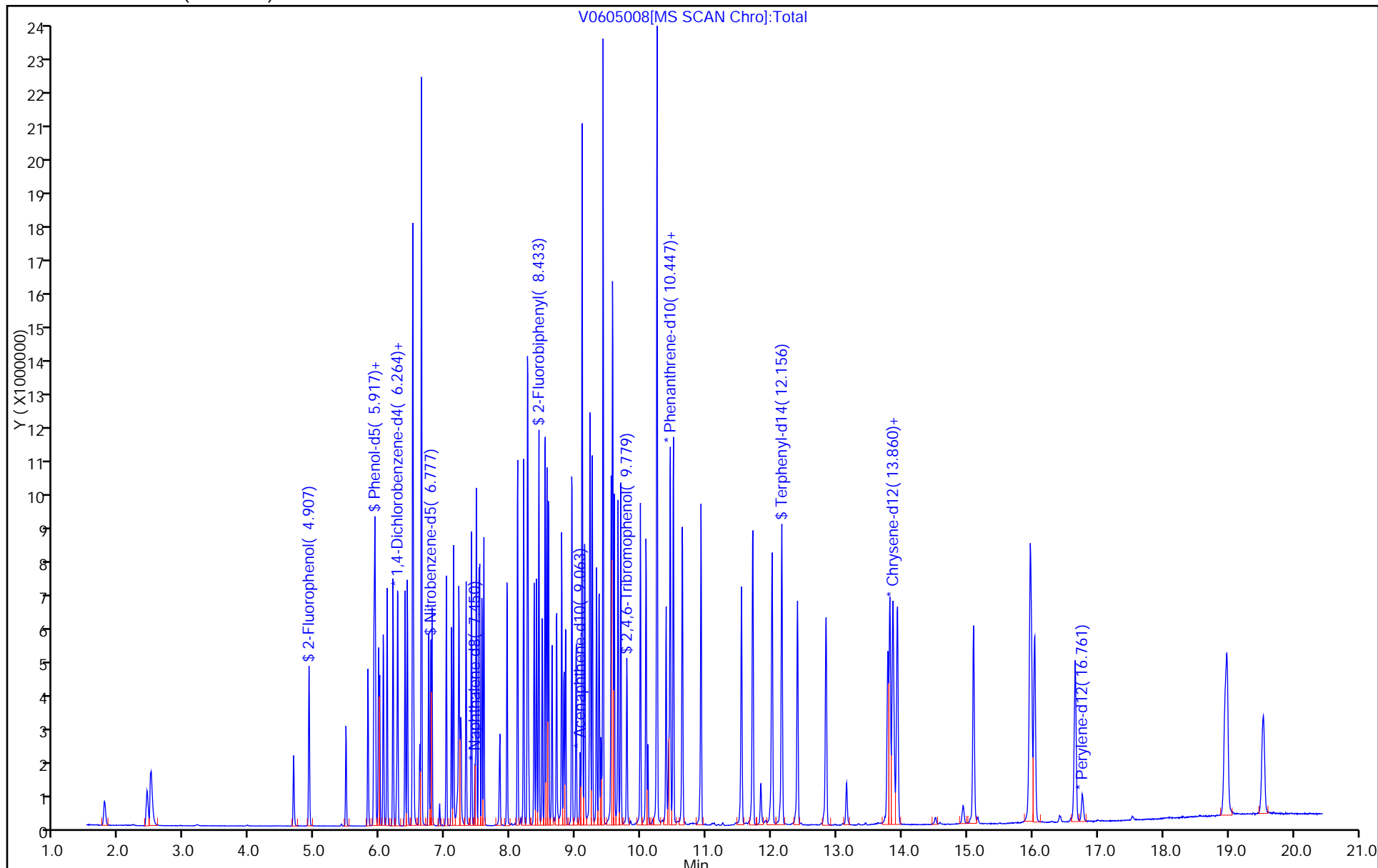
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (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-5SiIMS (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.)	Diff 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

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

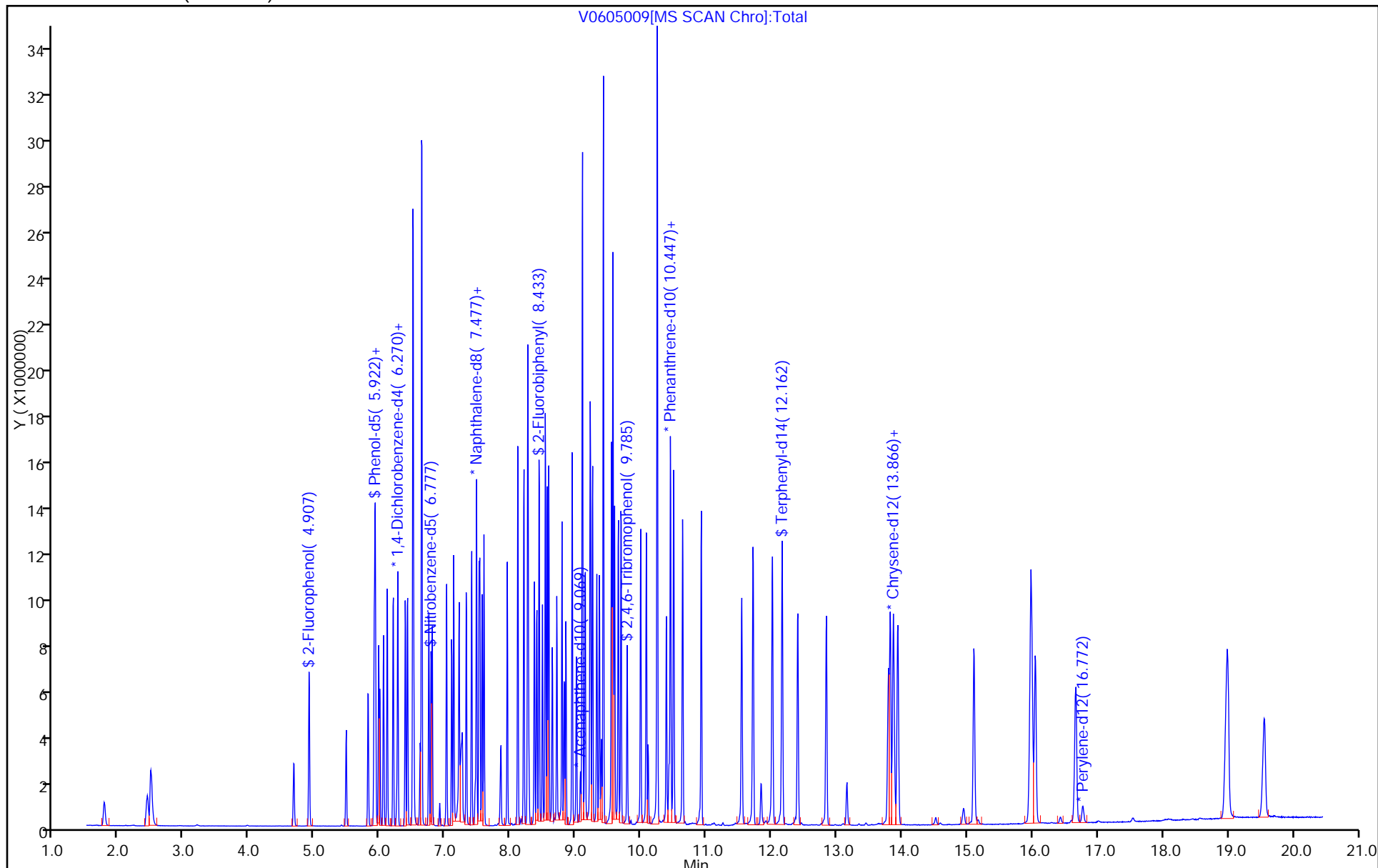
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



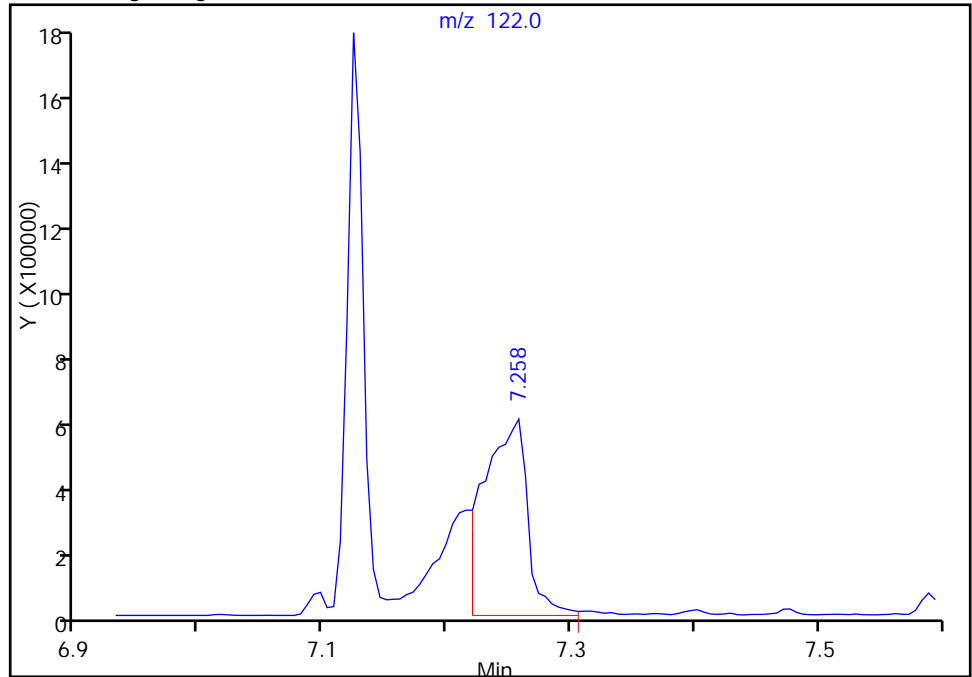
TestAmerica Pittsburgh

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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-5SiIMS (0.32 mm) Detector: MS SCAN

52 Benzoic acid, CAS: 65-85-0

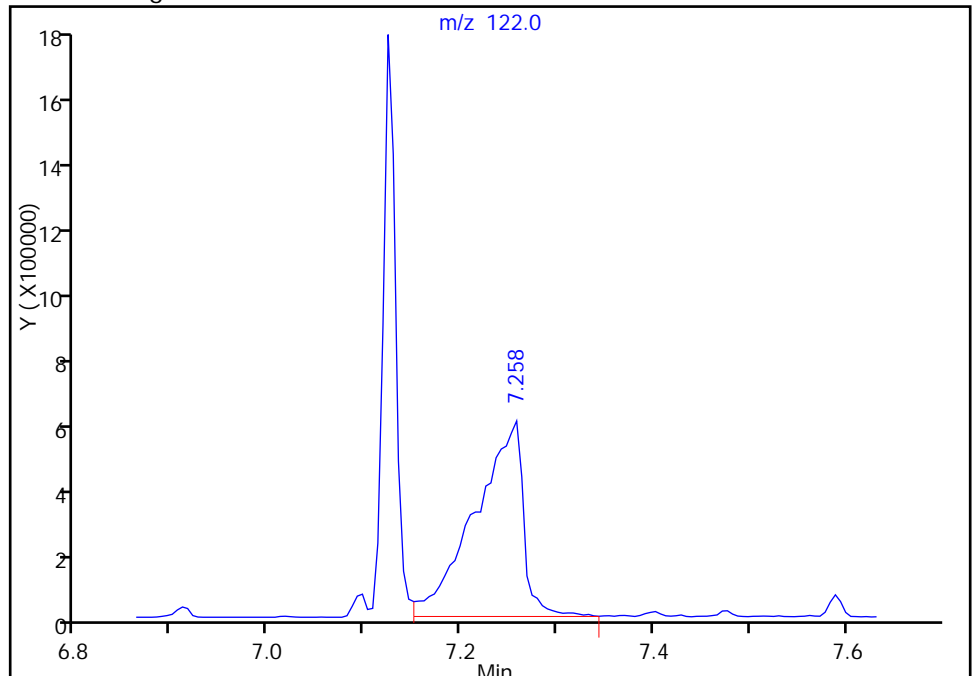
RT: 7.26
Response: 1476562
Amount: 114.4293

Processing Integration Results



RT: 7.26
Response: 2097306
Amount: 137.2898

Manual Integration Results



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-5SiIMS (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

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

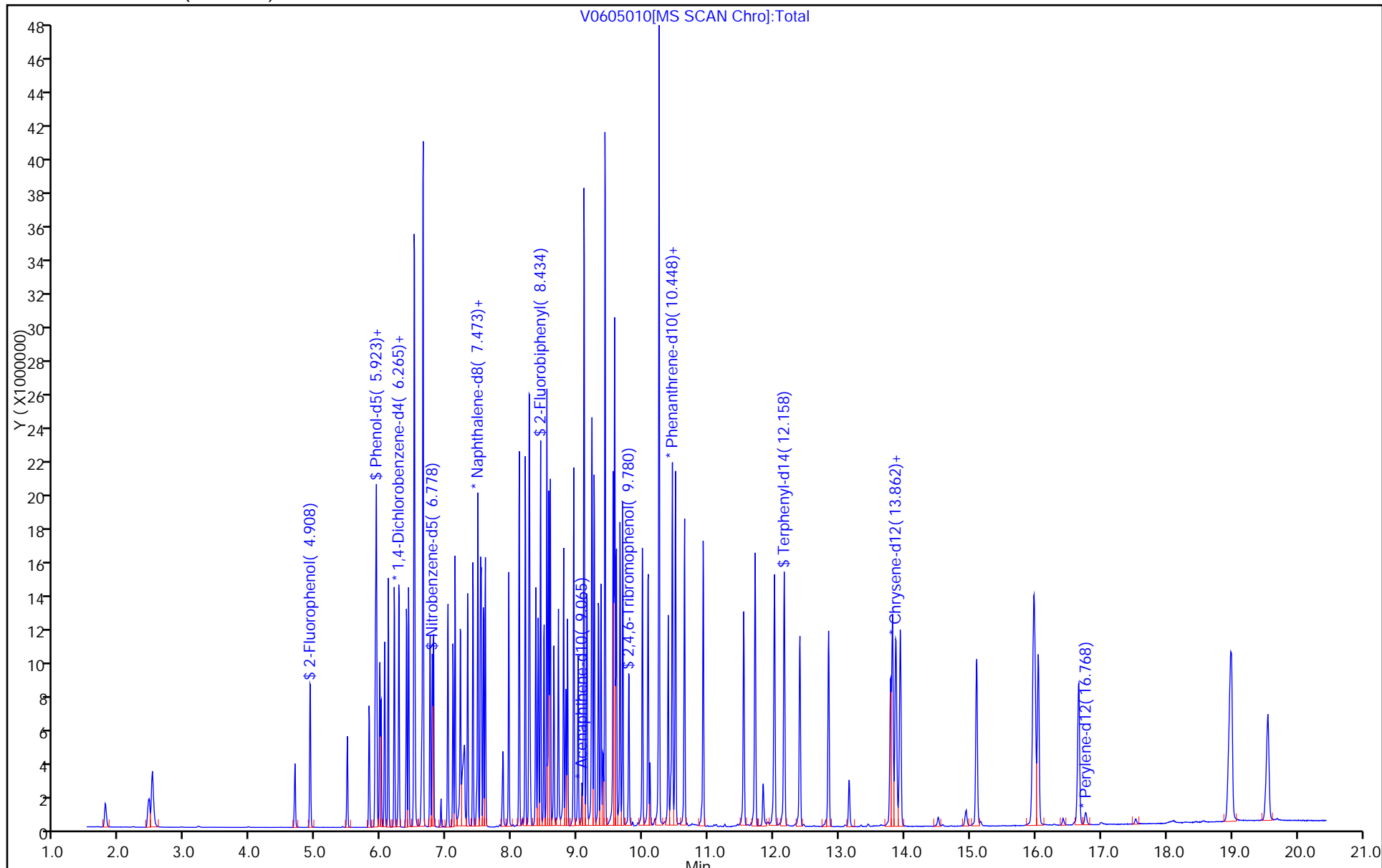
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



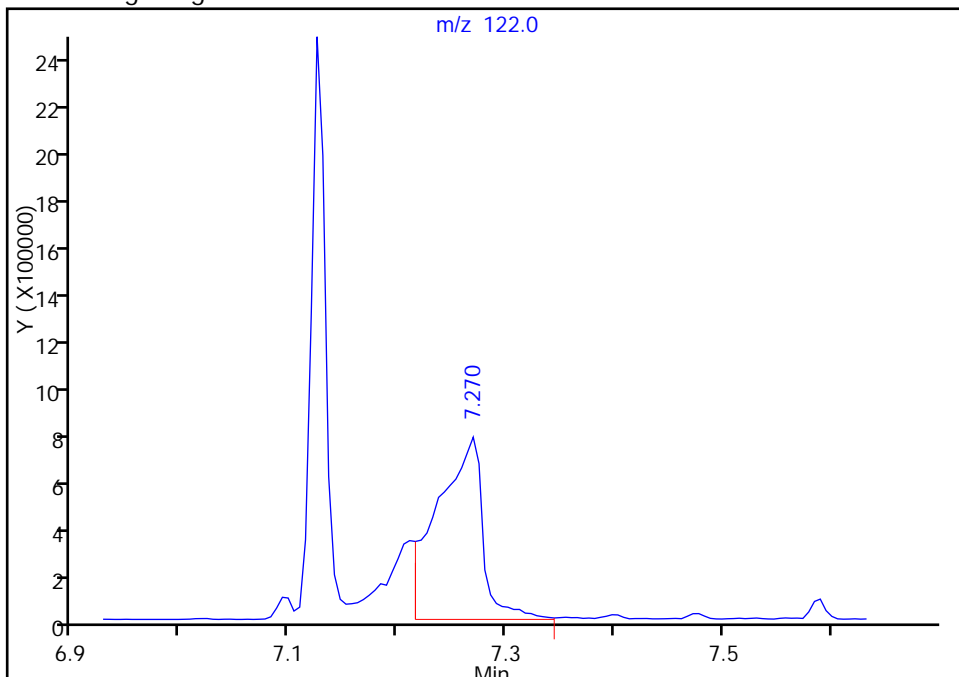
TestAmerica Pittsburgh

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-5SiIMS (0.32 mm) Detector: MS SCAN

52 Benzoic acid, CAS: 65-85-0

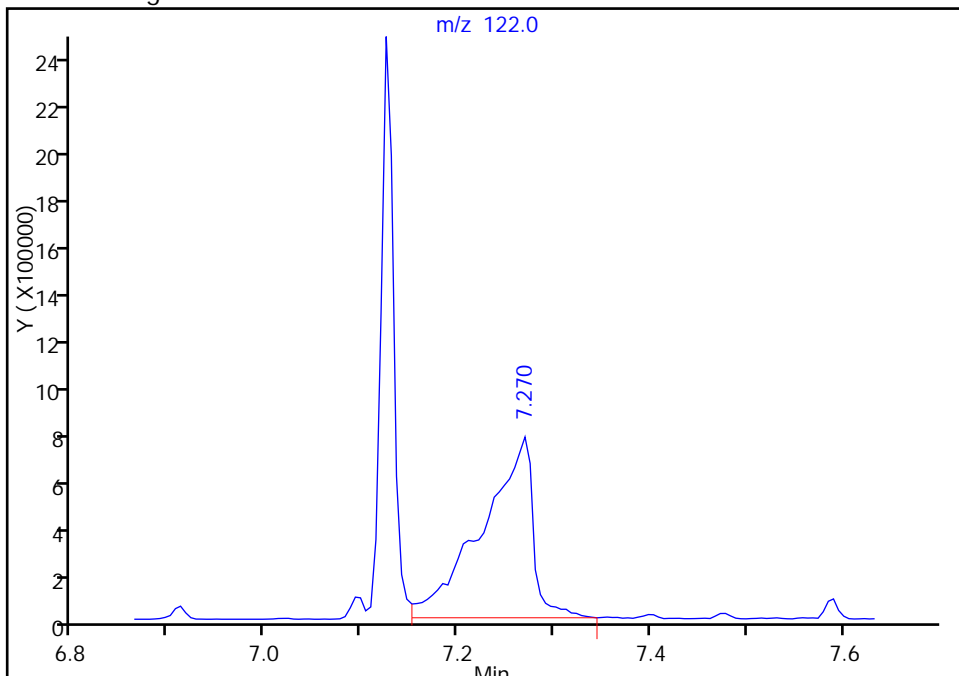
RT: 7.27
Response: 2284194
Amount: 160.2604

Processing Integration Results



RT: 7.27
Response: 2826502
Amount: 177.1414

Manual Integration Results



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.: 180-34298-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-110612/3 Calibration Date: 07/07/2014 11:06
 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: V0707003.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	0.9646	0.0100	6.56	5.00	31.2*	20.0
N-Nitrosodimethylamine	Ave	1.033	1.305	0.0100	6.32	5.00	26.4*	20.0
Pyridine	Ave	1.803	2.195	0.0100	6.09	5.00	21.8*	20.0
Methyl methanesulfonate	Ave	1.048	1.327	0.0100	6.33	5.00	26.7*	20.0
Benzaldehyde	Ave	1.059	1.275	0.0100	6.02	5.00	20.4*	20.0
Phenol	Ave	2.114	1.935	0.8000	4.58	5.00	-8.5	20.0
Aniline	Ave	2.017	1.874	0.0100	4.65	5.00	-7.1	20.0
Bis(2-chloroethyl)ether	Ave	1.387	1.307	0.7000	4.71	5.00	-5.8	20.0
2-Chlorophenol	Ave	1.429	1.459	0.8000	5.10	5.00	2.1	20.0
n-Decane	Ave	1.352	1.252		4.63	5.00	-7.4	20.0
1,3-Dichlorobenzene	Ave	1.688	1.780	0.0100	5.27	5.00	5.5	20.0
1,4-Dichlorobenzene	Ave	1.688	1.687	0.0100	5.00	5.00	-0.0	20.0
Benzyl alcohol	Ave	0.9071	0.7512	0.0100	4.14	5.00	-17.2	20.0
1,2-Dichlorobenzene	Ave	1.596	1.699	0.0100	5.32	5.00	6.5	20.0
2-Methylphenol	Ave	1.461	1.364	0.7000	4.67	5.00	-6.7	20.0
Indene	Ave	2.790	2.590	0.0100	4.64	5.00	-7.2	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.496	1.193	0.0100	3.99	5.00	-20.2*	20.0
N-Nitrosopyrrolidine	Ave	0.6249	0.6071	0.0100	4.86	5.00	-2.9	20.0
Acetophenone	Ave	2.472	2.470	0.0100	5.00	5.00	-0.0	20.0
N-Nitrosodi-n-propylamine	Ave	1.432	1.393	0.5000	4.86	5.00	-2.7	20.0
Methylphenol, 3 & 4	Ave	1.550	1.390	0.6000	4.48	5.00	-10.3	20.0
Hexachloroethane	Ave	0.7929	0.8807	0.3000	5.55	5.00	11.1	20.0
Nitrobenzene	Ave	0.5372	0.5705	0.2000	5.31	5.00	6.2	20.0
Isophorone	Ave	0.8134	0.8083	0.4000	4.97	5.00	-0.6	20.0
2-Nitrophenol	Ave	0.1994	0.2109	0.1000	5.29	5.00	5.8	20.0
2,4-Dimethylphenol	Ave	0.4548	0.5070	0.2000	5.57	5.00	11.5	20.0
Benzoic acid	Ave	0.1936	0.1617	0.0100	8.35	10.0	-16.5	20.0
Bis(2-chloroethoxy)methane	Ave	0.4379	0.4140	0.3000	4.73	5.00	-5.5	20.0
2,4-Dichlorophenol	Ave	0.3218	0.3467	0.2000	5.39	5.00	7.7	20.0
1,2,4-Trichlorobenzene	Ave	0.3822	0.4325	0.0100	5.66	5.00	13.1	20.0
Naphthalene	Ave	1.150	1.085	0.7000	4.72	5.00	-5.6	20.0
4-Chloroaniline	Ave	0.4493	0.4346	0.0100	4.84	5.00	-3.3	20.0
2,6-Dichlorophenol	Ave	0.3272	0.3467	0.0100	5.30	5.00	6.0	20.0
Hexachlorobutadiene	Ave	0.2650	0.3080	0.0100	5.81	5.00	16.2	20.0
Caprolactam	Ave	0.0987	0.0952	0.0100	4.82	5.00	-3.6	20.0
4-Chloro-3-methylphenol	Ave	0.3897	0.3941	0.2000	5.06	5.00	1.1	20.0
2-Methylnaphthalene	Ave	0.8202	0.8427	0.4000	5.14	5.00	2.8	20.0
1-Methylnaphthalene	Ave	0.7598	0.7343	0.0100	4.83	5.00	-3.4	20.0
Hexachlorocyclopentadiene	Ave	0.4683	0.6209	0.0500	6.63	5.00	32.6*	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.6322	0.7434	0.0100	5.88	5.00	17.6	20.0
2,4,6-Trichlorophenol	Ave	0.4008	0.4402	0.2000	5.49	5.00	9.8	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-110612/3 Calibration Date: 07/07/2014 11:06
 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: V0707003.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	0.4541	0.2000	5.38	5.00	7.6	20.0
1,1'-Biphenyl	Ave	1.579	1.583	0.0100	5.01	5.00	0.2	20.0
2-Chloronaphthalene	Ave	1.305	1.382	0.8000	5.30	5.00	6.0	20.0
2-Nitroaniline	Ave	0.4202	0.4682	0.0100	5.57	5.00	11.4	20.0
Dimethyl phthalate	Ave	1.409	1.483	0.0100	5.26	5.00	5.3	20.0
1,3-Dinitrobenzene	Ave	0.2192	0.2099	0.0100	4.79	5.00	-4.3	20.0
2,6-Dinitrotoluene	Ave	0.3071	0.3056	0.2000	4.97	5.00	-0.5	20.0
Acenaphthylene	Ave	1.984	1.963	0.9000	4.95	5.00	-1.1	20.0
3-Nitroaniline	Ave	0.3068	0.2841	0.0100	4.63	5.00	-7.4	20.0
2,4-Dinitrophenol	Lin2		0.1926	0.0100	10.2	10.0	2.1	20.0
Acenaphthene	Ave	1.286	1.244	0.9000	4.84	5.00	-3.3	20.0
4-Nitrophenol	Ave	0.2699	0.3337	0.0100	12.4	10.0	23.6*	20.0
2,4-Dinitrotoluene	Ave	0.4103	0.4436	0.2000	5.41	5.00	8.1	20.0
Dibenzofuran	Ave	1.861	1.785	0.8000	4.80	5.00	-4.1	20.0
2,3,5,6-Tetrachlorophenol	Ave	0.4027	0.4358	0.0100	5.41	5.00	8.2	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3817	0.4396	0.0100	5.76	5.00	15.2	20.0
2-Naphthylamine	Ave	0.3458	0.3435	0.0100	4.97	5.00	-0.7	20.0
Diethyl phthalate	Ave	1.535	1.593	0.0100	5.19	5.00	3.7	20.0
Hexadecane	Ave	0.4612	0.3722		4.03	5.00	-19.3	20.0
4-Chlorophenyl phenyl ether	Ave	0.7686	0.8132	0.4000	5.29	5.00	5.8	20.0
4-Nitroaniline	Ave	0.3275	0.2995	0.0100	4.57	5.00	-8.5	20.0
Fluorene	Ave	1.448	1.438	0.9000	4.96	5.00	-0.7	20.0
4,6-Dinitro-2-methylphenol	Ave	0.1491	0.1623	0.0100	10.9	10.0	8.9	20.0
N-Nitrosodiphenylamine	Ave	0.5696	0.5899	0.0100	5.18	5.00	3.6	20.0
1,2-Diphenylhydrazine (as Azobenzene)	Ave	0.9507	1.032	0.0100	5.43	5.00	8.5	20.0
4-Bromophenyl phenyl ether	Ave	0.2565	0.2890	0.1000	5.63	5.00	12.7	20.0
Hexachlorobenzene	Ave	0.2780	0.2976	0.1000	5.35	5.00	7.1	20.0
Atrazine	Ave	0.0779	0.0932	0.0100	5.98	5.00	19.6	20.0
n-Octadecane	Ave	1.926	1.470		3.82	5.00	-23.7*	20.0
Pentachlorophenol	Lin		0.1735	0.0500	10.9	10.0	9.1	20.0
Phenanthrene	Ave	1.203	1.189	0.7000	4.94	5.00	-1.2	20.0
Anthracene	Ave	1.192	1.184	0.7000	4.96	5.00	-0.7	20.0
Carbazole	Ave	1.041	1.021	0.0100	4.90	5.00	-2.0	20.0
Di-n-butyl phthalate	Ave	1.285	1.267	0.0100	4.93	5.00	-1.4	20.0
Fluoranthene	Ave	1.256	1.307	0.6000	5.20	5.00	4.1	20.0
Benzidine	Lin2		0.0570	0.0100		5.00	-47.3*	20.0
Pyrene	Ave	1.255	1.259	0.6000	5.01	5.00	0.3	20.0
Butyl benzyl phthalate	Ave	0.5061	0.4798	0.0100	4.74	5.00	-5.2	20.0
3,3'-Dichlorobenzidine	Ave	0.3830	0.3109	0.0100	4.06	5.00	-18.8	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.7036	0.6537	0.0100	4.65	5.00	-7.1	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-110612/3 Calibration Date: 07/07/2014 11:06
 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: V0707003.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	1.175	0.8000	4.94	5.00	-1.2	20.0
Chrysene	Ave	1.112	1.111	0.7000	5.00	5.00	-0.0	20.0
Di-n-octyl phthalate	Ave	1.352	1.303	0.0100	4.82	5.00	-3.6	20.0
7,12-Dimethylbenz(a)anthracene	Ave	0.6424	0.6575	0.0100	5.12	5.00	2.3	20.0
Benzo[b]fluoranthene	Ave	1.399	1.466	0.7000	5.24	5.00	4.7	20.0
Benzo[k]fluoranthene	Ave	1.371	1.358	0.7000	4.95	5.00	-1.0	20.0
Benzo[a]pyrene	Ave	1.190	1.239	0.7000	5.21	5.00	4.1	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.231	1.215	0.5000	4.94	5.00	-1.3	20.0
Dibenz(a,h)anthracene	Ave	1.078	1.069	0.4000	4.96	5.00	-0.9	20.0
Benzo[g,h,i]perylene	Ave	1.080	1.074	0.5000	4.97	5.00	-0.5	20.0
2-Fluorophenol (Surr)	Ave	1.473	1.547		5.25	5.00	5.1	20.0
Phenol-d5 (Surr)	Ave	1.779	1.657		4.66	5.00	-6.8	20.0
Nitrobenzene-d5 (Surr)	Ave	0.5221	0.5745		5.50	5.00	10.0	20.0
2-Fluorobiphenyl	Ave	1.467	1.526		5.20	5.00	4.0	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1149	0.1237	0.0100	5.39	5.00	7.7	20.0
Terphenyl-d14 (Surr)	Ave	0.9770	1.031		5.28	5.00	5.5	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20140707-2080.b\V0707003.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 07-Jul-2014 11:06:30 ALS Bottle#: 2 Worklist Smp#: 3
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0002080-003
 Misc. Info.: CCVIS
 Operator ID: 003200 Instrument ID: CH731
 Sublist: chrom-BNA_CH731*sub2
 Method: \\PITCHROM\ChromData\CH731\20140707-2080.b\BNA_CH731.m
 Limit Group: BNA 8270D ICAL
 Last Update: 08-Jul-2014 06:33:31 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-5SiIMS (0.32 mm) Det: MS SCAN
 Process Host: XAWRK002

First Level Reviewer: piccolinov

Date: 07-Jul-2014 13:09:40

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.271	6.271	0.000	85	171193	8.00	8.00	
* 2 Naphthalene-d8	136	7.478	7.478	0.000	96	638454	8.00	8.00	
* 3 Acenaphthene-d10	164	9.091	9.091	0.000	93	402886	8.00	8.00	
* 4 Phenanthrene-d10	188	10.453	10.453	0.000	94	721442	8.00	8.00	
* 5 Chrysene-d12	240	13.931	13.931	0.000	85	755261	8.00	8.00	
* 6 Perylene-d12	264	16.832	16.832	0.000	86	581280	8.00	8.00	
\$ 7 2-Fluorophenol	112	4.930	4.930	0.000	88	331109	10.0	10.5	
\$ 8 Phenol-d5	99	5.923	5.923	0.000	83	354681	10.0	9.32	
\$ 9 Nitrobenzene-d5	82	6.794	6.794	0.000	88	458464	10.0	11.0	
\$ 10 2-Fluorobiphenyl	172	8.455	8.455	0.000	98	768498	10.0	10.4	
\$ 11 2,4,6-Tribromophenol	330	9.812	9.812	0.000	87	111561	10.0	10.8	
\$ 12 Terphenyl-d14	244	12.195	12.195	0.000	97	973518	10.0	10.6	
13 1,4-Dioxane	88	1.810	1.810	0.000	90	206412	10.0	13.1	
14 N-Nitrosodimethylamine	74	2.467	2.467	0.000	78	279334	10.0	12.6	M
15 Pyridine	79	2.531	2.531	0.000	92	469758	10.0	12.2	
21 Methyl methanesulfonate	80	4.695	4.695	0.000	92	284037	10.0	12.7	
25 Benzaldehyde	77	5.832	5.832	0.000	83	272777	10.0	12.0	
26 Phenol	94	5.934	5.934	0.000	75	413977	10.0	9.15	
27 Aniline	93	5.945	5.945	0.000	67	401112	10.0	9.29	
29 Bis(2-chloroethyl)ether	93	6.009	6.009	0.000	85	279698	10.0	9.42	
30 2-Chlorophenol	128	6.068	6.068	0.000	89	312296	10.0	10.2	
31 n-Decane	43	6.126	6.126	0.000	75	267823	10.0	9.26	
32 1,3-Dichlorobenzene	146	6.217	6.217	0.000	85	380826	10.0	10.5	
33 1,4-Dichlorobenzene	146	6.287	6.287	0.000	79	361068	10.0	10.0	
34 Benzyl alcohol	108	6.404	6.404	0.000	82	160746	10.0	8.28	
35 1,2-Dichlorobenzene	146	6.436	6.436	0.000	79	363600	10.0	10.6	
36 2-Methylphenol	108	6.516	6.516	0.000	80	291809	10.0	9.33	
37 Indene	116	6.522	6.522	0.000	78	554171	10.0	9.28	
38 2,2'-oxybis[1-chloropropan	45	6.532	6.532	0.000	65	255359	10.0	7.98	
39 N-Nitrosopyrrolidine	100	6.623	6.623	0.000	68	129913	10.0	9.71	

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	6.650	6.650	0.000	81	298050	10.0	9.73	
40 Acetophenone	105	6.650	6.650	0.000	82	528630	10.0	10.0	
42 4-Methylphenol	108	6.655	6.655	0.000	87	297429	10.0	8.97	
45 Hexachloroethane	117	6.767	6.767	0.000	81	188462	10.0	11.1	
46 Nitrobenzene	77	6.815	6.815	0.000	89	455284	10.0	10.6	
48 Isophorone	82	7.034	7.034	0.000	93	645053	10.0	9.94	
49 2-Nitrophenol	139	7.115	7.115	0.000	72	168309	10.0	10.6	
50 2,4-Dimethylphenol	107	7.147	7.147	0.000	92	404588	10.0	11.1	
52 Benzoic acid	122	7.221	7.221	0.000	84	258038	20.0	16.7	M
53 Bis(2-chloroethoxy)methane	93	7.232	7.232	0.000	92	330422	10.0	9.45	
54 2,4-Dichlorophenol	162	7.344	7.344	0.000	92	276715	10.0	10.8	
57 Azobenzene	77		7.405					ND	
56 1,2,4-Trichlorobenzene	180	7.424	7.424	0.000	88	345146	10.0	11.3	
58 Naphthalene	128	7.499	7.499	0.000	96	866032	10.0	9.44	
59 4-Chloroaniline	127	7.537	7.537	0.000	86	346827	10.0	9.67	
60 2,6-Dichlorophenol	162	7.553	7.553	0.000	86	276678	10.0	10.6	
62 Hexachlorobutadiene	225	7.611	7.611	0.000	86	245835	10.0	11.6	
64 Caprolactam	113	7.830	7.830	0.000	66	75988	10.0	9.64	
67 4-Chloro-3-methylphenol	107	7.969	7.969	0.000	84	314523	10.0	10.1	
69 2-Methylnaphthalene	142	8.130	8.130	0.000	84	672555	10.0	10.3	
71 1-Methylnaphthalene	142	8.226	8.226	0.000	76	586021	10.0	9.66	
72 Hexachlorocyclopentadiene	237	8.285	8.285	0.000	87	312692	10.0	13.3	
73 1,2,4,5-Tetrachlorobenzene	216	8.290	8.290	0.000	94	374366	10.0	11.8	
74 2,4,6-Trichlorophenol	196	8.386	8.386	0.000	92	221707	10.0	11.0	
75 2,4,5-Trichlorophenol	196	8.418	8.418	0.000	88	228662	10.0	10.8	
76 1,1'-Biphenyl	154	8.552	8.552	0.000	96	797021	10.0	10.0	
77 2-Chloronaphthalene	162	8.578	8.578	0.000	96	696103	10.0	10.6	
79 2-Nitroaniline	65	8.658	8.658	0.000	67	235800	10.0	11.1	
82 Dimethyl phthalate	163	8.803	8.803	0.000	92	746639	10.0	10.5	
83 1,3-Dinitrobenzene	168	8.840	8.840	0.000	76	105680	10.0	9.57	
84 2,6-Dinitrotoluene	165	8.867	8.867	0.000	64	153879	10.0	9.95	
85 Acenaphthylene	152	8.963	8.963	0.000	92	988353	10.0	9.89	
86 3-Nitroaniline	138	9.027	9.027	0.000	83	143073	10.0	9.26	
87 2,4-Dinitrophenol	184	9.118	9.118	0.000	64	194033	20.0	20.4	
88 Acenaphthene	153	9.123	9.123	0.000	84	626528	10.0	9.67	
89 4-Nitrophenol	109	9.161	9.161	0.000	82	336064	20.0	24.7	
91 2,4-Dinitrotoluene	165	9.235	9.235	0.000	76	223393	10.0	10.8	
93 Dibenzofuran	168	9.273	9.273	0.000	79	898917	10.0	9.59	
95 2,3,5,6-Tetrachlorophenol	232	9.342	9.342	0.000	85	219446	10.0	10.8	
96 2,3,4,6-Tetrachlorophenol	232	9.385	9.385	0.000	74	221377	10.0	11.5	
97 2-Naphthylamine	143	9.412	9.412	0.000	86	172983	10.0	9.93	
98 Diethyl phthalate	149	9.438	9.438	0.000	93	802008	10.0	10.4	
99 Hexadecane	57	9.438	9.438	0.000	83	297057	10.0	8.07	
100 4-Chlorophenyl phenyl ethe	204	9.567	9.567	0.000	94	409518	10.0	10.6	
101 4-Nitroaniline	138	9.583	9.583	0.000	72	150836	10.0	9.15	
103 Fluorene	166	9.588	9.588	0.000	83	724077	10.0	9.93	
104 4,6-Dinitro-2-methylphenol	198	9.615	9.615	0.000	75	292794	20.0	21.8	
105 N-Nitrosodiphenylamine	169	9.668	9.668	0.000	61	531948	10.0	10.4	
90 1,2-Diphenylhydrazine	77	9.711	9.711	0.000	1	930503	10.0	10.9	
110 4-Bromophenyl phenyl ether	248	10.015	10.015	0.000	69	260630	10.0	11.3	
112 Hexachlorobenzene	284	10.101	10.101	0.000	83	268380	10.0	10.7	
113 Atrazine	200	10.128	10.128	0.000	83	84036	10.0	12.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.266	10.266	0.000	83	314553	10.0	7.63	
116 Pentachlorophenol	266	10.272	10.272	0.000	80	312920	20.0	21.8	
121 Phenanthrene	178	10.475	10.475	0.000	98	1072222	10.0	9.88	
122 Anthracene	178	10.523	10.523	0.000	97	1067404	10.0	9.93	
124 Carbazole	167	10.662	10.662	0.000	83	920638	10.0	9.80	
126 Di-n-butyl phthalate	149	10.945	10.945	0.000	99	1143021	10.0	9.86	
131 Fluoranthene	202	11.746	11.746	0.000	96	1178764	10.0	10.4	
132 Benzidine	184	11.864	11.864	0.000	71	53822	10.0	5.27	
133 Pyrene	202	12.045	12.045	0.000	98	1188151	10.0	10.0	
138 Butyl benzyl phthalate	149	12.873	12.873	0.000	93	452975	10.0	9.48	
144 3,3'-Dichlorobenzidine	252	13.824	13.824	0.000	66	293519	10.0	8.12	
145 Bis(2-ethylhexyl) phthalat	149	13.862	13.862	0.000	92	617149	10.0	9.29	
146 Benzo[a]anthracene	228	13.910	13.910	0.000	96	1109292	10.0	9.88	
147 Chrysene	228	13.979	13.979	0.000	87	1048714	10.0	10.0	
150 Di-n-octyl phthalate	149	15.149	15.149	0.000	98	946956	10.0	9.64	
151 7,12-Dimethylbenz(a)anthra	256	16.015	16.015	0.000	80	477700	10.0	10.2	
152 Benzo[b]fluoranthene	252	16.036	16.036	0.000	92	1064885	10.0	10.5	
153 Benzo[k]fluoranthene	252	16.095	16.095	0.000	96	986603	10.0	9.90	
154 Benzo[a]pyrene	252	16.720	16.720	0.000	69	900367	10.0	10.4	
157 Indeno[1,2,3-cd]pyrene	276	19.033	19.033	0.000	94	882764	10.0	9.87	
158 Dibenz(a,h)anthracene	278	19.060	19.060	0.000	66	776370	10.0	9.91	
159 Benzo[g,h,i]perylene	276	19.626	19.626	0.000	94	780285	10.0	9.95	
S 197 Methyl Phenols,Total	108				0		20.0	18.3	
S 199 Total Cresols	108				0		20.0	18.3	

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

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140707-2080.b\V0707003.D

Injection Date: 07-Jul-2014 11:06:30

Instrument ID: CH731

Operator ID: 003200

Lims ID: CCVIS

Worklist Smp#: 3

Client ID:

Injection Vol: 2.0 ul

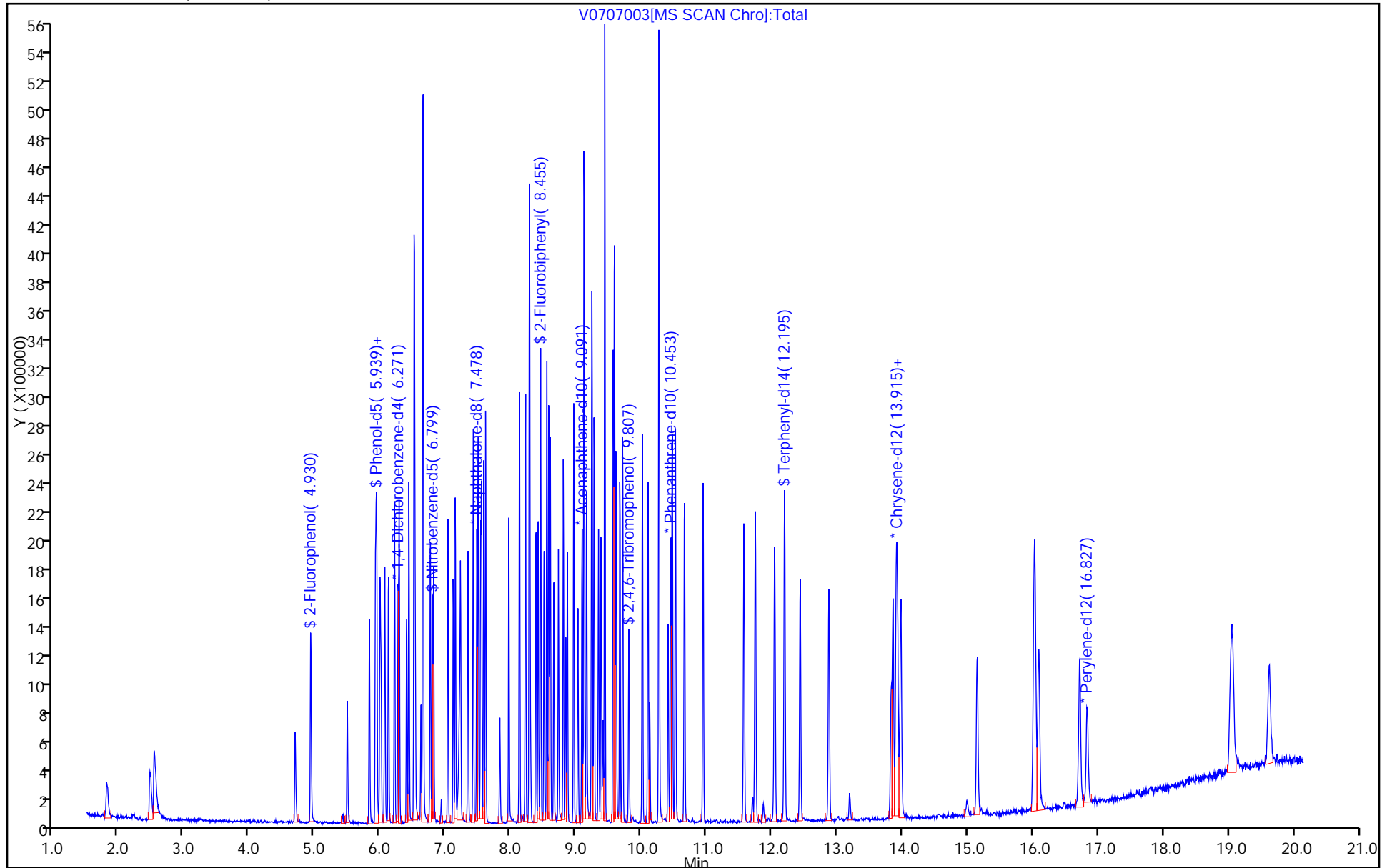
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



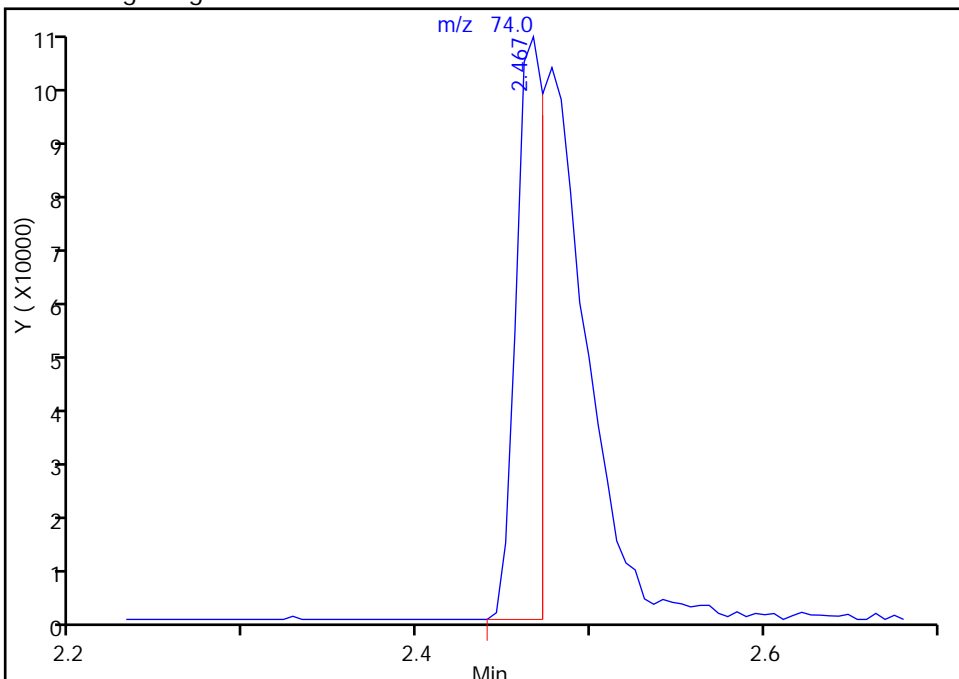
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140707-2080.b\V0707003.D
Injection Date: 07-Jul-2014 11:06:30 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-5SiIMS (0.32 mm) Detector: MS SCAN

14 N-Nitrosodimethylamine, CAS: 62-75-9

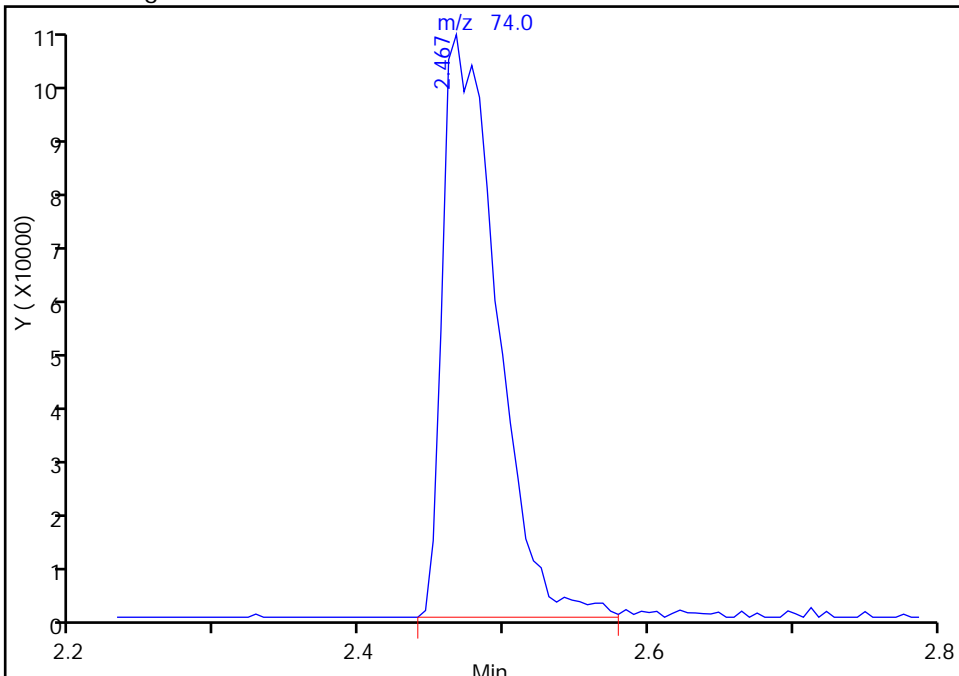
RT: 2.47
Response: 119199
Amount: 5.393015

Processing Integration Results



RT: 2.47
Response: 279334
Amount: 12.638131

Manual Integration Results



Reviewer: piccolinov, 07-Jul-2014 13:09:40
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

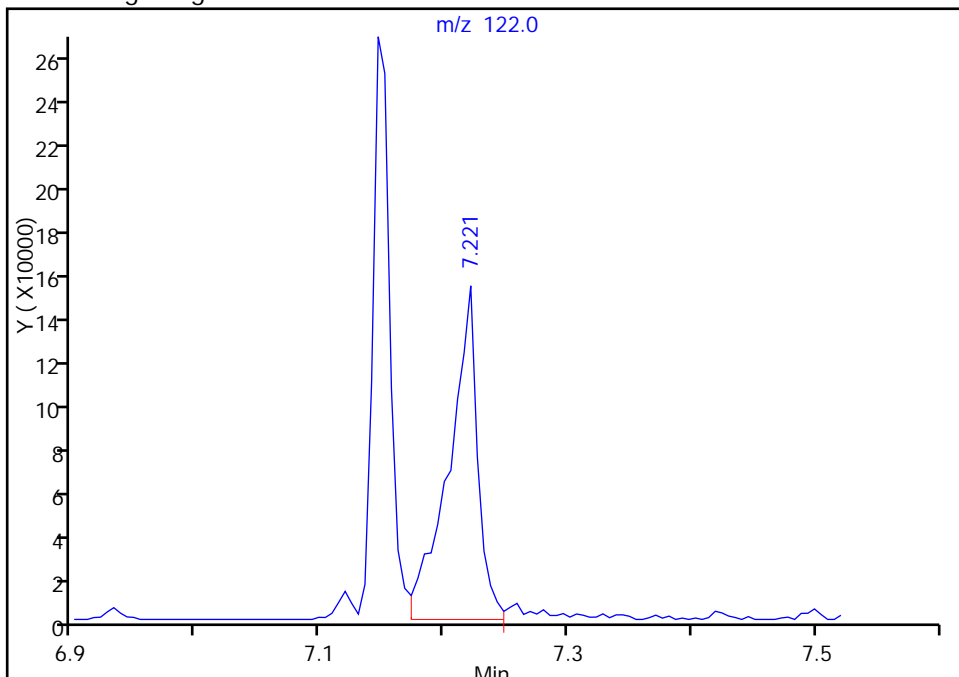
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140707-2080.b\V0707003.D
Injection Date: 07-Jul-2014 11:06:30 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-5SiIMS (0.32 mm) Detector: MS SCAN

52 Benzoic acid, CAS: 65-85-0

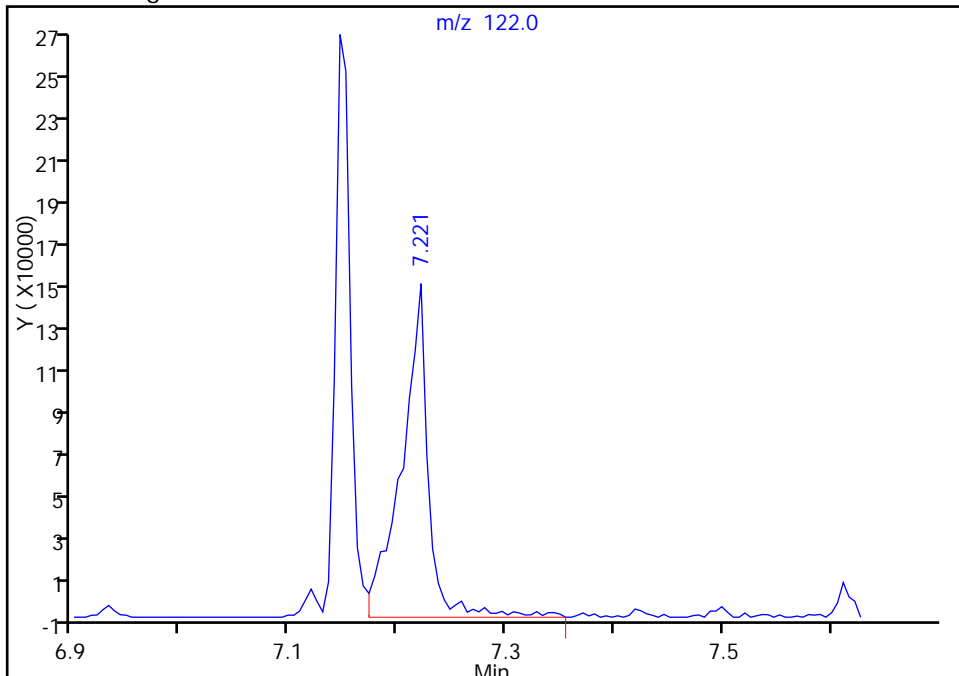
RT: 7.22
Response: 242611
Amount: 15.701910

Processing Integration Results



RT: 7.22
Response: 258038
Amount: 16.700354

Manual Integration Results



Reviewer: piccolinov, 07-Jul-2014 13:09:40
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 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.: 180-34298-1
 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.: 180-34298-1
 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)anthracene	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

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-5SiIMS (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

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

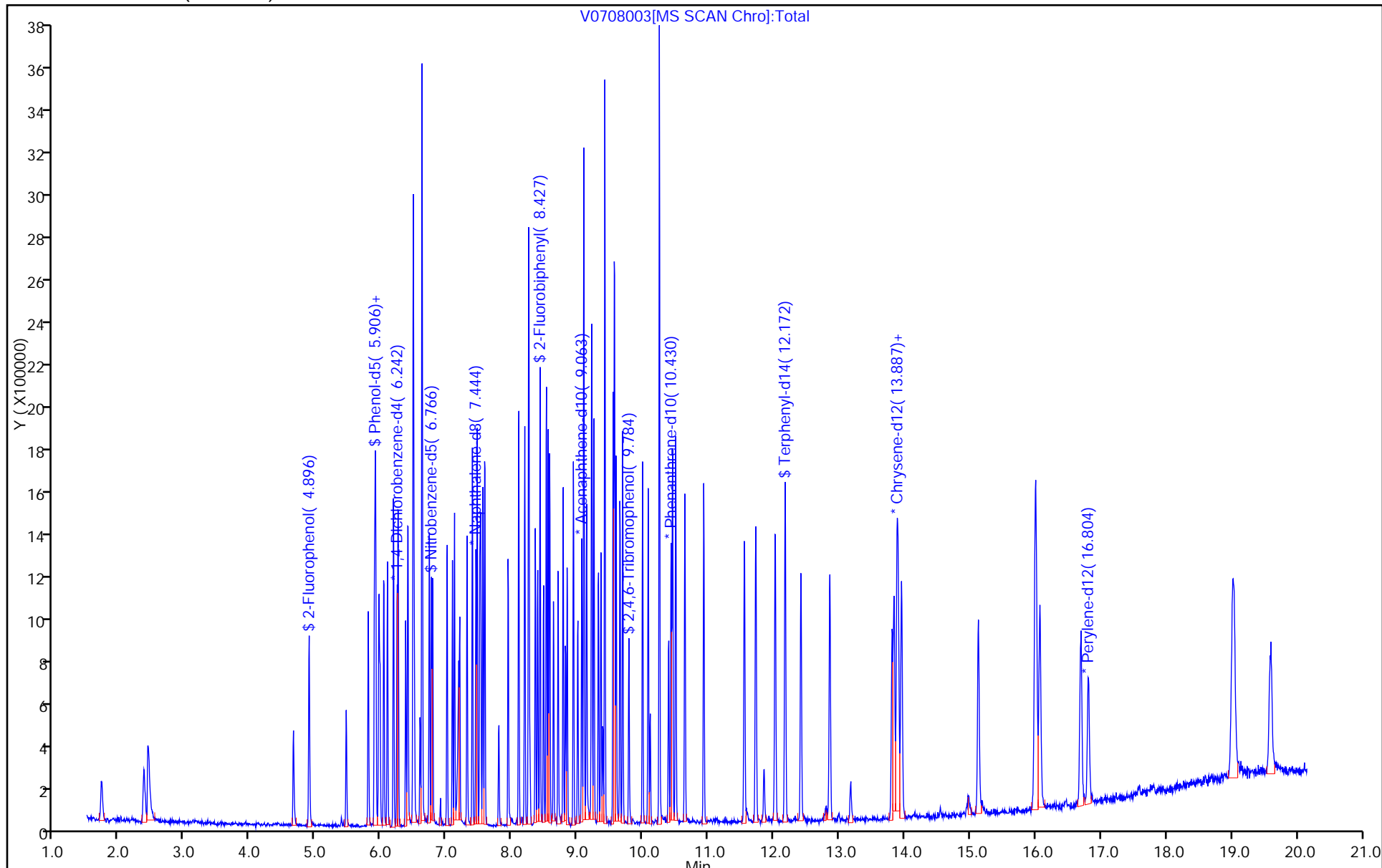
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



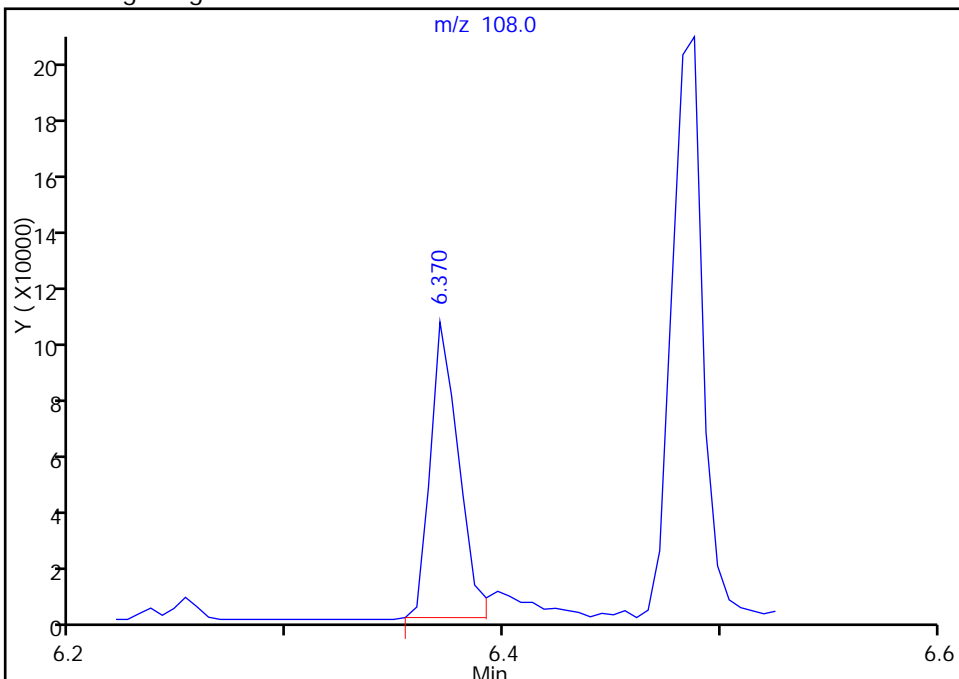
TestAmerica Pittsburgh

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-5SiIMS (0.32 mm) Detector: MS SCAN

34 Benzyl alcohol, CAS: 100-51-6

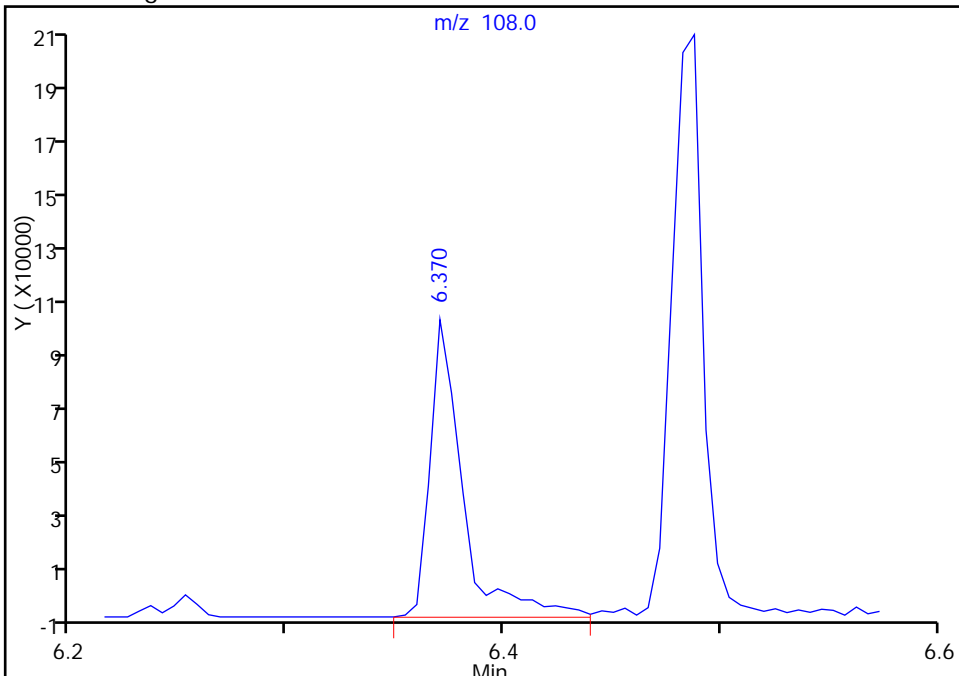
RT: 6.37
Response: 91933
Amount: 6.665808

Processing Integration Results



RT: 6.37
Response: 107967
Amount: 7.828389

Manual Integration Results



Reviewer: piccolinov, 09-Jul-2014 02:48:32
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

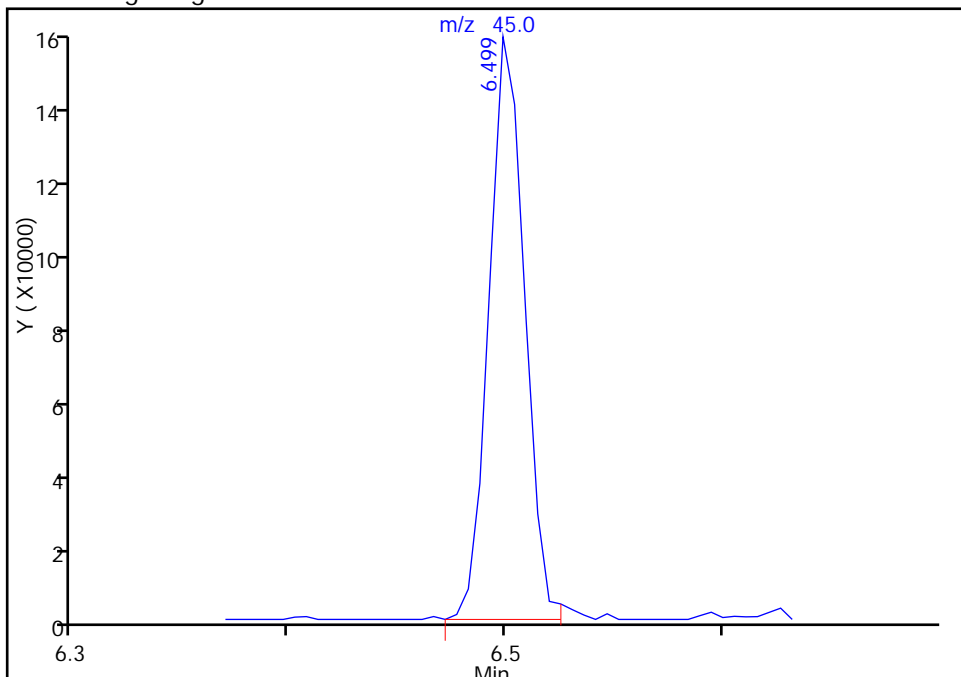
TestAmerica Pittsburgh

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-5SiIMS (0.32 mm) Detector: MS SCAN

38 2,2'-oxybis[1-chloropropane], CAS: 108-60-1

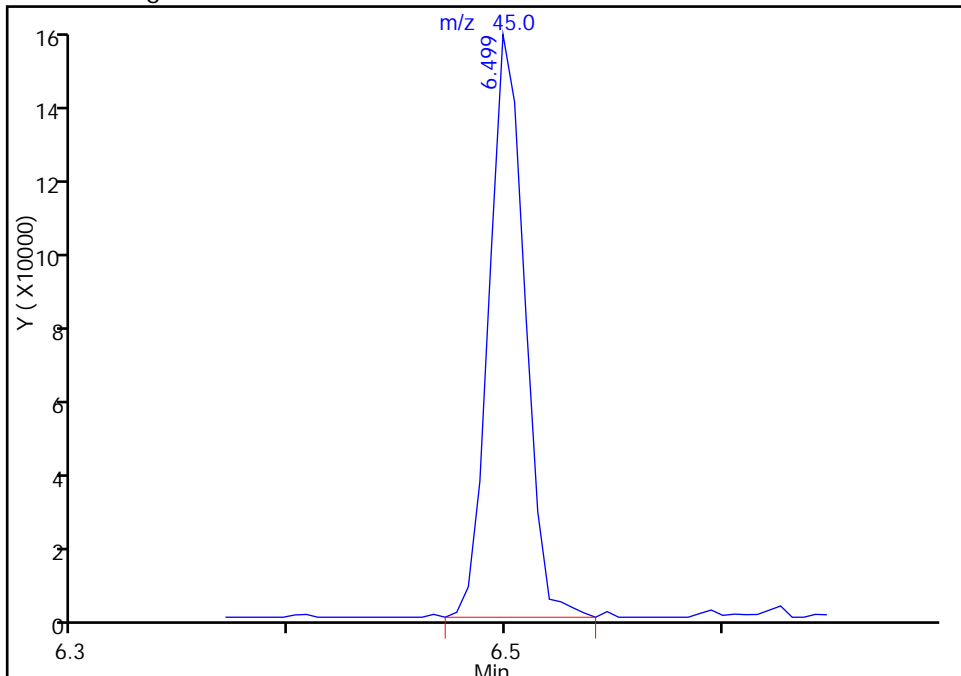
RT: 6.50
Response: 178124
Amount: 7.830140

Processing Integration Results



RT: 6.50
Response: 179352
Amount: 7.884121

Manual Integration Results



Reviewer: piccolinov, 09-Jul-2014 02:48:32
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

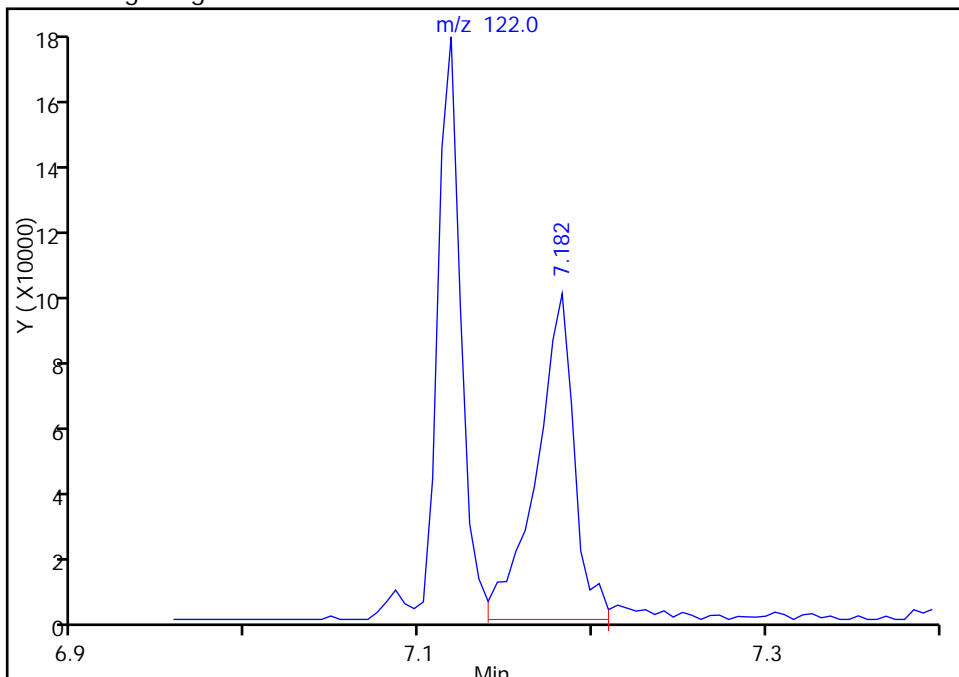
TestAmerica Pittsburgh

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-5SiIMS (0.32 mm) Detector: MS SCAN

52 Benzoic acid, CAS: 65-85-0

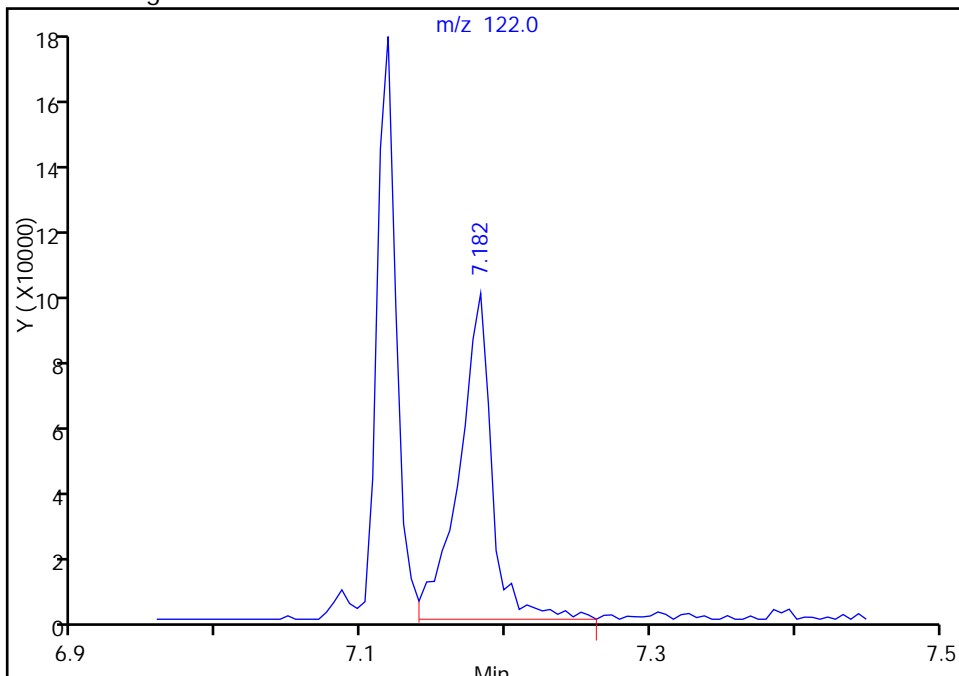
RT: 7.18
Response: 151353
Amount: 14.421728

Processing Integration Results



RT: 7.18
Response: 158288
Amount: 15.082532

Manual Integration Results



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

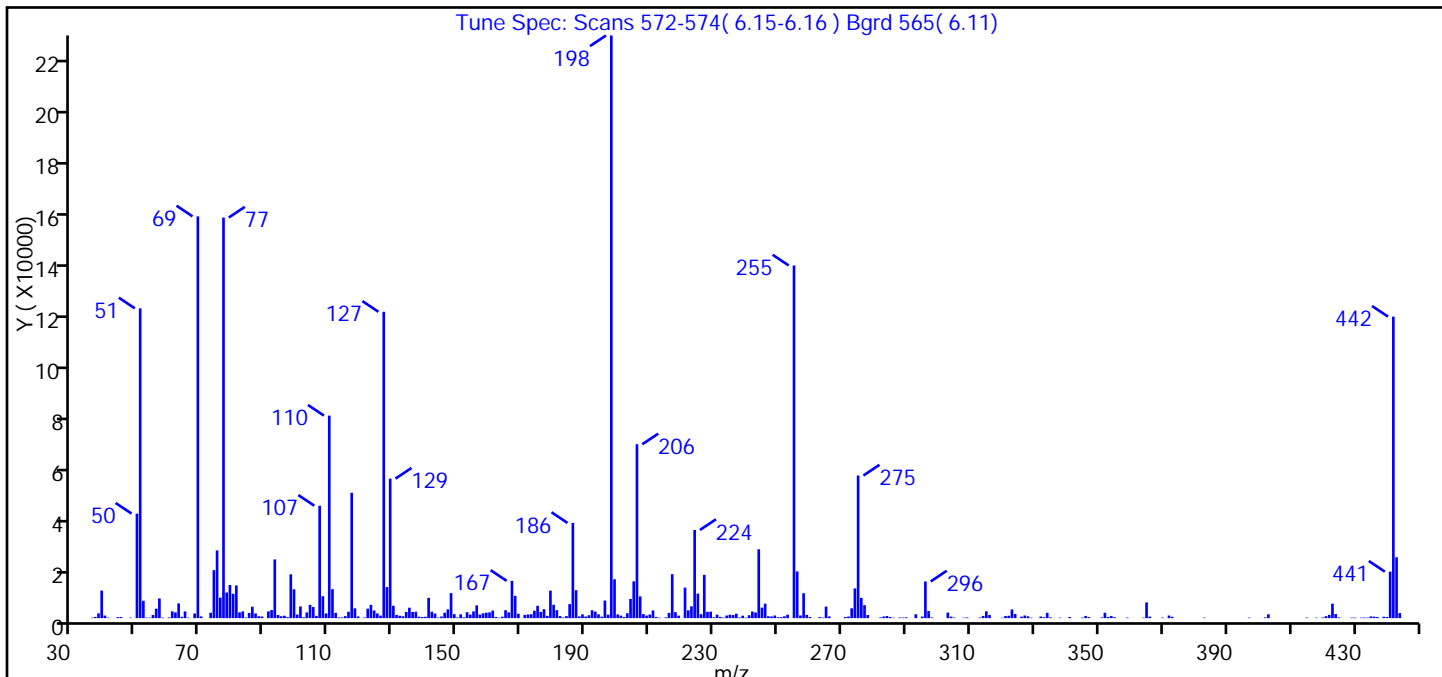
NR - Missing Quant Standard

ND - Not Detected or Marked ND

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)

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

Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\0605002.D\BNA_CH731.rsl\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

Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\0605002.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

TestAmerica Pittsburgh

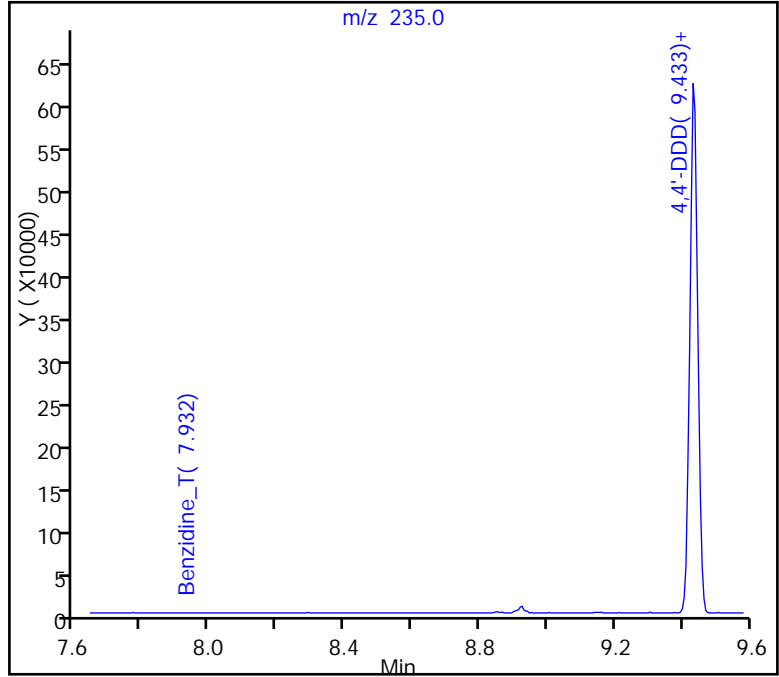
Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605002.D
Injection Date: 05-Jun-2014 08:07:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL
194 4,4'-DDT, 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



TestAmerica Pittsburgh

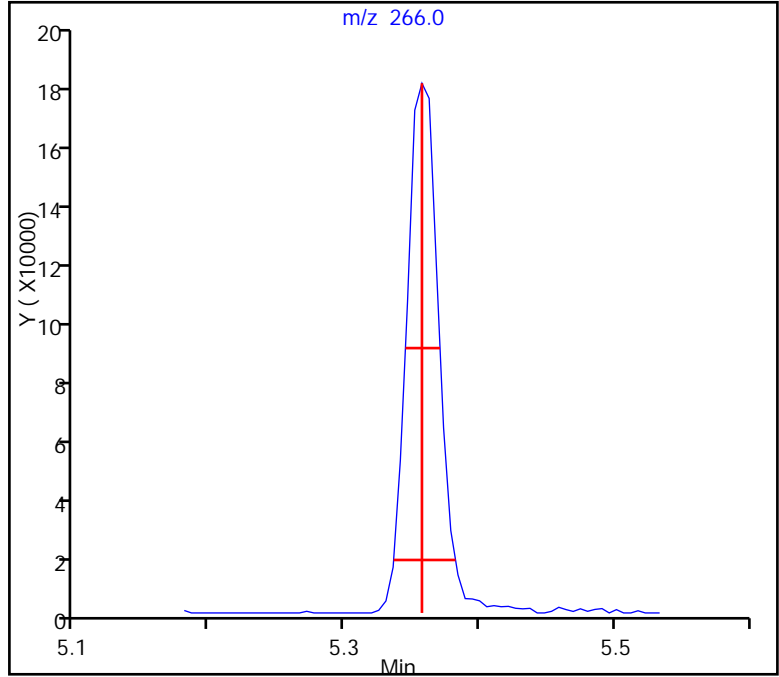
Data File: \\PITCHROM\ChromData\CH731\20140604-1566.b\V0605002.D
Injection Date: 05-Jun-2014 08:07:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL

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



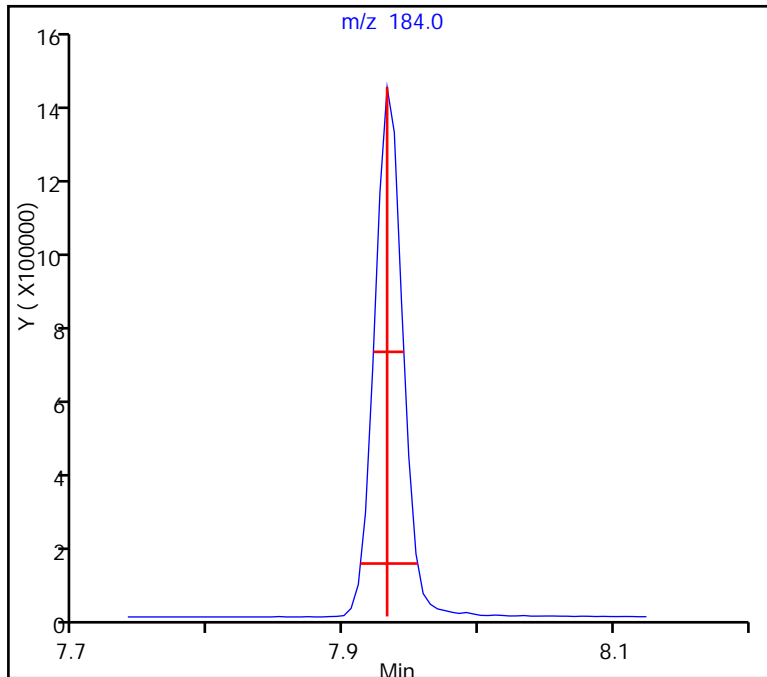
TestAmerica Pittsburgh

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\20140707-2080.b\V0707002.D
 Lims ID: DFTPP
 Client ID:
 Sample Type: DFTPP
 Inject. Date: 07-Jul-2014 10:48:30 ALS Bottle#: 1 Worklist Smp#: 2
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0002080-002
 Misc. Info.: ,dftpp
 Operator ID: 003200 Instrument ID: CH731
 Method: \\PITCHROM\ChromData\CH731\20140707-2080.b\BNA_CH731.m
 Limit Group: BNA 8270D ICAL
 Last Update: 08-Jul-2014 06:33:30 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-5SiIMS (0.32 mm) Det: MS SCAN
 Process Host: XAWRK002

First Level Reviewer: piccolinov Date: 07-Jul-2014 12:41:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
189 Pentachlorophenol_T	266	5.343	5.343	0.000	81	225360	NR	NR	
190 DFTPP									
191 Benzidine_T	184	7.939	7.939	0.000	97	1270250	NR	NR	
192 4,4'-DDE	246	8.292	8.292	0.000	1	622		NR	
193 4,4'-DDD	235	8.927	8.927	0.000	1	6672		NR	
194 4,4'-DDT	235	9.451	9.451	0.000	94	727267	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

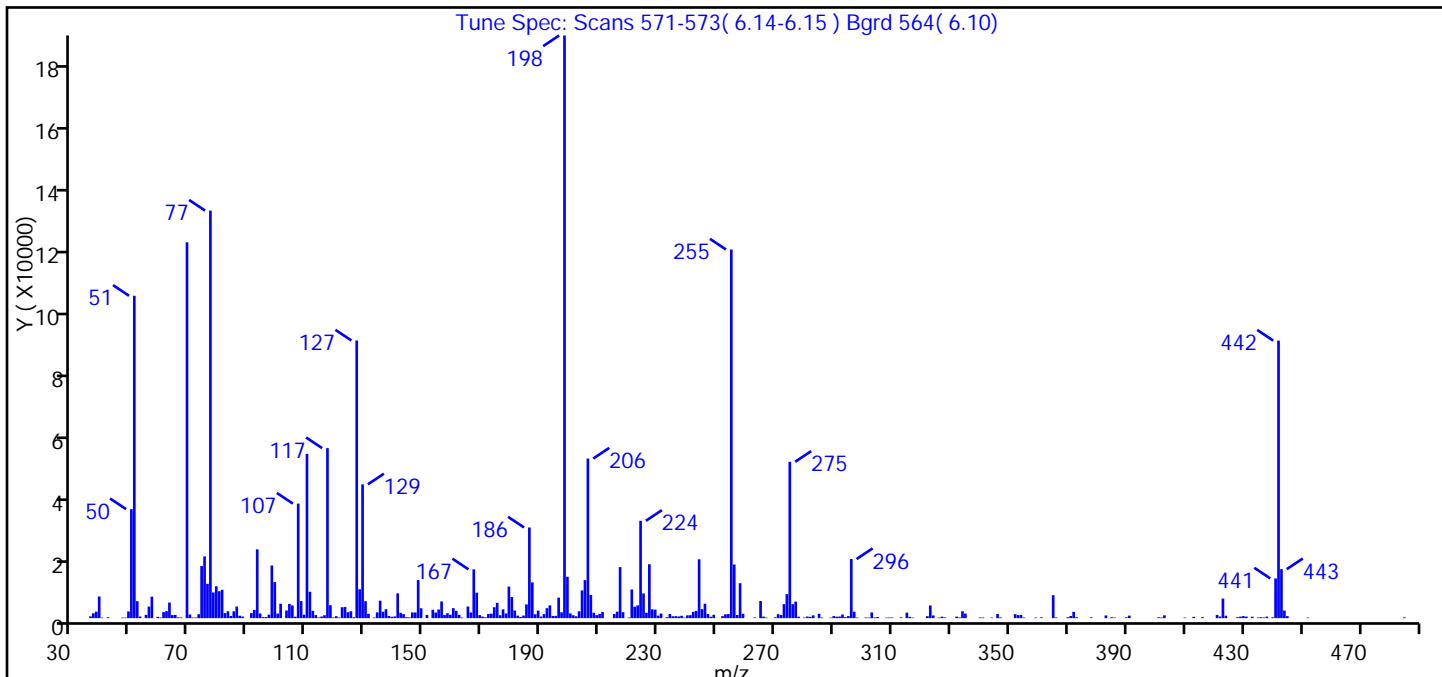
Reagents:

SVDFTPP50i_00018 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140707-2080.b\V0707002.D
 Injection Date: 07-Jul-2014 10:48:30 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	55.30
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Present	64.50
70	Less than 2.00% of mass 69	0.60 (1.00)
127	40.00 - 60.00% of mass 198	47.70
197	Less than 1.00% of mass 198	1.00
199	5.00 - 9.00% of mass 198	7.10
275	10.00 - 30.00% of mass 198	26.80
365	Greater than 1.00% of mass 198	3.90
441	Present, but less than mass 443	6.80 (81.10)
442	Greater than 40.00% of mass 198	47.60
443	17.00 - 23.00% of mass 442	8.40 (17.70)

Data File: \\PITCHROM\ChromData\CH731\20140707-2080.b\V0707002.D\BNA_CH731.rslt\spectra.d
Injection Date: 07-Jul-2014 10:48:30
Spectrum: Tune Spec: Scans 571-573(6.14-6.15) Bgrd 564(6.10)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	564	123.00	3516	203.00	2157	296.00	18616
37.00	1539	124.00	1866	204.00	8723	297.00	2029
38.00	2065	125.00	2167	205.00	11968	298.00	184
39.00	6812	126.00	288	206.00	50256	301.00	211
40.00	174	127.00	87440	207.00	7294	302.00	179
42.00	276	128.00	9097	208.00	1691	303.00	1797
47.00	179	129.00	42136	209.00	951	304.00	223
48.00	179	130.00	5345	210.00	1339	305.00	366
49.00	2114	131.00	1359	211.00	1914	308.00	175
50.00	34328	133.00	203	215.00	1299	309.00	192
51.00	101520	134.00	1817	216.00	2037	310.00	203
52.00	5349	135.00	5498	217.00	16080	313.00	257
53.00	511	136.00	2018	218.00	1875	315.00	1739
55.00	1038	137.00	2813	220.00	202	316.00	413
56.00	3649	138.00	671	221.00	9020	317.00	169
57.00	6765	139.00	430	222.00	3596	322.00	613
59.00	409	140.00	540	223.00	4034	323.00	3988
60.00	198	141.00	7814	224.00	30656	324.00	858
61.00	1904	142.00	1678	225.00	7782	326.00	191
62.00	2204	143.00	1267	226.00	1693	327.00	456
63.00	4899	144.00	301	227.00	16976	328.00	234
64.00	957	145.00	245	228.00	2763	332.00	477
65.00	1007	146.00	1805	229.00	2683	333.00	210
66.00	250	147.00	1791	230.00	800	334.00	2168
67.00	217	148.00	11994	231.00	1454	335.00	1433
69.00	118360	149.00	3119	233.00	316	340.00	211
70.00	1146	151.00	995	234.00	1307	341.00	200
71.00	193	153.00	2649	235.00	592	344.00	178
72.00	197	154.00	1760	236.00	618	346.00	1296
73.00	1236	155.00	2709	237.00	536	347.00	222
74.00	16408	156.00	5253	238.00	742	352.00	1239
75.00	19456	157.00	981	239.00	177	353.00	954
76.00	10797	158.00	1550	240.00	884	354.00	1012

Data File: \\PITCHROM\ChromData\CH731\20140707-2080.b\V0707002.D\BNA_CH731.rsl\spectra.d

Injection Date: 07-Jul-2014 10:48:30

Spectrum: Tune Spec: Scans 571-573(6.14-6.15) Bgrd 564(6.10)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	128344	159.00	1056	241.00	942	355.00	194
78.00	8078	160.00	3153	242.00	1969	359.00	183
79.00	10035	161.00	2293	243.00	2289	361.00	262
80.00	8477	162.00	1062	244.00	18536	365.00	7222
81.00	8919	163.00	177	245.00	2838	366.00	227
82.00	1588	165.00	3663	246.00	4544	370.00	295
83.00	2176	166.00	1785	247.00	1325	371.00	685
84.00	693	167.00	15368	248.00	439	372.00	1992
85.00	2153	168.00	8012	249.00	1051	373.00	308
86.00	3657	169.00	967	252.00	629	378.00	255
87.00	766	170.00	491	253.00	1200	383.00	853
88.00	506	171.00	260	254.00	1283	385.00	286
91.00	1594	172.00	1322	255.00	116088	386.00	192
92.00	2589	173.00	1419	256.00	16888	390.00	272
93.00	21656	174.00	3443	257.00	994	391.00	800
94.00	1465	175.00	4829	258.00	11021	401.00	267
95.00	331	176.00	909	259.00	1369	402.00	208
96.00	372	177.00	2772	263.00	211	403.00	896
97.00	1096	178.00	1470	265.00	5405	410.00	184
98.00	16584	179.00	9938	266.00	494	413.00	411
99.00	11349	180.00	6636	267.00	182	416.00	311
100.00	1450	181.00	2381	270.00	245	421.00	1012
101.00	4526	182.00	793	271.00	1245	422.00	511
103.00	2402	183.00	372	272.00	982	423.00	6161
104.00	4480	184.00	820	273.00	4410	424.00	772
105.00	3995	185.00	4338	274.00	7571	428.00	305
106.00	460	186.00	28552	275.00	49240	429.00	479
107.00	36072	187.00	11260	276.00	4403	430.00	645
108.00	5365	188.00	1204	277.00	5201	431.00	480
109.00	1087	189.00	2359	278.00	454	433.00	448
110.00	51728	190.00	506	280.00	174	435.00	208
111.00	8314	191.00	1262	281.00	506	436.00	291
112.00	2301	192.00	3141	282.00	403	437.00	200
113.00	962	193.00	4034	283.00	882	438.00	479

Report Date: 08-Jul-2014 06:33:30

Chrom Revision: 2.2 24-Jun-2014 07:21:42

Data File: \\PITCHROM\ChromData\CH731\20140707-2080.b\V0707002.D\BNA_CH731.rslt\spectra.d

Injection Date: 07-Jul-2014 10:48:30

Spectrum: Tune Spec: Scans 571-573(6.14-6.15) Bgrd 564(6.10)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y
114.00	215	194.00	684	285.00	1359	440.00	262
115.00	517	195.00	720	286.00	190	441.00	12507
116.00	914	196.00	6446	289.00	173	442.00	87400
117.00	53536	197.00	1842	290.00	642	443.00	15429
118.00	4071	198.00	183488	291.00	467	444.00	2386
119.00	214	199.00	13035	292.00	514	445.00	631
120.00	610	200.00	1499	293.00	1143	452.00	177
121.00	188	201.00	903	294.00	319	485.00	242
122.00	3430	202.00	587	295.00	649		

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140707-2080.b\V0707002.D
Injection Date: 07-Jul-2014 10:48:30 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

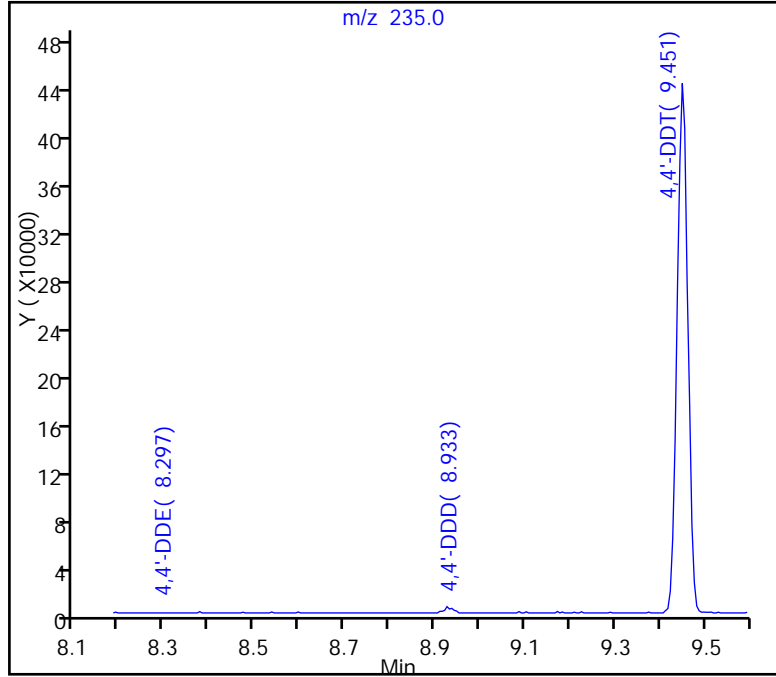
194 4,4'-DDT, Detector: MS SCAN

SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

194 4,4'-DDT, Area = 727267
192 4,4'-DDE, Area = 622
193 4,4'-DDD, Area = 6672

%Breakdown: 0.99%, Max Limit: 20.00%
Passed



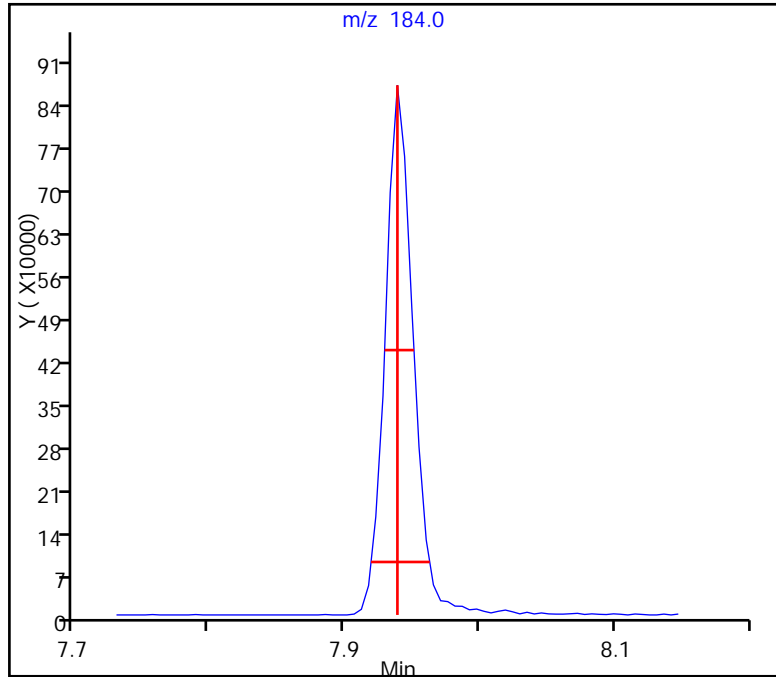
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140707-2080.b\V0707002.D
Injection Date: 07-Jul-2014 10:48:30 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 = 0.020 (min.)

Tailing Factor = 1.2, Max. Tailing < 2.00
Passed



TestAmerica Pittsburgh

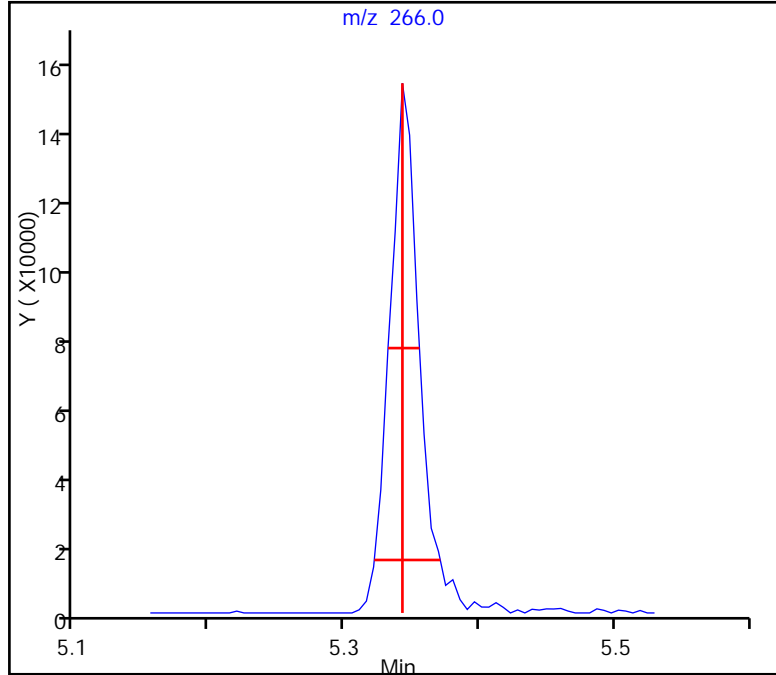
Data File: \\PITCHROM\ChromData\CH731\20140707-2080.b\V0707002.D
Injection Date: 07-Jul-2014 10:48:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL

189 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.028 (min.)
Front Width = 0.021 (min.)

Tailing Factor = 1.3, 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-5SiIMS (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

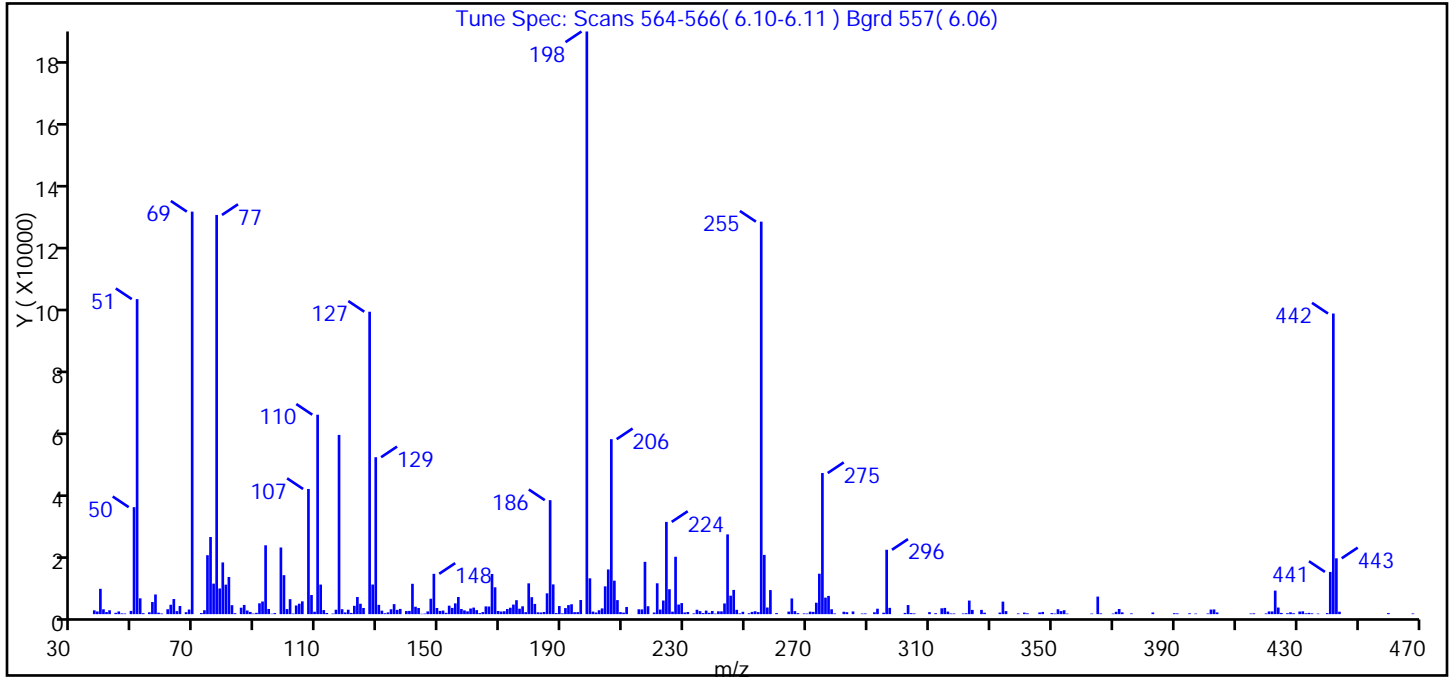
Reagents:

SVDFTPP50i_00018 Amount Added: 1.00 Units: mL

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

Data File:

\\PITCHROM\ChromData\CH731\20140708-2096.b\V0708002.D\BNA_CH731.rsl\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

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

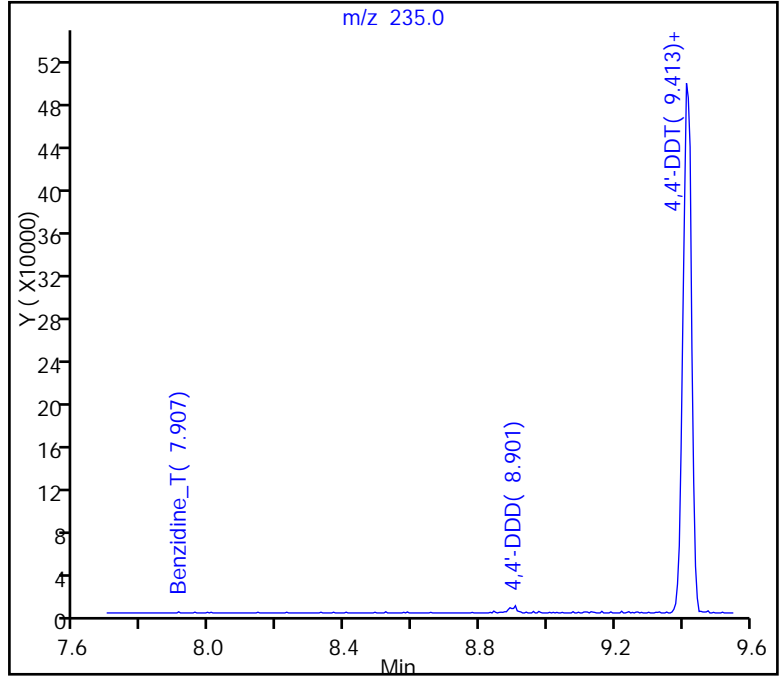
194 4,4'-DDT, Detector: MS SCAN

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



TestAmerica Pittsburgh

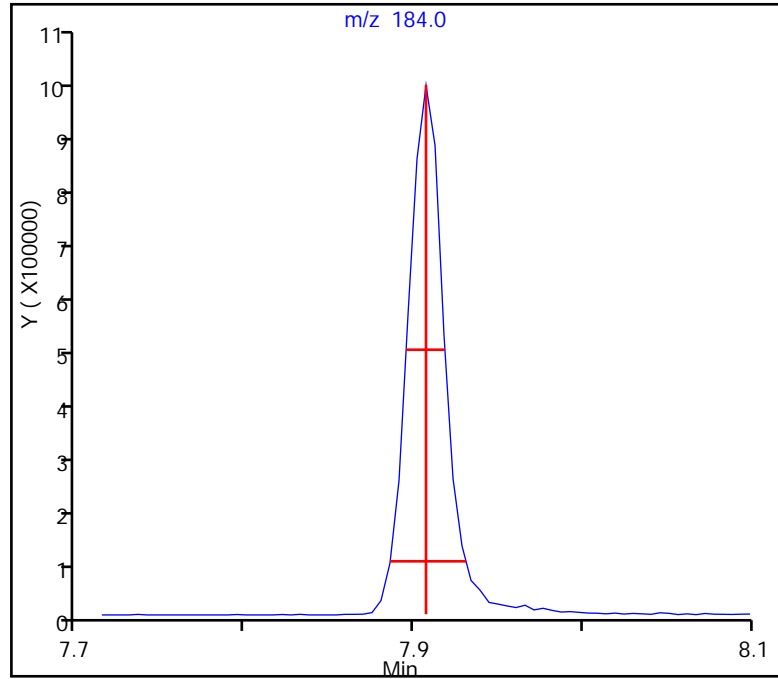
Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708002.D
Injection Date: 08-Jul-2014 13:42:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL

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



TestAmerica Pittsburgh

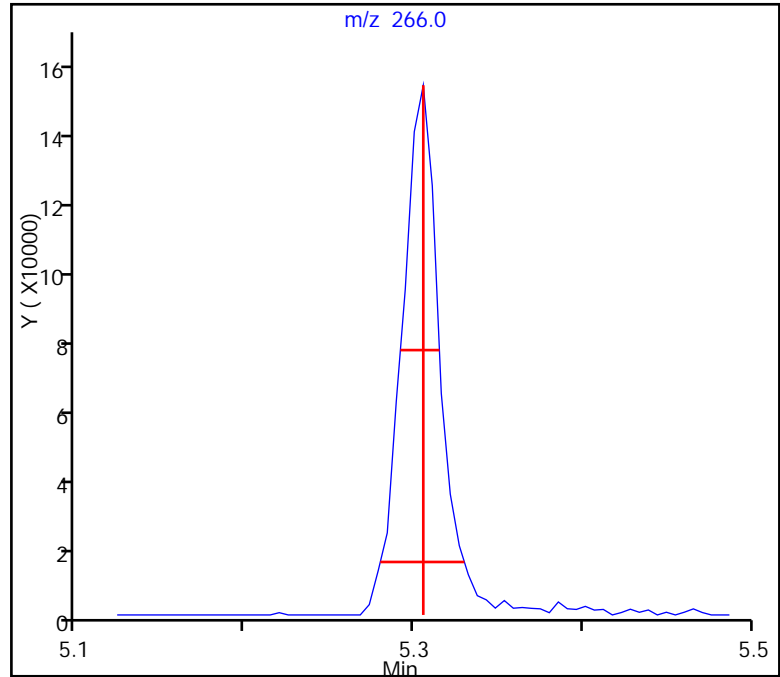
Data File: \\PITCHROM\ChromData\CH731\20140708-2096.b\V0708002.D
Injection Date: 08-Jul-2014 13:42:30 Instrument ID: CH731
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH731 Limit Group: BNA 8270D ICAL

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.: 180-34298-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 180-110164/1-A
 Matrix: Water Lab File ID: V0707006.D
 Analysis Method: 8270D LL Date Collected: _____
 Extract. Method: 3520C Date Extracted: 07/01/2014 10:46
 Sample wt/vol: 250 (mL) Date Analyzed: 07/07/2014 12:30
 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.: 110612 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.: 180-34298-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 180-110164/1-A
 Matrix: Water Lab File ID: V0707006.D
 Analysis Method: 8270D LL Date Collected: _____
 Extract. Method: 3520C Date Extracted: 07/01/2014 10:46
 Sample wt/vol: 250 (mL) Date Analyzed: 07/07/2014 12:30
 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.: 110612 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)	60		30-150
321-60-8	2-Fluorobiphenyl	61		30-150
367-12-4	2-Fluorophenol (Surr)	62		30-150
4165-60-0	Nitrobenzene-d5 (Surr)	67		30-150
4165-62-2	Phenol-d5 (Surr)	54		30-150
1718-51-0	Terphenyl-d14 (Surr)	85		10-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20140707-2080.b\V0707006.D
 Lims ID: MB 180-110164/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 07-Jul-2014 12:30:30 ALS Bottle#: 5 Worklist Smp#: 6
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0002080-006
 Misc. Info.: MB 180-110164/1-A
 Operator ID: 003200 Instrument ID: CH731
 Method: \\PITCHROM\ChromData\CH731\20140707-2080.b\BNA_CH731.m
 Limit Group: BNA 8270D ICAL
 Last Update: 08-Jul-2014 06:33:31 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-5SiIMS (0.32 mm) Det: MS SCAN
 Process Host: XAWRK002

First Level Reviewer: piccolinov

Date: 08-Jul-2014 06:11:34

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	6.275	6.271	0.004	81	181210	8.00	8.00	
* 2 Naphthalene-d8	136	7.477	7.478	-0.001	97	604736	8.00	8.00	
* 3 Acenaphthene-d10	164	9.090	9.091	-0.001	90	380977	8.00	8.00	
* 4 Phenanthrene-d10	188	10.447	10.453	-0.006	95	669042	8.00	8.00	
* 5 Chrysene-d12	240	13.919	13.931	-0.012	82	665784	8.00	8.00	
* 6 Perylene-d12	264	16.831	16.832	-0.001	97	502279	8.00	8.00	
\$ 7 2-Fluorophenol	112	4.934	4.930	0.004	90	821456	40.0	24.6	
\$ 8 Phenol-d5	99	5.922	5.923	-0.001	82	865456	40.0	21.5	
\$ 9 Nitrobenzene-d5	82	6.798	6.794	0.004	92	1056536	40.0	26.8	
\$ 10 2-Fluorobiphenyl	172	8.454	8.455	-0.001	98	1704257	40.0	24.4	
\$ 11 2,4,6-Tribromophenol	330	9.806	9.812	-0.006	77	229548	40.0	23.9	
\$ 12 Terphenyl-d14	244	12.194	12.195	-0.001	98	2773317	40.0	34.1	
13 1,4-Dioxane	88		1.810					ND	
14 N-Nitrosodimethylamine	74		2.467					ND	
15 Pyridine	79		2.531					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		4.695					ND	
22 Phenylmercaptan	110		5.000					ND	
23 N-Nitrosodiethylamine	102		5.115					ND	
24 Ethyl methanesulfonate	79		5.517					ND	
25 Benzaldehyde	77		5.832					ND	
26 Phenol	94		5.934					ND	
27 Aniline	93		5.945					ND	
29 Bis(2-chloroethyl)ether	93		6.009					ND	
28 Pentachloroethane	167		6.025					ND	
30 2-Chlorophenol	128		6.068					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
31 n-Decane	43		6.126					ND	
32 1,3-Dichlorobenzene	146		6.217					ND	
33 1,4-Dichlorobenzene	146		6.287					ND	
175 1,2,3-Trimethylbenzene	105		6.311					ND	
34 Benzyl alcohol	108		6.404					ND	
35 1,2-Dichlorobenzene	146		6.436					ND	
36 2-Methylphenol	108		6.516					ND	
37 Indene	116		6.522					ND	
38 2,2'-oxybis[1-chloropropan	45		6.532					ND	
39 N-Nitrosopyrrolidine	100		6.623					ND	
43 N-Nitrosomorpholine	116		6.632					ND	
41 N-Nitrosodi-n-propylamine	70		6.650					ND	
40 Acetophenone	105		6.650					ND	
42 4-Methylphenol	108		6.655					ND	
44 2-Toluidine	106		6.664					ND	
45 Hexachloroethane	117		6.767					ND	
46 Nitrobenzene	77		6.815					ND	
47 N-Nitrosopiperidine	114		6.926					ND	
48 Isophorone	82		7.034					ND	
49 2-Nitrophenol	139		7.115					ND	
50 2,4-Dimethylphenol	107		7.147					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		7.221					ND	
53 Bis(2-chloroethoxy)methane	93		7.232					ND	
54 2,4-Dichlorophenol	162		7.344					ND	
55 alpha,alpha-Dimethyl phene	58		7.353					ND	
57 Azobenzene	77		7.405					ND	
56 1,2,4-Trichlorobenzene	180		7.424					ND	
58 Naphthalene	128		7.499					ND	
59 4-Chloroaniline	127		7.537					ND	
60 2,6-Dichlorophenol	162		7.553					ND	
62 Hexachlorobutadiene	225		7.611					ND	
61 Hexachloropropene	213		7.627					ND	
63 Quinoline	129		7.786					ND	
65 N-Nitrosodi-n-butylamine	84		7.818					ND	
64 Caprolactam	113		7.830					ND	
66 p-Phenylene diamine	108		7.834					ND	
67 4-Chloro-3-methylphenol	107		7.969					ND	
68 Safrole, Total	162		8.026					ND	
69 2-Methylnaphthalene	142		8.130					ND	
167 Phthalic anhydride	104		8.144					ND	
70 Diphenamid	168		8.200					ND	
71 1-Methylnaphthalene	142		8.226					ND	
72 Hexachlorocyclopentadiene	237		8.285					ND	
73 1,2,4,5-Tetrachlorobenzene	216		8.290					ND	
74 2,4,6-Trichlorophenol	196		8.386					ND	
75 2,4,5-Trichlorophenol	196		8.418					ND	
76 1,1'-Biphenyl	154		8.552					ND	
77 2-Chloronaphthalene	162		8.578					ND	
78 1-Chloronaphthalene	162		8.648					ND	
79 2-Nitroaniline	65		8.658					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		8.803					ND	
83 1,3-Dinitrobenzene	168		8.840					ND	
84 2,6-Dinitrotoluene	165		8.867					ND	
85 Acenaphthylene	152		8.963					ND	
86 3-Nitroaniline	138		9.027					ND	
87 2,4-Dinitrophenol	184		9.118					ND	
88 Acenaphthene	153		9.123					ND	
89 4-Nitrophenol	109		9.161					ND	
91 2,4-Dinitrotoluene	165		9.235					ND	
93 Dibenzofuran	168		9.273					ND	
92 Pentachlorobenzene	250		9.299					ND	
94 1-Naphthylamine	143		9.340					ND	
95 2,3,5,6-Tetrachlorophenol	232		9.342					ND	
96 2,3,4,6-Tetrachlorophenol	232		9.385					ND	
97 2-Naphthylamine	143		9.412					ND	
98 Diethyl phthalate	149		9.438					ND	
99 Hexadecane	57		9.438					ND	
170 4-tert-Octylphenol	135		9.522					ND	
100 4-Chlorophenyl phenyl ethe	204		9.567					ND	
101 4-Nitroaniline	138		9.583					ND	
102 N-Nitro-o-toluidine	152		9.586					ND	
103 Fluorene	166		9.588					ND	
104 4,6-Dinitro-2-methylphenol	198		9.615					ND	
105 N-Nitrosodiphenylamine	169		9.668					ND	
106 Diphenylamine	169		9.677					ND	
90 1,2-Diphenylhydrazine	77		9.711					ND	
107 1,3,5-Trinitrobenzene	213		9.896					ND	
108 Phenacetin	108		9.939					ND	
109 Phorate	121		9.944					ND	
212 2,3,7,8-TCDD TIC	322		10.000					ND	
110 4-Bromophenyl phenyl ether	248		10.015					ND	
111 Dimethoate	87		10.099					ND	
112 Hexachlorobenzene	284		10.101					ND	
113 Atrazine	200		10.128					ND	
114 4-Aminobiphenyl	169		10.265					ND	
115 n-Octadecane	57		10.266					ND	
116 Pentachlorophenol	266		10.272					ND	
117 Pronamide	173		10.297					ND	
118 Pentachloronitrobenzene	237		10.302					ND	
119 Disulfoton	88		10.419					ND	
120 Dinoseb	211		10.475					ND	
121 Phenanthrene	178		10.475					ND	
122 Anthracene	178		10.523					ND	
123 Hexachlorophene TIC	198		10.600					ND	
124 Carbazole	167		10.662					ND	
125 Methyl parathion	109		10.793					ND	
126 Di-n-butyl phthalate	149		10.945					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		11.746					ND	
132 Benzidine	184		11.864					ND	
133 Pyrene	202		12.045					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		12.873					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		13.824					ND	
145 Bis(2-ethylhexyl) phthalat	149		13.862					ND	
143 4,4'-Methylene bis(2-chlor	231		13.881					ND	
146 Benzo[a]anthracene	228		13.910					ND	
147 Chrysene	228		13.979					ND	
148 Sulfotepp	97		14.530					ND	
149 6-Methylchrysene	242		14.907					ND	
150 Di-n-octyl phthalate	149		15.149					ND	
151 7,12-Dimethylbenz(a)anthra	256		16.015					ND	
152 Benzo[b]fluoranthene	252		16.036					ND	
153 Benzo[k]fluoranthene	252		16.095					ND	
154 Benzo[a]pyrene	252		16.720					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		19.033					ND	
158 Dibenz(a,h)anthracene	278		19.060					ND	
159 Benzo[g,h,i]perylene	276		19.626					ND	
188 2-Bromonaphthalene	127		0.000					ND	
160 n,n'-Dimethylaniline	120		0.000					ND	
163 Diallate Peak 2	86		0.000					ND	
185 4-Nitrobiphenyl	199		0.000					ND	
181 4-Chlorobenzoic Acid	139		0.000					ND	
177 1,2,3,4-Tetrahydronaphthal	104		0.000					ND	
165 Benzotrichloride	159		0.000					ND	
169 Octachlorostyrene	308		0.000					ND	
182 4-Chlorophenol	128		0.000					ND	
217 1-Phenyl-1-(4-methylphenyl	1		0.000					ND	
216 1-Phenyl-1-(2,4-dimethylph	1		0.000					ND	
218 Benzotrichloride TIC	1		0.000					ND	
183 2,3-Dichlorophenol	162		0.000					ND	
174 2-Chlorobenzoic Acid	139		0.000					ND	
186 o-Phenylphenol	1		0.000					ND	
179 2,5-Dichlorophenol	162		0.000					ND	
184 Diallate Peak 1	86		0.000					ND	
178 Trifluralin	306		0.000					ND	
180 Isosafrole	162		0.000					ND	
162 3-Chlorobenzoic Acid	139		0.000					ND	
173 Octachlorocyclopentene	307		0.000					ND	
187 1,2-Dibromo-3-Chloropropan	157		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
213 3-Methylphenol	1		0.000					ND	
164 Aramite Peak 2	185		0.000					ND	
168 Aramite Peak 1	185		0.000					ND	
171 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
172 Carbaryl	144		0.000					ND	
215 1-Phenyl-1-(2,4-dimethylph	1		0.000					ND	
214 1-Phenyl-1-(4-methylphenyl	1		0.000					ND	
161 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
189 Pentachlorophenol_T	266		5.343					ND	
191 Benzidine_T	184		7.939					ND	
192 4,4'-DDE	246		8.292					ND	
193 4,4'-DDD	235		8.927					ND	
194 4,4'-DDT	235		9.451					ND	
S 195 Aramite, Total	185		1.000					0	
S 196 4-Methyl-1-cyclohexanemeth	97		0.000					0	
S 197 Methyl Phenols, Total	108		0.000					0	
S 198 Diallate	86		0.000					0	
S 199 Total Cresols	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

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140707-2080.b\V0707006.D

Injection Date: 07-Jul-2014 12:30:30

Instrument ID: CH731

Operator ID: 003200

Lims ID: MB 180-110164/1-A

Worklist Smp#: 6

Client ID:

Injection Vol: 2.0 ul

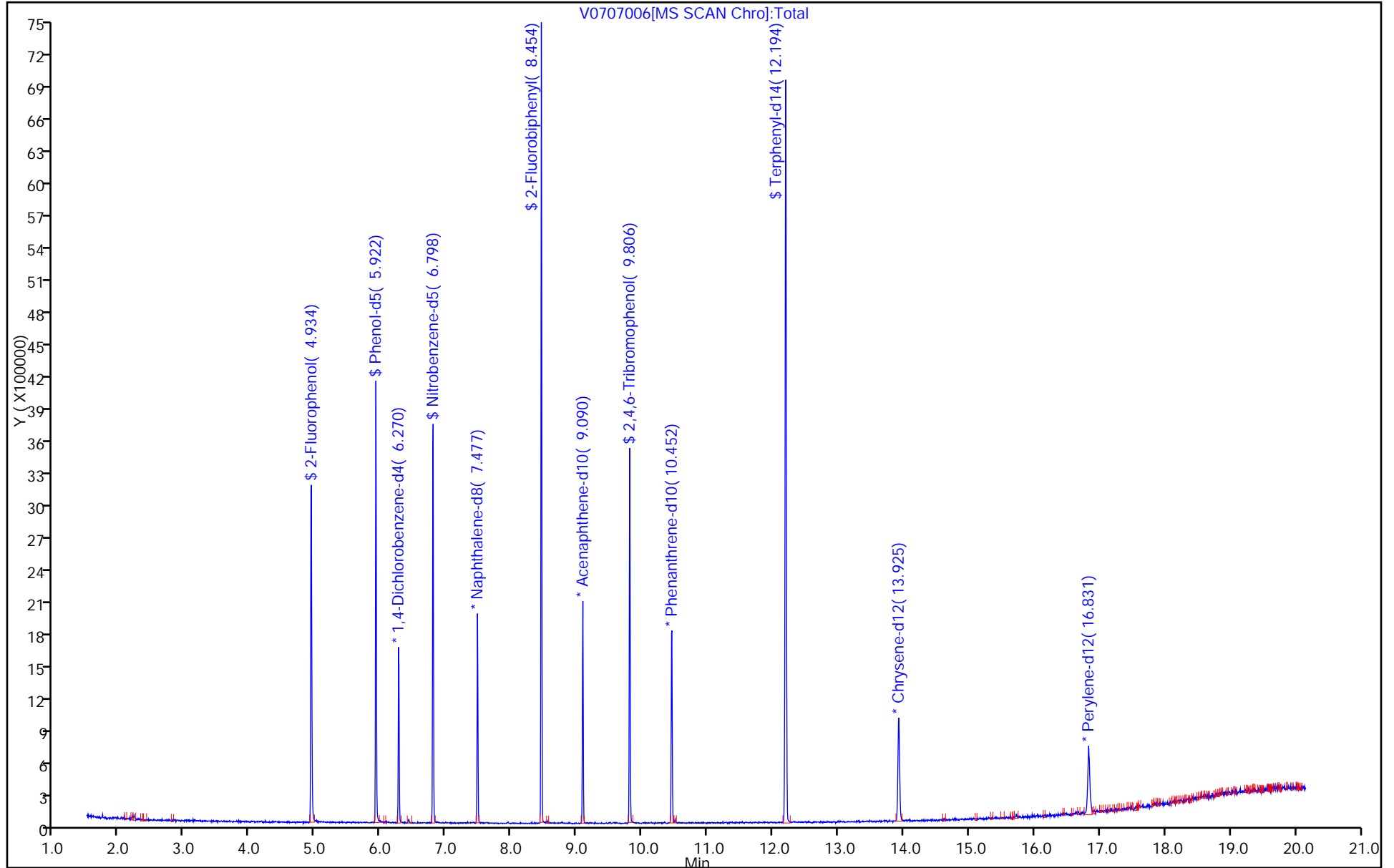
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 180-110164/2-A
 Matrix: Water Lab File ID: V0707010.D
 Analysis Method: 8270D LL Date Collected: _____
 Extract. Method: 3520C Date Extracted: 07/01/2014 10:46
 Sample wt/vol: 250 (mL) Date Analyzed: 07/07/2014 14:23
 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.: 110612 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	12.6		0.20	0.029
208-96-8	Acenaphthylene	12.2		0.20	0.022
120-12-7	Anthracene	12.7		0.20	0.019
92-87-5	Benzidine	7.76	J	20	4.7
56-55-3	Benzo[a]anthracene	12.7		0.20	0.037
205-99-2	Benzo[b]fluoranthene	12.4		0.20	0.049
207-08-9	Benzo[k]fluoranthene	12.6		0.20	0.030
65-85-0	Benzoic acid	9.49		5.0	1.6
191-24-2	Benzo[g,h,i]perylene	12.2		0.20	0.029
50-32-8	Benzo[a]pyrene	13.0		0.20	0.028
111-91-1	Bis(2-chloroethoxy)methane	11.3		1.0	0.13
111-44-4	Bis(2-chloroethyl)ether	9.83		1.0	0.032
117-81-7	Bis(2-ethylhexyl) phthalate	11.3		2.0	0.44
108-60-1	2,2'-oxybis[1-chloropropane]	8.42		1.0	0.024
101-55-3	4-Bromophenyl phenyl ether	14.3		1.0	0.12
7005-72-3	4-Chlorophenyl phenyl ether	13.6		1.0	0.080
91-58-7	2-Chloronaphthalene	11.4		0.20	0.031
85-68-7	Butyl benzyl phthalate	11.9		1.0	0.21
218-01-9	Chrysene	13.0		0.20	0.031
53-70-3	Dibenz(a,h)anthracene	12.2		0.20	0.027
84-74-2	Di-n-butyl phthalate	12.4		1.0	0.24
117-84-0	Di-n-octyl phthalate	11.7		1.0	0.20
84-66-2	Diethyl phthalate	13.7		1.0	0.30
131-11-3	Dimethyl phthalate	12.9		1.0	0.18
91-94-1	3,3'-Dichlorobenzidine	11.6		1.0	0.15
121-14-2	2,4-Dinitrotoluene	12.8		1.0	0.21
606-20-2	2,6-Dinitrotoluene	12.7		1.0	0.14
95-57-8	2-Chlorophenol	10.7		1.0	0.23
120-83-2	2,4-Dichlorophenol	12.6		1.0	0.067
105-67-9	2,4-Dimethylphenol	12.9		1.0	0.17
51-28-5	2,4-Dinitrophenol	21.1		5.0	2.5
88-75-5	2-Nitrophenol	12.1		1.0	0.11
88-06-2	2,4,6-Trichlorophenol	13.7		1.0	0.30
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	13.2		1.0	0.12

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 180-110164/2-A
 Matrix: Water Lab File ID: V0707010.D
 Analysis Method: 8270D LL Date Collected: _____
 Extract. Method: 3520C Date Extracted: 07/01/2014 10:46
 Sample wt/vol: 250 (mL) Date Analyzed: 07/07/2014 14:23
 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.: 110612 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-82-1	1,2,4-Trichlorobenzene	12.8		1.0	0.085
59-50-7	4-Chloro-3-methylphenol	11.6		1.0	0.17
100-02-7	4-Nitrophenol	31.7		5.0	0.80
534-52-1	4,6-Dinitro-2-methylphenol	26.1		5.0	1.6
206-44-0	Fluoranthene	12.7		0.20	0.021
86-73-7	Fluorene	12.7		0.20	0.024
118-74-1	Hexachlorobenzene	14.2		1.0	0.061
87-68-3	Hexachlorobutadiene	13.8		1.0	0.094
77-47-4	Hexachlorocyclopentadiene	16.1		1.0	0.14
67-72-1	Hexachloroethane	10.9		1.0	0.14
193-39-5	Indeno[1,2,3-cd]pyrene	12.5		0.20	0.043
78-59-1	Isophorone	12.6		1.0	0.074
91-20-3	Naphthalene	11.6		0.20	0.023
98-95-3	Nitrobenzene	12.5		2.0	0.15
621-64-7	N-Nitrosodi-n-propylamine	11.4		1.0	0.050
62-75-9	N-Nitrosodimethylamine	13.1		1.0	0.12
86-30-6	N-Nitrosodiphenylamine	12.7		1.0	0.12
85-01-8	Phenanthrene	12.0		0.20	0.042
129-00-0	Pyrene	12.6		0.20	0.023
87-86-5	Pentachlorophenol	30.9		1.0	0.50
108-95-2	Phenol	10.6		1.0	0.055

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	63		30-150
321-60-8	2-Fluorobiphenyl	63		30-150
367-12-4	2-Fluorophenol (Surr)	56		30-150
4165-60-0	Nitrobenzene-d5 (Surr)	62		30-150
4165-62-2	Phenol-d5 (Surr)	54		30-150
1718-51-0	Terphenyl-d14 (Surr)	75		10-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20140707-2080.b\V0707010.D
 Lims ID: LCS 180-110164/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 07-Jul-2014 14:23:30 ALS Bottle#: 9 Worklist Smp#: 10
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0002080-010
 Misc. Info.: LCS 180-110164/2-A
 Operator ID: 003200 Instrument ID: CH731
 Method: \\PITCHROM\ChromData\CH731\20140707-2080.b\BNA_CH731.m
 Limit Group: BNA 8270D ICAL
 Last Update: 08-Jul-2014 06:33:31 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-5SiIMS (0.32 mm) Det: MS SCAN
 Process Host: XAWRK002

First Level Reviewer: piccolinov

Date: 08-Jul-2014 06:13:45

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	6.278	6.271	0.007	84	205220	8.00	8.00	
* 2 Naphthalene-d8	136	7.485	7.478	0.007	97	710000	8.00	8.00	
* 3 Acenaphthene-d10	164	9.093	9.091	0.002	91	447246	8.00	8.00	
* 4 Phenanthrene-d10	188	10.455	10.453	0.002	96	834759	8.00	8.00	
* 5 Chrysene-d12	240	13.938	13.931	0.007	78	858965	8.00	8.00	
* 6 Perylene-d12	264	16.845	16.832	0.013	93	678783	8.00	8.00	
\$ 7 2-Fluorophenol	112	4.937	4.930	0.007	90	850607	40.0	22.5	
\$ 8 Phenol-d5	99	5.931	5.923	0.008	82	987697	40.0	21.6	
\$ 9 Nitrobenzene-d5	82	6.801	6.794	0.007	91	1156532	40.0	25.0	
\$ 10 2-Fluorobiphenyl	172	8.463	8.455	0.008	98	2071002	40.0	25.3	
\$ 11 2,4,6-Tribromophenol	330	9.814	9.812	0.002	84	303457	40.0	25.3	
\$ 12 Terphenyl-d14	244	12.202	12.195	0.007	98	3158208	40.0	30.1	
13 1,4-Dioxane	88	1.812	1.810	0.002	89	483899	40.0	25.7	
14 N-Nitrosodimethylamine	74	2.474	2.467	0.007	80	691972	40.0	26.1	
15 Pyridine	79	2.528	2.531	-0.003	92	1328478	40.0	28.7	
25 Benzaldehyde	77	5.834	5.832	0.002	82	522712	40.0	19.2	
26 Phenol	94	5.941	5.934	0.007	87	1151803	40.0	21.2	
27 Aniline	93	5.947	5.945	0.002	84	1287101	40.0	24.9	
29 Bis(2-chloroethyl)ether	93	6.016	6.009	0.007	90	699520	40.0	19.7	
30 2-Chlorophenol	128	6.075	6.068	0.007	91	783727	40.0	21.4	
31 n-Decane	43	6.128	6.126	0.002	77	599805	40.0	17.3	
32 1,3-Dichlorobenzene	146	6.219	6.217	0.002	86	887239	40.0	20.5	
33 1,4-Dichlorobenzene	146	6.294	6.287	0.007	83	916487	40.0	21.2	
34 Benzyl alcohol	108	6.406	6.404	0.002	82	454542	40.0	19.5	
35 1,2-Dichlorobenzene	146	6.443	6.436	0.007	84	866076	40.0	21.2	
36 2-Methylphenol	108	6.518	6.516	0.002	86	832276	40.0	22.2	
37 Indene	116	6.524	6.522	0.002	77	1544651	40.0	21.6	
38 2,2'-oxybis[1-chloropropan	45	6.534	6.532	0.002	65	646439	40.0	16.8	
41 N-Nitrosodi-n-propylamine	70	6.657	6.650	0.007	84	834907	40.0	22.7	
40 Acetophenone	105	6.657	6.650	0.007	77	1393149	40.0	22.0	
42 4-Methylphenol	108	6.657	6.655	0.002	89	855249	40.0	21.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
45 Hexachloroethane	117	6.769	6.767	0.002	82	441488	40.0	21.7	
46 Nitrobenzene	77	6.817	6.815	0.002	82	1192288	40.0	25.0	
48 Isophorone	82	7.042	7.034	0.008	94	1826061	40.0	25.3	
49 2-Nitrophenol	139	7.122	7.115	0.007	75	427487	40.0	24.2	
50 2,4-Dimethylphenol	107	7.154	7.147	0.007	93	1043003	40.0	25.8	
52 Benzoic acid	122	7.234	7.221	0.013	38	326126	40.0	19.0	
53 Bis(2-chloroethoxy)methane	93	7.234	7.232	0.002	95	877088	40.0	22.6	
54 2,4-Dichlorophenol	162	7.346	7.344	0.002	91	719785	40.0	25.2	
57 Azobenzene	77		7.405						ND
56 1,2,4-Trichlorobenzene	180	7.426	7.424	0.002	88	866650	40.0	25.5	
58 Naphthalene	128	7.501	7.499	0.002	97	2363997	40.0	23.2	
59 4-Chloroaniline	127	7.539	7.537	0.002	76	895216	40.0	22.5	
62 Hexachlorobutadiene	225	7.619	7.611	0.008	89	647007	40.0	27.5	
64 Caprolactam	113	7.843	7.830	0.013	72	200897	40.0	22.9	
67 4-Chloro-3-methylphenol	107	7.977	7.969	0.008	84	805344	40.0	23.3	
69 2-Methylnaphthalene	142	8.137	8.130	0.007	79	1709423	40.0	23.5	
71 1-Methylnaphthalene	142	8.228	8.226	0.002	75	1588214	40.0	23.6	
72 Hexachlorocyclopentadiene	237	8.286	8.285	0.002	92	844853	40.0	32.3	
73 1,2,4,5-Tetrachlorobenzene	216	8.292	8.290	0.002	86	959780	40.0	27.2	
74 2,4,6-Trichlorophenol	196	8.388	8.386	0.002	90	613149	40.0	27.4	
75 2,4,5-Trichlorophenol	196	8.425	8.418	0.007	88	645586	40.0	27.4	
76 1,1'-Biphenyl	154	8.554	8.552	0.002	96	2140516	40.0	24.2	
77 2-Chloronaphthalene	162	8.586	8.578	0.008	98	1669238	40.0	22.9	
79 2-Nitroaniline	65	8.660	8.658	0.002	70	621713	40.0	26.5	
82 Dimethyl phthalate	163	8.810	8.803	0.007	93	2027301	40.0	25.7	
83 1,3-Dinitrobenzene	168	8.847	8.840	0.007	77	314276	40.0	25.7	
84 2,6-Dinitrotoluene	165	8.874	8.867	0.007	76	436057	40.0	25.4	
85 Acenaphthylene	152	8.970	8.963	0.007	93	2699995	40.0	24.3	
86 3-Nitroaniline	138	9.034	9.027	0.007	84	377377	40.0	22.0	
87 2,4-Dinitrophenol	184	9.125	9.118	0.007	68	502144	80.0	42.2	
88 Acenaphthene	153	9.125	9.123	0.002	86	1812196	40.0	25.2	
89 4-Nitrophenol	109	9.168	9.161	0.007	81	957051	80.0	63.4	
91 2,4-Dinitrotoluene	165	9.243	9.235	0.008	74	585855	40.0	25.5	
93 Dibenzofuran	168	9.280	9.273	0.007	82	2490957	40.0	23.9	
96 2,3,4,6-Tetrachlorophenol	232	9.387	9.385	0.002	74	581088	40.0	27.2	
98 Diethyl phthalate	149	9.446	9.438	0.008	94	2355244	40.0	27.4	
99 Hexadecane	57	9.446	9.438	0.008	71	944762	40.0	23.1	
100 4-Chlorophenyl phenyl ethe	204	9.574	9.567	0.007	95	1171724	40.0	27.3	
101 4-Nitroaniline	138	9.590	9.583	0.007	67	415902	40.0	22.7	
103 Fluorene	166	9.595	9.588	0.007	80	2056860	40.0	25.4	
104 4,6-Dinitro-2-methylphenol	198	9.622	9.615	0.007	76	812402	80.0	52.2	
105 N-Nitrosodiphenylamine	169	9.675	9.668	0.007	62	1504807	40.0	25.3	
90 1,2-Diphenylhydrazine	77	9.718	9.711	0.007	1	2612229	40.0	26.3	
110 4-Bromophenyl phenyl ether	248	10.023	10.015	0.008	69	766490	40.0	28.6	
112 Hexachlorobenzene	284	10.108	10.101	0.007	91	825073	40.0	28.4	
113 Atrazine	200	10.135	10.128	0.007	89	584557	40.0	71.9	
115 n-Octadecane	57	10.274	10.266	0.008	84	1031357	40.0	20.9	
116 Pentachlorophenol	266	10.279	10.272	0.007	81	1030623	80.0	61.9	
121 Phenanthrene	178	10.482	10.475	0.007	97	3009524	40.0	24.0	
122 Anthracene	178	10.530	10.523	0.007	97	3169579	40.0	25.5	
124 Carbazole	167	10.669	10.662	0.007	87	2580191	40.0	23.7	
126 Di-n-butyl phthalate	149	10.952	10.945	0.007	99	3320069	40.0	24.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
131 Fluoranthene	202	11.753	11.746	0.007	96	3331063	40.0	25.4	
132 Benzidine	184	11.876	11.864	0.012	94	263583	40.0	15.5	
133 Pyrene	202	12.053	12.045	0.008	98	3400145	40.0	25.2	
138 Butyl benzyl phthalate	149	12.886	12.873	0.013	93	1297035	40.0	23.9	
144 3,3'-Dichlorobenzidine	252	13.842	13.824	0.018	68	950186	40.0	23.1	
145 Bis(2-ethylhexyl) phthalat	149	13.869	13.862	0.007	94	1700265	40.0	22.5	
146 Benzo[a]anthracene	228	13.917	13.910	0.007	96	3247020	40.0	25.4	
147 Chrysene	228	13.987	13.979	0.007	93	3092185	40.0	25.9	
150 Di-n-octyl phthalate	149	15.162	15.149	0.013	99	2688075	40.0	23.4	
152 Benzo[b]fluoranthene	252	16.049	16.036	0.013	91	2933432	40.0	24.7	
153 Benzo[k]fluoranthene	252	16.107	16.095	0.012	95	2929532	40.0	25.2	
154 Benzo[a]pyrene	252	16.732	16.720	0.012	70	2632449	40.0	26.1	
157 Indeno[1,2,3-cd]pyrene	276	19.056	19.033	0.023	95	2616807	40.0	25.1	
158 Dibenz(a,h)anthracene	278	19.078	19.060	0.018	61	2240669	40.0	24.5	
159 Benzo[g,h,i]perylene	276	19.644	19.626	0.018	91	2228706	40.0	24.3	
S 197 Methyl Phenols, Total	108				0		80.0	43.7	
S 199 Total Cresols	108				0		80.0	43.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SVTAPITINTRNi_00005

Amount Added: 1.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140707-2080.b\V0707010.D

Injection Date: 07-Jul-2014 14:23:30

Instrument ID: CH731

Operator ID: 003200

Lims ID: LCS 180-110164/2-A

Worklist Smp#: 10

Client ID:

Injection Vol: 2.0 ul

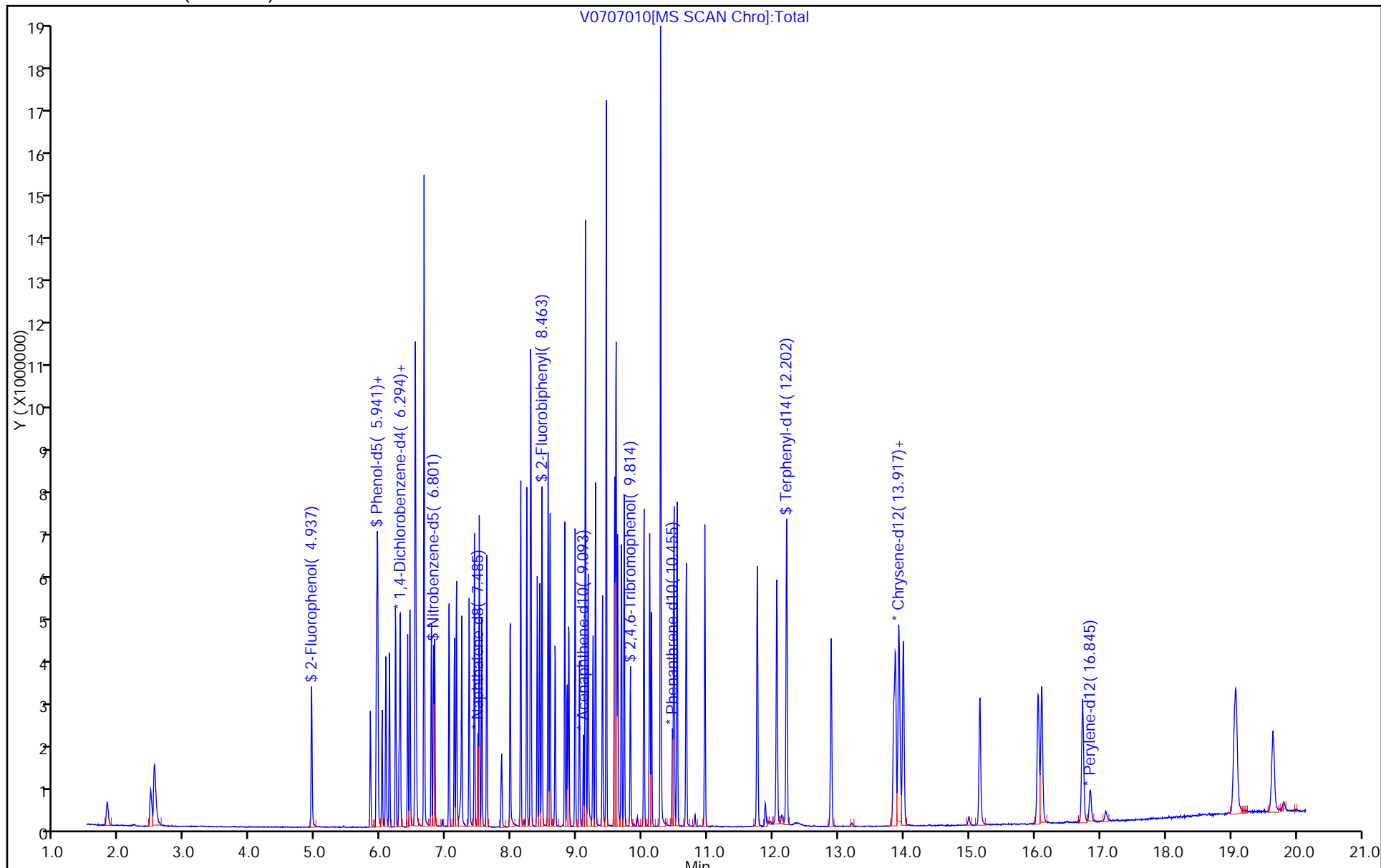
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 180-110164/3-A
 Matrix: Water Lab File ID: V0707011.D
 Analysis Method: 8270D LL Date Collected: _____
 Extract. Method: 3520C Date Extracted: 07/01/2014 10:46
 Sample wt/vol: 250 (mL) Date Analyzed: 07/07/2014 14:52
 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.: 110612 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	13.3		0.20	0.029
208-96-8	Acenaphthylene	12.6		0.20	0.022
120-12-7	Anthracene	13.0		0.20	0.019
92-87-5	Benzidine	6.82	J	20	4.7
56-55-3	Benzo[a]anthracene	13.4		0.20	0.037
205-99-2	Benzo[b]fluoranthene	13.2		0.20	0.049
207-08-9	Benzo[k]fluoranthene	13.9		0.20	0.030
65-85-0	Benzoic acid	10.7		5.0	1.6
191-24-2	Benzo[g,h,i]perylene	12.8		0.20	0.029
50-32-8	Benzo[a]pyrene	13.9		0.20	0.028
111-91-1	Bis(2-chloroethoxy)methane	11.7		1.0	0.13
111-44-4	Bis(2-chloroethyl)ether	10.5		1.0	0.032
117-81-7	Bis(2-ethylhexyl) phthalate	12.2		2.0	0.44
108-60-1	2,2'-oxybis[1-chloropropane]	9.58		1.0	0.024
101-55-3	4-Bromophenyl phenyl ether	14.4		1.0	0.12
7005-72-3	4-Chlorophenyl phenyl ether	14.4		1.0	0.080
91-58-7	2-Chloronaphthalene	11.9		0.20	0.031
85-68-7	Butyl benzyl phthalate	12.7		1.0	0.21
218-01-9	Chrysene	13.1		0.20	0.031
53-70-3	Dibenz(a,h)anthracene	13.0		0.20	0.027
84-74-2	Di-n-butyl phthalate	12.9		1.0	0.24
117-84-0	Di-n-octyl phthalate	13.3		1.0	0.20
84-66-2	Diethyl phthalate	14.9		1.0	0.30
131-11-3	Dimethyl phthalate	13.6		1.0	0.18
91-94-1	3,3'-Dichlorobenzidine	12.0		1.0	0.15
121-14-2	2,4-Dinitrotoluene	13.9		1.0	0.21
606-20-2	2,6-Dinitrotoluene	13.1		1.0	0.14
95-57-8	2-Chlorophenol	11.8		1.0	0.23
120-83-2	2,4-Dichlorophenol	13.7		1.0	0.067
105-67-9	2,4-Dimethylphenol	13.4		1.0	0.17
51-28-5	2,4-Dinitrophenol	23.6		5.0	2.5
88-75-5	2-Nitrophenol	12.7		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)	13.0		1.0	0.12

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 180-110164/3-A
 Matrix: Water Lab File ID: V0707011.D
 Analysis Method: 8270D LL Date Collected: _____
 Extract. Method: 3520C Date Extracted: 07/01/2014 10:46
 Sample wt/vol: 250 (mL) Date Analyzed: 07/07/2014 14:52
 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.: 110612 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-82-1	1,2,4-Trichlorobenzene	13.5		1.0	0.085
59-50-7	4-Chloro-3-methylphenol	13.2		1.0	0.17
100-02-7	4-Nitrophenol	35.9		5.0	0.80
534-52-1	4,6-Dinitro-2-methylphenol	27.3		5.0	1.6
206-44-0	Fluoranthene	13.5		0.20	0.021
86-73-7	Fluorene	13.5		0.20	0.024
118-74-1	Hexachlorobenzene	14.4		1.0	0.061
87-68-3	Hexachlorobutadiene	14.1		1.0	0.094
77-47-4	Hexachlorocyclopentadiene	15.9		1.0	0.14
67-72-1	Hexachloroethane	12.1		1.0	0.14
193-39-5	Indeno[1,2,3-cd]pyrene	13.2		0.20	0.043
78-59-1	Isophorone	13.5		1.0	0.074
91-20-3	Naphthalene	12.3		0.20	0.023
98-95-3	Nitrobenzene	12.9		2.0	0.15
621-64-7	N-Nitrosodi-n-propylamine	12.5		1.0	0.050
62-75-9	N-Nitrosodimethylamine	14.1		1.0	0.12
86-30-6	N-Nitrosodiphenylamine	12.7		1.0	0.12
85-01-8	Phenanthrene	12.7		0.20	0.042
129-00-0	Pyrene	12.9		0.20	0.023
87-86-5	Pentachlorophenol	33.2		1.0	0.50
108-95-2	Phenol	11.4		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	66		30-150
367-12-4	2-Fluorophenol (Surr)	61		30-150
4165-60-0	Nitrobenzene-d5 (Surr)	67		30-150
4165-62-2	Phenol-d5 (Surr)	60		30-150
1718-51-0	Terphenyl-d14 (Surr)	79		10-150

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH731\20140707-2080.b\V0707011.D
 Lims ID: LCSD 180-110164/3-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 07-Jul-2014 14:52:30 ALS Bottle#: 10 Worklist Smp#: 11
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0002080-011
 Misc. Info.: LCSD 180-110164/3-A
 Operator ID: 003200 Instrument ID: CH731
 Method: \\PITCHROM\ChromData\CH731\20140707-2080.b\BNA_CH731.m
 Limit Group: BNA 8270D ICAL
 Last Update: 08-Jul-2014 06:33:31 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-5SiIMS (0.32 mm) Det: MS SCAN
 Process Host: XAWRK002

First Level Reviewer: piccolinov

Date: 08-Jul-2014 06:14:40

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.280	6.271	0.009	83	187859	8.00	8.00	
* 2 Naphthalene-d8	136	7.482	7.478	0.004	96	678951	8.00	8.00	
* 3 Acenaphthene-d10	164	9.096	9.091	0.005	87	447104	8.00	8.00	
* 4 Phenanthrene-d10	188	10.458	10.453	0.005	96	888992	8.00	8.00	
* 5 Chrysene-d12	240	13.946	13.931	0.015	82	932298	8.00	8.00	
* 6 Perylene-d12	264	16.852	16.832	0.020	92	674675	8.00	8.00	
\$ 7 2-Fluorophenol	112	4.940	4.930	0.010	90	844295	40.0	24.4	
\$ 8 Phenol-d5	99	5.933	5.923	0.010	81	1007299	40.0	24.1	
\$ 9 Nitrobenzene-d5	82	6.804	6.794	0.010	91	1184336	40.0	26.7	
\$ 10 2-Fluorobiphenyl	172	8.460	8.455	0.005	98	2174642	40.0	26.5	
\$ 11 2,4,6-Tribromophenol	330	9.817	9.812	0.005	86	347305	40.0	27.2	
\$ 12 Terphenyl-d14	244	12.210	12.195	0.015	98	3596714	40.0	31.6	
13 1,4-Dioxane	88	1.814	1.810	0.004	89	450430	40.0	26.1	
14 N-Nitrosodimethylamine	74	2.482	2.467	0.015	80	684024	40.0	28.2	
15 Pyridine	79	2.536	2.531	0.005	92	1350922	40.0	31.9	M
25 Benzaldehyde	77	5.837	5.832	0.005	80	486381	40.0	19.6	
26 Phenol	94	5.944	5.934	0.010	87	1129505	40.0	22.8	
27 Aniline	93	5.955	5.945	0.010	79	1288271	40.0	27.2	
29 Bis(2-chloroethyl)ether	93	6.019	6.009	0.010	91	685621	40.0	21.0	
30 2-Chlorophenol	128	6.072	6.068	0.004	90	793141	40.0	23.6	
31 n-Decane	43	6.131	6.126	0.005	77	582518	40.0	18.4	
32 1,3-Dichlorobenzene	146	6.222	6.217	0.005	86	880866	40.0	22.2	
33 1,4-Dichlorobenzene	146	6.296	6.287	0.009	84	878684	40.0	22.2	
34 Benzyl alcohol	108	6.409	6.404	0.005	80	433217	40.0	20.3	
35 1,2-Dichlorobenzene	146	6.441	6.436	0.005	84	849423	40.0	22.7	
36 2-Methylphenol	108	6.521	6.516	0.005	83	856590	40.0	25.0	
37 Indene	116	6.526	6.522	0.004	73	1530912	40.0	23.4	
38 2,2'-oxybis[1-chloropropan	45	6.537	6.532	0.005	67	672983	40.0	19.2	
41 N-Nitrosodi-n-propylamine	70	6.660	6.650	0.010	86	839766	40.0	25.0	
40 Acetophenone	105	6.660	6.650	0.010	75	1390904	40.0	24.0	
42 4-Methylphenol	108	6.665	6.655	0.010	85	894300	40.0	24.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
45 Hexachloroethane	117	6.772	6.767	0.005	83	448802	40.0	24.1	
46 Nitrobenzene	77	6.820	6.815	0.005	80	1176878	40.0	25.8	
48 Isophorone	82	7.039	7.034	0.005	94	1862508	40.0	27.0	
49 2-Nitrophenol	139	7.124	7.115	0.009	77	428805	40.0	25.3	
50 2,4-Dimethylphenol	107	7.157	7.147	0.009	93	1034739	40.0	26.8	
52 Benzoic acid	122	7.237	7.221	0.016	42	352036	40.0	21.4	
53 Bis(2-chloroethoxy)methane	93	7.237	7.232	0.005	95	870849	40.0	23.4	
54 2,4-Dichlorophenol	162	7.349	7.344	0.005	92	746652	40.0	27.3	
57 Azobenzene	77		7.405						ND
56 1,2,4-Trichlorobenzene	180	7.429	7.424	0.005	87	877721	40.0	27.1	
58 Naphthalene	128	7.504	7.499	0.005	97	2399078	40.0	24.6	
59 4-Chloroaniline	127	7.541	7.537	0.004	76	924680	40.0	24.3	
62 Hexachlorobutadiene	225	7.616	7.611	0.005	90	632168	40.0	28.1	
64 Caprolactam	113	7.846	7.830	0.016	74	229598	40.0	27.4	
67 4-Chloro-3-methylphenol	107	7.974	7.969	0.005	85	876507	40.0	26.5	
69 2-Methylnaphthalene	142	8.139	8.130	0.009	81	1735441	40.0	24.9	
71 1-Methylnaphthalene	142	8.230	8.226	0.004	76	1631221	40.0	25.3	
72 Hexachlorocyclopentadiene	237	8.289	8.285	0.005	88	831500	40.0	31.8	
73 1,2,4,5-Tetrachlorobenzene	216	8.294	8.290	0.004	93	986422	40.0	27.9	
74 2,4,6-Trichlorophenol	196	8.391	8.386	0.005	94	662886	40.0	29.6	
75 2,4,5-Trichlorophenol	196	8.428	8.418	0.010	92	677939	40.0	28.7	
76 1,1'-Biphenyl	154	8.556	8.552	0.004	97	2256613	40.0	25.6	
77 2-Chloronaphthalene	162	8.588	8.578	0.010	98	1730617	40.0	23.7	
79 2-Nitroaniline	65	8.663	8.658	0.005	68	679385	40.0	28.9	
82 Dimethyl phthalate	163	8.813	8.803	0.010	93	2134627	40.0	27.1	
83 1,3-Dinitrobenzene	168	8.850	8.840	0.010	78	334569	40.0	27.3	
84 2,6-Dinitrotoluene	165	8.877	8.867	0.010	76	451338	40.0	26.3	
85 Acenaphthylene	152	8.973	8.963	0.010	97	2797435	40.0	25.2	
86 3-Nitroaniline	138	9.037	9.027	0.010	82	404849	40.0	23.6	
87 2,4-Dinitrophenol	184	9.128	9.118	0.010	69	569344	80.0	47.3	
88 Acenaphthene	153	9.128	9.123	0.005	85	1907071	40.0	26.5	
89 4-Nitrophenol	109	9.170	9.161	0.009	82	1082785	80.0	71.8	
91 2,4-Dinitrotoluene	165	9.245	9.235	0.010	75	638504	40.0	27.8	
93 Dibenzofuran	168	9.283	9.273	0.010	81	2679338	40.0	25.8	
96 2,3,4,6-Tetrachlorophenol	232	9.390	9.385	0.005	73	639944	40.0	30.0	
98 Diethyl phthalate	149	9.448	9.438	0.010	93	2564961	40.0	29.9	
99 Hexadecane	57	9.448	9.438	0.010	71	977005	40.0	25.0	
100 4-Chlorophenyl phenyl ethe	204	9.576	9.567	0.009	94	1236517	40.0	28.8	
101 4-Nitroaniline	138	9.593	9.583	0.009	68	461038	40.0	25.2	
103 Fluorene	166	9.598	9.588	0.010	89	2192050	40.0	27.1	
104 4,6-Dinitro-2-methylphenol	198	9.619	9.615	0.004	76	903888	80.0	54.5	
105 N-Nitrosodiphenylamine	169	9.678	9.668	0.010	63	1605416	40.0	25.4	
90 1,2-Diphenylhydrazine	77	9.721	9.711	0.010	1	2739661	40.0	25.9	
110 4-Bromophenyl phenyl ether	248	10.025	10.015	0.010	69	822917	40.0	28.9	
112 Hexachlorobenzene	284	10.111	10.101	0.010	86	889017	40.0	28.8	
113 Atrazine	200	10.137	10.128	0.009	88	657431	40.0	76.0	
115 n-Octadecane	57	10.276	10.266	0.010	85	1132551	40.0	25.0	
116 Pentachlorophenol	266	10.282	10.272	0.010	86	1176149	80.0	66.3	
121 Phenanthrene	178	10.485	10.475	0.010	97	3403215	40.0	25.5	
122 Anthracene	178	10.533	10.523	0.010	97	3450083	40.0	26.0	
124 Carbazole	167	10.672	10.662	0.010	83	2863448	40.0	24.7	
126 Di-n-butyl phthalate	149	10.955	10.945	0.010	99	3693018	40.0	25.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
131 Fluoranthene	202	11.761	11.746	0.015	96	3762522	40.0	27.0	
132 Benzidine	184	11.879	11.864	0.015	95	246135	40.0	13.6	
133 Pyrene	202	12.055	12.045	0.010	98	3766152	40.0	25.7	
138 Butyl benzyl phthalate	149	12.889	12.873	0.016	93	1493832	40.0	25.3	
144 3,3'-Dichlorobenzidine	252	13.850	13.824	0.026	68	1070427	40.0	24.0	
145 Bis(2-ethylhexyl) phthalat	149	13.872	13.862	0.010	94	1998100	40.0	24.4	
146 Benzo[a]anthracene	228	13.925	13.910	0.015	95	3715940	40.0	26.8	
147 Chrysene	228	13.994	13.979	0.015	92	3382570	40.0	26.1	
150 Di-n-octyl phthalate	149	15.164	15.149	0.015	98	3021436	40.0	26.5	
152 Benzo[b]fluoranthene	252	16.056	16.036	0.020	91	3126199	40.0	26.5	
153 Benzo[k]fluoranthene	252	16.110	16.095	0.015	96	3226603	40.0	27.9	
154 Benzo[a]pyrene	252	16.740	16.720	0.020	70	2786032	40.0	27.8	
157 Indeno[1,2,3-cd]pyrene	276	19.064	19.033	0.031	96	2740315	40.0	26.4	
158 Dibenz(a,h)anthracene	278	19.096	19.060	0.036	74	2358885	40.0	25.9	
159 Benzo[g,h,i]perylene	276	19.652	19.626	0.026	93	2333122	40.0	25.6	
S 197 Methyl Phenols, Total	108				0		80.0	49.5	
S 199 Total Cresols	108				0		80.0	49.5	

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

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH731\20140707-2080.b\V0707011.D

Injection Date: 07-Jul-2014 14:52:30 Instrument ID: CH731

Lims ID: LCSD 180-110164/3-A

Operator ID: 003200

Worklist Smp#: 11

Client ID:

Injection Vol: 2.0 ul

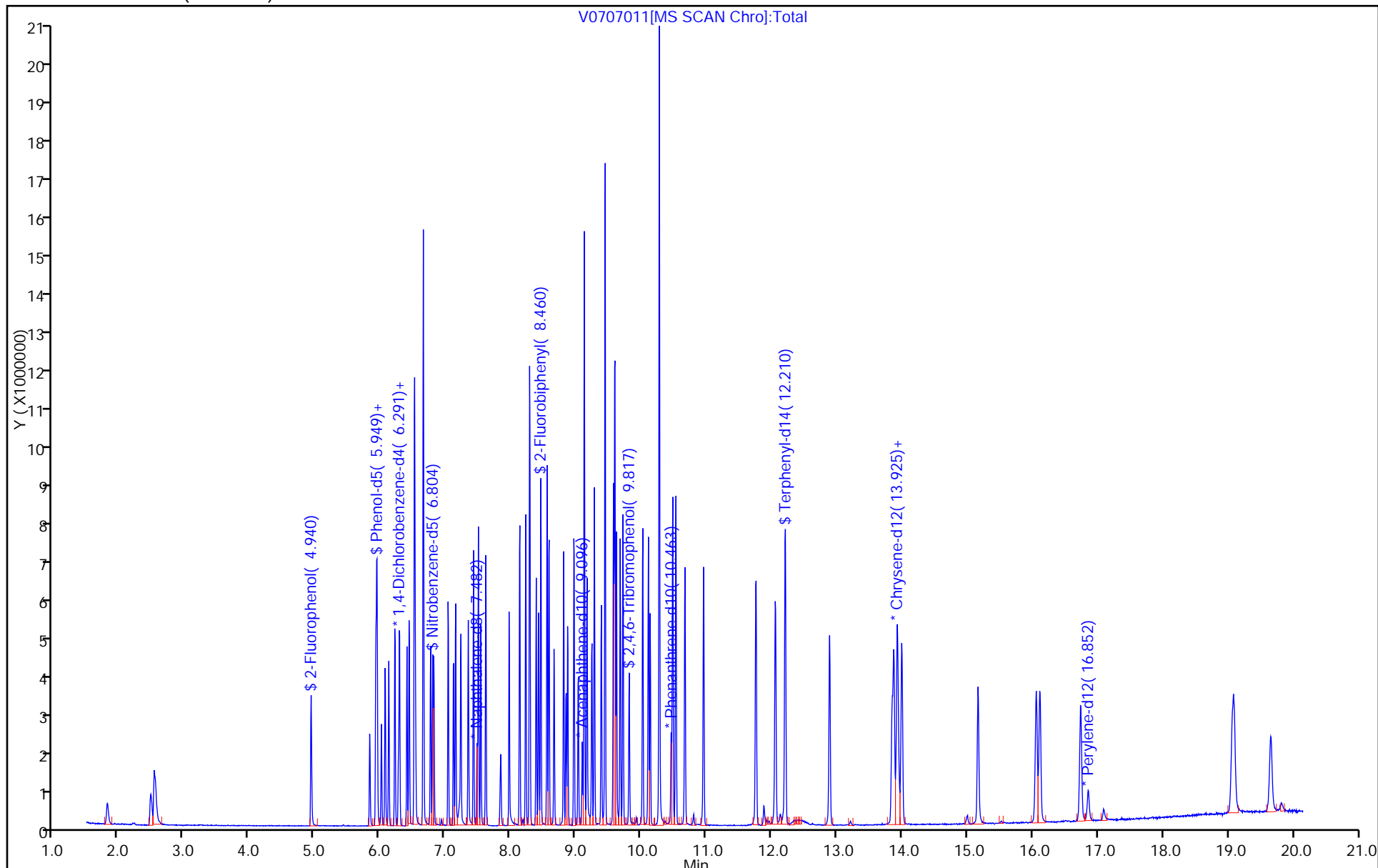
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: BNA_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

Instrument ID: CH731 Start Date: 06/05/2014 08:07Analysis 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.: 180-34298-1

SDG No.: _____

Instrument ID: CH731 Start Date: 07/07/2014 10:48Analysis Batch Number: 110612 End Date: 07/07/2014 21:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-110612/2		07/07/2014 10:48	1	V0707002.D	Rxi-5SilMS 0.32 (mm)
CCVIS 180-110612/3		07/07/2014 11:06	1	V0707003.D	Rxi-5SilMS 0.32 (mm)
ZZZZZ		07/07/2014 11:34	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		07/07/2014 12:02	1		Rxi-5SilMS 0.32 (mm)
MB 180-110164/1-A		07/07/2014 12:30	1	V0707006.D	Rxi-5SilMS 0.32 (mm)
ZZZZZ		07/07/2014 12:58	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		07/07/2014 13:27	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		07/07/2014 13:55	1		Rxi-5SilMS 0.32 (mm)
LCS 180-110164/2-A		07/07/2014 14:23	1	V0707010.D	Rxi-5SilMS 0.32 (mm)
LCSD 180-110164/3-A		07/07/2014 14:52	1	V0707011.D	Rxi-5SilMS 0.32 (mm)
ZZZZZ		07/07/2014 16:45	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		07/07/2014 17:13	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		07/07/2014 17:41	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		07/07/2014 18:09	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		07/07/2014 18:37	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		07/07/2014 19:05	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		07/07/2014 19:33	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		07/07/2014 20:01	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		07/07/2014 20:29	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		07/07/2014 20:57	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		07/07/2014 21:25	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		07/07/2014 21:53	1		Rxi-5SilMS 0.32 (mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

Instrument ID: CH731 Start Date: 07/08/2014 13:42Analysis 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)
ZZZZZ		07/08/2014 14:57	1		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)
ZZZZZ		07/08/2014 16:51	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		07/08/2014 17:20	1		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)
180-34298-2	062514-DP	07/08/2014 19:43	1	V0708015.D	Rxi-5SilMS 0.32 (mm)
180-34298-3	TS04-PDM004	07/08/2014 20:12	1	V0708016.D	Rxi-5SilMS 0.32 (mm)
180-34298-4	RW20-PZP000	07/08/2014 20:40	1	V0708017.D	Rxi-5SilMS 0.32 (mm)
180-34298-5	RW20-PZM020	07/08/2014 21:08	1	V0708018.D	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)
ZZZZZ		07/08/2014 22:34	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		07/08/2014 23:02	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		07/08/2014 23:30	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		07/08/2014 23:59	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		07/09/2014 00:27	1		Rxi-5SilMS 0.32 (mm)

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

Batch Number: 110164 Batch Start Date: 07/01/14 10:43 Batch Analyst: Trout, BillBatch Method: 3520C Batch End Date: 07/03/14 07:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	FirstAdjustpH	OPLVISPKMIX1i 00027	OPQL8270SURI 00018
MB 180-110164/1		3520C, 8270D LL		5 SU	250 mL	0.25 mL	2		25 uL
LCS 180-110164/2		3520C, 8270D LL		5 SU	250 mL	0.25 mL	2	25 uL	25 uL
LCSD 180-110164/3		3520C, 8270D LL		5 SU	250 mL	0.25 mL	2	25 uL	25 uL
180-34298-A-2	062514-DP	3520C, 8270D LL	T	7 SU	240 mL	0.25 mL	2		25 uL
180-34298-A-3	TS04-PDM004	3520C, 8270D LL	T	7 SU	260 mL	0.25 mL	2		25 uL
180-34298-A-4	RW20-PZP000	3520C, 8270D LL	T	7 SU	250 mL	0.25 mL	2		25 uL
180-34298-C-5	RW20-PZM020	3520C, 8270D LL	T	7 SU	250 mL	0.25 mL	2		25 uL

Batch Notes	
Acid used for pH adjustment	1:1 Sulfuric acid
Acid used for pH adjust Lot #	1133204
Person's name who did the concentration	JM
N-evap #	1
Na2SO4 Lot Number	1173928
pH Paper Lot Number	Ph paper HC412469
Prep Solvent Lot #	1220399
Prep Solvent Name	Methylene chloride
Prep Solvent Volume Used	100 mL
Person's name who did the prep	BT
Uncorrected N-evap Temperature	30 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: 180-34298-1

SDG No.: _____

Project: Sparrows Point Trust Offshore Investigat

Client Sample ID	Lab Sample ID
<u>062514-DP</u>	<u>180-34298-2</u>
<u>TS04-PDM004</u>	<u>180-34298-3</u>
<u>RW20-PZP000</u>	<u>180-34298-4</u>
<u>RW20-PZM020</u>	<u>180-34298-5</u>

Comments:

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: 062514-DP

Lab Sample ID: 180-34298-2

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

SDG ID.:

Matrix: Water

Date Sampled: 06/25/2014 00:00

Reporting Basis: WET

Date Received: 06/26/2014 08:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.20	0.038	ug/L			1	7470A

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS - TOTAL RECOVERABLE

Client Sample ID: 062514-DP

Lab Sample ID: 180-34298-2

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

SDG ID.: _____

Matrix: Water

Date Sampled: 06/25/2014 00:00

Reporting Basis: WET

Date Received: 06/26/2014 08:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	25	5.0	1.5	ug/L			5	6020A
7440-43-9	Cadmium	97	5.0	0.57	ug/L			5	6020A
7440-47-3	Chromium	6.1	10	2.7	ug/L	J		5	6020A
7439-92-1	Lead	1.0	5.0	0.096	ug/L	J		5	6020A
7782-49-2	Selenium	5.1	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	19	5.0	0.87	ug/L			5	6020A
7440-66-6	Zinc	22000	25	4.8	ug/L			5	6020A
7440-50-8	Copper	2.1	10	1.2	ug/L	J		5	6020A

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: TS04-PDM004 Lab Sample ID: 180-34298-3

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG ID.: _____

Matrix: Water Date Sampled: 06/25/2014 13:40

Reporting Basis: WET Date Received: 06/26/2014 08:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.20	0.038	ug/L			1	7470A

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS - TOTAL RECOVERABLE

Client Sample ID: TS04-PDM004

Lab Sample ID: 180-34298-3

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

SDG ID.: _____

Matrix: Water

Date Sampled: 06/25/2014 13:40

Reporting Basis: WET

Date Received: 06/26/2014 08:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	40	5.0	1.5	ug/L			5	6020A
7440-43-9	Cadmium	3.1	5.0	0.57	ug/L	J		5	6020A
7440-47-3	Chromium	32	10	2.7	ug/L			5	6020A
7439-92-1	Lead	25	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	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	1.5	10	0.094	ug/L	J		5	6020A
7440-02-0	Nickel	51	5.0	0.87	ug/L			5	6020A
7440-66-6	Zinc	2400	25	4.8	ug/L			5	6020A
7440-50-8	Copper	15	10	1.2	ug/L			5	6020A

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: RW20-PZP000

Lab Sample ID: 180-34298-4

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

SDG ID.: _____

Matrix: Water

Date Sampled: 06/25/2014 12:50

Reporting Basis: WET

Date Received: 06/26/2014 08:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.20	0.038	ug/L			1	7470A

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS - TOTAL RECOVERABLE

Client Sample ID: RW20-PZP000

Lab Sample ID: 180-34298-4

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

SDG ID.: _____

Matrix: Water

Date Sampled: 06/25/2014 12:50

Reporting Basis: WET

Date Received: 06/26/2014 08:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	85	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	9.2	10	2.7	ug/L	J		5	6020A
7439-92-1	Lead	7.1	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	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	5.3	10	0.094	ug/L	J		5	6020A
7440-02-0	Nickel	11	5.0	0.87	ug/L			5	6020A
7440-66-6	Zinc	37	25	4.8	ug/L			5	6020A
7440-50-8	Copper	9.6	10	1.2	ug/L	J		5	6020A

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: RW20-PZM020

Lab Sample ID: 180-34298-5

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

SDG ID.: _____

Matrix: Water

Date Sampled: 06/25/2014 10:05

Reporting Basis: WET

Date Received: 06/26/2014 08:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.20	0.038	ug/L			1	7470A

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS - TOTAL RECOVERABLE

Client Sample ID: RW20-PZM020

Lab Sample ID: 180-34298-5

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

SDG ID.: _____

Matrix: Water

Date Sampled: 06/25/2014 10:05

Reporting Basis: WET

Date Received: 06/26/2014 08:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	25	5.0	1.5	ug/L			5	6020A
7440-43-9	Cadmium	100	5.0	0.57	ug/L			5	6020A
7440-47-3	Chromium	5.0	10	2.7	ug/L	J		5	6020A
7439-92-1	Lead	0.97	5.0	0.096	ug/L	J		5	6020A
7782-49-2	Selenium	6.4	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	0.13	10	0.094	ug/L	J		5	6020A
7440-02-0	Nickel	18	5.0	0.87	ug/L			5	6020A
7440-66-6	Zinc	23000	25	4.8	ug/L			5	6020A
7440-50-8	Copper	2.1	10	1.2	ug/L	J		5	6020A

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

ICV Source: MICVX_00020 Concentration Units: ug/L

CCV Source: MCCV1X_00064

Analyte	ICV 180-111800/5 07/16/2014 16:48				CCV 180-111800/10 07/16/2014 17:08				CCV 180-111800/46 07/16/2014 19:31			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	77.8		80.0	97	98.3		100	98	97.1		100	97
Arsenic	80.0		80.0	100	102		100	102	101		100	101
Beryllium	81.0		80.0	101	102		100	102	100		100	100
Cadmium	76.2		80.0	95	100		100	100	100		100	100
Chromium	79.9		80.0	100	103		100	103	104		100	104
Copper	81.2		80.0	102	105		100	105	100		100	100
Lead	76.7		80.0	96	102		100	102	97.9		100	98
Nickel	81.0		80.0	101	105		100	105	102		100	102
Selenium	81.4		80.0	102	103		100	103	101		100	101
Silver	77.6		80.0	97	101		100	101	99.5		100	99
Thallium	79.2		80.0	99	102		100	102	98.1		100	98
Zinc	81.1		80.0	101	104		100	104	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.: 180-34298-1

SDG No.: _____

ICV Source: MICVX_00020 Concentration Units: ug/L

CCV Source: MCCV1X_00064

Analyte	CCV 180-111800/58 07/16/2014 20:25				CCV 180-111800/70 07/16/2014 21:15				CCV 180-111800/82 07/16/2014 22:06			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	100		100	100	100		100	100	99.6		100	100
Arsenic	102		100	102	102		100	102	103		100	103
Beryllium	101		100	101	102		100	102	96.0		100	96
Cadmium	103		100	103	102		100	102	103		100	103
Chromium	104		100	104	103		100	103	105		100	105
Copper	102		100	102	101		100	101	103		100	103
Lead	102		100	102	101		100	101	103		100	103
Nickel	103		100	103	101		100	101	104		100	104
Selenium	105		100	105	103		100	103	103		100	103
Silver	102		100	102	101		100	101	102		100	102
Thallium	103		100	103	101		100	101	104		100	104
Zinc	103		100	103	101		100	101	103		100	103

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.: 180-34298-1

SDG No.: _____

ICV Source: MHgWorkingicv_00821 Concentration Units: ug/L

CCV Source: MHgworkingCal_00840

Analyte	ICV 180-111205/7-A 07/11/2014 14:03				CCV 180-111205/10-A 07/11/2014 14:09				CCV 180-111205/10-A 07/11/2014 14:30			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.52		2.50	101	5.05		5.00	101	5.05		5.00	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.: 180-34298-1

SDG No.: _____

ICV Source: MHgWorkingicv_00821 Concentration Units: ug/L

CCV Source: MHgworkingCal_00840

Analyte	CCV 180-111205/10-A 07/11/2014 14:50				CCV 180-111205/10-A 07/11/2014 15:12							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.78		5.00	96	4.94		5.00	99				

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.: 180-34298-1
 SDG No.: _____
 Method: 6020A Instrument ID: M
 Lab Sample ID: CRI 180-111800/7 Concentration Units: ug/L
 CRQL Check Standard Source: MCRIX_00052

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Arsenic	1.00	1.03		103	70-130
Cadmium	1.00	1.04		104	70-130
Chromium	2.00	2.15		107	70-130
Lead	1.00	1.07		107	70-130
Selenium	5.00	5.89		118	70-130
Silver	1.00	1.16		116	70-130
Beryllium	1.00	1.07		107	70-130
Thallium	1.00	1.08		108	70-130
Antimony	2.00	2.30		115	70-130
Nickel	1.00	1.12		112	70-130
Zinc	5.00	5.97		119	70-130
Copper	2.00	2.26		113	70-130

Lab Sample ID: CRI 180-111800/138 Concentration Units: ug/L
 CRQL Check Standard Source: MCRIX_00052

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Arsenic	1.00	1.11		111	70-130
Cadmium	1.00	1.01		101	70-130
Chromium	2.00	2.19		110	70-130
Lead	1.00	0.996	J	100	70-130
Selenium	5.00	5.58		112	70-130
Silver	1.00	1.09		109	70-130
Beryllium	1.00	0.784	J	78	70-130
Thallium	1.00	1.02		102	70-130
Antimony	2.00	2.27		113	70-130
Nickel	1.00	1.07		107	70-130
Zinc	5.00	5.78		116	70-130
Copper	2.00	2.03		101	70-130

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

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 SDG No.: _____
 Method: 7470A Instrument ID: K
 Lab Sample ID: CRA 180-111205/9-A Concentration Units: ug/L
 CRQL Check Standard Source: MHgworkingCal_00840

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.186	J	93	50-150

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

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	ICB 180-111800/6 07/16/2014 16:51		CCB1 180-111800/11 07/16/2014 17:14		CCB4 180-111800/47 07/16/2014 19:38		CCB5 180-111800/59 07/16/2014 20:31	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.0480	J	0.116	J	0.145	J	0.127	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		ND		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.: 180-34298-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	CCB6 180-111800/71 07/16/2014 21:22		CCB7 180-111800/83 07/16/2014 22:12					
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.0930	J	0.0960	J				
Arsenic	1.0	ND		ND					
Beryllium	1.0	ND		ND					
Cadmium	1.0	ND		ND					
Chromium	2.0	ND		ND					
Copper	2.0	ND		ND					
Lead	1.0	ND		ND					
Nickel	1.0	ND		ND					
Selenium	5.0	ND		ND					
Silver	1.0	ND		ND					
Thallium	1.0	ND		0.0420	J				
Zinc	5.0	ND		ND					

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	ICB 180-111205/8-A 07/11/2014 14:05		CCB 180-111205/11-A 07/11/2014 14:10		CCB 180-111205/11-A 07/11/2014 14:31		CCB 180-111205/11-A 07/11/2014 14:52	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	CCB 180-111205/11-A 07/11/2014 15:14							
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	ND							

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
SDG No.: _____
Concentration Units: ug/L Lab Sample ID: MB 180-111451/1-A
Instrument Code: M Batch No.: 111800

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	ND			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.: 180-34298-1
SDG No.: _____
Concentration Units: ug/L Lab Sample ID: MB 180-111203/1-A
Instrument Code: K Batch No.: 111238

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			7470A

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 SDG No.: _____
 Lab Sample ID: ICSA 180-111800/8 Instrument ID: M
 Lab File ID: M40716A.xml ICS Source: MICSAX_00051
 Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		0.0740	
Arsenic		-0.107	
Beryllium		-0.228	
Cadmium		0.284	
Chromium		0.309	
Copper		1.60	
Lead		0.221	
Nickel		-0.533	
Selenium		-0.391	
Silver		0.0380	
Thallium		-0.0030	
Zinc		3.20	
<i>Aluminum</i>	<i>100000</i>	<i>108600</i>	<i>109</i>
<i>Barium</i>		<i>0.0940</i>	
<i>Boron</i>		<i>0.628</i>	
<i>Calcium</i>	<i>100000</i>	<i>106300</i>	<i>106</i>
<i>Cobalt</i>		<i>0.0760</i>	
<i>Iron</i>	<i>100000</i>	<i>106700</i>	<i>107</i>
<i>Magnesium</i>	<i>100000</i>	<i>107500</i>	<i>108</i>
<i>Manganese</i>		<i>0.847</i>	
<i>Molybdenum</i>	<i>2000</i>	<i>2257</i>	<i>113</i>
<i>Potassium</i>	<i>100000</i>	<i>105000</i>	<i>105</i>
<i>Silicon</i>		<i>21.0</i>	
<i>Sodium</i>	<i>100000</i>	<i>105400</i>	<i>105</i>
<i>Strontium</i>		<i>0.678</i>	
<i>Tin</i>		<i>-0.107</i>	
<i>Titanium</i>	<i>2000</i>	<i>2170</i>	<i>109</i>
<i>Vanadium</i>		<i>-0.634</i>	

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

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 SDG No.: _____
 Lab Sample ID: ICSAB 180-111800/9 Instrument ID: M
 Lab File ID: M40716A.xml ICS Source: MICSABX_00056
 Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution AB	Solution AB	
Antimony	20.0	21.7	109
Arsenic	20.0	22.2	111
Beryllium	20.0	21.3	106
Cadmium	20.0	21.9	109
Chromium	20.0	21.8	109
Copper	20.0	22.6	113
Lead	20.0	22.6	113
Nickel	20.0	20.3	101
Selenium	50.0	56.4	113
Silver	20.0	21.2	106
Thallium	20.0	21.9	109
Zinc	25.0	23.7	95
<i>Aluminum</i>	<i>100000</i>	<i>112800</i>	<i>113</i>
<i>Barium</i>	<i>20.0</i>	<i>21.7</i>	<i>108</i>
<i>Boron</i>	<i>50.0</i>	<i>56.7</i>	<i>113</i>
<i>Calcium</i>	<i>100000</i>	<i>107733</i>	<i>108</i>
<i>Cobalt</i>	<i>20.0</i>	<i>21.2</i>	<i>106</i>
<i>Iron</i>	<i>100000</i>	<i>108533</i>	<i>109</i>
<i>Magnesium</i>	<i>100000</i>	<i>110900</i>	<i>111</i>
<i>Manganese</i>	<i>22.5</i>	<i>22.2</i>	<i>99</i>
<i>Molybdenum</i>	<i>2000</i>	<i>2293</i>	<i>115</i>
<i>Potassium</i>	<i>100000</i>	<i>106033</i>	<i>106</i>
<i>Silicon</i>	<i>500</i>	<i>592</i>	<i>118</i>
<i>Sodium</i>	<i>100000</i>	<i>105433</i>	<i>105</i>
<i>Strontium</i>	<i>25.0</i>	<i>21.6</i>	<i>87</i>
<i>Tin</i>	<i>100</i>	<i>109</i>	<i>109</i>
<i>Titanium</i>	<i>2000</i>	<i>2195</i>	<i>110</i>
<i>Vanadium</i>	<i>20.0</i>	<i>20.8</i>	<i>104</i>

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

7A-IN
 LAB CONTROL SAMPLE
 METALS - TOTAL RECOVERABLE

Lab ID: LCS 180-111451/2-A

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

Sample Matrix: Water

LCS Source: MTAPITTICPMS_00017

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Arsenic	40.0	36.1		90	80	120		6020A
Cadmium	50.0	48.3		97	80	120		6020A
Chromium	200	197		99	80	120		6020A
Lead	20.0	19.2		96	80	120		6020A
Selenium	10.0	9.46		95	80	120		6020A
Silver	50.0	46.7		93	80	120		6020A
Beryllium	50.0	44.8		90	80	120		6020A
Thallium	50.0	46.2		92	80	120		6020A
Antimony	500	480		96	80	120		6020A
Nickel	500	459		92	80	120		6020A
Zinc	500	464		93	80	120		6020A
Copper	250	227		91	80	120		6020A

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

FORM VIIA - IN

7D-IN
 LAB CONTROL SAMPLE DUPLICATE
 METALS - TOTAL RECOVERABLE

Lab ID: LCS D 180-111451/3-A

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

Sample Matrix: Water

LCS Source: MTAPITTICPMS_00017

Analyte	(SDR) C	Spike Added	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Arsenic	36.8	40.0	92	80-120	2	20		6020A
Cadmium	48.2	50.0	96	80-120	0	20		6020A
Chromium	200	200	100	80-120	1	20		6020A
Lead	19.5	20.0	97	80-120	2	20		6020A
Selenium	10.5	10.0	105	80-120	11	20		6020A
Silver	47.4	50.0	95	80-120	1	20		6020A
Beryllium	45.3	50.0	91	80-120	1	20		6020A
Thallium	47.3	50.0	95	80-120	2	20		6020A
Antimony	481	500	96	80-120	0	20		6020A
Nickel	467	500	93	80-120	2	20		6020A
Zinc	467	500	93	80-120	1	20		6020A
Copper	231	250	92	80-120	2	20		6020A

SDR = Spike Duplicate Results

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

FORM VIID - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 180-111203/2-A

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

Sample Matrix: Water

LCS Source: MHgworkingCal_00840

Analyte	Water (ug/L)						
	True	Found	C	%R	Limits	Q	Method
Mercury	2.50	2.58		103	80 120		7470A

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

FORM VIIA - IN

8-IN
 ICP-AES AND ICP-MS SERIAL DILUTIONS
 METALS - TOTAL RECOVERABLE

Lab ID: 180-34298-2

SDG No: _____

Lab Name: TestAmerica Pittsburgh

Job No: 180-34298-1

Matrix: Water

Concentration Units: ug/L

Analyte	Initial Sample Result (I)		Serial Dilution Result (S)		% Difference	Q	Method
		C		C			
Arsenic	25		24.9	J	NC		6020A
Cadmium	97		95.0		1.7		6020A
Chromium	6.1	J	ND		NC		6020A
Lead	1.0	J	0.750	J	NC		6020A
Selenium	5.1	J	ND		NC		6020A
Silver	ND		ND		NC		6020A
Beryllium	ND		ND		NC		6020A
Thallium	ND		ND		NC		6020A
Antimony	ND		ND		NC		6020A
Nickel	19		17.5	J	NC		6020A
Zinc	22000		23000		4.5		6020A
Copper	2.1	J	ND		NC		6020A

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

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Pittsburgh Job Number: 180-34298-1
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: 180-34298-1
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: 180-34298-1
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: 180-34298-1
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: 180-34298-1

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.: 180-34298-1

SDG No.: _____

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 180-111451/1-A	07/15/2014 07:53	111451		50.0	50.0
LCS 180-111451/2-A	07/15/2014 07:53	111451		50.0	50.0
LCSD 180-111451/3-A	07/15/2014 07:53	111451		50.0	50.0
180-34298-2	07/15/2014 07:53	111451		50.0	50.0
180-34298-3	07/15/2014 07:53	111451		50.0	50.0
180-34298-4	07/15/2014 07:53	111451		50.0	50.0
180-34298-5	07/15/2014 07:53	111451		50.0	50.0

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 180-111203/1-A	07/11/2014 11:47	111203		50	50
LCS 180-111203/2-A	07/11/2014 11:47	111203		50	50
180-34298-2	07/11/2014 11:47	111203		50	50
180-34298-3	07/11/2014 11:47	111203		50	50
180-34298-4	07/11/2014 11:47	111203		50	50
180-34298-5	07/11/2014 11:47	111203		50	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

Instrument ID: M Method: 6020A

Start Date: 07/16/2014 15:48 End Date: 07/17/2014 02:08

Lab Sample ID	D / F	Type	Time	Analytes																	
				A g	A s	B e	C d	C r	C u	N i	P b	S b	S e	T l	Z n						
ZZZZZZ			19:17																		
ZZZZZZ			19:21																		
ZZZZZZ			19:24																		
CCV 180-111800/46	1		19:31	X	X	X	X	X	X	X	X	X	X	X	X	X					
CCB4 180-111800/47	1		19:38	X	X	X	X	X	X	X	X	X	X	X	X	X					
MB 180-111451/1-A	1	R	19:41	X	X	X	X	X	X	X	X	X	X	X	X	X					
LCS 180-111451/2-A	1	R	19:45	X	X	X	X	X	X	X	X	X	X	X	X	X					
LCSD 180-111451/3-A	1	R	19:49	X	X	X	X	X	X	X	X	X	X	X	X	X					
ZZZZZZ			19:56																		
ZZZZZZ			20:00																		
ZZZZZZ			20:03																		
ZZZZZZ			20:07																		
ZZZZZZ			20:11																		
ZZZZZZ			20:14																		
ZZZZZZ			20:18																		
CCV 180-111800/58	1		20:25	X	X	X	X	X	X	X	X	X	X	X	X	X					
CCB5 180-111800/59	1		20:31	X	X	X	X	X	X	X	X	X	X	X	X	X					
ZZZZZZ			20:35																		
ZZZZZZ			20:39																		
ZZZZZZ			20:43																		
ZZZZZZ			20:46																		
ZZZZZZ			20:50																		
ZZZZZZ			20:54																		
ZZZZZZ			20:57																		
ZZZZZZ			21:01																		
180-34298-2	5	R	21:05	X	X	X	X	X	X	X	X	X	X	X	X	X					
180-34298-2 SD	25	R	21:08	X	X	X	X	X	X	X	X	X	X	X	X	X					
CCV 180-111800/70	1		21:15	X	X	X	X	X	X	X	X	X	X	X	X	X					
CCB6 180-111800/71	1		21:22	X	X	X	X	X	X	X	X	X	X	X	X	X					
ZZZZZZ			21:25																		
180-34298-3	5	R	21:29	X	X	X	X	X	X	X	X	X	X	X	X	X					
180-34298-4	5	R	21:33	X	X	X	X	X	X	X	X	X	X	X	X	X					
180-34298-5	5	R	21:37	X	X	X	X	X	X	X	X	X	X	X	X	X					
ZZZZZZ			21:40																		
ZZZZZZ			21:47																		
ZZZZZZ			21:51																		
ZZZZZZ			21:54																		
ZZZZZZ			21:58																		
ZZZZZZ			22:02																		
CCV 180-111800/82	1		22:06	X	X	X	X	X	X	X	X	X	X	X	X	X					
CCB7 180-111800/83	1		22:12	X	X	X	X	X	X	X	X	X	X	X	X	X					
ZZZZZZ			22:16																		

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

Instrument ID: M Method: 6020A

Start Date: 07/16/2014 15:48 End Date: 07/17/2014 02:08

Lab Sample ID	D / F	Type	Time	Analytes																	
				A g	A s	B e	C d	C r	C u	N i	P b	S b	S e	T l	Z n						
ZZZZZZ			22:20																		
ZZZZZZ			22:23																		
ZZZZZZ			22:27																		
ZZZZZZ			22:31																		
ZZZZZZ			22:34																		
ZZZZZZ			22:38																		
ZZZZZZ			22:42																		
ZZZZZZ			22:45																		
ZZZZZZ			22:49																		
CCV 180-111800/94			22:53																		
CCB8 180-111800/95			22:59																		
ZZZZZZ			23:03																		
ZZZZZZ			23:07																		
ZZZZZZ			23:14																		
ZZZZZZ			23:17																		
ZZZZZZ			23:21																		
ZZZZZZ			23:25																		
ZZZZZZ			23:28																		
ZZZZZZ			23:32																		
ZZZZZZ			23:36																		
ZZZZZZ			23:39																		
CCV 180-111800/106			23:43																		
CCB9 180-111800/107			23:50																		
ZZZZZZ			23:53																		
ZZZZZZ			23:57																		
ZZZZZZ			00:01																		
ZZZZZZ			00:04																		
ZZZZZZ			00:08																		
ZZZZZZ			00:12																		
ZZZZZZ			00:16																		
ZZZZZZ			00:19																		
ZZZZZZ			00:23																		
ZZZZZZ			00:27																		
CCV 180-111800/118			00:30																		
CCB10 180-111800/119			00:37																		
ZZZZZZ			00:41																		
ZZZZZZ			00:44																		
ZZZZZZ			00:48																		
ZZZZZZ			00:52																		
ZZZZZZ			00:55																		
ZZZZZZ			00:59																		
ZZZZZZ			01:03																		

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

Instrument ID: M Method: 6020A

Start Date: 07/16/2014 15:48 End Date: 07/17/2014 02:08

Lab Sample ID	D / F	Type	Time	Analytes																	
				A g	A s	B e	C d	C r	C u	N i	P b	S b	S e	T l	Z n						
ZZZZZZ			01:07																		
ZZZZZZ			01:10																		
ZZZZZZ			01:14																		
CCV 180-111800/130			01:18																		
CCB11 180-111800/131			01:24																		
ZZZZZZ			01:28																		
ZZZZZZ			01:32																		
ZZZZZZ			01:35																		
ZZZZZZ			01:39																		
ZZZZZZ			01:43																		
ZZZZZZ			01:46																		
CRI 180-111800/138	1		01:54	X	X	X	X	X	X	X	X	X	X	X	X						
CCV 180-111800/139			02:01																		
CCB12 180-111800/140			02:08																		

Prep Types

R = Total Recoverable

T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

Instrument ID: K Method: 7470A

Start Date: 07/11/2014 13:46 End Date: 07/11/2014 16:50

Lab Sample ID	D / F	T y p e	Time	Analytes															
				H g															
IC 180-111205/1-A			13:46	X															
IC 180-111205/2-A			13:48	X															
IC 180-111205/3-A			13:50	X															
IC 180-111205/4-A			13:52	X															
IC 180-111205/5-A			13:53	X															
IC 180-111205/6-A			13:55	X															
ICV 180-111205/7-A	1		14:03	X															
ICB 180-111205/8-A	1		14:05	X															
CRA 180-111205/9-A	1		14:07	X															
CCV 180-111205/10-A	1		14:09	X															
CCB 180-111205/11-A	1		14:10	X															
MB 180-111203/1-A	1	T	14:12	X															
LCS 180-111203/2-A	1	T	14:14	X															
ZZZZZZ			14:16																
ZZZZZZ			14:18																
ZZZZZZ			14:19																
ZZZZZZ			14:21																
ZZZZZZ			14:23																
ZZZZZZ			14:24																
ZZZZZZ			14:26																
ZZZZZZ			14:28																
CCV 180-111205/10-A	1		14:30	X															
CCB 180-111205/11-A	1		14:31	X															
ZZZZZZ			14:33																
ZZZZZZ			14:35																
ZZZZZZ			14:37																
ZZZZZZ			14:38																
ZZZZZZ			14:40																
ZZZZZZ			14:42																
ZZZZZZ			14:44																
ZZZZZZ			14:45																
ZZZZZZ			14:47																
ZZZZZZ			14:49																
CCV 180-111205/10-A	1		14:50	X															
CCB 180-111205/11-A	1		14:52	X															
180-34298-2	1	T	14:54	X															
180-34298-3	1	T	14:56	X															
180-34298-4	1	T	14:58	X															
180-34298-5	1	T	15:00	X															
ZZZZZZ			15:01																
ZZZZZZ			15:03																
ZZZZZZ			15:05																

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

Instrument ID: K Method: 7470A

Start Date: 07/11/2014 13:46 End Date: 07/11/2014 16:50

Lab Sample ID	D / F	T y p e	Time	Analytes															
				H g															
ZZZZZZ			15:07																
ZZZZZZ			15:09																
ZZZZZZ			15:10																
CCV 180-111205/10-A	1		15:12	X															
CCB 180-111205/11-A	1		15:14	X															
ZZZZZZ			15:16																
ZZZZZZ			15:17																
ZZZZZZ			15:19																
ZZZZZZ			15:21																
ZZZZZZ			15:23																
ZZZZZZ			15:24																
ZZZZZZ			15:26																
ZZZZZZ			15:28																
ZZZZZZ			15:29																
ZZZZZZ			15:31																
CCV 180-111205/10-A			15:33																
CCB 180-111205/11-A			15:34																
ZZZZZZ			15:37																
ZZZZZZ			15:38																
ZZZZZZ			15:40																
ZZZZZZ			15:42																
ZZZZZZ			15:43																
ZZZZZZ			15:45																
ZZZZZZ			15:47																
ZZZZZZ			15:49																
ZZZZZZ			15:50																
ZZZZZZ			15:52																
CCV 180-111205/10-A			15:54																
CCB 180-111205/11-A			15:56																
ZZZZZZ			15:58																
ZZZZZZ			15:59																
ZZZZZZ			16:02																
ZZZZZZ			16:04																
ZZZZZZ			16:05																
ZZZZZZ			16:07																
ZZZZZZ			16:09																
ZZZZZZ			16:11																
ZZZZZZ			16:12																
ZZZZZZ			16:15																
CCV 180-111205/10-A			16:17																
CCB 180-111205/11-A			16:19																
ZZZZZZ			16:21																

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

Instrument ID: K Method: 7470A

Start Date: 07/11/2014 13:46 End Date: 07/11/2014 16:50

Lab Sample ID	D / F	T y p e	Time	Analytes																
				H g																
ZZZZZZ			16:22																	
ZZZZZZ			16:24																	
ZZZZZZ			16:26																	
ZZZZZZ			16:28																	
ZZZZZZ			16:29																	
ZZZZZZ			16:31																	
ZZZZZZ			16:33																	
ZZZZZZ			16:35																	
ZZZZZZ			16:37																	
CCV 180-111205/10-A			16:39																	
CCB 180-111205/11-A			16:41																	
ZZZZZZ			16:43																	
ZZZZZZ			16:44																	
ZZZZZZ			16:46																	
CCV 180-111205/10-A			16:48																	
CCB 180-111205/11-A			16:50																	

Prep Types
T = Total/NA

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

ICP-MS Instrument ID: M Start Date: 07/16/2014 End Date: 07/17/2014

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 180-111800/2 IC	16:36	100		100		100		100		100	
STD2 180-111800/3 IC	16:41	92		97		98		88		98	
STD3 180-111800/4 IC	16:44	93		93		96		93		98	
ICV 180-111800/5	16:48	90		94		98		91		100	
ICB 180-111800/6	16:51	99		99		102		99		104	
CRI 180-111800/7	16:54	101		108		112		99		107	
ICSA 180-111800/8	16:58	83		91		96		86		96	
ICSAB 180-111800/9	17:01	85		94		102		90		101	
CCV 180-111800/10	17:08	95		102		107		98		107	
CCB1 180-111800/11	17:14	105		110		113		110		113	
CCV 180-111800/46	19:31	92		97		104		98		104	
CCB4 180-111800/47	19:38	101		101		108		108		109	
MB 180-111451/1-A	19:41	98		99		107		107		106	
LCS 180-111451/2-A	19:45	107		103		113		102		108	
LCSD 180-111451/3-A	19:49	108		104		113		103		108	
CCV 180-111800/58	20:25	94		101		105		98		105	
CCB5 180-111800/59	20:31	102		103		111		110		110	
180-34298-2	21:05	95		100		111		100		108	
180-34298-2 SD	21:08	95		98		108		103		107	
CCV 180-111800/70	21:15	94		105		108		101		107	
CCB6 180-111800/71	21:22	101		106		114		114		113	
180-34298-3	21:29	96		98		110		107		107	
180-34298-4	21:33	96		97		107		105		106	
180-34298-5	21:37	91		93		104		95		101	
CCV 180-111800/82	22:06	96		97		101		95		101	
CCB7 180-111800/83	22:12	98		99		105		107		105	
CRI 180-111800/138	01:54	90		91		96		93		92	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

ICP-MS Instrument ID: M Start Date: 07/16/2014 End Date: 07/17/2014

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 180-111800/2 IC	16:36	100		100		100					
STD2 180-111800/3 IC	16:41	102		103		93					
STD3 180-111800/4 IC	16:44	101		101		96					
ICV 180-111800/5	16:48	103		103		94					
ICB 180-111800/6	16:51	105		105		100					
CRI 180-111800/7	16:54	104		105		100					
ICSA 180-111800/8	16:58	103		104		94					
ICSAB 180-111800/9	17:01	108		110		95					
CCV 180-111800/10	17:08	111		112		100					
CCB1 180-111800/11	17:14	113		113		105					
CCV 180-111800/46	19:31	110		111		102					
CCB4 180-111800/47	19:38	110		111		106					
MB 180-111451/1-A	19:41	109		110		108					
LCS 180-111451/2-A	19:45	115		116		103					
LCSD 180-111451/3-A	19:49	115		116		101					
CCV 180-111800/58	20:25	109		110		100					
CCB5 180-111800/59	20:31	111		111		107					
180-34298-2	21:05	115		117		100					
180-34298-2 SD	21:08	111		112		102					
CCV 180-111800/70	21:15	112		112		104					
CCB6 180-111800/71	21:22	114		114		112					
180-34298-3	21:29	112		113		107					
180-34298-4	21:33	109		111		106					
180-34298-5	21:37	108		110		95					
CCV 180-111800/82	22:06	106		107		98					
CCB7 180-111800/83	22:12	107		107		105					
CRI 180-111800/138	01:54	95		96		99					

Dilution Corrected Concentrations

STD1 1241003 NT STD 7/16/2014 4:36:25 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	16:36:44	99.358%	0.106	0.421	0.199	0.000	1.618	0.273	-0.170
2	16:37:03	99.766%	0.056	0.043	0.098	0.000	0.251	-0.097	0.105
3	16:37:22	100.876%	-0.162	-0.464	-0.297	0.000	-1.870	-0.175	0.065
X		100.000%	0.000	0.000	-0.000	0.000	-0.000	-0.000	-0.000
σ		0.785%	0.142	0.444	0.263	0.000	1.758	0.239	0.148
%RSD		0.785	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	16:36:44	0.060	0.172	0.000	-1.290	1.138	0.398	98.328%	0.012
2	16:37:03	-0.120	-0.334	0.000	-0.133	5.555	0.599	100.320%	0.008
3	16:37:22	0.060	0.162	0.000	1.423	-6.693	-0.997	101.352%	-0.020
X		0.000	0.000	0.000	0.000	0.000	-0.000	100.000%	0.000
σ		0.104	0.289	0.000	1.361	6.203	0.869	1.537%	0.018
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	1.537	0.000
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:36:44	-0.014	-0.018	0.015	0.213	-1.549	0.002	0.020	0.047
2	16:37:03	0.078	0.011	-0.007	0.112	-1.393	0.003	-0.020	0.014
3	16:37:22	-0.064	0.007	-0.008	-0.324	2.942	-0.006	0.001	-0.061
X		0.000	0.000	0.000	0.000	0.000	0.000	-0.000	-0.000
σ		0.072	0.016	0.013	0.285	2.549	0.005	0.020	0.055
%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	16:36:44	-0.032	-0.007	0.014	0.022	-0.358	0.106	0.000	-0.001
2	16:37:03	0.025	-0.003	0.010	-0.152	-0.280	-0.614	0.000	-0.006
3	16:37:22	0.007	0.009	-0.025	0.130	0.638	0.508	0.000	0.007
X		0.000	-0.000	0.000	-0.000	0.000	0.000	0.000	-0.000
σ		0.029	0.008	0.021	0.142	0.554	0.569	0.000	0.007
%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	16:36:44	97.655%	0.031	0.000	99.729%	-0.008	-0.003	0.007	0.014
2	16:37:03	100.000%	-0.013	-0.000	100.085%	0.003	-0.001	-0.044	-0.033
3	16:37:22	102.345%	-0.018	-0.000	100.187%	0.006	0.004	0.037	0.019
X		100.000%	0.000	0.000	100.000%	-0.000	-0.000	0.000	0.000
σ		2.345%	0.027	0.000	0.240%	0.007	0.003	0.041	0.028
%RSD		2.345	0.000	0.000	0.240	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	16:36:44	97.044%	0.002	-0.008	0.009	-0.022	0.013	96.546%	96.902%
2	16:37:03	100.951%	0.067	0.009	0.005	-0.005	-0.008	100.099%	99.747%
3	16:37:22	102.005%	-0.069	-0.001	-0.015	0.027	-0.004	103.355%	103.350%
X		100.000%	0.000	0.000	0.000	0.000	0.000	100.000%	100.000%
σ		2.614%	0.068	0.008	0.013	0.025	0.011	3.406%	3.232%
%RSD		2.614	0.000	0.000	0.000	0.000	0.000	3.406	3.232
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	16:36:44	-0.000	0.000	0.003	-0.003	-0.001	100.863%		
2	16:37:03	-0.002	0.001	0.002	0.001	0.006	99.665%		
3	16:37:22	0.003	-0.002	-0.004	0.001	-0.006	99.472%		
X		-0.000	0.000	0.000	-0.000	-0.000	100.000%		
σ		0.002	0.001	0.004	0.002	0.006	0.753%		
%RSD		0.000	0.000	0.000	0.000	0.000	0.753		

STD2 1207519

7/16/2014 4:41:23 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	16:41:23	91.366%	199.800	0.064	-0.446	0.000	100400.000	99960.000	99360.000
2	16:41:42	91.062%	204.800	-0.059	-0.439	0.000	100800.000	100700.000	101000.000
3	16:42:01	93.613%	195.400	-0.262	0.181	0.000	98860.000	99390.000	99660.000
X		92.014%	200.000	-0.086	-0.234	0.000	100000.000	100000.000	100000.000
σ		1.393%	4.706	0.165	0.360	0.000	1013.000	632.400	858.400
%RSD		1.514	2.353	191.600	153.600	0.000	1.013	0.632	0.858
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:41:23	983.000	12.670	0.000	99870.000	99350.000	99760.000	96.196%	-0.009
2	16:41:42	1015.000	13.520	0.000	100600.000	100300.000	100600.000	96.889%	-0.143
3	16:42:01	1002.000	13.050	0.000	99560.000	100400.000	99640.000	96.930%	-0.037
X		1000.000	13.080	0.000	100000.000	100000.000	100000.000	96.672%	-0.063
σ		16.120	0.424	0.000	514.300	566.300	524.300	0.413%	0.071
%RSD		1.612	3.239	0.000	0.514	0.566	0.524	0.427	111.600
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:41:23	197.200	197.600	1003.000	50010.000	50010.000	197.300	196.400	196.200
2	16:41:42	201.600	200.400	997.400	49980.000	49870.000	200.300	200.200	201.600
3	16:42:01	201.200	202.000	999.500	50010.000	50120.000	202.400	203.400	202.200
X		200.000	200.000	1000.000	50000.000	50000.000	200.000	200.000	200.000
σ		2.446	2.245	2.904	19.340	129.800	2.550	3.509	3.305
%RSD		1.223	1.123	0.290	0.039	0.260	1.275	1.755	1.653
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:41:23	198.700	197.700	196.700	195.500	197.500	198.000	0.000	198.000
2	16:41:42	200.000	200.300	200.000	203.000	199.500	202.900	0.000	201.400
3	16:42:01	201.300	202.000	203.200	201.500	203.000	199.100	0.000	200.500
X		200.000	200.000	200.000	200.000	200.000	200.000	0.000	200.000
σ		1.327	2.182	3.263	3.929	2.805	2.546	0.000	1.774
%RSD		0.663	1.091	1.631	1.965	1.402	1.273	0.000	0.887
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:41:23	96.667%	0.199	0.077	88.080%	195.600	196.800	196.500	200.200
2	16:41:42	98.617%	0.171	0.064	87.806%	202.600	202.700	201.400	200.100
3	16:42:01	99.947%	0.229	0.075	89.003%	201.800	200.500	202.100	199.600
X		98.410%	0.200	0.072	88.296%	200.000	200.000	200.000	200.000
σ		1.650%	0.029	0.007	0.627%	3.811	2.964	3.076	0.327
%RSD		1.676	14.390	9.539	0.710	1.905	1.482	1.538	0.164
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:41:23	95.297%	-0.269	0.145	0.138	199.000	200.400	99.164%	100.406%
2	16:41:42	98.226%	-0.226	0.161	0.214	200.600	200.800	102.524%	103.414%
3	16:42:01	100.059%	-0.211	0.130	0.175	200.400	198.800	105.093%	104.907%
X		97.861%	-0.235	0.145	0.176	200.000	200.000	102.260%	102.909%
σ		2.402%	0.030	0.015	0.038	0.849	1.081	2.973%	2.293%
%RSD		2.454	12.810	10.550	21.620	0.425	0.540	2.908	2.228
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	16:41:23	191.000	189.900	189.300	189.700	189.700	94.175%		
2	16:41:42	202.100	202.200	202.400	202.200	201.900	93.253%		
3	16:42:01	206.900	207.900	208.300	208.100	208.500	91.433%		
X		200.000	200.000	200.000	200.000	200.000	92.954%		
σ		8.142	9.177	9.708	9.396	9.531	1.395%		
%RSD		4.071	4.588	4.854	4.698	4.765	1.501		

STD3 1207520 7/16/2014 4:44:45 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	16:44:45	92.285%	-0.041	196.500	195.100	0.000	43.290	19.590	17.870
2	16:45:04	91.321%	-0.012	205.800	201.700	0.000	54.260	17.590	16.680
3	16:45:23	94.724%	-0.174	197.600	203.200	0.000	48.150	15.530	16.850
X		92.777%	-0.076	200.000	200.000	0.000	48.570	17.570	17.130
σ		1.754%	0.087	5.075	4.273	0.000	5.498	2.028	0.641
%RSD		1.890	115.100	2.538	2.137	0.000	11.320	11.540	3.739
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:44:45	1.722	9906.000	0.000	27.670	12.970	70.670	92.733%	198.000
2	16:45:04	1.694	10160.000	0.000	24.970	20.800	57.860	92.834%	202.900
3	16:45:23	1.861	9937.000	0.000	25.250	20.150	73.290	94.192%	199.200
X		1.759	10000.000	0.000	25.960	17.970	67.280	93.253%	200.000
σ		0.089	137.300	0.000	1.482	4.347	8.258	0.815%	2.550
%RSD		5.057	1.373	0.000	5.706	24.190	12.270	0.874	1.275
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:44:45	-0.108	-0.015	0.221	47.800	53.020	0.035	0.106	0.401
2	16:45:04	-0.235	-0.026	0.207	32.280	39.500	0.027	0.113	0.436
3	16:45:23	0.047	0.031	0.241	21.100	27.740	0.014	0.093	0.539
X		-0.099	-0.003	0.223	33.730	40.090	0.025	0.104	0.459
σ		0.141	0.031	0.017	13.410	12.650	0.010	0.010	0.072
%RSD		142.800	881.200	7.507	39.750	31.550	40.970	9.688	15.630
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:44:45	0.301	0.438	0.439	0.029	0.578	-0.140	0.000	0.029
2	16:45:04	0.196	0.499	0.352	0.077	0.182	-0.568	0.000	0.037
3	16:45:23	0.126	0.516	0.362	-0.104	0.485	-0.730	0.000	0.043
X		0.208	0.484	0.385	0.001	0.415	-0.479	0.000	0.037
σ		0.088	0.041	0.047	0.094	0.207	0.304	0.000	0.007
%RSD		42.420	8.462	12.350	15620.000	49.940	63.500	0.000	19.440
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:44:45	94.499%	195.300	195.800	91.453%	0.049	0.069	0.057	-0.392
2	16:45:04	95.463%	201.900	201.500	93.084%	0.069	0.061	0.032	-0.244
3	16:45:23	98.395%	202.800	202.700	93.891%	0.044	0.091	0.049	-0.318
X		96.119%	200.000	200.000	92.810%	0.054	0.073	0.046	-0.318
σ		2.030%	4.107	3.694	1.242%	0.013	0.016	0.013	0.074
%RSD		2.112	2.053	1.847	1.338	24.790	21.230	28.040	23.210
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:44:45	96.309%	198.200	198.300	197.100	0.136	0.327	98.643%	98.932%
2	16:45:04	97.688%	201.200	200.300	201.300	0.047	0.246	101.426%	101.308%
3	16:45:23	99.577%	200.600	201.400	201.600	0.062	0.294	102.913%	102.912%
X		97.858%	200.000	200.000	200.000	0.082	0.289	100.994%	101.051%
σ		1.640%	1.584	1.560	2.507	0.048	0.041	2.168%	2.003%
%RSD		1.676	0.792	0.780	1.254	58.550	14.070	2.146	1.982
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	16:44:45	0.043	0.037	0.037	0.026	0.021	96.391%		
2	16:45:04	0.043	0.042	0.034	0.044	0.033	94.734%		
3	16:45:23	0.035	0.031	0.027	0.032	0.032	95.970%		
X		0.040	0.037	0.032	0.034	0.029	95.698%		
σ		0.005	0.006	0.005	0.009	0.006	0.861%		
%RSD		11.600	15.740	15.930	26.890	22.160	0.900		

ICV 1240999 7/16/2014 4:48:07 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	16:48:07	88.844%	83.230	82.380	80.620	0.000	40670.000	39070.000	38640.000
2	16:48:27	89.777%	79.900	77.170	83.390	0.000	40180.000	39260.000	38720.000
3	16:48:46	90.826%	79.970	81.410	83.660	0.000	40270.000	39200.000	38960.000
x		89.816%	101.293%	100.399%	103.194%	0.000	100.941%	97.935%	96.936%
σ		0.992%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.104	2.345	3.448	2.039	0.000	0.650	0.253	0.439
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:48:07	387.000	3941.000	0.000	40680.000	39050.000	39350.000	92.158%	73.570
2	16:48:27	395.500	3983.000	0.000	40340.000	39480.000	39410.000	94.203%	77.660
3	16:48:46	394.700	4000.000	0.000	40300.000	39740.000	39850.000	94.400%	78.450
x		98.101%	99.372%	0.000	101.103%	98.548%	98.838%	93.587%	95.701%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.241%	n/a
%RSD		1.200	0.758	0.000	0.508	0.884	0.687	1.327	3.425
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:48:07	77.500	79.620	384.400	19710.000	19630.000	79.320	80.290	80.470
2	16:48:27	78.000	79.890	388.400	19610.000	19860.000	79.790	80.250	81.470
3	16:48:46	78.610	80.280	396.100	19740.000	20070.000	81.010	82.350	81.120
x		97.544%	99.910%	97.417%	98.444%	99.257%	100.050%	101.202%	101.277%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.711	0.414	1.522	0.342	1.100	1.092	1.488	0.631
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:48:07	80.870	79.470	78.730	80.820	81.570	80.200	0.000	75.090
2	16:48:27	81.650	82.870	80.370	78.520	81.320	81.530	0.000	75.310
3	16:48:46	81.090	81.070	80.120	80.780	82.750	82.430	0.000	76.840
x		101.505%	101.421%	99.674%	100.050%	102.346%	101.731%	0.000	94.685%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.492	2.092	1.107	1.648	0.933	1.376	0.000	1.256
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:48:07	95.183%	75.510	76.690	89.054%	75.850	76.810	74.080	75.890
2	16:48:27	99.181%	78.080	79.720	91.128%	77.420	77.250	76.680	76.050
3	16:48:46	100.228%	81.350	82.220	91.365%	79.440	79.630	77.720	77.760
x		98.197%	97.890%	99.429%	90.515%	96.964%	97.373%	95.204%	95.709%
σ		2.662%	n/a	n/a	1.271%	n/a	n/a	n/a	n/a
%RSD		2.711	3.735	3.485	1.405	2.321	1.947	2.462	1.351
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:48:07	96.578%	74.490	77.460	77.140	76.020	76.060	99.588%	99.938%
2	16:48:27	100.872%	76.080	77.330	77.580	76.180	75.810	104.278%	104.440%
3	16:48:46	101.262%	77.610	78.480	78.390	77.340	77.630	104.423%	105.198%
x		99.570%	95.072%	97.194%	97.127%	95.642%	95.627%	102.763%	103.192%
σ		2.599%	n/a	n/a	n/a	n/a	n/a	2.750%	2.844%
%RSD		2.610	2.051	0.812	0.816	0.942	1.291	2.677	2.756
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	16:48:07	75.820	75.920	75.450	71.270	73.080	93.686%		
2	16:48:27	79.480	79.370	79.970	74.360	77.210	93.758%		
3	16:48:46	82.110	82.250	81.970	77.450	79.710	92.997%		
x		98.924%	98.976%	98.911%	92.955%	95.832%	93.481%		
σ		n/a	n/a	n/a	n/a	n/a	0.420%		
%RSD		3.991	4.006	4.220	4.155	4.370	0.449		

ICB 7/16/2014 4:51:32 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	16:51:32	97.815%	-0.254	-0.622	0.126	0.000	16.800	1.886	2.045
2	16:51:51	98.866%	-0.134	0.072	-0.277	0.000	15.610	2.143	1.981
3	16:52:10	99.437%	-0.207	-0.306	-0.247	0.000	21.130	1.123	1.221
X		98.706%	-0.198	-0.285	-0.132	0.000	17.850	1.717	1.749
σ		0.822%	0.060	0.347	0.224	0.000	2.904	0.531	0.458
%RSD		0.833	30.460	121.800	169.500	0.000	16.270	30.900	26.200
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:51:32	-0.683	4.633	0.000	12.460	-1.290	-4.511	98.210%	-0.170
2	16:51:51	-0.478	4.456	0.000	9.647	-3.982	-3.116	99.484%	-0.042
3	16:52:10	-0.512	4.185	0.000	9.110	-4.083	-0.344	100.078%	-0.094
X		-0.558	4.424	0.000	10.410	-3.118	-2.657	99.258%	-0.102
σ		0.109	0.226	0.000	1.799	1.584	2.121	0.955%	0.064
%RSD		19.610	5.100	0.000	17.290	50.790	79.820	0.962	62.910
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:51:32	-0.147	-0.081	0.055	15.780	27.330	-0.001	0.004	0.170
2	16:51:51	-0.067	-0.065	0.025	10.510	15.800	-0.003	0.084	0.227
3	16:52:10	-0.038	-0.046	0.019	6.113	14.540	0.005	0.031	0.208
X		-0.084	-0.064	0.033	10.800	19.220	0.000	0.039	0.202
σ		0.057	0.018	0.019	4.841	7.046	0.004	0.041	0.029
%RSD		67.400	27.870	57.350	44.810	36.650	888.500	103.100	14.330
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:51:32	-0.002	0.146	0.024	0.147	0.259	0.236	0.000	0.038
2	16:51:51	-0.021	0.146	0.157	0.024	1.145	-0.390	0.000	0.035
3	16:52:10	-0.036	0.158	0.080	-0.018	0.898	0.089	0.000	0.038
X		-0.020	0.150	0.087	0.051	0.767	-0.022	0.000	0.037
σ		0.017	0.007	0.067	0.086	0.457	0.328	0.000	0.001
%RSD		87.400	4.703	76.750	168.400	59.600	1508.000	0.000	3.960
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:51:32	99.166%	0.902	0.746	97.483%	0.005	0.006	-0.029	-0.016
2	16:51:51	102.528%	0.694	0.613	99.204%	-0.013	0.008	0.047	0.028
3	16:52:10	103.763%	0.520	0.589	101.128%	0.001	0.003	-0.035	-0.031
X		101.819%	0.705	0.649	99.272%	-0.003	0.006	-0.006	-0.006
σ		2.379%	0.191	0.084	1.823%	0.009	0.002	0.045	0.031
%RSD		2.337	27.080	13.010	1.837	374.700	43.640	816.300	499.200
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:51:32	100.614%	-0.217	0.049	0.071	-0.022	-0.023	102.215%	102.630%
2	16:51:51	104.263%	-0.219	0.038	0.067	0.018	-0.024	105.365%	105.618%
3	16:52:10	105.837%	-0.240	0.057	0.077	0.009	-0.015	106.521%	107.710%
X		103.572%	-0.225	0.048	0.072	0.002	-0.020	104.700%	105.319%
σ		2.679%	0.013	0.010	0.005	0.021	0.005	2.228%	2.553%
%RSD		2.587	5.820	20.100	6.893	1276.000	24.780	2.128	2.424
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	16:51:32	-0.000	-0.005	-0.009	-0.006	-0.013	100.558%		
2	16:51:51	-0.003	-0.002	-0.012	-0.014	-0.012	100.660%		
3	16:52:10	0.009	-0.003	-0.005	-0.007	-0.012	100.034%		
X		0.002	-0.003	-0.009	-0.009	-0.012	100.418%		
σ		0.007	0.001	0.004	0.004	0.001	0.336%		
%RSD		367.900	41.350	43.200	50.160	5.150	0.335		

CRI 1228099 7/16/2014 4:54:57 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	16:54:57	100.465%	1.092	4.122	4.731	0.000	106.200	107.800	105.000
2	16:55:17	99.150%	1.038	4.085	4.520	0.000	109.300	113.200	112.900
3	16:55:36	103.493%	1.076	6.788	5.286	0.000	109.600	110.600	110.000
X		101.036%	106.860%	99.963%	96.913%	0.000	108.372%	110.527%	109.284%
σ		2.227%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.204	2.630	31.020	8.162	0.000	1.704	2.437	3.674
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:54:57	31.640	538.600	0.000	112.600	124.500	99.110	107.087%	4.726
2	16:55:17	34.110	555.600	0.000	112.600	110.000	106.600	107.868%	5.280
3	16:55:36	32.500	552.100	0.000	109.400	103.100	108.400	107.694%	5.072
X		109.164%	109.751%	0.000	111.513%	112.549%	104.726%	107.550%	100.525%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.410%	n/a
%RSD		3.820	1.634	0.000	1.670	9.674	4.720	0.381	5.567
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:54:57	1.019	2.072	5.231	52.250	59.370	0.565	1.277	2.069
2	16:55:17	0.957	2.121	5.363	51.920	56.610	0.582	0.952	2.279
3	16:55:36	0.931	2.242	5.439	50.600	59.940	0.547	1.140	2.271
X		96.913%	107.249%	106.885%	103.182%	117.278%	112.969%	112.284%	110.316%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		4.671	4.084	1.967	1.688	3.038	3.127	14.540	5.396
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:54:57	2.232	5.527	6.259	0.792	5.879	5.171	0.000	5.064
2	16:55:17	2.260	6.052	6.409	1.004	6.144	5.505	0.000	4.992
3	16:55:36	2.300	6.330	6.076	1.305	6.314	7.002	0.000	5.043
X		113.205%	119.398%	124.959%	103.375%	122.242%	117.849%	0.000	100.657%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.514	6.831	2.675	24.910	3.585	16.550	0.000	0.740
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:54:57	109.620%	5.349	5.386	97.961%	1.136	1.112	1.053	1.118
2	16:55:17	112.093%	5.531	5.431	99.079%	1.167	1.211	1.092	1.159
3	16:55:36	113.509%	5.356	5.961	100.481%	1.187	1.154	0.972	1.112
X		111.740%	108.239%	111.852%	99.174%	116.335%	115.886%	103.890%	112.982%
σ		1.968%	n/a	n/a	1.263%	n/a	n/a	n/a	n/a
%RSD		1.762	1.904	5.721	1.273	2.191	4.258	5.872	2.290
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:54:57	104.502%	5.211	2.173	2.280	11.050	11.160	102.135%	102.554%
2	16:55:17	106.899%	5.223	2.437	2.283	11.390	10.800	104.461%	104.484%
3	16:55:36	108.542%	5.043	2.290	2.299	10.980	11.200	105.835%	106.445%
X		106.648%	103.179%	115.016%	114.362%	111.406%	110.540%	104.144%	104.494%
σ		2.032%	n/a	n/a	n/a	n/a	n/a	1.870%	1.945%
%RSD		1.905	1.958	5.750	0.448	1.928	1.965	1.796	1.862
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	16:54:57	1.042	1.074	1.040	0.997	1.036	100.951%		
2	16:55:17	1.017	1.057	1.082	1.100	1.091	99.595%		
3	16:55:36	1.164	1.105	1.045	1.121	1.086	99.892%		
X		107.416%	107.872%	105.552%	107.273%	107.113%	100.146%		
σ		n/a	n/a	n/a	n/a	n/a	0.713%		
%RSD		7.333	2.275	2.163	6.178	2.883	0.712		

ICSA 1224151 7/16/2014 4:58:22 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	16:58:22	82.475%	-0.207	0.259	0.581	0.000	106900.000	105900.000	106000.000
2	16:58:41	84.758%	-0.267	-0.248	0.852	0.000	104700.000	105200.000	106700.000
3	16:59:00	82.978%	-0.208	-0.052	0.452	0.000	104500.000	107200.000	109800.000
X		83.404%	-0.228	-0.014	0.628	0.000	105400.000	106100.000	107500.000
σ		1.199%	0.034	0.256	0.204	0.000	1311.000	1041.000	1988.000
%RSD		1.438	15.050	1887.000	32.500	0.000	1.244	0.981	1.849
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:58:22	106900.000	19.980	0.000	105600.000	105100.000	106900.000	89.420%	2156.000
2	16:58:41	108000.000	20.860	0.000	104400.000	105500.000	106100.000	90.943%	2185.000
3	16:59:00	110800.000	22.070	0.000	104900.000	106400.000	105800.000	91.821%	2171.000
X		108600.000	20.970	0.000	105000.000	105700.000	106300.000	90.728%	2170.000
σ		2013.000	1.046	0.000	612.600	693.500	585.700	1.215%	14.450
%RSD		1.853	4.987	0.000	0.584	0.656	0.551	1.339	0.666
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:58:22	-0.598	0.089	0.833	106700.000	107000.000	0.096	-0.378	2.012
2	16:58:41	-0.646	0.434	0.922	106800.000	106800.000	0.075	-0.720	2.108
3	16:59:00	-0.660	0.404	0.784	106700.000	106300.000	0.056	-0.502	2.014
X		-0.634	0.309	0.847	106700.000	106700.000	0.076	-0.533	2.045
σ		0.033	0.191	0.070	57.380	374.100	0.020	0.173	0.055
%RSD		5.143	61.920	8.274	0.054	0.351	26.740	32.480	2.675
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:58:22	1.455	2.940	2.455	-0.427	2.490	-0.758	0.000	0.670
2	16:58:41	1.681	3.395	2.121	-0.327	2.299	-0.321	0.000	0.658
3	16:59:00	1.652	3.271	2.281	0.435	3.332	-0.094	0.000	0.706
X		1.596	3.202	2.285	-0.107	2.707	-0.391	0.000	0.678
σ		0.123	0.235	0.167	0.471	0.549	0.338	0.000	0.025
%RSD		7.711	7.343	7.320	442.800	20.290	86.390	0.000	3.708
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:58:22	92.418%	2143.000	2235.000	83.591%	0.032	0.058	0.229	0.343
2	16:58:41	96.859%	2205.000	2265.000	85.843%	0.023	0.032	0.450	0.314
3	16:59:00	98.871%	2217.000	2272.000	87.872%	0.060	0.050	0.174	0.256
X		96.049%	2188.000	2257.000	85.769%	0.038	0.046	0.284	0.304
σ		3.302%	39.870	19.590	2.142%	0.019	0.013	0.146	0.044
%RSD		3.438	1.822	0.868	2.497	49.720	28.660	51.370	14.590
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:58:22	92.361%	-0.097	0.075	0.111	0.104	0.070	98.498%	98.085%
2	16:58:41	96.475%	-0.141	0.067	0.075	0.089	0.113	104.405%	104.835%
3	16:59:00	99.777%	-0.083	0.080	0.077	0.143	0.099	107.316%	108.340%
X		96.205%	-0.107	0.074	0.088	0.112	0.094	103.406%	103.753%
σ		3.715%	0.030	0.006	0.020	0.028	0.022	4.493%	5.212%
%RSD		3.862	28.260	8.748	22.870	25.060	23.500	4.345	5.023
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	16:58:22	0.011	-0.005	0.224	0.205	0.205	96.094%		
2	16:58:41	-0.007	-0.003	0.261	0.177	0.229	92.614%		
3	16:59:00	-0.009	-0.002	0.242	0.227	0.229	91.730%		
X		-0.001	-0.003	0.242	0.203	0.221	93.480%		
σ		0.011	0.001	0.018	0.025	0.014	2.307%		
%RSD		794.800	36.070	7.514	12.310	6.191	2.468		

ICSAB 1224152 7/16/2014 5:01:47 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	17:01:47	83.979%	21.450	51.700	56.070	0.000	106200.000	107600.000	109300.000
2	17:02:06	85.390%	20.340	54.110	56.170	0.000	105200.000	108600.000	111300.000
3	17:02:25	85.817%	22.040	52.060	57.920	0.000	104900.000	109400.000	112100.000
X		85.062%	106.401%	105.240%	113.446%	0.000	105.415%	108.537%	110.938%
σ		0.962%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.131	4.055	2.470	1.832	0.000	0.643	0.847	1.315
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:01:47	110800.000	583.700	0.000	106300.000	105600.000	107500.000	92.746%	2168.000
2	17:02:06	113300.000	590.100	0.000	105400.000	106000.000	108000.000	94.260%	2202.000
3	17:02:25	114300.000	601.500	0.000	106400.000	105800.000	107700.000	94.374%	2216.000
X		112.820%	118.352%	0.000	106.004%	105.784%	107.713%	93.793%	109.767%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.909%	n/a
%RSD		1.584	1.519	0.000	0.521	0.159	0.230	0.969	1.134
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:01:47	20.730	21.480	22.080	108100.000	108100.000	20.880	19.730	22.160
2	17:02:06	20.630	21.690	22.440	108800.000	108500.000	21.250	20.570	23.140
3	17:02:25	20.930	22.140	22.170	108700.000	108200.000	21.400	20.500	22.830
X		103.807%	108.850%	96.650%	108.520%	108.283%	105.879%	101.342%	113.554%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.750	1.554	0.850	0.381	0.202	1.264	2.287	2.192
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:01:47	22.630	23.410	22.730	21.780	57.790	56.390	0.000	21.390
2	17:02:06	22.300	24.030	22.560	21.320	58.720	55.150	0.000	21.970
3	17:02:25	22.970	23.740	22.220	23.350	59.310	57.590	0.000	21.540
X		113.161%	94.896%	90.004%	110.749%	117.206%	112.757%	0.000	108.165%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.478	1.303	1.147	4.790	1.309	2.167	0.000	1.377
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:01:47	97.943%	2170.000	2255.000	88.164%	20.500	20.990	22.420	21.540
2	17:02:06	102.064%	2280.000	2326.000	90.121%	21.830	20.970	21.870	21.810
3	17:02:25	104.587%	2247.000	2298.000	92.277%	21.210	21.060	21.280	21.220
X		101.532%	111.627%	114.657%	90.187%	105.907%	105.046%	109.272%	107.627%
σ		3.354%	n/a	n/a	2.057%	n/a	n/a	n/a	n/a
%RSD		3.303	2.538	1.563	2.281	3.127	0.218	2.597	1.377
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:01:47	97.810%	107.600	21.320	21.700	21.120	20.950	103.406%	105.044%
2	17:02:06	100.604%	110.400	22.380	21.960	21.310	22.250	108.691%	110.532%
3	17:02:25	104.639%	107.600	21.410	21.540	20.850	21.780	111.864%	113.546%
X		101.018%	108.523%	108.520%	108.679%	105.463%	108.291%	107.987%	109.707%
σ		3.433%	n/a	n/a	n/a	n/a	n/a	4.273%	4.310%
%RSD		3.398	1.527	2.695	0.975	1.110	3.041	3.957	3.929
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:01:47	20.800	20.540	21.720	21.450	21.460	95.413%		
2	17:02:06	22.360	22.560	22.710	23.190	23.080	94.048%		
3	17:02:25	22.500	22.560	23.160	23.270	23.220	94.605%		
X		109.431%	109.434%	112.644%	113.179%	112.929%	94.689%		
σ		n/a	n/a	n/a	n/a	n/a	0.686%		
%RSD		4.314	5.318	3.282	4.557	4.317	0.725		

CCV 1241000 7/16/2014 5:08:17 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	17:08:17	94.114%	99.270	100.800	93.700	0.000	51260.000	51420.000	51870.000
2	17:08:36	96.245%	103.000	93.070	97.280	0.000	50370.000	51280.000	51770.000
3	17:08:55	95.466%	103.000	93.250	98.070	0.000	50570.000	51610.000	52350.000
x		95.275%	101.755%	95.718%	96.349%	0.000	101.460%	102.872%	103.996%
σ		1.078%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.132	2.117	4.627	2.416	0.000	0.922	0.317	0.600
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:08:17	515.300	5164.000	0.000	51820.000	49800.000	50940.000	102.036%	97.840
2	17:08:36	522.200	5159.000	0.000	51500.000	50340.000	50740.000	102.266%	99.090
3	17:08:55	527.800	5181.000	0.000	51520.000	50310.000	50640.000	102.601%	98.760
x		104.357%	103.357%	0.000	103.224%	100.299%	101.546%	102.301%	98.560%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.284%	n/a
%RSD		1.200	0.223	0.000	0.347	0.610	0.303	0.278	0.658
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:08:17	101.100	101.400	503.300	25790.000	25670.000	102.500	104.700	103.200
2	17:08:36	103.400	104.300	511.100	25870.000	26190.000	103.600	103.200	104.700
3	17:08:55	102.700	103.900	520.200	25870.000	26400.000	104.600	105.900	105.400
x		102.417%	103.235%	102.310%	103.375%	104.345%	103.549%	104.593%	104.449%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.172	1.514	1.649	0.193	1.443	1.040	1.296	1.050
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:08:17	104.500	103.100	101.600	101.600	102.000	103.900	0.000	99.820
2	17:08:36	105.400	104.900	102.300	102.100	104.700	103.200	0.000	100.100
3	17:08:55	105.400	104.500	101.100	101.700	102.500	101.200	0.000	100.900
x		105.097%	104.169%	101.632%	101.810%	103.085%	102.789%	0.000	100.281%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.489	0.881	0.592	0.253	1.400	1.350	0.000	0.547
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:08:17	104.229%	101.300	103.900	96.787%	99.130	100.100	98.210	100.200
2	17:08:36	107.092%	104.100	105.900	98.695%	101.100	100.300	100.800	101.800
3	17:08:55	109.491%	105.500	108.100	99.542%	101.800	102.000	101.700	101.300
x		106.937%	103.629%	105.945%	98.341%	100.666%	100.793%	100.219%	101.076%
σ		2.634%	n/a	n/a	1.411%	n/a	n/a	n/a	n/a
%RSD		2.464	2.016	1.991	1.435	1.367	1.006	1.788	0.795
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:08:17	103.755%	98.760	97.750	96.950	100.600	101.100	107.170%	107.618%
2	17:08:36	108.025%	97.760	98.520	97.990	101.800	100.400	111.797%	112.792%
3	17:08:55	110.279%	98.800	98.620	100.000	101.600	99.480	113.185%	114.111%
x		107.353%	98.442%	98.297%	98.318%	101.343%	100.333%	110.717%	111.507%
σ		3.314%	n/a	n/a	n/a	n/a	n/a	3.150%	3.432%
%RSD		3.087	0.598	0.487	1.584	0.613	0.801	2.845	3.078
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:08:17	97.810	98.100	97.210	96.990	97.230	100.022%		
2	17:08:36	102.500	102.800	101.500	102.700	103.000	99.375%		
3	17:08:55	105.200	105.600	104.700	104.200	105.000	99.058%		
x		101.846%	102.155%	101.127%	101.304%	101.749%	99.485%		
σ		n/a	n/a	n/a	n/a	n/a	0.491%		
%RSD		3.667	3.697	3.699	3.765	3.981	0.494		

CCB1 7/16/2014 5:14:46 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	17:15:05	103.396%	-0.259	-1.229	-1.209	0.000	14.860	2.567	2.222
2	17:15:24	104.147%	-0.214	-0.448	-1.423	0.000	19.300	1.998	2.535
3	17:15:44	108.798%	-0.176	-0.666	-1.472	0.000	5.681	1.984	2.309
X		105.447%	-0.216	-0.781	-1.368	0.000	13.280	2.183	2.356
σ		2.926%	0.042	0.403	0.140	0.000	6.946	0.333	0.162
%RSD		2.775	19.270	51.590	10.250	0.000	52.300	15.240	6.861
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:05	-0.545	2.714	0.000	9.125	1.390	-15.290	108.354%	-0.175
2	17:15:24	-0.559	2.642	0.000	7.425	5.534	-15.490	109.802%	0.011
3	17:15:44	-0.440	3.106	0.000	7.604	2.990	-13.330	111.108%	-0.015
X		-0.515	2.821	0.000	8.051	3.304	-14.700	109.754%	-0.060
σ		0.065	0.250	0.000	0.934	2.090	1.194	1.378%	0.101
%RSD		12.610	8.869	0.000	11.600	63.250	8.120	1.255	168.500
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:05	-0.088	-0.020	0.050	3.811	6.948	0.004	-0.006	0.106
2	17:15:24	-0.102	-0.063	0.050	2.359	5.953	-0.000	-0.055	0.114
3	17:15:44	-0.006	-0.024	0.069	1.388	3.495	-0.002	0.010	0.140
X		-0.065	-0.036	0.056	2.519	5.465	0.001	-0.017	0.120
σ		0.052	0.024	0.011	1.219	1.778	0.003	0.034	0.018
%RSD		79.820	66.280	19.450	48.390	32.520	449.000	201.000	15.060
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:05	0.038	0.240	0.162	0.037	0.645	0.069	0.000	0.042
2	17:15:24	-0.089	0.163	0.250	-0.124	0.510	-0.506	0.000	0.040
3	17:15:44	-0.048	0.204	0.122	0.232	0.721	0.789	0.000	0.058
X		-0.033	0.203	0.178	0.048	0.625	0.117	0.000	0.047
σ		0.065	0.038	0.065	0.179	0.107	0.649	0.000	0.010
%RSD		197.300	18.990	36.710	369.800	17.090	552.500	0.000	21.840
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:05	109.657%	0.619	0.612	108.387%	-0.003	0.003	-0.057	-0.045
2	17:15:24	113.107%	0.504	0.549	110.444%	-0.012	0.006	0.024	0.021
3	17:15:44	116.018%	0.555	0.506	112.353%	-0.008	0.001	0.081	0.045
X		112.927%	0.559	0.556	110.395%	-0.007	0.003	0.016	0.007
σ		3.184%	0.057	0.053	1.983%	0.005	0.003	0.069	0.046
%RSD		2.820	10.250	9.614	1.796	65.130	87.400	434.400	655.600
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:05	110.401%	-0.320	0.134	0.164	-0.007	-0.015	108.503%	108.605%
2	17:15:24	114.081%	-0.269	0.102	0.126	-0.001	-0.012	113.228%	113.446%
3	17:15:44	115.188%	-0.291	0.111	0.132	-0.009	-0.021	116.232%	115.588%
X		113.224%	-0.293	0.116	0.141	-0.006	-0.016	112.654%	112.546%
σ		2.506%	0.026	0.016	0.021	0.004	0.004	3.896%	3.577%
%RSD		2.213	8.757	13.890	14.780	75.070	28.080	3.459	3.179
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:15:05	0.007	0.001	-0.011	-0.006	-0.012	104.472%		
2	17:15:24	0.007	-0.003	-0.011	-0.002	-0.011	105.591%		
3	17:15:44	0.003	0.002	-0.008	-0.002	-0.011	105.876%		
X		0.006	-0.000	-0.010	-0.004	-0.011	105.313%		
σ		0.002	0.003	0.002	0.002	0.000	0.742%		
%RSD		35.760	896.200	18.650	57.230	4.130	0.704		

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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	17:18:48	104.884%	-0.306	-1.478	-1.479	0.000	31.470	0.875	-0.038
2	17:19:08	104.099%	-0.214	-1.354	-1.612	0.000	31.410	-0.475	0.122
3	17:19:27	104.453%	-0.237	-0.682	-1.502	0.000	27.880	0.592	0.112
X		104.478%	-0.252	-1.171	-1.531	0.000	30.250	0.331	0.065
σ		0.393%	0.048	0.428	0.071	0.000	2.057	0.712	0.090
%RSD		0.376	18.920	36.580	4.636	0.000	6.801	215.100	137.500
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:18:48	-0.335	2.027	0.000	5.695	8.426	2.576	107.105%	-0.055
2	17:19:08	-0.378	1.889	0.000	5.827	17.190	-1.861	108.071%	-0.104
3	17:19:27	-0.309	1.827	0.000	4.366	12.230	6.536	109.624%	-0.036
X		-0.341	1.914	0.000	5.296	12.610	2.417	108.267%	-0.065
σ		0.035	0.103	0.000	0.808	4.394	4.201	1.271%	0.035
%RSD		10.230	5.357	0.000	15.260	34.830	173.800	1.174	54.080
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:18:48	-0.828	0.166	0.045	-1.124	0.677	-0.021	0.091	0.671
2	17:19:08	0.334	0.229	0.054	-1.638	-1.497	-0.018	0.047	0.550
3	17:19:27	-0.196	0.238	0.027	-3.052	-3.227	-0.011	0.017	0.578
X		-0.230	0.211	0.042	-1.938	-1.349	-0.017	0.052	0.600
σ		0.582	0.039	0.014	0.998	1.956	0.005	0.037	0.063
%RSD		253.100	18.510	32.930	51.510	145.000	29.170	71.150	10.570
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:18:48	0.050	0.795	0.935	-0.126	1.895	-0.470	0.000	0.007
2	17:19:08	0.027	0.760	0.908	0.078	1.713	0.911	0.000	0.011
3	17:19:27	-0.009	0.825	0.900	-0.336	1.087	-0.087	0.000	0.012
X		0.023	0.793	0.914	-0.128	1.565	0.118	0.000	0.010
σ		0.030	0.032	0.018	0.207	0.424	0.713	0.000	0.002
%RSD		129.400	4.071	1.973	161.700	27.100	605.900	0.000	24.160
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:18:48	111.357%	0.277	0.233	110.444%	-0.008	-0.011	-0.058	-0.041
2	17:19:08	113.717%	0.293	0.272	111.683%	-0.010	0.005	0.041	0.022
3	17:19:27	117.817%	0.337	0.279	113.938%	-0.000	-0.001	-0.049	-0.039
X		114.297%	0.302	0.261	112.021%	-0.006	-0.002	-0.022	-0.019
σ		3.269%	0.031	0.025	1.771%	0.005	0.008	0.055	0.036
%RSD		2.860	10.290	9.427	1.581	83.510	328.500	249.500	187.100
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:18:48	111.526%	-0.206	0.061	0.051	-0.031	-0.020	111.866%	112.271%
2	17:19:08	114.081%	-0.227	0.049	0.055	-0.016	-0.020	113.963%	114.557%
3	17:19:27	116.805%	-0.238	0.031	0.028	-0.002	-0.008	117.343%	117.872%
X		114.137%	-0.223	0.047	0.045	-0.016	-0.016	114.391%	114.900%
σ		2.640%	0.016	0.015	0.014	0.015	0.007	2.764%	2.816%
%RSD		2.313	7.277	31.610	32.290	90.470	41.970	2.416	2.451
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:18:48	-0.001	-0.008	-0.006	0.002	-0.007	108.429%		
2	17:19:08	-0.006	-0.008	-0.002	0.004	-0.003	106.709%		
3	17:19:27	-0.010	-0.009	-0.014	-0.003	-0.010	108.763%		
X		-0.005	-0.008	-0.008	0.001	-0.007	107.967%		
σ		0.005	0.001	0.006	0.003	0.003	1.102%		
%RSD		85.150	10.300	78.620	362.400	46.940	1.021		

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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	17:22:29	108.662%	-0.132	-0.999	-1.319	0.000	-3.382	0.210	-0.141
2	17:22:48	111.146%	-0.201	-1.150	-1.756	0.000	1.077	0.259	-0.128
3	17:23:08	112.331%	-0.266	-0.328	-1.441	0.000	-2.112	0.186	-0.236
X		110.713%	-0.200	-0.826	-1.505	0.000	-1.472	0.219	-0.168
σ		1.873%	0.067	0.438	0.226	0.000	2.297	0.037	0.059
%RSD		1.692	33.530	53.040	15.000	0.000	156.000	17.050	35.030
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:22:29	-0.568	1.123	0.000	4.205	2.131	-16.210	115.468%	-0.089
2	17:22:48	-0.740	0.619	0.000	4.766	10.390	-15.990	115.984%	-0.046
3	17:23:08	-0.712	0.590	0.000	1.768	-8.603	-15.030	117.113%	-0.091
X		-0.673	0.777	0.000	3.580	1.307	-15.740	116.188%	-0.075
σ		0.092	0.299	0.000	1.594	9.525	0.628	0.841%	0.026
%RSD		13.700	38.530	0.000	44.530	728.800	3.986	0.724	34.110
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:22:29	0.059	0.019	0.034	-2.244	-0.131	-0.017	0.008	-0.018
2	17:22:48	0.115	0.013	0.032	-1.385	-2.464	-0.012	0.006	-0.024
3	17:23:08	-0.161	-0.016	0.026	-2.493	-1.900	-0.005	-0.008	-0.031
X		0.004	0.005	0.031	-2.041	-1.498	-0.011	0.002	-0.024
σ		0.146	0.018	0.004	0.581	1.218	0.006	0.008	0.006
%RSD		3253.000	337.600	12.980	28.470	81.260	50.590	407.500	26.530
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:22:29	-0.021	0.301	0.271	0.050	0.640	0.482	0.000	-0.001
2	17:22:48	-0.041	0.275	0.365	0.278	1.050	1.094	0.000	-0.004
3	17:23:08	-0.056	0.427	0.401	0.061	0.498	0.231	0.000	-0.005
X		-0.039	0.334	0.346	0.130	0.729	0.602	0.000	-0.003
σ		0.018	0.081	0.067	0.128	0.287	0.444	0.000	0.002
%RSD		44.690	24.290	19.400	98.910	39.340	73.630	0.000	69.620
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:22:29	116.032%	0.207	0.220	115.059%	0.001	-0.012	0.044	0.033
2	17:22:48	118.776%	0.251	0.201	116.631%	-0.005	-0.008	0.008	-0.005
3	17:23:08	121.497%	0.151	0.179	117.421%	-0.010	0.006	-0.006	0.000
X		118.768%	0.203	0.200	116.370%	-0.005	-0.005	0.015	0.009
σ		2.733%	0.050	0.020	1.203%	0.005	0.009	0.026	0.020
%RSD		2.301	24.670	10.090	1.033	116.600	201.900	170.200	218.500
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:22:29	116.254%	-0.391	-0.004	0.011	-0.009	-0.029	114.099%	114.172%
2	17:22:48	118.462%	-0.363	0.008	0.010	-0.009	-0.021	116.217%	116.250%
3	17:23:08	120.340%	-0.361	0.009	0.023	-0.024	0.003	118.255%	118.892%
X		118.352%	-0.372	0.004	0.015	-0.014	-0.016	116.190%	116.438%
σ		2.045%	0.017	0.008	0.007	0.009	0.017	2.078%	2.366%
%RSD		1.728	4.502	171.700	46.870	62.290	108.200	1.788	2.032
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:22:29	-0.005	-0.011	-0.006	0.019	-0.000	106.442%		
2	17:22:48	-0.010	-0.003	0.004	0.004	-0.003	104.749%		
3	17:23:08	-0.003	-0.008	-0.004	0.009	0.002	107.026%		
X		-0.006	-0.007	-0.002	0.011	-0.000	106.072%		
σ		0.004	0.004	0.005	0.008	0.002	1.183%		
%RSD		60.540	55.410	258.900	71.960	533.700	1.115		

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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	17:26:10	106.320%	45.590	952.800	1004.000	0.000	45770.000	50470.000	53140.000
2	17:26:30	107.537%	50.120	975.100	1032.000	0.000	45510.000	50440.000	53500.000
3	17:26:49	111.220%	46.920	979.900	1007.000	0.000	44490.000	49980.000	53060.000
X		108.359%	47.540	969.300	1014.000	0.000	45260.000	50290.000	53230.000
σ		2.551%	2.331	14.450	15.460	0.000	678.700	275.500	235.500
%RSD		2.354	4.902	1.491	1.525	0.000	1.500	0.548	0.442
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:26:10	2152.000	10170.000	0.000	48160.000	48290.000	49950.000	101.954%	981.500
2	17:26:30	2165.000	10320.000	0.000	47630.000	48460.000	49600.000	105.139%	986.700
3	17:26:49	2150.000	10150.000	0.000	46920.000	47940.000	49280.000	107.043%	967.800
X		2156.000	10210.000	0.000	47570.000	48230.000	49610.000	104.712%	978.700
σ		8.371	89.840	0.000	622.400	261.800	332.200	2.571%	9.786
%RSD		0.388	0.880	0.000	1.309	0.543	0.670	2.456	1.000
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:26:10	512.400	205.900	506.600	1035.000	1127.000	495.600	488.200	244.200
2	17:26:30	513.000	207.800	511.700	1026.000	1131.000	494.200	486.200	245.000
3	17:26:49	512.000	205.700	506.700	1016.000	1093.000	487.100	484.300	241.700
X		512.500	206.500	508.400	1026.000	1117.000	492.300	486.200	243.600
σ		0.467	1.133	2.927	9.477	20.980	4.553	1.914	1.690
%RSD		0.091	0.549	0.576	0.924	1.879	0.925	0.394	0.694
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:26:10	247.400	494.300	492.800	39.010	13.300	10.400	0.000	1001.000
2	17:26:30	242.900	496.200	494.000	38.740	13.900	10.470	0.000	986.100
3	17:26:49	241.600	490.800	490.700	40.220	13.030	11.180	0.000	973.900
X		244.000	493.800	492.500	39.320	13.410	10.680	0.000	987.000
σ		3.043	2.741	1.692	0.788	0.448	0.431	0.000	13.580
%RSD		1.247	0.555	0.344	2.004	3.343	4.031	0.000	1.376
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:26:10	108.290%	1029.000	1045.000	99.136%	49.440	50.310	51.550	47.160
2	17:26:30	112.806%	1051.000	1065.000	100.964%	49.770	50.080	50.270	45.850
3	17:26:49	116.431%	1050.000	1063.000	103.163%	49.900	50.050	50.430	46.800
X		112.509%	1043.000	1058.000	101.088%	49.710	50.150	50.750	46.600
σ		4.079%	12.510	10.920	2.016%	0.237	0.141	0.697	0.678
%RSD		3.625	1.199	1.032	1.994	0.477	0.282	1.373	1.455
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:26:10	105.207%	2000.000	507.900	505.700	1970.000	1967.000	110.723%	111.912%
2	17:26:30	109.532%	1948.000	504.600	504.400	1984.000	1977.000	114.400%	116.035%
3	17:26:49	112.107%	1942.000	504.800	503.000	1970.000	1963.000	118.058%	119.646%
X		108.949%	1963.000	505.800	504.400	1975.000	1969.000	114.394%	115.864%
σ		3.486%	31.780	1.856	1.360	7.993	7.143	3.668%	3.870%
%RSD		3.200	1.619	0.367	0.270	0.405	0.363	3.206	3.340
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:26:10	48.530	49.340	20.480	20.380	20.470	97.330%		
2	17:26:30	50.440	50.310	20.770	20.900	20.880	99.416%		
3	17:26:49	50.350	50.660	21.000	21.050	21.120	100.865%		
X		49.770	50.100	20.750	20.780	20.820	99.204%		
σ		1.082	0.683	0.264	0.354	0.327	1.777%		
%RSD		2.174	1.364	1.271	1.706	1.570	1.791		

LCSD 180-111466/3-A 7/16/2014 5:29:33 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	17:29:53	108.521%	47.250	965.700	995.200	0.000	44120.000	48640.000	51570.000
2	17:30:12	112.102%	46.990	960.900	1003.000	0.000	43210.000	48560.000	51710.000
3	17:30:31	115.758%	45.910	946.000	985.500	0.000	42660.000	48370.000	51320.000
X		112.127%	46.720	957.600	994.600	0.000	43330.000	48520.000	51530.000
σ		3.618%	0.714	10.260	8.877	0.000	737.500	140.100	196.900
%RSD		3.227	1.528	1.071	0.892	0.000	1.702	0.289	0.382
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:53	2090.000	9948.000	0.000	45690.000	45340.000	47640.000	106.306%	926.900
2	17:30:12	2088.000	9953.000	0.000	45420.000	46460.000	47400.000	107.863%	930.800
3	17:30:31	2080.000	9851.000	0.000	44800.000	45220.000	47070.000	110.337%	928.700
X		2086.000	9918.000	0.000	45300.000	45670.000	47370.000	108.169%	928.800
σ		5.192	57.400	0.000	456.700	686.700	285.600	2.032%	1.961
%RSD		0.249	0.579	0.000	1.008	1.504	0.603	1.879	0.211
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:53	484.500	197.900	487.100	984.900	1073.000	469.100	466.700	233.000
2	17:30:12	489.200	201.200	491.700	980.700	1069.000	471.100	470.500	233.900
3	17:30:31	491.300	199.400	488.400	971.800	1059.000	468.600	465.200	234.000
X		488.300	199.500	489.100	979.200	1067.000	469.600	467.500	233.700
σ		3.490	1.631	2.394	6.671	7.276	1.344	2.711	0.582
%RSD		0.715	0.818	0.489	0.681	0.682	0.286	0.580	0.249
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:53	233.900	470.800	472.100	35.230	11.770	9.252	0.000	946.400
2	17:30:12	234.500	468.000	467.100	35.950	12.140	10.280	0.000	939.100
3	17:30:31	233.200	472.100	471.400	36.020	12.770	9.834	0.000	932.300
X		233.900	470.300	470.200	35.730	12.230	9.787	0.000	939.300
σ		0.677	2.111	2.736	0.440	0.508	0.514	0.000	7.066
%RSD		0.290	0.449	0.582	1.230	4.151	5.251	0.000	0.752
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:53	113.111%	988.600	1004.000	102.476%	47.210	47.650	48.660	44.620
2	17:30:12	116.883%	1004.000	1021.000	104.474%	48.130	47.900	48.710	45.380
3	17:30:31	118.901%	1001.000	1023.000	105.819%	48.080	47.600	48.400	45.040
X		116.298%	997.900	1016.000	104.256%	47.800	47.720	48.590	45.010
σ		2.939%	8.161	10.160	1.682%	0.520	0.163	0.167	0.382
%RSD		2.527	0.818	1.000	1.614	1.087	0.342	0.343	0.848
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:53	108.866%	1883.000	482.400	479.900	1869.000	1861.000	115.104%	116.193%
2	17:30:12	111.596%	1875.000	482.900	485.900	1893.000	1892.000	118.103%	119.297%
3	17:30:31	114.000%	1839.000	480.100	480.700	1865.000	1874.000	120.885%	122.110%
X		111.488%	1866.000	481.800	482.100	1876.000	1875.000	118.031%	119.200%
σ		2.569%	23.570	1.486	3.270	15.310	15.670	2.891%	2.960%
%RSD		2.304	1.263	0.309	0.678	0.816	0.836	2.449	2.483
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:29:53	47.040	47.990	19.820	19.520	19.730	99.710%		
2	17:30:12	48.820	49.160	19.950	20.000	20.150	101.093%		
3	17:30:31	49.100	48.800	20.070	19.970	20.200	101.621%		
X		48.320	48.650	19.950	19.830	20.030	100.808%		
σ		1.119	0.599	0.127	0.266	0.257	0.987%		
%RSD		2.317	1.231	0.639	1.343	1.284	0.979		

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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	17:33:34	98.672%	48.500	914.500	965.400	0.000	46030.000	49100.000	50880.000
2	17:33:54	98.133%	48.700	965.200	984.700	0.000	46230.000	49440.000	51430.000
3	17:34:13	99.419%	49.490	957.500	987.800	0.000	45510.000	49390.000	51740.000
X		98.741%	48.900	945.700	979.300	0.000	45920.000	49310.000	51350.000
σ		0.646%	0.525	27.300	12.170	0.000	374.000	182.400	433.100
%RSD		0.654	1.074	2.886	1.243	0.000	0.815	0.370	0.843
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:33:34	2063.000	9895.000	0.000	47880.000	47610.000	48840.000	98.109%	954.300
2	17:33:54	2082.000	10010.000	0.000	47800.000	47990.000	48910.000	99.270%	958.100
3	17:34:13	2093.000	10020.000	0.000	47480.000	48500.000	48640.000	99.124%	956.700
X		2079.000	9974.000	0.000	47720.000	48040.000	48800.000	98.834%	956.400
σ		15.170	69.010	0.000	212.200	444.700	141.900	0.632%	1.906
%RSD		0.730	0.692	0.000	0.445	0.926	0.291	0.640	0.199
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:33:34	500.900	199.800	493.100	1021.000	1112.000	487.400	493.400	241.800
2	17:33:54	501.400	202.500	498.300	1017.000	1119.000	487.300	492.100	243.100
3	17:34:13	504.100	203.400	500.300	1012.000	1113.000	487.800	492.300	244.200
X		502.200	201.900	497.300	1017.000	1115.000	487.500	492.600	243.000
σ		1.702	1.890	3.707	4.570	3.908	0.247	0.720	1.157
%RSD		0.339	0.936	0.746	0.450	0.351	0.051	0.146	0.476
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:33:34	244.600	488.100	483.500	37.880	12.340	10.840	0.000	970.300
2	17:33:54	245.500	486.300	485.200	37.220	11.840	9.014	0.000	954.200
3	17:34:13	246.100	489.600	485.400	37.140	11.630	9.272	0.000	952.100
X		245.400	488.000	484.700	37.420	11.940	9.709	0.000	958.800
σ		0.714	1.629	1.017	0.407	0.364	0.988	0.000	10.000
%RSD		0.291	0.334	0.210	1.088	3.048	10.180	0.000	1.043
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:33:34	104.226%	985.000	995.000	96.713%	47.690	48.080	48.830	43.910
2	17:33:54	107.623%	998.700	1015.000	97.878%	48.330	48.170	49.720	45.100
3	17:34:13	108.776%	1006.000	1030.000	97.849%	48.800	48.550	49.240	45.820
X		106.875%	996.700	1013.000	97.480%	48.270	48.270	49.260	44.940
σ		2.365%	10.840	17.430	0.664%	0.554	0.246	0.448	0.963
%RSD		2.213	1.088	1.721	0.681	1.148	0.510	0.909	2.142
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:33:34	102.275%	1941.000	489.700	488.200	1913.000	1919.000	108.504%	108.952%
2	17:33:54	105.799%	1917.000	489.100	490.000	1903.000	1894.000	111.565%	111.758%
3	17:34:13	105.589%	1933.000	495.600	495.500	1936.000	1933.000	112.092%	112.435%
X		104.554%	1931.000	491.500	491.200	1917.000	1915.000	110.721%	111.048%
σ		1.976%	12.310	3.598	3.802	16.840	19.790	1.937%	1.847%
%RSD		1.890	0.638	0.732	0.774	0.878	1.033	1.750	1.663
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:33:34	50.500	50.220	20.280	20.450	20.380	92.712%		
2	17:33:54	50.900	51.140	20.540	20.810	20.670	94.031%		
3	17:34:13	52.180	51.960	21.460	21.170	21.270	93.874%		
X		51.200	51.110	20.760	20.810	20.770	93.539%		
σ		0.878	0.870	0.620	0.360	0.453	0.721%		
%RSD		1.714	1.702	2.984	1.729	2.179	0.770		

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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	17:37:17	98.186%	46.030	901.100	945.200	0.000	44790.000	48120.000	50510.000
2	17:37:36	99.008%	47.440	926.100	959.400	0.000	44350.000	48120.000	50450.000
3	17:37:55	98.810%	45.350	929.700	959.200	0.000	44480.000	48450.000	50920.000
X		98.668%	46.270	918.900	954.600	0.000	44540.000	48230.000	50630.000
σ		0.429%	1.069	15.570	8.177	0.000	227.000	193.400	253.100
%RSD		0.434	2.311	1.694	0.857	0.000	0.510	0.401	0.500
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:17	2040.000	9778.000	0.000	46950.000	46800.000	48210.000	97.219%	926.100
2	17:37:36	2050.000	9768.000	0.000	46330.000	46000.000	47500.000	98.995%	925.900
3	17:37:55	2063.000	9813.000	0.000	46220.000	46140.000	47740.000	99.890%	936.200
X		2051.000	9786.000	0.000	46500.000	46320.000	47820.000	98.701%	929.400
σ		11.570	23.790	0.000	396.500	427.600	365.200	1.359%	5.881
%RSD		0.564	0.243	0.000	0.853	0.923	0.764	1.377	0.633
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:17	491.700	197.100	488.400	1003.000	1089.000	477.700	480.900	237.800
2	17:37:36	487.100	197.800	485.000	986.400	1076.000	475.200	480.900	237.000
3	17:37:55	489.900	197.700	491.700	988.200	1080.000	475.400	481.000	237.200
X		489.600	197.500	488.400	992.500	1081.000	476.100	480.900	237.300
σ		2.313	0.404	3.318	9.073	6.570	1.417	0.031	0.395
%RSD		0.472	0.204	0.679	0.914	0.608	0.297	0.006	0.166
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:17	239.300	479.700	474.100	36.340	12.570	9.330	0.000	951.700
2	17:37:36	236.600	480.600	472.400	36.430	12.180	9.444	0.000	938.600
3	17:37:55	239.000	481.700	473.300	37.310	11.940	9.218	0.000	943.900
X		238.300	480.700	473.300	36.690	12.230	9.331	0.000	944.700
σ		1.498	0.988	0.832	0.536	0.321	0.113	0.000	6.571
%RSD		0.629	0.205	0.176	1.462	2.621	1.209	0.000	0.696
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:17	105.291%	963.800	967.600	97.747%	46.580	47.120	49.060	44.780
2	17:37:36	108.062%	977.800	994.900	98.745%	47.130	47.450	48.050	43.640
3	17:37:55	109.909%	997.500	1008.000	99.004%	47.540	47.860	49.930	45.500
X		107.754%	979.700	990.300	98.499%	47.080	47.480	49.010	44.640
σ		2.324%	16.930	20.680	0.664%	0.478	0.371	0.944	0.938
%RSD		2.157	1.728	2.088	0.674	1.016	0.781	1.927	2.101
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:17	102.838%	1909.000	483.300	480.400	1894.000	1883.000	108.416%	110.722%
2	17:37:36	105.835%	1872.000	479.100	480.200	1873.000	1866.000	112.944%	113.654%
3	17:37:55	106.671%	1879.000	484.500	485.000	1899.000	1895.000	114.007%	116.251%
X		105.115%	1887.000	482.300	481.900	1889.000	1881.000	111.789%	113.542%
σ		2.015%	19.630	2.818	2.732	13.960	14.550	2.969%	2.766%
%RSD		1.917	1.040	0.584	0.567	0.739	0.773	2.656	2.436
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:37:17	48.930	49.010	19.910	19.810	19.860	95.170%		
2	17:37:36	50.180	50.140	19.970	20.600	20.260	96.111%		
3	17:37:55	50.190	50.320	20.190	20.430	20.450	97.378%		
X		49.770	49.820	20.020	20.280	20.190	96.220%		
σ		0.725	0.711	0.145	0.415	0.297	1.108%		
%RSD		1.456	1.426	0.724	2.045	1.471	1.152		

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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	17:40:59	110.790%	-0.178	30.340	28.100	0.000	4824.000	4433.000	4692.000
2	17:41:18	113.304%	-0.097	29.180	28.970	0.000	4801.000	4494.000	4762.000
3	17:41:37	114.421%	-0.162	26.030	27.770	0.000	4736.000	4490.000	4767.000
X		112.839%	-0.146	28.520	28.280	0.000	4787.000	4472.000	4740.000
σ		1.860%	0.043	2.230	0.620	0.000	45.740	33.830	42.130
%RSD		1.648	29.480	7.820	2.193	0.000	0.956	0.756	0.889
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:40:59	9.138	3184.000	0.000	3230.000	20660.000	21150.000	104.162%	2.256
2	17:41:18	9.369	3199.000	0.000	3215.000	20730.000	21080.000	106.451%	2.010
3	17:41:37	9.253	3212.000	0.000	3180.000	20370.000	21320.000	107.621%	1.914
X		9.253	3198.000	0.000	3209.000	20590.000	21180.000	106.078%	2.060
σ		0.115	13.960	0.000	25.630	189.500	124.200	1.760%	0.176
%RSD		1.248	0.436	0.000	0.799	0.920	0.586	1.659	8.569
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:40:59	-0.235	2.596	0.599	11.870	60.150	0.158	2.079	3.480
2	17:41:18	0.600	2.556	0.606	11.340	56.800	0.182	2.274	3.495
3	17:41:37	0.796	2.760	0.634	10.690	59.100	0.159	2.185	3.433
X		0.387	2.637	0.613	11.300	58.680	0.167	2.179	3.469
σ		0.548	0.108	0.019	0.590	1.714	0.014	0.098	0.033
%RSD		141.600	4.100	3.058	5.222	2.921	8.203	4.477	0.941
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:40:59	3.238	19.480	19.810	1.635	2.266	-0.575	0.000	67.440
2	17:41:18	3.732	19.630	19.470	0.849	2.120	0.558	0.000	67.320
3	17:41:37	3.148	19.170	19.850	0.657	1.990	0.231	0.000	67.940
X		3.373	19.430	19.710	1.047	2.125	0.071	0.000	67.570
σ		0.315	0.236	0.208	0.518	0.138	0.583	0.000	0.327
%RSD		9.333	1.217	1.055	49.500	6.481	820.100	0.000	0.483
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:40:59	110.468%	8.529	8.710	105.813%	-0.005	-0.003	0.035	-0.049
2	17:41:18	113.942%	6.387	6.548	107.235%	-0.004	0.010	0.030	0.002
3	17:41:37	115.759%	4.961	4.824	108.035%	-0.001	-0.003	0.015	-0.035
X		113.390%	6.626	6.694	107.028%	-0.003	0.001	0.027	-0.027
σ		2.688%	1.796	1.947	1.126%	0.002	0.008	0.010	0.026
%RSD		2.371	27.110	29.090	1.052	52.210	553.800	37.510	96.300
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:40:59	107.483%	11.410	0.827	0.929	14.800	15.130	110.939%	110.715%
2	17:41:18	109.445%	9.401	0.726	0.755	15.290	14.980	113.943%	114.646%
3	17:41:37	111.998%	8.013	0.818	0.828	14.860	15.110	116.466%	116.435%
X		109.642%	9.609	0.790	0.837	14.980	15.070	113.783%	113.932%
σ		2.264%	1.710	0.056	0.088	0.268	0.080	2.767%	2.926%
%RSD		2.064	17.790	7.057	10.450	1.792	0.529	2.431	2.568
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:40:59	0.172	0.203	0.022	0.034	0.028	102.571%		
2	17:41:18	0.187	0.176	0.046	0.033	0.037	103.155%		
3	17:41:37	0.175	0.174	0.042	0.041	0.036	103.771%		
X		0.178	0.184	0.037	0.036	0.034	103.165%		
σ		0.008	0.016	0.013	0.004	0.005	0.600%		
%RSD		4.573	8.715	35.240	11.710	13.820	0.582		

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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	17:44:41	97.769%	-0.229	707.600	728.800	0.000	378.800	1963.000	2020.000
2	17:45:00	99.533%	-0.231	678.100	724.500	0.000	377.700	1987.000	2044.000
3	17:45:19	99.711%	-0.303	702.900	722.800	0.000	370.400	1971.000	2039.000
X		99.004%	-0.254	696.200	725.400	0.000	375.700	1974.000	2034.000
σ		1.073%	0.042	15.820	3.076	0.000	4.569	12.490	12.380
%RSD		1.084	16.630	2.273	0.424	0.000	1.216	0.633	0.609
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:44:41	14.890	341.200	0.000	981.400	19120.000	19320.000	97.676%	0.118
2	17:45:00	15.020	342.100	0.000	987.100	19440.000	19600.000	97.693%	-0.092
3	17:45:19	14.680	342.100	0.000	981.200	18670.000	19290.000	99.182%	-0.016
X		14.860	341.800	0.000	983.200	19080.000	19400.000	98.183%	0.003
σ		0.172	0.520	0.000	3.366	387.800	169.300	0.865%	0.106
%RSD		1.155	0.152	0.000	0.342	2.033	0.873	0.881	3141.000
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:44:41	0.366	0.430	18.870	4.098	50.060	-0.003	1.703	0.259
2	17:45:00	0.552	0.417	19.100	3.835	46.240	0.007	1.626	0.454
3	17:45:19	0.055	0.398	18.890	3.682	46.470	0.012	1.794	0.356
X		0.325	0.415	18.950	3.872	47.590	0.005	1.708	0.356
σ		0.251	0.016	0.127	0.210	2.145	0.007	0.084	0.098
%RSD		77.340	3.900	0.669	5.435	4.508	137.100	4.909	27.370
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:44:41	0.272	11.720	11.060	4.271	13.320	13.270	0.000	51.450
2	17:45:00	0.247	11.250	11.780	3.802	13.310	11.950	0.000	51.210
3	17:45:19	0.296	11.280	11.130	4.392	13.000	12.650	0.000	50.780
X		0.272	11.420	11.320	4.155	13.210	12.620	0.000	51.150
σ		0.024	0.261	0.399	0.312	0.179	0.660	0.000	0.339
%RSD		8.978	2.282	3.521	7.499	1.355	5.233	0.000	0.663
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:44:41	103.651%	1.930	2.013	100.360%	-0.013	-0.002	0.088	0.056
2	17:45:00	105.981%	1.791	1.977	102.109%	-0.009	-0.006	0.071	0.058
3	17:45:19	106.941%	1.760	1.864	101.935%	-0.008	-0.003	0.082	0.061
X		105.525%	1.827	1.951	101.468%	-0.010	-0.004	0.081	0.058
σ		1.692%	0.091	0.077	0.963%	0.003	0.002	0.009	0.002
%RSD		1.603	4.962	3.966	0.949	26.430	51.510	10.740	4.172
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:44:41	101.724%	0.106	0.005	0.013	4.029	4.262	104.062%	104.076%
2	17:45:00	104.976%	0.113	-0.007	0.001	4.355	4.326	107.394%	107.909%
3	17:45:19	105.955%	0.098	0.002	-0.005	3.703	4.099	109.182%	109.207%
X		104.218%	0.106	-0.000	0.003	4.029	4.229	106.879%	107.064%
σ		2.215%	0.007	0.007	0.009	0.326	0.117	2.599%	2.668%
%RSD		2.125	7.006	17360.000	278.500	8.088	2.775	2.431	2.492
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:44:41	0.071	0.063	-0.011	-0.009	-0.005	96.271%		
2	17:45:00	0.076	0.068	-0.004	-0.001	-0.002	96.681%		
3	17:45:19	0.072	0.062	-0.003	0.006	-0.004	97.857%		
X		0.073	0.064	-0.006	-0.001	-0.004	96.936%		
σ		0.003	0.003	0.005	0.007	0.002	0.823%		
%RSD		3.805	4.923	75.940	552.200	42.290	0.849		

180-34791-B-1-A@10

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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	17:48:24	94.558%	-0.250	895.100	953.000	0.000	442.900	2559.000	2640.000
2	17:48:43	97.917%	-0.253	907.300	936.200	0.000	494.700	2583.000	2661.000
3	17:49:02	98.781%	-0.230	875.800	943.700	0.000	424.400	2533.000	2641.000
X		97.085%	-0.244	892.800	944.300	0.000	454.000	2558.000	2648.000
σ		2.231%	0.013	15.860	8.409	0.000	36.480	24.950	11.930
%RSD		2.298	5.191	1.776	0.890	0.000	8.036	0.975	0.451
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:48:24	74.930	447.000	0.000	1301.000	42730.000	45480.000	93.087%	0.052
2	17:48:43	76.020	448.400	0.000	1285.000	43810.000	45840.000	93.969%	0.158
3	17:49:02	77.580	448.800	0.000	1289.000	43820.000	45400.000	94.613%	0.047
X		76.170	448.100	0.000	1292.000	43450.000	45570.000	93.890%	0.086
σ		1.333	0.950	0.000	8.474	625.800	234.800	0.766%	0.063
%RSD		1.750	0.212	0.000	0.656	1.440	0.515	0.816	73.040
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:48:24	-0.580	0.557	41.100	7.404	106.400	0.032	0.587	0.589
2	17:48:43	-0.511	0.490	41.660	6.693	109.100	0.058	0.315	0.535
3	17:49:02	0.407	0.456	41.670	6.402	101.100	0.061	0.466	0.514
X		-0.228	0.501	41.480	6.833	105.600	0.050	0.456	0.546
σ		0.551	0.051	0.328	0.516	4.050	0.016	0.136	0.039
%RSD		241.900	10.250	0.791	7.547	3.837	31.780	29.870	7.121
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:48:24	0.436	15.280	15.670	17.850	15.500	15.450	0.000	80.110
2	17:48:43	0.540	15.850	15.170	17.980	15.860	15.210	0.000	80.970
3	17:49:02	0.597	14.910	14.880	18.190	16.580	15.180	0.000	80.090
X		0.524	15.350	15.240	18.010	15.980	15.280	0.000	80.390
σ		0.082	0.473	0.398	0.171	0.553	0.145	0.000	0.499
%RSD		15.590	3.083	2.613	0.948	3.463	0.950	0.000	0.621
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:48:24	102.256%	2.371	2.301	97.392%	-0.010	0.002	0.074	0.049
2	17:48:43	103.074%	2.205	2.248	98.236%	-0.003	-0.003	0.091	0.109
3	17:49:02	105.814%	2.325	2.358	98.783%	-0.014	-0.016	0.056	0.098
X		103.715%	2.300	2.302	98.137%	-0.009	-0.006	0.074	0.085
σ		1.864%	0.086	0.055	0.701%	0.006	0.009	0.017	0.032
%RSD		1.797	3.726	2.394	0.714	66.850	151.000	23.430	37.540
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:48:24	98.802%	0.281	-0.006	0.036	5.372	4.966	102.604%	103.007%
2	17:48:43	101.326%	0.183	-0.002	0.023	5.217	5.543	104.319%	105.764%
3	17:49:02	103.140%	0.108	-0.008	0.000	5.487	5.188	106.421%	107.362%
X		101.089%	0.191	-0.005	0.020	5.359	5.232	104.448%	105.377%
σ		2.179%	0.086	0.003	0.018	0.136	0.291	1.912%	2.203%
%RSD		2.155	45.390	51.550	92.320	2.534	5.565	1.830	2.091
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:48:24	0.050	0.042	0.051	0.040	0.040	98.696%		
2	17:48:43	0.053	0.046	0.063	0.081	0.061	98.596%		
3	17:49:02	0.042	0.045	0.072	0.063	0.071	98.906%		
X		0.049	0.044	0.062	0.061	0.058	98.733%		
σ		0.006	0.002	0.010	0.021	0.016	0.158%		
%RSD		11.950	5.215	16.600	33.590	27.450	0.160		

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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	17:52:08	91.907%	-0.143	56.140	55.730	0.000	17850.000	6182.000	6414.000
2	17:52:27	93.684%	-0.172	52.700	55.770	0.000	17920.000	6263.000	6582.000
3	17:52:46	97.247%	-0.105	52.200	53.240	0.000	17130.000	6059.000	6401.000
X		94.279%	-0.140	53.680	54.910	0.000	17640.000	6168.000	6465.000
σ		2.719%	0.034	2.142	1.450	0.000	436.100	102.500	100.900
%RSD		2.884	24.160	3.990	2.640	0.000	2.473	1.662	1.560
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:52:08	186.100	2853.000	0.000	1961.000	23260.000	23820.000	91.836%	2.534
2	17:52:27	190.200	2948.000	0.000	1964.000	24090.000	24380.000	91.963%	2.332
3	17:52:46	190.100	2845.000	0.000	1917.000	23950.000	23850.000	94.179%	2.489
X		188.800	2882.000	0.000	1947.000	23770.000	24020.000	92.660%	2.451
σ		2.367	57.150	0.000	26.340	443.900	312.900	1.318%	0.106
%RSD		1.254	1.983	0.000	1.352	1.868	1.303	1.422	4.311
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:52:08	-0.522	0.956	51.020	482.100	543.400	0.414	1.929	9.133
2	17:52:27	0.289	1.022	51.900	489.900	531.300	0.478	2.009	9.209
3	17:52:46	0.292	1.012	50.840	493.900	526.000	0.450	1.959	8.664
X		0.020	0.997	51.250	488.600	533.600	0.448	1.965	9.002
σ		0.470	0.035	0.570	6.021	8.915	0.032	0.040	0.295
%RSD		2377.000	3.552	1.112	1.232	1.671	7.188	2.049	3.275
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:52:08	8.405	18.920	18.590	0.914	0.663	-0.018	0.000	114.700
2	17:52:27	8.871	19.080	19.290	0.746	1.079	0.503	0.000	115.200
3	17:52:46	8.446	19.000	19.500	1.551	1.123	0.634	0.000	113.300
X		8.574	19.000	19.130	1.070	0.955	0.373	0.000	114.400
σ		0.258	0.079	0.477	0.425	0.254	0.345	0.000	0.974
%RSD		3.009	0.417	2.496	39.680	26.560	92.520	0.000	0.851
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:52:08	97.155%	1.063	1.270	94.890%	-0.023	-0.009	0.017	0.022
2	17:52:27	99.951%	1.120	1.362	95.473%	-0.002	-0.001	0.071	0.035
3	17:52:46	102.734%	1.335	1.281	97.365%	-0.016	0.003	-0.040	-0.054
X		99.946%	1.173	1.304	95.909%	-0.013	-0.002	0.016	0.001
σ		2.790%	0.143	0.050	1.294%	0.011	0.006	0.056	0.048
%RSD		2.791	12.240	3.869	1.349	79.400	236.900	351.200	4045.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:52:08	96.987%	0.398	0.080	0.104	38.040	37.650	101.712%	101.818%
2	17:52:27	98.743%	0.306	0.090	0.083	38.090	38.820	103.072%	104.752%
3	17:52:46	101.383%	0.275	0.086	0.113	36.990	37.120	106.380%	107.347%
X		99.038%	0.327	0.085	0.100	37.710	37.860	103.721%	104.639%
σ		2.213%	0.064	0.005	0.015	0.624	0.867	2.401%	2.766%
%RSD		2.235	19.580	5.989	15.410	1.654	2.290	2.315	2.644
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:52:08	0.033	0.018	4.714	4.244	4.439	94.563%		
2	17:52:27	0.032	0.024	4.557	4.517	4.583	94.945%		
3	17:52:46	0.022	0.031	4.492	4.324	4.476	96.485%		
X		0.029	0.024	4.588	4.361	4.499	95.331%		
σ		0.006	0.007	0.114	0.140	0.075	1.018%		
%RSD		20.980	27.440	2.487	3.215	1.664	1.067		

CCV 1241000 7/16/2014 5:55:31 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	17:55:31	91.664%	102.000	101.500	102.600	0.000	49320.000	50430.000	51340.000
2	17:55:50	93.471%	96.910	100.200	105.100	0.000	49050.000	50380.000	51480.000
3	17:56:10	94.200%	100.100	103.400	101.100	0.000	48610.000	51360.000	52560.000
X		93.112%	99.658%	101.699%	102.934%	0.000	97.990%	101.447%	103.591%
σ		1.306%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.402	2.565	1.564	1.955	0.000	0.733	1.094	1.291
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:55:31	506.800	5139.000	0.000	50760.000	48830.000	50550.000	93.905%	95.320
2	17:55:50	516.900	5153.000	0.000	50170.000	50030.000	50430.000	94.563%	98.840
3	17:56:10	527.800	5225.000	0.000	50590.000	50190.000	51160.000	94.891%	102.900
X		103.429%	103.446%	0.000	101.012%	99.367%	101.420%	94.453%	99.007%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.502%	n/a
%RSD		2.032	0.899	0.000	0.601	1.493	0.775	0.532	3.810
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:55:31	99.490	102.600	505.800	26020.000	25560.000	101.400	100.000	101.000
2	17:55:50	102.600	103.300	514.900	26050.000	26120.000	102.700	103.400	102.900
3	17:56:10	103.500	105.700	523.100	26430.000	26530.000	104.500	102.800	104.200
X		101.857%	103.863%	102.916%	104.672%	104.279%	102.832%	102.073%	102.718%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.063	1.545	1.683	0.873	1.873	1.505	1.791	1.559
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:55:31	101.700	102.900	99.180	100.900	99.580	99.280	0.000	99.320
2	17:55:50	105.000	102.100	102.900	100.600	100.800	102.500	0.000	100.100
3	17:56:10	106.200	103.500	103.300	103.200	103.300	102.000	0.000	100.800
X		104.267%	102.851%	101.800%	101.549%	101.246%	101.247%	0.000	100.063%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.240	0.698	2.238	1.419	1.887	1.705	0.000	0.725
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:55:31	96.639%	98.940	98.880	91.252%	98.610	99.500	97.340	98.940
2	17:55:50	100.052%	100.800	101.700	92.966%	100.200	100.500	100.300	101.700
3	17:56:10	101.944%	104.100	106.100	93.262%	101.600	100.900	100.800	101.300
X		99.545%	101.273%	102.237%	92.493%	100.143%	100.295%	99.501%	100.647%
σ		2.689%	n/a	n/a	1.086%	n/a	n/a	n/a	n/a
%RSD		2.701	2.582	3.585	1.174	1.508	0.724	1.901	1.479
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:55:31	97.814%	97.600	95.750	95.130	97.750	99.830	101.308%	101.057%
2	17:55:50	100.763%	99.570	97.540	98.120	100.600	99.280	105.081%	106.077%
3	17:56:10	102.163%	99.330	98.900	98.160	99.290	99.250	107.245%	108.312%
X		100.247%	98.834%	97.398%	97.137%	99.202%	99.454%	104.545%	105.149%
σ		2.220%	n/a	n/a	n/a	n/a	n/a	3.005%	3.715%
%RSD		2.215	1.091	1.620	1.789	1.416	0.330	2.874	3.533
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	17:55:31	98.730	98.890	97.570	97.960	97.840	94.578%		
2	17:55:50	102.800	103.800	103.300	103.100	103.500	94.061%		
3	17:56:10	104.800	106.000	105.000	105.700	105.500	94.456%		
X		102.100%	102.887%	101.952%	102.248%	102.279%	94.365%		
σ		n/a	n/a	n/a	n/a	n/a	0.270%		
%RSD		3.018	3.527	3.815	3.841	3.891	0.286		

CCB2 7/16/2014 6:00:51 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	18:01:10	101.347%	-0.210	1.881	1.629	0.000	10.310	1.889	2.366	
2	18:01:30	101.523%	-0.233	3.514	1.542	0.000	14.800	2.801	2.750	
3	18:01:49	103.705%	-0.236	1.997	1.578	0.000	9.261	2.246	1.765	
X		102.192%	-0.226	2.464	1.583	0.000	11.460	2.312	2.294	
		σ	1.314%	0.015	0.911	0.044	0.000	2.940	0.460	0.496
		%RSD	1.286	6.415	36.980	2.752	0.000	25.660	19.880	21.640
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	18:01:10	-0.614	2.728	0.000	12.800	-1.620	-6.200	99.772%	-0.145	
2	18:01:30	-0.586	3.335	0.000	12.080	-4.127	-4.120	100.241%	0.007	
3	18:01:49	-0.532	3.066	0.000	10.340	0.346	-2.217	101.931%	0.004	
X		-0.577	3.043	0.000	11.740	-1.800	-4.179	100.648%	-0.045	
		σ	0.041	0.304	0.000	1.267	2.242	1.993	1.135%	0.087
		%RSD	7.188	9.990	0.000	10.800	124.500	47.680	1.128	194.400
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	18:01:10	-0.051	-0.036	0.029	0.936	9.460	-0.004	-0.013	0.008	
2	18:01:30	0.060	-0.002	0.043	-0.003	5.834	0.000	0.001	0.001	
3	18:01:49	-0.331	0.002	0.040	-0.922	4.841	-0.003	0.071	-0.023	
X		-0.107	-0.012	0.037	0.004	6.712	-0.002	0.020	-0.005	
		σ	0.202	0.021	0.007	0.929	2.431	0.002	0.045	0.016
		%RSD	188.400	170.700	20.040	26040.000	36.230	93.060	231.400	333.300
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	18:01:10	-0.034	0.213	0.150	0.017	0.428	-0.687	0.000	0.046	
2	18:01:30	-0.069	0.149	0.079	0.165	0.514	0.229	0.000	0.048	
3	18:01:49	-0.159	0.267	0.147	-0.377	0.843	-1.006	0.000	0.042	
X		-0.087	0.210	0.125	-0.065	0.595	-0.488	0.000	0.046	
		σ	0.064	0.059	0.040	0.280	0.219	0.641	0.000	0.003
		%RSD	73.580	28.330	32.140	429.800	36.830	131.300	0.000	6.467
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	18:01:10	102.306%	0.344	0.391	102.917%	-0.018	-0.007	-0.016	-0.018	
2	18:01:30	104.889%	0.311	0.302	103.273%	-0.008	0.003	0.032	0.022	
3	18:01:49	106.370%	0.329	0.295	104.313%	-0.008	0.001	-0.030	-0.036	
X		104.522%	0.328	0.329	103.501%	-0.011	-0.001	-0.004	-0.011	
		σ	2.057%	0.017	0.053	0.726%	0.005	0.005	0.032	0.030
		%RSD	1.968	5.083	16.120	0.701	47.660	495.900	727.300	276.700
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	18:01:10	103.007%	-0.217	0.171	0.213	-0.014	-0.009	103.813%	103.523%	
2	18:01:30	106.251%	-0.218	0.138	0.168	-0.015	-0.015	106.131%	106.104%	
3	18:01:49	106.860%	-0.239	0.131	0.156	0.017	-0.015	106.816%	107.537%	
X		105.373%	-0.225	0.146	0.179	-0.004	-0.013	105.587%	105.721%	
		σ	2.071%	0.012	0.022	0.030	0.018	0.003	1.574%	2.034%
		%RSD	1.966	5.471	14.690	17.020	457.400	24.220	1.490	1.924
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	18:01:10	0.013	0.012	0.004	-0.001	-0.005	100.262%			
2	18:01:30	0.024	0.012	-0.006	-0.003	-0.010	100.530%			
3	18:01:49	0.018	0.014	-0.007	-0.000	-0.003	100.233%			
X		0.018	0.013	-0.003	-0.001	-0.006	100.342%			
		σ	0.005	0.001	0.006	0.001	0.004	0.164%		
		%RSD	28.760	9.126	201.600	92.870	61.920	0.163		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:04:55	109.290%	-0.175	29.290	30.620	0.000	930.300	19.670	21.610
2	18:05:14	111.705%	-0.179	32.170	31.600	0.000	919.200	20.860	21.480
3	18:05:33	113.617%	-0.119	29.100	31.360	0.000	891.400	21.490	21.110
X		111.537%	-0.158	30.180	31.190	0.000	913.600	20.680	21.400
σ		2.169%	0.034	1.718	0.511	0.000	20.030	0.924	0.260
%RSD		1.944	21.470	5.691	1.637	0.000	2.192	4.470	1.215
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:04:55	2.300	141.700	0.000	295.000	355.200	356.800	102.233%	2.453
2	18:05:14	2.607	149.500	0.000	291.900	257.200	360.400	103.399%	2.667
3	18:05:33	2.534	142.200	0.000	292.100	283.900	357.900	106.300%	3.407
X		2.480	144.500	0.000	293.000	298.800	358.300	103.977%	2.843
σ		0.160	4.362	0.000	1.746	50.650	1.837	2.094%	0.501
%RSD		6.455	3.019	0.000	0.596	16.950	0.513	2.014	17.620
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:04:55	-0.613	1.987	1.031	-2.791	3.134	-0.002	2.192	1.404
2	18:05:14	-1.094	2.000	1.055	-3.666	-0.403	0.009	2.088	1.360
3	18:05:33	-0.114	2.150	1.019	-4.507	-0.463	0.010	1.982	1.390
X		-0.607	2.046	1.035	-3.654	0.756	0.006	2.087	1.385
σ		0.490	0.091	0.018	0.858	2.059	0.007	0.105	0.023
%RSD		80.780	4.443	1.762	23.480	272.400	114.200	5.044	1.638
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:04:55	1.118	7.848	7.818	-1.001	1.672	0.565	0.000	0.613
2	18:05:14	1.142	7.783	7.976	0.095	2.122	-0.689	0.000	0.589
3	18:05:33	1.278	8.076	8.384	0.418	1.780	-0.228	0.000	0.652
X		1.179	7.902	8.059	-0.163	1.858	-0.117	0.000	0.618
σ		0.087	0.154	0.292	0.744	0.235	0.635	0.000	0.032
%RSD		7.338	1.942	3.619	457.800	12.640	541.700	0.000	5.158
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:04:55	108.384%	0.434	0.445	106.103%	0.017	0.005	-0.073	-0.066
2	18:05:14	112.055%	0.515	0.510	106.779%	0.002	0.006	-0.066	-0.032
3	18:05:33	113.690%	0.472	0.394	108.747%	-0.001	0.030	-0.026	-0.023
X		111.377%	0.474	0.450	107.210%	0.006	0.014	-0.055	-0.041
σ		2.717%	0.041	0.058	1.374%	0.010	0.014	0.025	0.023
%RSD		2.440	8.582	12.930	1.281	166.400	101.200	46.420	56.300
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:04:55	106.070%	2.958	0.284	0.378	0.089	0.117	108.473%	109.740%
2	18:05:14	107.340%	2.951	0.273	0.299	0.150	0.119	110.394%	111.820%
3	18:05:33	111.003%	2.739	0.289	0.315	0.166	0.083	115.035%	115.318%
X		108.138%	2.883	0.282	0.331	0.135	0.106	111.301%	112.292%
σ		2.561%	0.125	0.009	0.041	0.041	0.020	3.374%	2.819%
%RSD		2.369	4.326	3.031	12.540	30.230	18.920	3.031	2.510
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:04:55	0.006	0.001	0.280	0.294	0.278	104.582%		
2	18:05:14	-0.003	0.003	0.280	0.246	0.273	105.607%		
3	18:05:33	0.007	0.002	0.280	0.272	0.279	106.959%		
X		0.003	0.002	0.280	0.271	0.277	105.716%		
σ		0.005	0.001	0.000	0.024	0.003	1.192%		
%RSD		171.300	58.290	0.152	8.877	1.129	1.128		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:08:38	96.512%	-0.202	35.000	36.020	0.000	22130.000	5814.000	6038.000
2	18:08:57	96.651%	-0.054	34.650	38.440	0.000	21980.000	5828.000	6125.000
3	18:09:16	97.693%	-0.106	37.230	37.710	0.000	22040.000	5955.000	6238.000
X		96.952%	-0.121	35.630	37.390	0.000	22050.000	5866.000	6134.000
σ		0.646%	0.075	1.400	1.241	0.000	76.630	77.440	100.200
%RSD		0.666	62.490	3.930	3.319	0.000	0.347	1.320	1.634
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:08:38	729.500	1865.000	0.000	1839.000	33270.000	34030.000	91.949%	9.452
2	18:08:57	755.800	1882.000	0.000	1817.000	32950.000	34130.000	93.126%	9.130
3	18:09:16	763.400	1911.000	0.000	1829.000	33920.000	34650.000	93.076%	10.390
X		749.600	1886.000	0.000	1828.000	33380.000	34270.000	92.717%	9.658
σ		17.810	23.470	0.000	11.160	496.200	334.900	0.665%	0.656
%RSD		2.376	1.244	0.000	0.611	1.486	0.977	0.718	6.789
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:08:38	1.776	1.306	157.200	1208.000	1216.000	0.559	1.243	2.005
2	18:08:57	2.429	1.293	158.600	1202.000	1236.000	0.634	1.421	2.147
3	18:09:16	2.657	1.329	160.400	1209.000	1254.000	0.667	1.240	2.124
X		2.287	1.309	158.700	1206.000	1236.000	0.620	1.301	2.092
σ		0.457	0.018	1.637	3.559	19.080	0.055	0.104	0.076
%RSD		19.990	1.410	1.031	0.295	1.544	8.918	7.968	3.638
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:08:38	1.729	6.716	6.757	1.534	0.914	0.074	0.000	194.700
2	18:08:57	1.945	7.191	6.740	1.091	0.707	-0.687	0.000	194.500
3	18:09:16	1.782	7.262	6.490	1.777	0.751	0.304	0.000	195.700
X		1.819	7.056	6.662	1.467	0.791	-0.103	0.000	195.000
σ		0.112	0.297	0.150	0.348	0.109	0.519	0.000	0.631
%RSD		6.165	4.206	2.247	23.720	13.780	504.700	0.000	0.324
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:08:38	97.564%	1.244	1.361	94.690%	-0.015	-0.009	0.045	0.045
2	18:08:57	100.639%	1.463	1.224	96.376%	-0.020	-0.004	-0.007	-0.007
3	18:09:16	101.868%	1.227	1.327	96.458%	-0.013	-0.000	0.009	0.016
X		100.024%	1.312	1.304	95.841%	-0.016	-0.004	0.016	0.018
σ		2.217%	0.132	0.071	0.998%	0.004	0.004	0.027	0.026
%RSD		2.217	10.030	5.467	1.041	23.390	96.490	169.400	147.300
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:08:38	96.121%	-0.071	0.120	0.138	68.650	69.050	100.522%	101.699%
2	18:08:57	98.533%	-0.087	0.106	0.115	67.560	68.600	104.525%	104.620%
3	18:09:16	101.019%	-0.070	0.116	0.114	68.390	69.180	104.711%	105.808%
X		98.558%	-0.076	0.114	0.123	68.200	68.940	103.253%	104.042%
σ		2.449%	0.010	0.007	0.014	0.570	0.300	2.367%	2.114%
%RSD		2.485	12.590	6.424	11.180	0.836	0.436	2.292	2.032
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:08:38	0.012	0.010	0.896	0.877	0.916	92.894%		
2	18:08:57	0.013	0.014	0.883	0.876	0.919	93.992%		
3	18:09:16	0.020	0.015	0.988	0.963	0.969	94.866%		
X		0.015	0.013	0.922	0.905	0.935	93.917%		
σ		0.004	0.003	0.057	0.050	0.030	0.988%		
%RSD		28.310	21.290	6.213	5.507	3.173	1.052		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:20	92.058%	-0.170	55.870	59.780	0.000	57740.000	7659.000	8007.000
2	18:12:39	93.849%	-0.122	52.760	56.690	0.000	56750.000	7672.000	8100.000
3	18:12:59	95.107%	-0.125	47.930	57.380	0.000	56840.000	7766.000	8233.000
X		93.671%	-0.139	52.190	57.950	0.000	57110.000	7699.000	8114.000
σ		1.532%	0.027	4.001	1.620	0.000	547.600	58.450	113.600
%RSD		1.636	19.200	7.666	2.796	0.000	0.959	0.759	1.401
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:20	672.500	2362.000	0.000	2089.000	36950.000	37530.000	92.564%	13.610
2	18:12:39	680.900	2380.000	0.000	2077.000	37290.000	38050.000	93.748%	9.144
3	18:12:59	694.900	2379.000	0.000	2097.000	37730.000	38850.000	94.157%	10.240
X		682.800	2374.000	0.000	2088.000	37320.000	38140.000	93.490%	11.000
σ		11.300	9.917	0.000	10.360	389.500	661.500	0.827%	2.326
%RSD		1.655	0.418	0.000	0.496	1.044	1.734	0.885	21.160
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:20	1.374	2.062	78.320	1036.000	1069.000	0.503	1.270	2.147
2	18:12:39	1.817	2.013	79.150	1025.000	1075.000	0.503	1.218	2.213
3	18:12:59	1.080	2.150	80.550	1033.000	1090.000	0.538	1.014	1.986
X		1.424	2.075	79.340	1031.000	1078.000	0.514	1.167	2.115
σ		0.371	0.069	1.126	5.401	11.040	0.020	0.135	0.117
%RSD		26.040	3.340	1.419	0.524	1.024	3.893	11.580	5.524
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:20	1.633	6.614	6.355	2.098	0.824	1.316	0.000	312.200
2	18:12:39	1.863	6.643	6.412	2.142	1.258	0.539	0.000	312.000
3	18:12:59	1.421	6.808	6.237	2.177	1.696	0.074	0.000	312.200
X		1.639	6.688	6.335	2.139	1.259	0.643	0.000	312.100
σ		0.221	0.105	0.089	0.039	0.436	0.627	0.000	0.128
%RSD		13.460	1.564	1.406	1.841	34.590	97.550	0.000	0.041
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:20	99.248%	2.073	2.276	94.825%	-0.018	-0.003	-0.013	-0.017
2	18:12:39	102.872%	2.298	2.252	96.398%	-0.007	-0.005	-0.086	-0.041
3	18:12:59	104.777%	2.145	2.312	97.965%	-0.020	-0.007	-0.018	-0.007
X		102.299%	2.172	2.280	96.396%	-0.015	-0.005	-0.039	-0.022
σ		2.809%	0.115	0.030	1.570%	0.007	0.002	0.041	0.018
%RSD		2.745	5.277	1.321	1.629	48.250	41.680	105.300	80.860
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:20	97.676%	-0.048	0.098	0.131	67.810	67.790	102.290%	103.419%
2	18:12:39	101.929%	-0.119	0.146	0.116	68.820	66.830	107.032%	108.003%
3	18:12:59	102.716%	-0.111	0.143	0.189	68.820	66.610	108.339%	109.468%
X		100.774%	-0.092	0.129	0.145	68.490	67.080	105.887%	106.963%
σ		2.711%	0.039	0.027	0.038	0.583	0.626	3.183%	3.155%
%RSD		2.691	42.220	20.840	26.290	0.852	0.933	3.006	2.950
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:12:20	0.016	0.011	0.746	0.644	0.717	95.687%		
2	18:12:39	0.013	0.008	0.782	0.671	0.745	96.471%		
3	18:12:59	0.015	0.009	0.765	0.761	0.762	97.597%		
X		0.015	0.009	0.764	0.692	0.742	96.585%		
σ		0.002	0.002	0.018	0.061	0.023	0.960%		
%RSD		11.540	20.010	2.356	8.862	3.116	0.994		

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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	18:16:00	98.130%	-0.254	37.930	40.750	0.000	33870.000	7527.000	7880.000
2	18:16:19	98.116%	-0.278	38.670	41.300	0.000	33810.000	7598.000	8015.000
3	18:16:38	99.831%	-0.184	43.370	42.360	0.000	33890.000	7666.000	8095.000
X		98.692%	-0.238	39.990	41.470	0.000	33860.000	7597.000	7997.000
σ		0.986%	0.049	2.953	0.815	0.000	45.150	69.630	108.700
%RSD		0.999	20.600	7.385	1.965	0.000	0.133	0.916	1.359
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:00	74.830	1569.000	0.000	1719.000	40890.000	43060.000	95.575%	1.355
2	18:16:19	72.630	1583.000	0.000	1687.000	41040.000	42580.000	98.169%	1.183
3	18:16:38	71.660	1612.000	0.000	1716.000	40990.000	43050.000	98.656%	1.435
X		73.040	1588.000	0.000	1707.000	40970.000	42900.000	97.467%	1.324
σ		1.621	21.600	0.000	17.310	73.680	275.700	1.656%	0.129
%RSD		2.219	1.360	0.000	1.014	0.180	0.643	1.699	9.723
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:00	-0.123	0.663	10.100	96.540	197.600	0.117	0.139	0.997
2	18:16:19	-0.641	0.615	9.878	96.170	185.300	0.095	0.193	0.896
3	18:16:38	1.008	0.654	10.280	97.050	196.300	0.111	0.122	0.942
X		0.081	0.644	10.080	96.590	193.100	0.108	0.151	0.945
σ		0.843	0.026	0.199	0.444	6.764	0.011	0.037	0.051
%RSD		1037.000	3.983	1.973	0.459	3.503	10.640	24.300	5.358
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:00	0.832	3.960	3.299	0.077	1.344	-0.401	0.000	308.000
2	18:16:19	0.742	3.587	3.429	0.957	0.549	0.010	0.000	308.600
3	18:16:38	0.780	3.797	3.539	1.461	1.450	0.740	0.000	312.900
X		0.785	3.781	3.422	0.832	1.114	0.117	0.000	309.800
σ		0.045	0.187	0.120	0.701	0.492	0.578	0.000	2.698
%RSD		5.730	4.947	3.505	84.260	44.180	495.500	0.000	0.871
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:00	102.158%	1.048	1.090	98.565%	-0.013	-0.011	-0.062	-0.044
2	18:16:19	105.527%	1.184	1.084	100.676%	-0.013	-0.011	-0.042	-0.045
3	18:16:38	106.157%	1.202	1.132	100.856%	-0.018	-0.010	0.035	0.016
X		104.614%	1.145	1.102	100.032%	-0.015	-0.011	-0.023	-0.024
σ		2.150%	0.085	0.026	1.274%	0.003	0.001	0.052	0.035
%RSD		2.055	7.382	2.399	1.274	17.960	6.665	224.600	143.400
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:00	102.077%	-0.086	0.034	0.091	72.690	72.430	106.120%	107.301%
2	18:16:19	104.065%	-0.127	0.057	0.075	74.130	73.870	107.883%	110.167%
3	18:16:38	105.526%	-0.083	0.070	0.065	73.690	73.080	111.023%	111.435%
X		103.889%	-0.099	0.054	0.077	73.500	73.130	108.342%	109.634%
σ		1.731%	0.024	0.019	0.013	0.739	0.722	2.484%	2.118%
%RSD		1.667	24.820	34.520	16.700	1.006	0.987	2.293	1.932
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:16:00	-0.000	-0.005	0.127	0.089	0.103	98.950%		
2	18:16:19	-0.001	-0.002	0.087	0.113	0.115	100.501%		
3	18:16:38	0.003	-0.002	0.122	0.117	0.108	99.438%		
X		0.001	-0.003	0.112	0.106	0.109	99.630%		
σ		0.002	0.002	0.022	0.015	0.006	0.793%		
%RSD		264.000	63.980	19.440	14.170	5.210	0.796		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:19:41	90.629%	1.308	207.600	223.700	0.000	213400.000	1531.000	1608.000
2	18:20:00	92.646%	1.194	198.300	210.800	0.000	208700.000	1541.000	1597.000
3	18:20:19	92.165%	1.615	208.000	223.000	0.000	212200.000	1575.000	1658.000
X		91.813%	1.372	204.600	219.200	0.000	211500.000	1549.000	1621.000
σ		1.054%	0.218	5.506	7.264	0.000	2451.000	23.290	32.350
%RSD		1.148	15.900	2.691	3.314	0.000	1.159	1.503	1.996
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:19:41	9217.000	17470.000	0.000	3395.000	3529.000	3592.000	92.075%	13.870
2	18:20:00	9201.000	17350.000	0.000	3321.000	3253.000	3527.000	94.586%	12.650
3	18:20:19	9374.000	17750.000	0.000	3367.000	3451.000	3590.000	94.388%	15.090
X		9264.000	17520.000	0.000	3361.000	3411.000	3570.000	93.683%	13.870
σ		95.820	204.500	0.000	37.360	142.300	37.130	1.396%	1.223
%RSD		1.034	1.167	0.000	1.112	4.171	1.040	1.490	8.815
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:19:41	11.280	10.570	32.710	4707.000	4485.000	3.342	9.158	11.990
2	18:20:00	9.746	10.590	33.160	4612.000	4496.000	2.926	8.486	12.050
3	18:20:19	10.290	10.870	33.450	4670.000	4528.000	3.132	8.664	12.310
X		10.440	10.680	33.110	4663.000	4503.000	3.134	8.769	12.120
σ		0.779	0.166	0.377	48.340	22.350	0.208	0.348	0.171
%RSD		7.459	1.554	1.138	1.037	0.496	6.640	3.970	1.413
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:19:41	10.590	36.190	35.370	3.804	1.285	0.000	0.000	119.400
2	18:20:00	10.400	35.260	34.110	2.740	1.403	-0.727	0.000	116.800
3	18:20:19	10.410	35.980	35.830	3.210	1.227	-0.361	0.000	116.600
X		10.470	35.810	35.100	3.251	1.305	-0.362	0.000	117.600
σ		0.103	0.490	0.891	0.533	0.090	0.363	0.000	1.549
%RSD		0.989	1.368	2.537	16.400	6.873	100.200	0.000	1.318
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:19:41	99.440%	1.786	1.707	92.147%	0.007	0.006	-0.033	-0.006
2	18:20:00	104.014%	1.598	1.953	93.762%	0.011	0.021	-0.004	0.014
3	18:20:19	106.374%	1.819	1.751	95.422%	0.010	0.018	0.007	0.003
X		103.276%	1.734	1.804	93.777%	0.009	0.015	-0.010	0.004
σ		3.525%	0.119	0.131	1.637%	0.002	0.008	0.020	0.010
%RSD		3.414	6.872	7.285	1.746	21.670	53.840	204.900	269.500
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:19:41	97.037%	0.116	0.521	0.611	377.300	375.800	103.201%	103.011%
2	18:20:00	100.251%	0.167	0.596	0.577	380.800	378.300	105.343%	107.388%
3	18:20:19	101.572%	0.197	0.608	0.607	383.700	385.200	107.996%	109.316%
X		99.620%	0.160	0.575	0.598	380.600	379.800	105.514%	106.572%
σ		2.332%	0.041	0.047	0.018	3.178	4.868	2.402%	3.231%
%RSD		2.341	25.510	8.211	3.079	0.835	1.282	2.276	3.032
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:19:41	0.080	0.074	11.440	10.580	10.950	93.066%		
2	18:20:00	0.094	0.096	11.710	10.440	11.010	94.336%		
3	18:20:19	0.088	0.080	11.690	10.970	11.360	94.826%		
X		0.087	0.083	11.610	10.660	11.100	94.076%		
σ		0.007	0.011	0.152	0.275	0.221	0.908%		
%RSD		7.959	13.730	1.308	2.579	1.991	0.966		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:23:22	93.204%	-0.198	183.300	213.900	0.000	212000.000	131.200	139.900
2	18:23:41	94.754%	-0.200	198.600	216.200	0.000	212500.000	133.300	137.400
3	18:24:00	95.750%	-0.251	205.600	213.300	0.000	209500.000	133.400	137.700
X		94.569%	-0.216	195.800	214.500	0.000	211300.000	132.600	138.300
σ		1.283%	0.030	11.390	1.575	0.000	1629.000	1.243	1.390
%RSD		1.357	14.060	5.816	0.734	0.000	0.771	0.937	1.005
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:23:22	94.210	3833.000	0.000	846.600	876.300	913.700	94.189%	1.784
2	18:23:41	93.480	3796.000	0.000	852.800	907.300	896.400	95.471%	1.355
3	18:24:00	81.020	3849.000	0.000	881.300	934.800	902.800	96.000%	1.904
X		89.570	3826.000	0.000	860.200	906.100	904.300	95.220%	1.681
σ		7.412	26.930	0.000	18.530	29.310	8.716	0.932%	0.289
%RSD		8.275	0.704	0.000	2.154	3.234	0.964	0.978	17.160
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:23:22	-1.192	0.785	1.261	42.790	48.660	0.035	0.274	3.726
2	18:23:41	0.283	0.763	1.333	39.840	41.080	0.027	0.329	3.958
3	18:24:00	-1.275	0.671	1.253	37.370	49.730	0.053	0.249	4.195
X		-0.728	0.740	1.282	40.000	46.490	0.039	0.284	3.960
σ		0.877	0.061	0.044	2.712	4.715	0.013	0.041	0.234
%RSD		120.500	8.189	3.417	6.778	10.140	34.920	14.320	5.920
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:23:22	0.665	3.958	3.749	2.284	1.480	-0.095	0.000	34.390
2	18:23:41	0.636	3.757	3.745	1.709	1.336	-0.484	0.000	34.760
3	18:24:00	0.799	3.752	3.596	2.408	1.927	0.995	0.000	34.900
X		0.700	3.822	3.697	2.134	1.581	0.138	0.000	34.680
σ		0.087	0.118	0.088	0.373	0.308	0.767	0.000	0.260
%RSD		12.450	3.086	2.369	17.470	19.490	553.800	0.000	0.751
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:23:22	102.363%	2.166	1.851	96.359%	-0.026	-0.006	0.002	0.004
2	18:23:41	104.283%	2.154	2.069	97.160%	-0.022	0.001	-0.036	-0.021
3	18:24:00	105.648%	1.989	2.091	98.679%	-0.013	-0.007	-0.034	-0.033
X		104.098%	2.103	2.004	97.400%	-0.020	-0.004	-0.023	-0.017
σ		1.650%	0.099	0.133	1.178%	0.007	0.004	0.021	0.019
%RSD		1.585	4.709	6.622	1.210	32.320	108.900	94.800	111.300
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:23:22	100.826%	-0.058	1.050	1.018	91.870	90.340	106.845%	107.088%
2	18:23:41	103.130%	-0.064	1.005	0.915	90.660	92.040	109.177%	110.505%
3	18:24:00	104.208%	-0.045	1.130	1.135	93.060	91.690	110.488%	112.294%
X		102.721%	-0.056	1.062	1.023	91.860	91.360	108.837%	109.962%
σ		1.727%	0.010	0.063	0.110	1.199	0.900	1.845%	2.645%
%RSD		1.682	17.510	5.930	10.740	1.305	0.985	1.695	2.406
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:23:22	0.001	-0.008	0.155	0.127	0.132	97.005%		
2	18:23:41	-0.005	-0.007	0.124	0.131	0.114	98.732%		
3	18:24:00	-0.007	-0.005	0.118	0.118	0.125	98.147%		
X		-0.004	-0.007	0.132	0.126	0.124	97.961%		
σ		0.004	0.001	0.020	0.007	0.009	0.878%		
%RSD		110.100	22.320	14.900	5.269	7.069	0.896		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:27:03	96.325%	-0.053	213.700	233.800	0.000	206300.000	586.000	633.700
2	18:27:22	96.603%	-0.104	220.900	240.300	0.000	205200.000	618.800	649.200
3	18:27:41	97.619%	-0.253	211.900	236.900	0.000	204100.000	614.800	644.000
X		96.849%	-0.137	215.500	237.000	0.000	205200.000	606.500	642.300
σ		0.681%	0.104	4.761	3.271	0.000	1103.000	17.880	7.874
%RSD		0.703	75.990	2.209	1.380	0.000	0.538	2.949	1.226
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:27:03	1619.000	6552.000	0.000	930.900	1368.000	1520.000	95.366%	10.010
2	18:27:22	1668.000	6525.000	0.000	933.300	1461.000	1503.000	96.484%	11.190
3	18:27:41	1659.000	6622.000	0.000	925.600	1605.000	1499.000	97.311%	12.080
X		1649.000	6566.000	0.000	930.000	1478.000	1507.000	96.387%	11.090
σ		26.190	50.240	0.000	3.950	119.500	10.970	0.976%	1.037
%RSD		1.589	0.765	0.000	0.425	8.086	0.728	1.013	9.348
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:27:03	2.148	2.779	23.710	1611.000	1552.000	0.552	1.746	7.069
2	18:27:22	2.720	2.737	23.500	1602.000	1549.000	0.617	1.944	7.316
3	18:27:41	2.782	2.839	23.430	1597.000	1569.000	0.574	1.893	7.489
X		2.550	2.785	23.540	1603.000	1557.000	0.581	1.861	7.291
σ		0.349	0.051	0.146	6.857	11.020	0.033	0.103	0.211
%RSD		13.690	1.835	0.619	0.428	0.708	5.665	5.533	2.897
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:27:03	3.870	15.880	15.450	1.397	0.600	0.024	0.000	48.420
2	18:27:22	3.549	15.450	15.070	1.167	1.074	-0.685	0.000	48.690
3	18:27:41	3.544	15.140	15.930	0.866	1.863	-0.911	0.000	48.090
X		3.654	15.490	15.480	1.143	1.179	-0.524	0.000	48.400
σ		0.187	0.374	0.429	0.266	0.638	0.488	0.000	0.301
%RSD		5.114	2.411	2.771	23.280	54.110	93.170	0.000	0.622
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:27:03	102.254%	2.254	2.223	95.832%	-0.001	0.003	0.021	-0.015
2	18:27:22	104.499%	2.342	2.416	97.379%	-0.007	0.005	-0.045	-0.028
3	18:27:41	106.839%	2.406	2.456	99.095%	-0.010	-0.001	0.033	-0.002
X		104.531%	2.334	2.365	97.435%	-0.006	0.003	0.003	-0.015
σ		2.293%	0.076	0.125	1.632%	0.005	0.003	0.042	0.013
%RSD		2.193	3.264	5.276	1.675	83.630	127.400	1529.000	86.140
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:27:03	100.102%	0.426	0.184	0.137	50.600	52.180	105.410%	106.100%
2	18:27:22	103.254%	0.390	0.161	0.141	51.150	51.230	109.282%	109.862%
3	18:27:41	105.040%	0.442	0.145	0.176	51.150	50.800	110.306%	112.391%
X		102.799%	0.419	0.163	0.151	50.970	51.400	108.333%	109.451%
σ		2.500%	0.027	0.020	0.022	0.320	0.704	2.582%	3.166%
%RSD		2.432	6.340	12.140	14.240	0.627	1.369	2.383	2.892
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:27:03	0.008	0.003	0.951	0.855	0.912	94.721%		
2	18:27:22	0.005	0.010	1.004	0.934	0.944	95.177%		
3	18:27:41	0.016	0.016	1.036	0.911	0.944	97.084%		
X		0.010	0.010	0.997	0.900	0.933	95.661%		
σ		0.005	0.006	0.043	0.041	0.018	1.254%		
%RSD		55.310	65.190	4.311	4.552	1.968	1.311		

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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	18:30:44	92.377%	-0.222	221.500	238.700	0.000	210500.000	213.300	227.300
2	18:31:03	95.456%	-0.301	220.700	239.700	0.000	206000.000	214.000	232.200
3	18:31:23	96.545%	-0.252	223.400	243.300	0.000	204200.000	223.600	226.500
X		94.792%	-0.259	221.900	240.600	0.000	206900.000	217.000	228.700
σ		2.162%	0.040	1.407	2.430	0.000	3218.000	5.786	3.104
%RSD		2.281	15.420	0.634	1.010	0.000	1.555	2.667	1.357
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:30:44	19.080	3923.000	0.000	682.300	938.600	1014.000	95.519%	0.740
2	18:31:03	20.800	3943.000	0.000	679.600	999.900	1015.000	96.842%	0.937
3	18:31:23	20.950	3920.000	0.000	677.000	926.700	1018.000	98.174%	0.765
X		20.280	3929.000	0.000	679.600	955.100	1016.000	96.845%	0.814
σ		1.041	12.430	0.000	2.632	39.240	1.653	1.327%	0.107
%RSD		5.136	0.316	0.000	0.387	4.108	0.163	1.371	13.190
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:30:44	-0.655	0.578	4.407	16.320	24.700	-0.004	0.328	4.195
2	18:31:03	-0.442	0.586	4.558	15.070	21.810	0.008	0.335	4.613
3	18:31:23	0.170	0.683	4.556	13.760	18.690	0.008	0.211	4.384
X		-0.309	0.616	4.507	15.050	21.730	0.004	0.291	4.397
σ		0.429	0.059	0.087	1.279	3.006	0.007	0.070	0.209
%RSD		138.600	9.508	1.926	8.502	13.830	168.400	23.860	4.763
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:30:44	0.188	3.343	3.656	0.447	1.336	0.258	0.000	38.690
2	18:31:03	0.280	3.119	3.660	0.766	2.109	0.843	0.000	39.650
3	18:31:23	0.296	3.399	3.353	1.270	1.680	-0.083	0.000	39.470
X		0.255	3.287	3.557	0.828	1.709	0.339	0.000	39.270
σ		0.058	0.148	0.177	0.415	0.387	0.468	0.000	0.510
%RSD		22.900	4.512	4.965	50.110	22.670	138.000	0.000	1.299
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:30:44	104.416%	2.440	2.174	97.989%	-0.016	-0.016	-0.051	-0.041
2	18:31:03	106.623%	2.417	2.454	99.157%	-0.010	-0.013	-0.070	-0.067
3	18:31:23	108.527%	2.446	2.546	100.120%	-0.022	-0.016	-0.039	-0.042
X		106.522%	2.434	2.391	99.089%	-0.016	-0.015	-0.054	-0.050
σ		2.058%	0.015	0.194	1.067%	0.006	0.002	0.016	0.015
%RSD		1.932	0.634	8.099	1.077	36.220	11.530	29.210	29.220
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:30:44	102.564%	0.169	0.136	0.131	30.980	30.110	107.121%	108.033%
2	18:31:03	104.787%	0.191	0.130	0.144	31.470	31.420	110.563%	112.424%
3	18:31:23	105.963%	0.193	0.128	0.140	29.850	30.860	112.784%	114.461%
X		104.438%	0.184	0.131	0.138	30.760	30.800	110.156%	111.639%
σ		1.726%	0.013	0.004	0.007	0.829	0.656	2.854%	3.285%
%RSD		1.653	7.195	3.237	4.856	2.694	2.129	2.591	2.943
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:30:44	-0.008	-0.004	0.032	0.041	0.034	97.475%		
2	18:31:03	-0.008	-0.009	0.039	0.048	0.040	98.096%		
3	18:31:23	-0.004	-0.007	0.054	0.034	0.037	99.460%		
X		-0.007	-0.006	0.042	0.041	0.037	98.344%		
σ		0.002	0.003	0.011	0.007	0.003	1.015%		
%RSD		31.550	41.250	26.840	17.730	8.430	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	18:34:26	95.473%	-0.251	33.280	31.050	0.000	7103.000	7334.000	7714.000
2	18:34:45	95.027%	-0.175	31.890	32.080	0.000	7115.000	7485.000	7849.000
3	18:35:04	96.896%	-0.006	30.520	33.070	0.000	6969.000	7421.000	7832.000
X		95.799%	-0.144	31.900	32.070	0.000	7062.000	7413.000	7798.000
σ		0.976%	0.126	1.378	1.013	0.000	80.730	76.130	73.770
%RSD		1.019	87.260	4.322	3.158	0.000	1.143	1.027	0.946
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:34:26	244.500	6273.000	0.000	1335.000	15880.000	16390.000	94.092%	3.604
2	18:34:45	243.900	6334.000	0.000	1318.000	16250.000	16510.000	94.991%	3.996
3	18:35:04	243.400	6245.000	0.000	1316.000	16050.000	16350.000	95.689%	3.644
X		243.900	6284.000	0.000	1323.000	16060.000	16420.000	94.924%	3.748
σ		0.594	45.630	0.000	10.430	188.700	85.840	0.801%	0.216
%RSD		0.243	0.726	0.000	0.789	1.175	0.523	0.844	5.750
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:34:26	-0.108	0.883	74.590	575.200	597.000	0.452	1.210	1.292
2	18:34:45	0.109	0.891	75.010	578.500	606.200	0.536	1.010	1.241
3	18:35:04	-1.803	0.981	75.540	575.200	606.200	0.443	1.182	1.147
X		-0.601	0.919	75.050	576.300	603.100	0.477	1.134	1.227
σ		1.047	0.054	0.473	1.894	5.286	0.052	0.108	0.074
%RSD		174.300	5.907	0.631	0.329	0.876	10.850	9.552	6.007
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:34:26	0.692	6.265	6.622	-0.056	1.135	-0.043	0.000	68.650
2	18:34:45	0.677	6.647	6.954	0.260	1.395	-0.623	0.000	69.480
3	18:35:04	0.686	6.698	7.113	-0.073	1.039	-0.935	0.000	69.110
X		0.685	6.537	6.896	0.043	1.190	-0.534	0.000	69.080
σ		0.008	0.236	0.251	0.187	0.184	0.453	0.000	0.417
%RSD		1.119	3.619	3.634	430.700	15.450	84.880	0.000	0.604
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:34:26	102.106%	0.176	0.126	99.188%	-0.013	-0.011	0.010	0.006
2	18:34:45	104.446%	0.177	0.168	100.116%	-0.016	-0.007	0.057	0.023
3	18:35:04	105.874%	0.180	0.165	100.106%	-0.018	-0.014	-0.024	0.010
X		104.142%	0.178	0.153	99.803%	-0.016	-0.011	0.014	0.013
σ		1.902%	0.002	0.023	0.533%	0.002	0.004	0.040	0.009
%RSD		1.826	1.224	15.230	0.534	14.980	34.850	283.900	65.940
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:34:26	101.651%	-0.203	-0.001	0.015	40.380	39.220	106.500%	106.954%
2	18:34:45	103.488%	-0.138	-0.007	0.015	40.650	39.940	108.539%	110.246%
3	18:35:04	104.374%	-0.135	0.015	-0.002	40.880	39.940	109.387%	110.937%
X		103.171%	-0.159	0.002	0.009	40.640	39.700	108.142%	109.379%
σ		1.389%	0.038	0.011	0.010	0.250	0.412	1.484%	2.128%
%RSD		1.346	24.110	492.400	108.400	0.615	1.039	1.372	1.946
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:34:26	-0.004	0.003	1.014	0.922	0.946	99.951%		
2	18:34:45	0.003	-0.002	0.985	1.000	0.960	100.173%		
3	18:35:04	0.000	-0.000	0.954	0.922	0.965	100.588%		
X		-0.000	0.000	0.985	0.948	0.957	100.237%		
σ		0.004	0.002	0.030	0.045	0.010	0.323%		
%RSD		1922.000	956.500	3.065	4.738	1.013	0.322		

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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	18:38:07	95.027%	-0.150	66.650	64.450	0.000	4573.000	8249.000	8749.000
2	18:38:27	95.068%	-0.150	59.530	65.230	0.000	4519.000	8383.000	8894.000
3	18:38:46	95.034%	-0.251	65.640	64.780	0.000	4497.000	8437.000	8901.000
X		95.043%	-0.183	63.940	64.820	0.000	4530.000	8356.000	8848.000
σ		0.022%	0.058	3.853	0.390	0.000	39.250	96.540	85.660
%RSD		0.023	31.740	6.025	0.601	0.000	0.867	1.155	0.968
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:38:07	501.000	6340.000	0.000	2264.000	18030.000	18360.000	92.620%	8.817
2	18:38:27	508.600	6454.000	0.000	2256.000	17910.000	18350.000	93.484%	7.148
3	18:38:46	505.900	6385.000	0.000	2234.000	17850.000	18410.000	94.209%	7.251
X		505.200	6393.000	0.000	2251.000	17930.000	18370.000	93.437%	7.739
σ		3.850	57.320	0.000	15.730	91.350	33.700	0.795%	0.936
%RSD		0.762	0.897	0.000	0.699	0.509	0.183	0.851	12.090
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:38:07	1.218	1.350	133.500	926.700	904.100	0.585	1.321	1.608
2	18:38:27	0.039	1.372	135.800	926.500	927.600	0.618	1.343	1.607
3	18:38:46	1.365	1.365	134.800	927.200	909.600	0.613	1.395	1.629
X		0.874	1.362	134.700	926.800	913.700	0.605	1.353	1.615
σ		0.727	0.011	1.140	0.355	12.310	0.018	0.038	0.013
%RSD		83.120	0.797	0.846	0.038	1.347	2.916	2.817	0.787
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:38:07	1.323	12.050	11.630	0.192	0.966	-0.699	0.000	69.050
2	18:38:27	1.426	11.430	12.400	0.655	0.736	-0.762	0.000	69.390
3	18:38:46	1.425	11.970	11.500	1.001	1.250	-0.540	0.000	68.990
X		1.392	11.820	11.840	0.616	0.984	-0.667	0.000	69.140
σ		0.059	0.339	0.486	0.406	0.258	0.114	0.000	0.220
%RSD		4.243	2.866	4.108	65.820	26.210	17.130	0.000	0.318
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:38:07	101.531%	0.149	0.133	97.927%	-0.011	-0.011	0.075	0.051
2	18:38:27	103.283%	0.151	0.190	99.387%	-0.007	-0.014	0.000	0.027
3	18:38:46	105.128%	0.158	0.184	100.190%	0.002	-0.014	0.003	0.013
X		103.314%	0.153	0.169	99.168%	-0.005	-0.013	0.026	0.030
σ		1.799%	0.005	0.031	1.147%	0.007	0.002	0.042	0.019
%RSD		1.741	2.975	18.310	1.157	132.200	14.730	161.600	63.740
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:38:07	99.433%	-0.138	0.024	0.030	44.530	46.010	103.713%	105.714%
2	18:38:27	101.898%	-0.101	0.047	0.018	44.860	45.110	107.185%	107.838%
3	18:38:46	103.821%	-0.152	0.036	0.015	45.860	45.100	108.173%	110.126%
X		101.718%	-0.131	0.036	0.021	45.090	45.410	106.357%	107.893%
σ		2.200%	0.027	0.012	0.008	0.692	0.520	2.342%	2.206%
%RSD		2.162	20.340	33.270	36.530	1.535	1.146	2.202	2.045
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:38:07	0.010	0.005	1.195	1.082	1.146	98.199%		
2	18:38:27	0.007	-0.001	1.304	1.144	1.197	99.888%		
3	18:38:46	0.002	0.002	1.304	1.142	1.186	100.957%		
X		0.006	0.002	1.268	1.123	1.177	99.682%		
σ		0.004	0.003	0.063	0.035	0.027	1.391%		
%RSD		58.930	132.400	4.988	3.150	2.267	1.395		

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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	18:41:30	92.675%	99.340	99.170	96.070	0.000	49080.000	50120.000	51500.000
2	18:41:49	92.907%	98.830	93.800	98.440	0.000	48930.000	50740.000	52580.000
3	18:42:08	93.708%	102.800	97.560	100.200	0.000	48910.000	51090.000	52430.000
X		93.097%	100.323%	96.844%	98.246%	0.000	97.951%	101.304%	104.337%
σ		0.542%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.582	2.153	2.845	2.124	0.000	0.185	0.965	1.116
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:30	508.800	5146.000	0.000	50440.000	48890.000	50490.000	95.140%	96.690
2	18:41:49	523.600	5209.000	0.000	50410.000	49060.000	50400.000	95.381%	99.670
3	18:42:08	530.100	5243.000	0.000	50650.000	50330.000	50960.000	95.897%	97.990
X		104.166%	103.989%	0.000	101.000%	98.857%	101.231%	95.473%	98.117%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.386%	n/a
%RSD		2.088	0.947	0.000	0.259	1.596	0.601	0.405	1.526
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:30	99.510	102.300	507.000	26170.000	25790.000	102.300	101.000	102.000
2	18:41:49	102.300	104.400	515.500	26130.000	26120.000	103.600	101.900	102.300
3	18:42:08	103.400	104.500	522.900	26290.000	26460.000	104.200	105.100	103.000
X		101.725%	103.726%	103.024%	104.793%	104.494%	103.381%	102.680%	102.394%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.960	1.195	1.550	0.322	1.270	0.918	2.131	0.508
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:30	103.600	101.800	102.300	101.200	100.600	102.900	0.000	100.100
2	18:41:49	102.800	104.100	102.000	102.500	101.800	103.400	0.000	100.400
3	18:42:08	104.400	103.100	101.400	100.100	102.000	102.700	0.000	100.500
X		103.608%	102.979%	101.893%	101.266%	101.448%	103.013%	0.000	100.335%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.778	1.097	0.452	1.173	0.765	0.375	0.000	0.172
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:30	97.401%	98.600	100.500	92.489%	98.980	99.660	101.000	101.900
2	18:41:49	101.203%	101.500	102.500	94.058%	100.600	100.600	100.100	101.500
3	18:42:08	102.956%	103.000	104.800	94.806%	101.300	101.100	101.600	101.300
X		100.520%	101.027%	102.575%	93.784%	100.277%	100.463%	100.875%	101.571%
σ		2.840%	n/a	n/a	1.182%	n/a	n/a	n/a	n/a
%RSD		2.825	2.216	2.095	1.261	1.176	0.731	0.744	0.326
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:30	97.640%	99.540	98.370	97.470	100.500	98.880	103.195%	103.427%
2	18:41:49	102.795%	98.570	98.210	98.290	99.430	99.140	106.801%	108.156%
3	18:42:08	103.360%	99.080	98.500	98.570	101.000	101.100	108.455%	110.018%
X		101.265%	99.063%	98.361%	98.108%	100.308%	99.702%	106.150%	107.200%
σ		3.152%	n/a	n/a	n/a	n/a	n/a	2.690%	3.398%
%RSD		3.113	0.490	0.143	0.583	0.784	1.207	2.534	3.170
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:41:30	99.390	98.790	98.670	99.620	98.980	95.635%		
2	18:41:49	104.100	104.000	104.500	104.200	104.600	95.036%		
3	18:42:08	105.500	105.600	104.800	106.300	106.100	95.682%		
X		103.000%	102.790%	102.666%	103.365%	103.219%	95.451%		
σ		n/a	n/a	n/a	n/a	n/a	0.360%		
%RSD		3.103	3.453	3.372	3.297	3.629	0.378		

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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	18:48:19	99.099%	-0.255	-0.654	-0.718	0.000	11.010	2.433	2.787
2	18:48:38	98.882%	-0.182	-0.532	-0.999	0.000	18.540	2.561	2.225
3	18:48:57	101.895%	-0.210	0.565	-1.075	0.000	14.240	2.854	2.198
X		99.959%	-0.216	-0.207	-0.931	0.000	14.600	2.616	2.403
σ		1.680%	0.037	0.672	0.188	0.000	3.779	0.216	0.333
%RSD		1.681	16.940	324.500	20.190	0.000	25.890	8.255	13.850
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:48:19	-0.493	4.472	0.000	12.450	3.420	-12.060	99.128%	-0.119
2	18:48:38	-0.601	3.660	0.000	8.848	3.140	-9.940	100.347%	-0.044
3	18:48:57	-0.457	3.603	0.000	10.160	-4.224	-8.496	100.825%	-0.045
X		-0.517	3.912	0.000	10.490	0.779	-10.170	100.100%	-0.069
σ		0.075	0.486	0.000	1.824	4.334	1.795	0.875%	0.043
%RSD		14.570	12.420	0.000	17.400	556.600	17.650	0.874	62.250
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:48:19	-0.111	0.043	0.033	1.915	4.521	-0.004	0.010	-0.006
2	18:48:38	-0.156	-0.033	0.051	-0.293	2.994	-0.006	0.007	0.043
3	18:48:57	0.100	0.059	0.012	-0.749	2.033	-0.012	0.014	0.055
X		-0.056	0.023	0.032	0.291	3.183	-0.007	0.010	0.031
σ		0.137	0.049	0.019	1.425	1.255	0.004	0.003	0.033
%RSD		245.400	215.000	60.960	489.500	39.420	55.870	33.360	105.700
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:48:19	-0.122	0.215	0.190	0.175	0.372	0.892	0.000	0.033
2	18:48:38	-0.138	0.169	0.243	0.038	0.605	0.390	0.000	0.052
3	18:48:57	-0.022	0.153	0.138	-0.173	0.797	-0.035	0.000	0.027
X		-0.094	0.179	0.190	0.013	0.591	0.416	0.000	0.037
σ		0.063	0.032	0.053	0.176	0.212	0.464	0.000	0.013
%RSD		66.560	18.070	27.720	1311.000	35.930	111.600	0.000	35.600
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:48:19	102.185%	0.149	0.166	102.780%	-0.008	-0.006	0.031	0.017
2	18:48:38	106.008%	0.135	0.164	105.066%	-0.010	-0.012	-0.007	0.006
3	18:48:57	106.631%	0.147	0.155	105.570%	-0.014	-0.001	0.037	0.014
X		104.941%	0.144	0.162	104.472%	-0.011	-0.006	0.020	0.012
σ		2.407%	0.008	0.006	1.487%	0.003	0.006	0.024	0.006
%RSD		2.294	5.459	3.762	1.423	29.790	93.820	118.900	47.530
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:48:19	103.853%	-0.355	0.108	0.142	-0.006	0.009	103.923%	104.275%
2	18:48:38	105.088%	-0.371	0.110	0.091	-0.007	-0.005	107.162%	107.423%
3	18:48:57	107.483%	-0.387	0.083	0.124	-0.007	-0.011	109.224%	109.503%
X		105.474%	-0.371	0.100	0.119	-0.007	-0.002	106.770%	107.067%
σ		1.846%	0.016	0.015	0.026	0.000	0.010	2.673%	2.632%
%RSD		1.750	4.218	14.990	21.540	7.464	469.000	2.503	2.458
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:48:19	-0.001	0.002	-0.016	-0.007	-0.012	102.432%		
2	18:48:38	0.006	-0.006	0.002	0.002	-0.004	102.907%		
3	18:48:57	-0.008	0.000	-0.011	-0.006	-0.007	104.143%		
X		-0.001	-0.001	-0.008	-0.004	-0.008	103.161%		
σ		0.007	0.004	0.009	0.005	0.004	0.884%		
%RSD		652.700	303.500	110.600	134.000	48.140	0.856		

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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	18:52:03	91.249%	-0.246	30.380	32.670	0.000	6458.000	12990.000	13890.000
2	18:52:22	92.347%	-0.274	31.680	32.870	0.000	6399.000	13070.000	13780.000
3	18:52:41	92.629%	-0.067	33.100	32.400	0.000	6364.000	13070.000	13770.000
X		92.075%	-0.196	31.720	32.650	0.000	6407.000	13040.000	13810.000
σ		0.729%	0.112	1.358	0.234	0.000	47.620	44.520	63.600
%RSD		0.792	57.270	4.283	0.715	0.000	0.743	0.341	0.461
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:03	667.700	5958.000	0.000	1055.000	33860.000	34120.000	90.288%	9.562
2	18:52:22	660.000	5943.000	0.000	1057.000	33740.000	34290.000	90.916%	10.560
3	18:52:41	662.800	5957.000	0.000	1054.000	33310.000	34220.000	91.648%	10.050
X		663.500	5953.000	0.000	1055.000	33640.000	34210.000	90.951%	10.060
σ		3.887	8.224	0.000	1.872	289.000	84.240	0.681%	0.498
%RSD		0.586	0.138	0.000	0.177	0.859	0.246	0.748	4.953
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:03	1.963	1.193	75.580	1201.000	1226.000	0.661	2.337	1.354
2	18:52:22	1.762	1.417	77.100	1207.000	1224.000	0.714	2.249	1.303
3	18:52:41	0.380	1.299	77.120	1203.000	1219.000	0.755	2.312	1.250
X		1.368	1.303	76.600	1203.000	1223.000	0.710	2.299	1.303
σ		0.862	0.112	0.883	3.283	3.458	0.047	0.045	0.052
%RSD		62.980	8.628	1.153	0.273	0.283	6.650	1.968	4.008
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:03	1.065	11.800	12.060	0.568	0.293	-0.219	0.000	115.900
2	18:52:22	0.870	11.840	12.360	-0.189	0.984	-0.133	0.000	118.800
3	18:52:41	1.060	12.250	12.070	0.564	0.313	0.662	0.000	118.900
X		0.998	11.960	12.160	0.314	0.530	0.104	0.000	117.900
σ		0.111	0.246	0.173	0.436	0.394	0.486	0.000	1.684
%RSD		11.140	2.059	1.425	138.900	74.200	469.100	0.000	1.428
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:03	98.436%	0.199	0.161	95.475%	-0.015	-0.004	0.085	0.057
2	18:52:22	99.846%	0.261	0.176	94.645%	-0.014	-0.011	0.051	0.056
3	18:52:41	100.651%	0.161	0.182	95.861%	-0.006	-0.003	0.057	0.031
X		99.645%	0.207	0.173	95.327%	-0.012	-0.006	0.064	0.048
σ		1.121%	0.050	0.011	0.622%	0.005	0.004	0.018	0.015
%RSD		1.125	24.330	6.241	0.652	39.610	67.880	28.650	30.620
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:03	97.441%	-0.154	0.105	0.076	66.810	68.610	102.379%	103.535%
2	18:52:22	99.140%	-0.105	0.096	0.101	68.640	67.630	103.376%	105.571%
3	18:52:41	99.988%	-0.120	0.112	0.091	67.160	68.740	104.657%	107.032%
X		98.857%	-0.126	0.104	0.090	67.530	68.320	103.471%	105.379%
σ		1.297%	0.025	0.008	0.012	0.970	0.608	1.142%	1.756%
%RSD		1.312	19.810	7.556	13.720	1.436	0.889	1.104	1.666
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:52:03	0.014	0.008	1.449	1.385	1.366	98.862%		
2	18:52:22	0.006	0.013	1.399	1.341	1.384	100.023%		
3	18:52:41	0.003	0.014	1.491	1.422	1.449	98.290%		
X		0.008	0.012	1.446	1.383	1.400	99.058%		
σ		0.006	0.003	0.046	0.041	0.044	0.883%		
%RSD		72.960	23.510	3.204	2.939	3.136	0.891		

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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	18:55:46	90.278%	-0.139	66.490	76.930	0.000	16260.000	20870.000	21800.000
2	18:56:05	88.897%	-0.163	73.190	77.860	0.000	16390.000	21120.000	22270.000
3	18:56:24	91.966%	-0.247	71.180	77.460	0.000	15990.000	20910.000	22070.000
X		90.380%	-0.183	70.290	77.420	0.000	16210.000	20970.000	22050.000
σ		1.537%	0.057	3.437	0.467	0.000	201.200	134.400	234.900
%RSD		1.701	31.000	4.890	0.603	0.000	1.241	0.641	1.066
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:55:46	953.900	6573.000	0.000	1868.000	55650.000	59460.000	87.886%	16.310
2	18:56:05	1011.000	6693.000	0.000	1869.000	56140.000	59510.000	88.272%	15.620
3	18:56:24	958.400	6611.000	0.000	1842.000	55520.000	59090.000	89.614%	16.240
X		974.500	6625.000	0.000	1860.000	55770.000	59350.000	88.591%	16.060
σ		31.860	61.370	0.000	15.100	324.500	228.600	0.907%	0.379
%RSD		3.269	0.926	0.000	0.812	0.582	0.385	1.024	2.360
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:55:46	0.496	2.091	166.200	1715.000	1740.000	0.896	1.934	1.750
2	18:56:05	0.209	2.140	168.500	1720.000	1783.000	0.911	2.201	1.706
3	18:56:24	0.270	2.211	168.100	1701.000	1745.000	0.922	2.104	1.701
X		0.325	2.147	167.600	1712.000	1756.000	0.910	2.079	1.719
σ		0.151	0.060	1.222	9.682	23.550	0.013	0.135	0.027
%RSD		46.450	2.809	0.729	0.566	1.341	1.448	6.506	1.571
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:55:46	1.526	14.810	14.490	0.174	0.084	-0.172	0.000	209.800
2	18:56:05	1.759	15.170	15.540	0.953	0.398	0.679	0.000	210.300
3	18:56:24	1.636	14.730	15.050	0.561	1.000	-0.189	0.000	208.900
X		1.640	14.900	15.030	0.563	0.494	0.106	0.000	209.700
σ		0.117	0.232	0.528	0.390	0.465	0.496	0.000	0.742
%RSD		7.112	1.556	3.516	69.220	94.140	466.600	0.000	0.354
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:55:46	95.149%	0.308	0.249	92.196%	-0.008	-0.002	0.017	0.044
2	18:56:05	97.276%	0.318	0.287	92.989%	-0.019	-0.007	-0.023	0.008
3	18:56:24	99.167%	0.391	0.359	93.967%	-0.008	-0.018	0.080	0.037
X		97.197%	0.339	0.299	93.051%	-0.012	-0.009	0.025	0.030
σ		2.010%	0.045	0.056	0.887%	0.007	0.008	0.052	0.019
%RSD		2.068	13.380	18.700	0.953	56.200	91.830	209.000	65.470
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:55:46	94.514%	-0.056	0.089	0.089	74.390	73.100	99.001%	101.423%
2	18:56:05	95.882%	-0.155	0.046	0.103	75.360	75.270	102.817%	103.342%
3	18:56:24	98.720%	-0.065	0.095	0.099	73.420	73.060	104.666%	105.581%
X		96.372%	-0.092	0.076	0.097	74.390	73.810	102.161%	103.449%
σ		2.145%	0.055	0.027	0.007	0.973	1.262	2.889%	2.082%
%RSD		2.226	60.040	34.960	7.589	1.308	1.710	2.828	2.012
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:55:46	0.017	0.015	1.532	1.372	1.471	93.818%		
2	18:56:05	0.012	0.013	1.575	1.337	1.464	96.043%		
3	18:56:24	0.011	0.006	1.504	1.491	1.501	96.323%		
X		0.013	0.011	1.537	1.400	1.478	95.394%		
σ		0.003	0.005	0.036	0.080	0.020	1.373%		
%RSD		23.240	43.030	2.317	5.739	1.340	1.439		

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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	18:59:28	89.193%	-0.137	134.800	133.500	0.000	33670.000	42710.000	45250.000
2	18:59:47	91.947%	-0.117	136.300	134.500	0.000	33500.000	42450.000	44830.000
3	19:00:06	92.443%	-0.222	127.800	138.100	0.000	33440.000	42500.000	45060.000
X		91.194%	-0.159	133.000	135.400	0.000	33540.000	42550.000	45050.000
σ		1.751%	0.056	4.523	2.403	0.000	122.400	141.400	209.400
%RSD		1.920	35.070	3.401	1.775	0.000	0.365	0.332	0.465
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:59:28	644.300	6349.000	0.000	1692.000	88850.000	95310.000	90.412%	9.719
2	18:59:47	648.500	6311.000	0.000	1687.000	90070.000	95190.000	90.700%	10.520
3	19:00:06	658.700	6315.000	0.000	1669.000	88860.000	94880.000	92.119%	9.468
X		650.500	6325.000	0.000	1683.000	89260.000	95130.000	91.077%	9.904
σ		7.401	20.850	0.000	11.880	700.000	222.000	0.914%	0.552
%RSD		1.138	0.330	0.000	0.706	0.784	0.233	1.003	5.573
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:59:28	1.038	1.522	111.500	1324.000	1442.000	0.843	1.628	1.257
2	18:59:47	2.106	1.624	113.200	1326.000	1456.000	0.798	1.744	1.241
3	19:00:06	1.475	1.497	113.200	1319.000	1445.000	0.876	1.692	1.294
X		1.540	1.548	112.700	1323.000	1448.000	0.839	1.688	1.264
σ		0.537	0.067	0.976	3.373	7.079	0.039	0.058	0.027
%RSD		34.870	4.324	0.867	0.255	0.489	4.672	3.460	2.148
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:59:28	1.390	15.020	15.310	-0.080	0.539	-0.109	0.000	225.000
2	18:59:47	0.989	15.240	14.720	0.409	1.023	-0.654	0.000	224.200
3	19:00:06	1.041	14.380	14.450	1.827	0.469	-0.335	0.000	224.000
X		1.140	14.880	14.820	0.719	0.677	-0.366	0.000	224.400
σ		0.218	0.448	0.439	0.990	0.301	0.274	0.000	0.541
%RSD		19.120	3.007	2.960	137.800	44.540	74.880	0.000	0.241
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:59:28	98.263%	0.117	0.099	93.599%	-0.015	-0.004	0.112	0.093
2	18:59:47	100.425%	0.134	0.112	94.011%	-0.018	-0.003	0.021	0.005
3	19:00:06	103.176%	0.097	0.124	95.738%	-0.021	-0.006	0.097	0.027
X		100.621%	0.116	0.112	94.449%	-0.018	-0.004	0.077	0.042
σ		2.462%	0.019	0.012	1.135%	0.003	0.002	0.049	0.046
%RSD		2.447	16.070	11.020	1.202	17.720	41.890	63.270	110.100
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:59:28	96.473%	-0.195	0.016	0.069	64.260	64.910	103.748%	104.250%
2	18:59:47	98.390%	-0.174	0.046	0.061	65.760	66.090	106.172%	106.950%
3	19:00:06	100.884%	-0.109	0.039	0.040	65.240	65.350	108.334%	109.756%
X		98.582%	-0.159	0.034	0.057	65.090	65.450	106.084%	106.985%
σ		2.212%	0.045	0.016	0.015	0.762	0.599	2.294%	2.753%
%RSD		2.244	28.410	46.330	25.920	1.170	0.915	2.163	2.573
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	18:59:28	0.008	0.002	1.483	1.311	1.421	97.346%		
2	18:59:47	0.005	-0.003	1.488	1.386	1.467	98.261%		
3	19:00:06	0.006	0.004	1.622	1.477	1.513	98.933%		
X		0.006	0.001	1.531	1.391	1.467	98.180%		
σ		0.002	0.003	0.079	0.083	0.046	0.797%		
%RSD		27.670	298.000	5.147	5.981	3.106	0.811		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:03:11	77.476%	-0.260	3207.000	3342.000	0.000	571300.000	60440.000	63560.000
2	19:03:30	77.802%	-0.260	3301.000	3405.000	0.000	569200.000	60630.000	63690.000
3	19:03:49	78.734%	-0.171	3257.000	3401.000	0.000	562200.000	60900.000	64400.000
X		78.004%	-0.230	3255.000	3383.000	0.000	567500.000	60660.000	63880.000
σ		0.653%	0.051	47.340	35.340	0.000	4744.000	227.800	452.400
%RSD		0.837	22.230	1.454	1.045	0.000	0.836	0.376	0.708
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:03:11	32.280	4053.000	0.000	67930.000	575900.000	600700.000	89.353%	0.406
2	19:03:30	33.380	4125.000	0.000	67110.000	577500.000	596700.000	92.215%	0.359
3	19:03:49	33.290	4178.000	0.000	66780.000	576300.000	596700.000	92.618%	0.549
X		32.980	4119.000	0.000	67270.000	576600.000	598000.000	91.395%	0.438
σ		0.612	62.580	0.000	589.000	830.300	2264.000	1.780%	0.099
%RSD		1.855	1.519	0.000	0.875	0.144	0.379	1.948	22.550
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:03:11	0.550	0.660	1285.000	167.500	1460.000	0.556	-2.476	2.121
2	19:03:30	0.165	0.617	1275.000	164.000	1427.000	0.505	-2.838	2.052
3	19:03:49	-0.450	0.534	1271.000	164.100	1392.000	0.610	-3.062	2.420
X		0.088	0.604	1277.000	165.200	1426.000	0.557	-2.792	2.198
σ		0.504	0.064	7.405	2.007	34.080	0.053	0.296	0.195
%RSD		571.900	10.660	0.580	1.215	2.390	9.435	10.590	8.893
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:03:11	0.710	13.220	12.920	12.520	1.168	4.113	0.000	3226.000
2	19:03:30	0.721	13.170	13.220	12.840	1.423	4.514	0.000	3208.000
3	19:03:49	0.714	13.020	13.590	13.170	1.806	4.074	0.000	3166.000
X		0.715	13.140	13.240	12.840	1.466	4.234	0.000	3200.000
σ		0.006	0.101	0.336	0.330	0.321	0.243	0.000	30.550
%RSD		0.820	0.767	2.536	2.566	21.910	5.751	0.000	0.955
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:03:11	97.416%	4.207	4.550	85.951%	-0.009	-0.018	-0.040	-0.038
2	19:03:30	101.188%	4.623	4.690	87.404%	-0.022	-0.016	0.081	0.040
3	19:03:49	103.703%	4.615	4.750	89.066%	-0.019	-0.009	-0.011	-0.021
X		100.769%	4.482	4.663	87.474%	-0.017	-0.014	0.010	-0.006
σ		3.164%	0.238	0.103	1.559%	0.007	0.005	0.063	0.041
%RSD		3.140	5.301	2.202	1.782	41.710	35.000	630.400	680.300
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:03:11	93.765%	0.104	0.178	0.199	23.220	23.430	102.904%	103.157%
2	19:03:30	97.012%	0.171	0.203	0.217	22.860	22.550	106.600%	108.646%
3	19:03:49	99.705%	0.119	0.187	0.218	22.410	22.940	109.151%	110.198%
X		96.827%	0.131	0.189	0.211	22.830	22.970	106.218%	107.334%
σ		2.974%	0.036	0.013	0.011	0.406	0.442	3.141%	3.699%
%RSD		3.071	27.100	6.793	5.201	1.776	1.922	2.957	3.447
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	19:03:11	-0.010	-0.010	0.052	0.046	0.045	87.010%		
2	19:03:30	-0.003	-0.010	0.045	0.054	0.045	89.125%		
3	19:03:49	-0.011	-0.007	0.053	0.056	0.048	89.596%		
X		-0.008	-0.009	0.050	0.052	0.046	88.577%		
σ		0.004	0.002	0.004	0.005	0.001	1.378%		
%RSD		50.940	23.970	8.665	9.978	3.132	1.555		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:06:52	74.870%	-0.100	2498.000	2604.000	0.000	789500.000	25330.000	26620.000
2	19:07:12	76.749%	-0.198	2502.000	2587.000	0.000	772900.000	24840.000	26390.000
3	19:07:31	75.098%	-0.195	2591.000	2649.000	0.000	784800.000	25480.000	27160.000
X		75.572%	-0.164	2530.000	2614.000	0.000	782400.000	25220.000	26720.000
σ		1.026%	0.056	52.320	32.070	0.000	8568.000	333.500	393.700
%RSD		1.357	34.030	2.068	1.227	0.000	1.095	1.322	1.473
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:06:52	118.900	4678.000	0.000	92220.000	537500.000	556700.000	92.001%	1.497
2	19:07:12	118.000	4623.000	0.000	90460.000	533200.000	555400.000	93.651%	2.011
3	19:07:31	120.200	4731.000	0.000	90940.000	532200.000	555400.000	94.592%	2.042
X		119.000	4677.000	0.000	91210.000	534300.000	555900.000	93.415%	1.850
σ		1.063	54.120	0.000	911.200	2863.000	727.700	1.312%	0.306
%RSD		0.892	1.157	0.000	0.999	0.536	0.131	1.404	16.550
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:06:52	0.755	0.514	2536.000	334.900	1483.000	0.889	-1.812	5.071
2	19:07:12	0.359	0.481	2529.000	336.100	1471.000	0.930	-1.317	5.010
3	19:07:31	0.714	0.410	2517.000	334.800	1452.000	0.910	-1.645	5.181
X		0.609	0.469	2527.000	335.300	1469.000	0.910	-1.591	5.087
σ		0.217	0.053	9.755	0.738	15.780	0.020	0.252	0.086
%RSD		35.690	11.350	0.386	0.220	1.075	2.237	15.820	1.698
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:06:52	0.960	6.505	5.904	30.540	4.156	5.827	0.000	3616.000
2	19:07:12	0.825	6.849	6.135	30.700	4.964	5.648	0.000	3599.000
3	19:07:31	0.932	6.698	6.933	31.060	5.329	4.931	0.000	3594.000
X		0.906	6.684	6.324	30.770	4.816	5.469	0.000	3603.000
σ		0.072	0.173	0.540	0.268	0.600	0.474	0.000	11.930
%RSD		7.919	2.585	8.539	0.870	12.460	8.674	0.000	0.331
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:06:52	102.534%	65.570	67.270	89.174%	-0.019	-0.007	0.016	0.003
2	19:07:12	105.097%	67.570	69.640	90.146%	-0.012	-0.014	0.052	0.001
3	19:07:31	106.623%	66.100	68.130	91.317%	-0.020	-0.015	-0.047	-0.010
X		104.752%	66.410	68.350	90.212%	-0.017	-0.012	0.007	-0.002
σ		2.067%	1.036	1.202	1.073%	0.004	0.004	0.050	0.007
%RSD		1.973	1.560	1.758	1.190	26.520	37.330	725.900	342.700
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:06:52	98.158%	-0.054	1.153	1.131	27.660	27.760	108.029%	109.125%
2	19:07:12	101.087%	-0.023	1.311	1.252	27.100	26.840	110.971%	112.582%
3	19:07:31	102.705%	-0.028	1.151	1.224	26.790	27.010	112.835%	114.750%
X		100.650%	-0.035	1.205	1.202	27.180	27.200	110.611%	112.152%
σ		2.305%	0.017	0.092	0.064	0.440	0.491	2.423%	2.837%
%RSD		2.290	47.730	7.613	5.287	1.620	1.807	2.191	2.530
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	19:06:52	0.001	-0.009	0.274	0.320	0.287	91.204%		
2	19:07:12	-0.003	-0.004	0.289	0.291	0.300	92.732%		
3	19:07:31	-0.006	-0.006	0.329	0.306	0.291	93.511%		
X		-0.003	-0.006	0.297	0.306	0.293	92.482%		
σ		0.003	0.003	0.029	0.014	0.007	1.174%		
%RSD		123.800	45.240	9.592	4.741	2.355	1.269		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	19:10:33	94.157%	-0.225	124.200	125.000	0.000	40240.000	13560.000	14850.000	
2	19:10:53	96.212%	-0.277	118.200	121.000	0.000	39630.000	13650.000	14720.000	
3	19:11:12	97.360%	-0.253	115.300	117.900	0.000	39160.000	13750.000	14700.000	
X		95.910%	-0.252	119.200	121.300	0.000	39680.000	13660.000	14760.000	
		σ	1.623%	0.026	4.551	3.536	0.000	544.900	93.340	81.360
		%RSD	1.692	10.380	3.817	2.916	0.000	1.373	0.684	0.551
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	19:10:33	52.940	2826.000	0.000	2111.000	146600.000	156100.000	97.230%	3.058	
2	19:10:53	46.040	2869.000	0.000	2077.000	147100.000	156300.000	97.911%	2.956	
3	19:11:12	53.020	2820.000	0.000	2063.000	147700.000	155800.000	98.373%	2.603	
X		50.670	2838.000	0.000	2084.000	147100.000	156100.000	97.838%	2.873	
		σ	4.011	26.790	0.000	24.910	549.000	227.800	0.575%	0.239
		%RSD	7.917	0.944	0.000	1.196	0.373	0.146	0.588	8.313
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	19:10:33	1.446	0.833	12.520	87.070	438.600	0.274	1.167	0.809	
2	19:10:53	1.163	0.843	12.710	86.290	435.500	0.245	1.456	0.700	
3	19:11:12	2.427	0.838	12.690	87.140	421.000	0.235	1.133	0.793	
X		1.679	0.838	12.640	86.830	431.700	0.251	1.252	0.767	
		σ	0.663	0.005	0.106	0.475	9.374	0.021	0.177	0.059
		%RSD	39.510	0.621	0.839	0.547	2.171	8.171	14.140	7.681
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	19:10:33	0.401	8.007	8.345	2.693	2.253	1.438	0.000	212.800	
2	19:10:53	0.525	8.473	8.439	3.169	1.418	1.824	0.000	214.700	
3	19:11:12	0.640	7.928	8.140	3.705	1.621	0.846	0.000	214.200	
X		0.522	8.136	8.308	3.189	1.764	1.369	0.000	213.900	
		σ	0.119	0.295	0.153	0.506	0.436	0.493	0.000	0.945
		%RSD	22.850	3.624	1.840	15.880	24.710	35.980	0.000	0.442
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	19:10:33	107.623%	4.055	3.770	101.500%	-0.016	-0.006	-0.006	0.011	
2	19:10:53	108.790%	3.675	3.697	101.168%	-0.015	-0.007	0.091	0.051	
3	19:11:12	110.606%	3.589	3.641	102.177%	-0.015	-0.009	-0.023	-0.015	
X		109.007%	3.773	3.703	101.615%	-0.015	-0.007	0.021	0.016	
		σ	1.503%	0.248	0.065	0.514%	0.001	0.002	0.062	0.034
		%RSD	1.379	6.572	1.753	0.506	4.866	21.590	293.900	214.100
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	19:10:33	106.155%	-0.199	0.151	0.180	9.922	9.904	111.327%	113.275%	
2	19:10:53	107.330%	-0.235	0.212	0.203	10.820	10.140	113.507%	114.917%	
3	19:11:12	108.584%	-0.144	0.181	0.239	10.840	10.040	114.795%	116.188%	
X		107.356%	-0.193	0.181	0.207	10.530	10.030	113.210%	114.793%	
		σ	1.214%	0.046	0.031	0.030	0.524	0.120	1.753%	1.461%
		%RSD	1.131	23.750	16.830	14.370	4.978	1.194	1.549	1.272
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	19:10:33	-0.005	-0.006	0.165	0.148	0.155	101.416%			
2	19:10:53	-0.002	-0.008	0.191	0.174	0.181	100.500%			
3	19:11:12	-0.005	-0.008	0.197	0.154	0.167	101.223%			
X		-0.004	-0.007	0.184	0.159	0.167	101.046%			
		σ	0.002	0.001	0.017	0.013	0.483%			
		%RSD	47.870	19.080	9.366	8.455	7.724	0.478		

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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	19:14:14	92.038%	-0.092	80.260	79.480	0.000	77390.000	30080.000	32000.000
2	19:14:33	90.942%	-0.011	75.540	81.120	0.000	77510.000	30590.000	32330.000
3	19:14:53	93.731%	0.005	70.470	78.820	0.000	75680.000	30260.000	32190.000
X		92.237%	-0.032	75.420	79.810	0.000	76860.000	30310.000	32180.000
σ		1.405%	0.052	4.897	1.188	0.000	1022.000	262.400	164.100
%RSD		1.524	160.300	6.493	1.489	0.000	1.329	0.866	0.510
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:14:14	1802.000	5576.000	0.000	54680.000	103700.000	110900.000	93.141%	95.740
2	19:14:33	1817.000	5603.000	0.000	53940.000	104500.000	109300.000	94.760%	73.700
3	19:14:53	1839.000	5555.000	0.000	53550.000	103200.000	108900.000	95.355%	81.300
X		1819.000	5578.000	0.000	54060.000	103800.000	109700.000	94.419%	83.580
σ		18.820	23.610	0.000	573.800	685.100	1090.000	1.146%	11.200
%RSD		1.035	0.423	0.000	1.061	0.660	0.994	1.214	13.400
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:14:14	1.535	13.420	231.900	7060.000	7050.000	1.925	24.170	306.600
2	19:14:33	2.840	13.460	233.800	7027.000	7072.000	1.908	24.130	306.700
3	19:14:53	3.065	13.520	232.600	6984.000	7047.000	1.880	23.780	307.000
X		2.480	13.470	232.800	7024.000	7056.000	1.904	24.030	306.700
σ		0.826	0.053	0.962	38.120	13.920	0.023	0.216	0.224
%RSD		33.310	0.393	0.413	0.543	0.197	1.193	0.898	0.073
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:14:14	306.900	1078.000	1085.000	1.723	2.631	0.929	0.000	244.700
2	19:14:33	307.500	1076.000	1083.000	1.140	3.286	0.512	0.000	245.200
3	19:14:53	306.300	1083.000	1071.000	1.324	2.783	2.252	0.000	244.900
X		306.900	1079.000	1079.000	1.396	2.900	1.231	0.000	244.900
σ		0.574	3.641	7.417	0.298	0.343	0.908	0.000	0.213
%RSD		0.187	0.337	0.687	21.360	11.820	73.740	0.000	0.087
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:14:14	105.524%	2.700	2.645	94.715%	16.680	17.050	0.897	0.919
2	19:14:33	108.782%	2.781	2.683	96.085%	16.320	16.520	0.954	0.987
3	19:14:53	110.142%	2.859	2.761	97.098%	16.820	16.910	0.949	0.869
X		108.149%	2.780	2.696	95.966%	16.610	16.830	0.933	0.925
σ		2.373%	0.079	0.059	1.196%	0.258	0.271	0.032	0.059
%RSD		2.194	2.854	2.189	1.246	1.551	1.609	3.398	6.423
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:14:14	99.778%	2.716	1.530	1.414	468.600	468.900	106.932%	108.188%
2	19:14:33	104.054%	2.803	1.513	1.503	470.300	466.900	110.171%	112.514%
3	19:14:53	105.973%	2.786	1.508	1.586	458.500	461.900	113.121%	114.648%
X		103.268%	2.768	1.517	1.501	465.800	465.900	110.075%	111.783%
σ		3.171%	0.046	0.012	0.086	6.407	3.612	3.096%	3.291%
%RSD		3.071	1.677	0.758	5.715	1.376	0.775	2.812	2.944
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	19:14:14	0.045	0.024	192.800	180.800	186.100	97.894%		
2	19:14:33	0.031	0.035	197.200	184.500	190.100	99.126%		
3	19:14:53	0.032	0.039	197.800	185.600	191.700	100.092%		
X		0.036	0.032	196.000	183.600	189.300	99.037%		
σ		0.008	0.008	2.711	2.526	2.870	1.101%		
%RSD		22.250	23.930	1.384	1.376	1.516	1.112		

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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	19:17:55	89.635%	-0.165	134.600	130.600	0.000	174200.000	23320.000	24790.000
2	19:18:14	89.772%	-0.139	129.300	133.100	0.000	174600.000	23620.000	24970.000
3	19:18:33	91.778%	-0.221	123.200	133.700	0.000	171200.000	23450.000	25110.000
X		90.395%	-0.175	129.000	132.400	0.000	173400.000	23460.000	24950.000
σ		1.200%	0.042	5.703	1.661	0.000	1838.000	150.500	160.600
%RSD		1.328	24.020	4.420	1.254	0.000	1.060	0.641	0.644
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:17:55	60.880	15360.000	0.000	10390.000	149500.000	158000.000	92.702%	3.190
2	19:18:14	64.610	15340.000	0.000	10280.000	151800.000	157800.000	94.333%	3.022
3	19:18:33	66.050	15360.000	0.000	10200.000	149800.000	157600.000	95.175%	3.555
X		63.850	15350.000	0.000	10290.000	150300.000	157800.000	94.070%	3.256
σ		2.667	13.670	0.000	97.390	1235.000	216.200	1.257%	0.272
%RSD		4.177	0.089	0.000	0.946	0.821	0.137	1.336	8.365
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:17:55	1.621	1.562	1224.000	27570.000	27410.000	2.186	3.583	14.130
2	19:18:14	2.452	1.603	1212.000	27210.000	26940.000	2.153	3.393	14.570
3	19:18:33	2.141	1.600	1218.000	27320.000	27030.000	2.111	3.661	15.000
X		2.071	1.588	1218.000	27370.000	27130.000	2.150	3.545	14.570
σ		0.420	0.023	6.132	185.200	252.900	0.038	0.138	0.434
%RSD		20.260	1.427	0.504	0.677	0.932	1.757	3.887	2.976
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:17:55	11.900	17.730	18.470	1.776	1.959	0.446	0.000	883.600
2	19:18:14	12.030	17.970	18.630	1.036	2.184	-1.005	0.000	877.900
3	19:18:33	11.730	18.770	18.090	0.793	2.682	0.364	0.000	878.700
X		11.880	18.160	18.400	1.201	2.275	-0.065	0.000	880.100
σ		0.150	0.541	0.277	0.512	0.370	0.815	0.000	3.108
%RSD		1.266	2.979	1.504	42.630	16.270	1255.000	0.000	0.353
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:17:55	102.932%	0.198	0.167	95.259%	-0.024	-0.008	0.150	0.212
2	19:18:14	105.546%	0.114	0.144	96.434%	-0.008	-0.010	0.152	0.134
3	19:18:33	107.412%	0.195	0.145	96.868%	-0.016	-0.013	0.153	0.152
X		105.297%	0.169	0.152	96.187%	-0.016	-0.010	0.152	0.166
σ		2.250%	0.048	0.013	0.832%	0.008	0.003	0.002	0.041
%RSD		2.137	28.390	8.504	0.865	49.520	25.530	1.059	24.850
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:17:55	100.426%	-0.113	0.002	0.039	289.600	287.700	107.802%	110.134%
2	19:18:14	103.648%	-0.141	0.018	0.023	293.300	289.800	111.018%	113.295%
3	19:18:33	105.458%	-0.101	0.002	0.031	288.700	288.700	113.496%	114.961%
X		103.177%	-0.118	0.008	0.031	290.500	288.700	110.772%	112.796%
σ		2.549%	0.021	0.009	0.008	2.425	1.059	2.855%	2.452%
%RSD		2.470	17.540	121.100	25.830	0.835	0.367	2.577	2.174
Run	Time	203TI	205TI	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	19:17:55	-0.005	-0.013	1.204	1.166	1.160	97.505%		
2	19:18:14	-0.005	-0.009	1.254	1.121	1.204	97.268%		
3	19:18:33	-0.007	-0.009	1.223	1.113	1.182	99.189%		
X		-0.006	-0.010	1.227	1.133	1.182	97.987%		
σ		0.001	0.002	0.025	0.029	0.022	1.048%		
%RSD		20.840	23.750	2.022	2.561	1.863	1.069		

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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	19:21:36	95.579%	-0.176	31.700	36.670	0.000	63060.000	7393.000	7884.000
2	19:21:55	95.208%	-0.251	29.790	35.450	0.000	62970.000	7559.000	8063.000
3	19:22:14	95.467%	-0.126	37.160	35.460	0.000	63360.000	7679.000	8190.000
X		95.418%	-0.184	32.880	35.860	0.000	63130.000	7544.000	8046.000
σ		0.190%	0.063	3.824	0.700	0.000	205.600	143.700	153.900
%RSD		0.199	34.030	11.630	1.953	0.000	0.326	1.905	1.913
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:21:36	65.130	1744.000	0.000	8146.000	38630.000	40640.000	95.372%	0.876
2	19:21:55	68.730	1778.000	0.000	8053.000	37970.000	40660.000	96.293%	0.811
3	19:22:14	68.840	1817.000	0.000	8099.000	38130.000	40920.000	96.863%	0.936
X		67.570	1780.000	0.000	8100.000	38240.000	40740.000	96.176%	0.874
σ		2.108	36.570	0.000	46.330	344.200	154.500	0.752%	0.063
%RSD		3.120	2.055	0.000	0.572	0.900	0.379	0.782	7.164
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:21:36	0.759	0.551	81.320	342.000	425.900	1.237	1.919	20.020
2	19:21:55	-0.640	0.508	82.080	336.800	427.400	1.235	1.713	20.260
3	19:22:14	-0.329	0.467	82.920	335.600	424.500	1.320	1.842	20.530
X		-0.070	0.508	82.110	338.100	425.900	1.264	1.825	20.270
σ		0.735	0.042	0.796	3.369	1.474	0.048	0.104	0.258
%RSD		1048.000	8.206	0.970	0.996	0.346	3.812	5.723	1.270
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:21:36	20.460	41.660	41.260	6.754	2.646	0.349	0.000	200.100
2	19:21:55	19.260	40.820	43.180	6.453	2.432	0.050	0.000	200.300
3	19:22:14	19.520	42.880	43.240	6.795	3.046	1.048	0.000	200.300
X		19.750	41.790	42.560	6.667	2.708	0.482	0.000	200.200
σ		0.633	1.037	1.127	0.187	0.312	0.512	0.000	0.090
%RSD		3.206	2.482	2.649	2.798	11.500	106.200	0.000	0.045
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:21:36	103.203%	21.360	21.150	98.993%	0.049	0.043	0.114	0.093
2	19:21:55	107.243%	21.580	21.440	100.368%	0.032	0.065	0.079	0.070
3	19:22:14	108.695%	22.600	21.610	101.934%	0.046	0.036	0.009	0.023
X		106.380%	21.850	21.400	100.432%	0.043	0.048	0.067	0.062
σ		2.846%	0.662	0.234	1.472%	0.009	0.015	0.054	0.035
%RSD		2.675	3.028	1.094	1.465	21.430	31.680	79.720	57.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:21:36	102.676%	-0.272	0.533	0.500	43.200	42.420	108.816%	109.192%
2	19:21:55	105.017%	-0.278	0.489	0.524	42.730	42.910	110.125%	111.273%
3	19:22:14	107.143%	-0.268	0.458	0.565	43.480	43.280	113.241%	114.636%
X		104.945%	-0.273	0.493	0.530	43.140	42.870	110.727%	111.700%
σ		2.235%	0.005	0.038	0.033	0.377	0.435	2.273%	2.747%
%RSD		2.129	1.803	7.658	6.210	0.874	1.014	2.053	2.459
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	19:21:36	0.013	0.017	0.169	0.159	0.173	99.352%		
2	19:21:55	0.028	0.023	0.226	0.168	0.190	99.456%		
3	19:22:14	0.015	0.020	0.194	0.161	0.191	101.149%		
X		0.019	0.020	0.196	0.163	0.185	99.986%		
σ		0.008	0.003	0.028	0.005	0.010	1.009%		
%RSD		43.270	15.410	14.530	2.973	5.441	1.009		

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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	19:25:16	94.525%	-0.301	6.494	8.021	0.000	12930.000	1489.000	1570.000
2	19:25:35	95.357%	-0.276	8.274	8.259	0.000	12820.000	1507.000	1577.000
3	19:25:55	97.365%	-0.180	7.684	7.999	0.000	12480.000	1496.000	1591.000
X		95.749%	-0.252	7.484	8.093	0.000	12740.000	1497.000	1579.000
σ		1.460%	0.064	0.907	0.144	0.000	238.700	8.865	10.730
%RSD		1.525	25.380	12.120	1.783	0.000	1.873	0.592	0.680
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:16	13.010	350.700	0.000	1652.000	7715.000	7859.000	96.873%	0.015
2	19:25:35	13.270	352.400	0.000	1643.000	7766.000	7934.000	97.968%	0.038
3	19:25:55	13.140	350.900	0.000	1618.000	7622.000	7788.000	98.994%	0.113
X		13.140	351.300	0.000	1637.000	7701.000	7860.000	97.945%	0.055
σ		0.129	0.920	0.000	17.590	72.960	73.330	1.061%	0.051
%RSD		0.983	0.262	0.000	1.074	0.948	0.933	1.083	92.400
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:16	0.283	0.121	16.360	64.890	82.700	0.248	0.346	4.367
2	19:25:35	-0.508	0.102	16.390	63.870	79.990	0.260	0.404	4.161
3	19:25:55	0.106	0.120	16.080	63.800	79.930	0.206	0.515	4.282
X		-0.040	0.114	16.280	64.190	80.870	0.238	0.422	4.270
σ		0.415	0.010	0.171	0.609	1.585	0.028	0.086	0.103
%RSD		1050.000	8.855	1.048	0.949	1.959	11.970	20.360	2.420
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:16	3.748	8.651	8.999	0.892	0.892	-0.582	0.000	39.470
2	19:25:35	3.954	8.917	8.680	1.765	1.180	-0.198	0.000	39.610
3	19:25:55	3.903	8.408	8.180	1.673	1.264	0.324	0.000	39.940
X		3.868	8.659	8.620	1.443	1.112	-0.152	0.000	39.670
σ		0.107	0.255	0.413	0.480	0.195	0.455	0.000	0.242
%RSD		2.775	2.942	4.791	33.240	17.510	298.500	0.000	0.609
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:16	105.369%	4.450	4.380	104.059%	-0.011	0.006	-0.013	-0.015
2	19:25:35	108.658%	4.255	4.252	105.166%	-0.018	-0.008	-0.000	0.007
3	19:25:55	110.200%	4.402	4.407	106.629%	0.000	-0.006	-0.055	-0.040
X		108.076%	4.369	4.347	105.284%	-0.010	-0.003	-0.023	-0.016
σ		2.468%	0.102	0.083	1.289%	0.009	0.007	0.028	0.024
%RSD		2.283	2.327	1.899	1.224	98.030	260.300	123.800	147.600
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:16	105.244%	-0.425	0.049	0.093	8.815	8.491	108.125%	109.398%
2	19:25:35	108.435%	-0.403	0.045	0.065	8.472	8.655	112.010%	113.312%
3	19:25:55	110.069%	-0.421	0.062	0.096	8.280	8.486	114.779%	116.165%
X		107.916%	-0.416	0.052	0.084	8.523	8.544	111.638%	112.958%
σ		2.454%	0.012	0.009	0.017	0.271	0.096	3.342%	3.397%
%RSD		2.274	2.852	16.960	20.290	3.182	1.124	2.994	3.008
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	19:25:16	-0.004	-0.005	0.027	0.028	0.029	106.892%		
2	19:25:35	-0.001	-0.002	0.034	0.042	0.031	106.643%		
3	19:25:55	-0.006	-0.005	0.030	0.046	0.029	107.394%		
X		-0.004	-0.004	0.030	0.039	0.030	106.976%		
σ		0.002	0.002	0.003	0.010	0.001	0.383%		
%RSD		62.380	46.580	11.240	24.990	3.579	0.358		

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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	19:31:43	90.087%	103.200	99.880	98.490	0.000	49520.000	51930.000	53570.000
2	19:32:02	94.538%	95.820	96.970	97.470	0.000	46710.000	49880.000	51920.000
3	19:32:22	91.698%	102.300	97.340	101.300	0.000	48460.000	51740.000	54260.000
X		92.108%	100.448%	98.064%	99.094%	0.000	96.461%	102.369%	106.504%
σ		2.254%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.447	4.015	1.613	2.017	0.000	2.936	2.216	2.255
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:31:43	532.800	5419.000	0.000	51090.000	49690.000	51130.000	96.040%	100.100
2	19:32:02	524.100	5211.000	0.000	48970.000	48320.000	49590.000	97.562%	95.130
3	19:32:22	550.600	5420.000	0.000	49950.000	48940.000	50590.000	97.270%	100.100
X		107.168%	107.002%	0.000	100.002%	97.969%	100.873%	96.957%	98.438%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.808%	n/a
%RSD		2.527	2.248	0.000	2.118	1.403	1.546	0.833	2.911
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:31:43	101.000	103.300	513.000	26480.000	25860.000	101.900	101.300	101.600
2	19:32:02	99.620	103.000	511.000	25910.000	25770.000	100.400	101.100	99.250
3	19:32:22	102.300	104.900	521.700	26310.000	26320.000	101.300	102.100	100.800
X		100.995%	103.737%	103.048%	104.934%	103.927%	101.208%	101.505%	100.542%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.349	1.005	1.103	1.120	1.145	0.785	0.537	1.171
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:31:43	101.800	101.000	99.530	102.600	102.700	101.400	0.000	99.230
2	19:32:02	99.150	101.000	98.660	100.500	99.290	101.100	0.000	97.830
3	19:32:22	100.000	101.400	101.800	99.460	102.600	99.260	0.000	100.700
X		100.317%	101.114%	99.979%	100.878%	101.526%	100.586%	0.000	99.256%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.348	0.212	1.596	1.604	1.909	1.149	0.000	1.455
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:31:43	101.261%	97.680	99.320	96.312%	98.570	97.960	99.840	102.100
2	19:32:02	105.601%	100.100	100.700	98.222%	98.620	97.180	98.270	98.940
3	19:32:22	106.386%	105.100	105.300	98.026%	101.300	101.600	102.300	101.200
X		104.416%	100.983%	101.760%	97.520%	99.490%	98.927%	100.135%	100.743%
σ		2.760%	n/a	n/a	1.051%	n/a	n/a	n/a	n/a
%RSD		2.644	3.765	3.077	1.078	1.558	2.414	2.028	1.611
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:31:43	101.554%	99.460	96.580	96.720	99.150	99.260	105.840%	106.703%
2	19:32:02	105.846%	95.850	95.400	95.460	96.600	96.440	111.659%	113.055%
3	19:32:22	105.828%	99.740	99.430	99.770	101.500	100.700	110.877%	112.307%
X		104.409%	98.351%	97.138%	97.319%	99.088%	98.796%	109.458%	110.688%
σ		2.473%	n/a	n/a	n/a	n/a	n/a	3.158%	3.471%
%RSD		2.369	2.204	2.133	2.277	2.484	2.189	2.885	3.136
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	19:31:43	95.420	94.770	95.010	94.880	94.920	101.723%		
2	19:32:02	97.720	98.860	98.060	97.660	97.880	101.946%		
3	19:32:22	101.100	100.700	100.900	101.100	100.800	102.805%		
X		98.092%	98.102%	97.995%	97.873%	97.871%	102.158%		
σ		n/a	n/a	n/a	n/a	n/a	0.571%		
%RSD		2.931	3.088	3.016	3.171	3.008	0.559		

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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	19:38:32	100.307%	-0.327	0.625	-0.575	0.000	22.590	3.413	2.305
2	19:38:51	100.943%	-0.280	0.598	0.232	0.000	19.870	3.088	3.148
3	19:39:11	101.358%	-0.281	0.345	-0.313	0.000	21.190	3.555	2.474
X		100.870%	-0.296	0.523	-0.219	0.000	21.220	3.352	2.642
σ		0.529%	0.027	0.154	0.412	0.000	1.361	0.240	0.446
%RSD		0.525	9.172	29.460	188.300	0.000	6.413	7.148	16.870
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:38:32	-0.557	3.779	0.000	12.750	-13.740	-11.680	99.295%	-0.119
2	19:38:51	-0.231	3.863	0.000	10.580	5.454	-14.960	100.658%	-0.095
3	19:39:11	-0.458	3.240	0.000	11.350	5.218	-15.750	101.591%	-0.147
X		-0.415	3.627	0.000	11.560	-1.021	-14.130	100.515%	-0.121
σ		0.167	0.338	0.000	1.100	11.010	2.157	1.155%	0.026
%RSD		40.240	9.313	0.000	9.515	1078.000	15.270	1.149	21.370
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:38:32	0.107	0.027	0.032	2.353	5.874	-0.007	0.001	0.030
2	19:38:51	-0.050	-0.009	0.020	0.788	5.269	-0.011	-0.023	0.015
3	19:39:11	0.009	-0.005	0.035	-0.318	-0.141	-0.005	-0.024	0.035
X		0.022	0.005	0.029	0.941	3.667	-0.008	-0.015	0.026
σ		0.079	0.020	0.008	1.342	3.312	0.003	0.014	0.010
%RSD		364.000	431.800	27.400	142.600	90.320	38.120	92.680	39.300
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:38:32	-0.112	0.053	0.162	0.096	0.581	-0.355	0.000	0.042
2	19:38:51	-0.055	0.150	0.145	0.120	0.609	0.320	0.000	0.050
3	19:39:11	-0.124	0.247	0.195	0.069	0.756	0.525	0.000	0.035
X		-0.097	0.150	0.168	0.095	0.649	0.163	0.000	0.042
σ		0.037	0.097	0.025	0.025	0.094	0.460	0.000	0.008
%RSD		38.220	64.680	15.150	26.610	14.480	281.700	0.000	17.920
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:38:32	105.844%	0.224	0.236	106.297%	-0.002	-0.013	-0.059	-0.045
2	19:38:51	108.420%	0.193	0.146	107.665%	-0.012	0.000	0.043	0.033
3	19:39:11	110.109%	0.120	0.205	109.260%	-0.005	-0.010	0.049	0.045
X		108.124%	0.179	0.196	107.740%	-0.006	-0.007	0.011	0.011
σ		2.148%	0.053	0.046	1.483%	0.005	0.007	0.061	0.049
%RSD		1.987	29.860	23.420	1.377	78.750	95.590	562.700	440.900
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:38:32	106.509%	-0.308	0.153	0.177	0.033	-0.001	107.267%	108.357%
2	19:38:51	108.749%	-0.353	0.140	0.146	-0.023	-0.020	109.882%	110.729%
3	19:39:11	110.784%	-0.352	0.142	0.115	0.007	-0.020	112.273%	112.908%
X		108.680%	-0.338	0.145	0.146	0.006	-0.014	109.807%	110.665%
σ		2.138%	0.025	0.007	0.031	0.028	0.011	2.504%	2.276%
%RSD		1.967	7.494	4.891	20.990	481.300	79.760	2.280	2.057
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	19:38:32	0.002	-0.006	-0.007	0.003	-0.009	106.304%		
2	19:38:51	-0.003	-0.000	-0.007	-0.004	-0.011	105.425%		
3	19:39:11	0.005	-0.005	-0.002	-0.008	-0.009	106.866%		
X		0.001	-0.004	-0.005	-0.003	-0.009	106.198%		
σ		0.004	0.003	0.003	0.005	0.001	0.726%		
%RSD		327.500	82.940	46.890	177.300	11.850	0.684		

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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	19:42:17	96.603%	-0.277	0.764	-0.244	0.000	26.940	-0.295	0.024
2	19:42:36	97.448%	-0.278	-0.130	-0.336	0.000	30.730	0.059	-0.138
3	19:42:55	100.801%	-0.328	0.249	-0.820	0.000	28.350	-0.031	-0.015
X		98.284%	-0.294	0.295	-0.467	0.000	28.680	-0.089	-0.043
σ		2.220%	0.029	0.449	0.310	0.000	1.916	0.184	0.085
%RSD		2.259	9.835	152.300	66.360	0.000	6.682	207.600	197.800
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:42:17	-0.307	1.925	0.000	10.360	11.470	-5.179	96.995%	-0.064
2	19:42:36	-0.323	1.911	0.000	5.685	-3.981	-9.599	99.559%	-0.043
3	19:42:55	-0.592	1.186	0.000	5.479	3.089	-9.552	100.466%	-0.044
X		-0.407	1.674	0.000	7.173	3.526	-8.110	99.006%	-0.050
σ		0.160	0.422	0.000	2.758	7.735	2.538	1.800%	0.012
%RSD		39.340	25.230	0.000	38.450	219.400	31.300	1.818	23.880
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:42:17	0.583	0.134	0.014	-3.673	-0.328	-0.013	0.033	0.067
2	19:42:36	-0.383	0.169	0.039	-4.940	-0.029	-0.013	-0.014	0.145
3	19:42:55	-0.260	0.130	0.029	-5.442	-0.605	-0.017	0.013	0.021
X		-0.020	0.144	0.028	-4.685	-0.321	-0.014	0.011	0.078
σ		0.526	0.021	0.013	0.912	0.288	0.002	0.024	0.062
%RSD		2650.000	14.610	46.180	19.460	89.810	12.640	222.500	80.130
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:42:17	-0.033	0.439	0.400	-0.209	0.816	-0.297	0.000	0.003
2	19:42:36	-0.058	0.448	0.326	0.438	0.708	-0.056	0.000	0.007
3	19:42:55	-0.104	0.359	0.301	0.320	0.376	1.058	0.000	0.013
X		-0.065	0.416	0.342	0.183	0.633	0.235	0.000	0.008
σ		0.036	0.049	0.051	0.345	0.229	0.723	0.000	0.005
%RSD		55.370	11.770	15.030	188.000	36.170	307.800	0.000	62.890
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:42:17	105.356%	0.063	0.060	104.952%	-0.021	-0.012	0.017	0.005
2	19:42:36	106.905%	0.053	0.040	106.410%	-0.024	-0.013	-0.013	-0.018
3	19:42:55	109.325%	0.073	0.059	109.007%	-0.020	-0.014	0.002	-0.001
X		107.196%	0.063	0.053	106.790%	-0.021	-0.013	0.002	-0.004
σ		2.000%	0.010	0.011	2.054%	0.002	0.001	0.015	0.012
%RSD		1.866	15.810	21.010	1.923	9.294	8.307	790.000	274.400
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:42:17	103.430%	-0.329	0.025	0.051	0.002	-0.019	106.182%	106.667%
2	19:42:36	106.545%	-0.362	0.018	0.037	-0.031	-0.010	108.634%	109.919%
3	19:42:55	108.961%	-0.361	0.012	0.022	-0.023	-0.024	111.143%	112.088%
X		106.312%	-0.351	0.018	0.036	-0.017	-0.018	108.653%	109.558%
σ		2.773%	0.019	0.006	0.014	0.017	0.007	2.481%	2.728%
%RSD		2.608	5.452	34.990	39.260	98.080	39.240	2.283	2.490
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	19:42:17	-0.010	-0.011	-0.014	-0.006	-0.014	107.349%		
2	19:42:36	-0.012	-0.015	-0.008	0.001	-0.007	107.690%		
3	19:42:55	-0.009	-0.013	-0.009	-0.000	-0.009	108.164%		
X		-0.010	-0.013	-0.011	-0.002	-0.010	107.734%		
σ		0.002	0.002	0.003	0.004	0.003	0.409%		
%RSD		17.250	15.180	28.020	208.500	32.080	0.380		

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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	19:45:58	103.796%	45.350	938.100	960.300	0.000	42860.000	48640.000	51920.000
2	19:46:17	106.402%	44.480	913.200	975.300	0.000	42410.000	48480.000	51990.000
3	19:46:37	109.157%	44.610	934.900	996.900	0.000	42480.000	48900.000	52230.000
X		106.452%	44.820	928.800	977.500	0.000	42590.000	48680.000	52040.000
σ		2.680%	0.469	13.570	18.390	0.000	244.500	211.600	164.000
%RSD		2.518	1.046	1.461	1.882	0.000	0.574	0.435	0.315
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:58	2111.000	9969.000	0.000	45500.000	45280.000	47620.000	99.881%	928.300
2	19:46:17	2109.000	9949.000	0.000	44900.000	44900.000	47550.000	102.961%	929.300
3	19:46:37	2121.000	10010.000	0.000	45090.000	45380.000	47540.000	104.739%	931.900
X		2114.000	9975.000	0.000	45170.000	45190.000	47570.000	102.527%	929.900
σ		6.472	30.530	0.000	307.100	249.200	47.650	2.458%	1.857
%RSD		0.306	0.306	0.000	0.680	0.551	0.100	2.397	0.200
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:58	484.600	196.400	481.300	994.500	1059.000	459.700	461.900	226.700
2	19:46:17	488.500	197.300	485.000	985.300	1059.000	460.400	456.800	226.500
3	19:46:37	493.300	198.200	493.000	983.700	1075.000	464.100	459.300	226.700
X		488.800	197.300	486.400	987.800	1064.000	461.400	459.300	226.600
σ		4.385	0.911	5.969	5.826	9.566	2.368	2.554	0.097
%RSD		0.897	0.462	1.227	0.590	0.899	0.513	0.556	0.043
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:58	226.300	463.400	456.400	36.420	11.220	8.438	0.000	962.000
2	19:46:17	225.700	463.400	461.000	35.250	11.700	10.670	0.000	948.900
3	19:46:37	227.500	463.800	460.300	36.570	11.770	9.272	0.000	942.400
X		226.500	463.500	459.200	36.080	11.560	9.461	0.000	951.100
σ		0.906	0.283	2.509	0.724	0.298	1.129	0.000	10.030
%RSD		0.400	0.061	0.546	2.006	2.581	11.930	0.000	1.054
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:58	108.480%	969.200	977.800	100.484%	46.370	46.630	47.900	42.770
2	19:46:17	113.095%	988.900	1001.000	102.048%	46.640	46.960	48.290	43.570
3	19:46:37	115.808%	992.300	1003.000	103.824%	47.180	47.420	48.800	43.640
X		112.461%	983.500	993.700	102.119%	46.730	47.000	48.330	43.330
σ		3.705%	12.490	13.810	1.671%	0.411	0.397	0.454	0.484
%RSD		3.295	1.270	1.390	1.637	0.880	0.844	0.939	1.118
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:58	104.383%	1916.000	479.200	480.500	1870.000	1856.000	111.278%	112.604%
2	19:46:17	109.362%	1884.000	480.700	479.000	1867.000	1857.000	115.786%	116.907%
3	19:46:37	111.244%	1880.000	479.100	477.100	1866.000	1864.000	118.465%	119.102%
X		108.329%	1893.000	479.700	478.900	1867.000	1859.000	115.176%	116.205%
σ		3.545%	19.410	0.921	1.678	2.305	4.146	3.632%	3.305%
%RSD		3.273	1.025	0.192	0.350	0.124	0.223	3.154	2.845
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	19:45:58	44.950	44.820	18.880	18.820	18.800	102.879%		
2	19:46:17	46.120	46.300	19.210	19.530	19.370	103.403%		
3	19:46:37	47.060	47.500	19.540	19.100	19.380	103.928%		
X		46.040	46.210	19.210	19.150	19.180	103.403%		
σ		1.054	1.342	0.330	0.358	0.336	0.524%		
%RSD		2.288	2.904	1.719	1.870	1.753	0.507		

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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	19:49:41	105.054%	46.290	942.300	994.000	0.000	43640.000	48930.000	52360.000
2	19:50:00	108.706%	44.400	937.700	992.800	0.000	42880.000	49260.000	52500.000
3	19:50:19	108.968%	45.170	952.000	1004.000	0.000	42610.000	49110.000	52580.000
X		107.576%	45.290	944.000	996.800	0.000	43050.000	49100.000	52480.000
σ		2.188%	0.951	7.287	5.879	0.000	534.100	163.100	114.200
%RSD		2.034	2.101	0.772	0.590	0.000	1.241	0.332	0.218
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:41	2146.000	10140.000	0.000	46220.000	46020.000	48030.000	101.073%	936.100
2	19:50:00	2130.000	10020.000	0.000	45160.000	45270.000	47450.000	104.416%	935.800
3	19:50:19	2127.000	10130.000	0.000	45250.000	45880.000	47720.000	105.325%	941.600
X		2134.000	10100.000	0.000	45540.000	45730.000	47730.000	103.605%	937.800
σ		10.480	67.060	0.000	585.600	399.400	294.300	2.239%	3.296
%RSD		0.491	0.664	0.000	1.286	0.874	0.617	2.161	0.351
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:41	488.500	199.000	490.400	1007.000	1089.000	470.200	469.000	231.300
2	19:50:00	488.100	200.500	488.100	986.200	1065.000	468.500	467.400	231.700
3	19:50:19	494.500	199.400	490.900	989.000	1065.000	467.600	464.900	230.700
X		490.400	199.600	489.800	994.200	1073.000	468.800	467.100	231.200
σ		3.607	0.781	1.518	11.540	13.760	1.279	2.104	0.481
%RSD		0.736	0.392	0.310	1.161	1.283	0.273	0.450	0.208
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:41	232.300	470.400	466.900	38.040	11.630	10.630	0.000	960.300
2	19:50:00	230.400	465.700	471.200	35.390	11.780	10.920	0.000	951.200
3	19:50:19	229.300	464.400	461.500	36.860	12.140	9.965	0.000	940.000
X		230.700	466.800	466.500	36.760	11.850	10.510	0.000	950.500
σ		1.486	3.143	4.862	1.325	0.260	0.490	0.000	10.180
%RSD		0.644	0.673	1.042	3.605	2.190	4.663	0.000	1.071
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:41	109.207%	991.200	990.700	100.881%	47.240	47.120	47.920	43.310
2	19:50:00	112.530%	1000.000	1014.000	102.820%	47.320	47.900	48.910	45.190
3	19:50:19	116.217%	1001.000	1014.000	103.714%	47.730	47.280	47.680	44.250
X		112.651%	997.400	1006.000	102.472%	47.430	47.430	48.170	44.250
σ		3.506%	5.372	13.440	1.449%	0.261	0.413	0.651	0.939
%RSD		3.113	0.539	1.335	1.414	0.551	0.871	1.351	2.122
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:41	105.338%	1920.000	482.800	478.800	1866.000	1867.000	111.816%	112.150%
2	19:50:00	108.761%	1891.000	481.500	481.000	1881.000	1879.000	114.660%	117.243%
3	19:50:19	110.908%	1873.000	479.900	479.500	1886.000	1878.000	117.362%	119.200%
X		108.336%	1894.000	481.400	479.700	1877.000	1875.000	114.613%	116.198%
σ		2.809%	23.830	1.413	1.126	10.420	6.923	2.773%	3.639%
%RSD		2.593	1.258	0.293	0.235	0.555	0.369	2.419	3.132
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	19:49:41	45.740	46.210	19.080	19.260	19.170	99.661%		
2	19:50:00	47.200	47.560	19.590	19.220	19.510	101.305%		
3	19:50:19	47.910	48.060	19.770	19.800	19.760	102.613%		
X		46.950	47.280	19.480	19.430	19.480	101.193%		
σ		1.106	0.958	0.355	0.324	0.298	1.479%		
%RSD		2.356	2.027	1.824	1.669	1.528	1.462		

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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	19:56:47	109.282%	-0.263	10.010	10.460	0.000	31.180	1.164	2.096
2	19:57:06	111.196%	-0.200	8.156	10.510	0.000	23.540	2.263	1.877
3	19:57:25	112.198%	-0.158	11.370	10.600	0.000	20.160	1.437	1.688
X		110.892%	-0.207	9.843	10.520	0.000	24.960	1.622	1.887
σ		1.482%	0.053	1.611	0.072	0.000	5.644	0.572	0.204
%RSD		1.336	25.480	16.370	0.681	0.000	22.610	35.290	10.830
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:56:47	2.738	19.660	0.000	12.920	22.170	58.370	100.624%	1.556
2	19:57:06	2.789	19.230	0.000	13.350	14.230	65.630	102.745%	1.493
3	19:57:25	3.078	19.530	0.000	14.230	23.110	77.740	104.002%	1.719
X		2.868	19.470	0.000	13.500	19.840	67.250	102.457%	1.589
σ		0.184	0.220	0.000	0.668	4.879	9.787	1.708%	0.117
%RSD		6.404	1.130	0.000	4.945	24.590	14.550	1.667	7.328
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:56:47	0.087	2.388	0.090	-2.195	-1.688	-0.015	0.080	0.006
2	19:57:06	-0.953	2.521	0.117	-3.032	-1.634	-0.011	0.175	0.064
3	19:57:25	2.701	2.445	0.110	-3.363	-1.617	-0.011	0.123	0.035
X		0.612	2.451	0.106	-2.863	-1.646	-0.012	0.126	0.035
σ		1.882	0.067	0.014	0.602	0.037	0.002	0.048	0.029
%RSD		307.600	2.714	13.360	21.020	2.263	19.750	37.930	82.970
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:56:47	0.021	3.069	2.937	-0.022	1.167	-0.145	0.000	0.094
2	19:57:06	-0.000	2.743	3.011	-0.630	1.577	-0.253	0.000	0.102
3	19:57:25	0.051	2.563	2.946	-0.355	1.198	-0.883	0.000	0.124
X		0.024	2.792	2.965	-0.336	1.314	-0.427	0.000	0.107
σ		0.026	0.257	0.041	0.304	0.228	0.399	0.000	0.015
%RSD		107.600	9.191	1.368	90.650	17.350	93.420	0.000	14.470
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:56:47	106.904%	1.246	1.184	105.380%	-0.022	-0.007	-0.015	-0.034
2	19:57:06	110.475%	1.084	1.030	107.667%	-0.026	-0.011	-0.005	-0.051
3	19:57:25	110.892%	0.922	1.025	107.425%	-0.025	-0.016	0.033	0.007
X		109.423%	1.084	1.080	106.824%	-0.025	-0.011	0.004	-0.026
σ		2.192%	0.162	0.091	1.256%	0.002	0.004	0.025	0.030
%RSD		2.003	14.950	8.414	1.176	8.902	39.480	574.800	114.500
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:56:47	104.037%	3.587	0.087	0.085	0.034	0.009	107.050%	107.821%
2	19:57:06	107.361%	3.268	0.060	0.090	0.056	0.007	109.953%	111.161%
3	19:57:25	107.619%	3.088	0.047	0.084	0.024	0.011	111.805%	111.581%
X		106.339%	3.314	0.065	0.086	0.038	0.009	109.603%	110.188%
σ		1.998%	0.253	0.020	0.003	0.016	0.002	2.397%	2.061%
%RSD		1.879	7.620	31.490	3.951	43.160	22.560	2.187	1.870
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	19:56:47	0.124	0.133	-0.001	0.019	0.007	103.736%		
2	19:57:06	0.122	0.127	0.003	0.006	0.007	104.179%		
3	19:57:25	0.111	0.106	0.011	0.013	0.005	105.253%		
X		0.119	0.122	0.004	0.012	0.007	104.389%		
σ		0.007	0.014	0.006	0.007	0.001	0.780%		
%RSD		5.672	11.610	134.300	52.960	15.450	0.747		

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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	20:00:30	95.665%	-0.277	347.300	379.500	0.000	857200.000	113700.000	119000.000
2	20:00:49	97.072%	-0.278	337.300	387.600	0.000	846700.000	114700.000	120100.000
3	20:01:08	99.037%	-0.159	354.400	386.100	0.000	838400.000	113000.000	118900.000
X		97.258%	-0.238	346.300	384.400	0.000	847500.000	113800.000	119300.000
σ		1.694%	0.068	8.594	4.302	0.000	9404.000	862.300	655.000
%RSD		1.741	28.720	2.482	1.119	0.000	1.110	0.758	0.549
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:00:30	11.580	101.000	0.000	33580.000	33730.000	34620.000	99.266%	0.885
2	20:00:49	11.060	101.600	0.000	33380.000	33720.000	34750.000	102.172%	0.903
3	20:01:08	11.670	95.130	0.000	33290.000	33800.000	34650.000	103.389%	1.186
X		11.440	99.240	0.000	33420.000	33750.000	34670.000	101.609%	0.991
σ		0.329	3.575	0.000	148.300	39.320	67.290	2.118%	0.169
%RSD		2.880	3.602	0.000	0.444	0.117	0.194	2.085	17.000
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:00:30	0.034	1.079	2.690	31.880	100.000	0.069	0.038	10.900
2	20:00:49	0.399	1.007	2.513	31.800	99.640	0.038	-0.014	10.560
3	20:01:08	0.133	1.061	2.731	31.600	98.160	0.056	0.064	10.710
X		0.189	1.049	2.645	31.760	99.270	0.054	0.029	10.720
σ		0.189	0.037	0.116	0.147	0.976	0.015	0.039	0.168
%RSD		100.100	3.568	4.383	0.463	0.983	28.600	135.300	1.565
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:00:30	0.163	1.397	1.463	2.058	3.484	5.579	0.000	662.700
2	20:00:49	0.117	1.438	1.394	0.632	4.140	4.813	0.000	654.400
3	20:01:08	0.204	1.346	1.375	1.617	3.561	5.770	0.000	651.800
X		0.162	1.394	1.410	1.436	3.728	5.387	0.000	656.300
σ		0.044	0.046	0.046	0.730	0.358	0.506	0.000	5.716
%RSD		27.040	3.309	3.280	50.850	9.614	9.402	0.000	0.871
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:00:30	105.034%	1.190	1.334	96.016%	-0.021	-0.009	-0.052	-0.048
2	20:00:49	109.279%	1.350	1.231	98.640%	-0.030	-0.007	-0.055	-0.056
3	20:01:08	112.046%	1.319	1.281	99.834%	-0.022	-0.017	0.063	0.030
X		108.786%	1.286	1.282	98.163%	-0.025	-0.011	-0.015	-0.025
σ		3.531%	0.085	0.051	1.953%	0.005	0.005	0.067	0.048
%RSD		3.246	6.600	3.995	1.990	20.530	49.430	451.000	193.700
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:00:30	100.101%	0.122	0.010	-0.001	0.887	0.956	105.548%	106.753%
2	20:00:49	105.329%	0.077	-0.020	0.029	0.841	0.892	111.210%	111.553%
3	20:01:08	107.884%	0.004	-0.019	-0.002	1.052	0.926	112.138%	114.036%
X		104.438%	0.068	-0.009	0.009	0.926	0.925	109.632%	110.781%
σ		3.967%	0.059	0.017	0.018	0.111	0.032	3.567%	3.702%
%RSD		3.799	87.560	182.900	195.600	11.990	3.430	3.254	3.342
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:00:30	0.041	0.038	0.034	0.031	0.026	91.506%		
2	20:00:49	0.049	0.037	0.025	0.026	0.026	93.247%		
3	20:01:08	0.034	0.036	0.053	0.021	0.036	94.255%		
X		0.041	0.037	0.037	0.026	0.029	93.003%		
σ		0.008	0.001	0.014	0.005	0.006	1.391%		
%RSD		18.290	1.773	37.580	19.490	18.740	1.495		

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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	20:04:13	95.745%	-0.177	368.700	396.200	0.000	883400.000	117300.000	122700.000	
2	20:04:32	99.412%	-0.208	351.200	389.600	0.000	850000.000	113900.000	119900.000	
3	20:04:51	98.594%	-0.231	373.900	392.600	0.000	854600.000	115500.000	121400.000	
X		97.917%	-0.205	364.600	392.800	0.000	862700.000	115600.000	121300.000	
		σ	1.925%	0.027	11.900	3.292	0.000	18120.000	1719.000	1409.000
		%RSD	1.965	13.010	3.265	0.838	0.000	2.100	1.487	1.161
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	20:04:13	10.270	106.700	0.000	34460.000	34840.000	36880.000	102.296%	0.453	
2	20:04:32	10.650	100.500	0.000	33570.000	34150.000	34840.000	105.101%	0.483	
3	20:04:51	11.230	102.200	0.000	33470.000	33940.000	34560.000	105.410%	0.940	
X		10.720	103.100	0.000	33830.000	34310.000	35430.000	104.269%	0.625	
		σ	0.486	3.213	0.000	546.400	468.700	1271.000	1.716%	0.273
		%RSD	4.532	3.116	0.000	1.615	1.366	3.588	1.645	43.690
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	20:04:13	0.739	0.963	2.981	32.980	99.110	0.050	0.023	11.290	
2	20:04:32	-0.156	1.004	2.869	30.230	96.380	0.056	-0.033	11.350	
3	20:04:51	-0.594	0.954	2.899	31.030	100.600	0.036	-0.046	11.380	
X		-0.004	0.974	2.916	31.410	98.710	0.047	-0.018	11.340	
		σ	0.679	0.026	0.058	1.417	2.160	0.011	0.037	0.048
		%RSD	18090.000	2.719	1.979	4.511	2.188	22.360	201.000	0.419
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	20:04:13	0.333	0.713	0.580	1.142	4.067	5.602	0.000	684.700	
2	20:04:32	0.236	0.727	0.599	1.285	4.329	3.902	0.000	659.600	
3	20:04:51	0.246	0.776	0.729	1.328	4.043	5.785	0.000	652.000	
X		0.272	0.739	0.636	1.252	4.146	5.097	0.000	665.400	
		σ	0.053	0.033	0.081	0.098	1.038	0.000	17.110	
		%RSD	19.640	4.459	12.740	7.816	3.825	20.380	0.000	2.571
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	20:04:13	107.312%	1.325	1.205	97.462%	-0.016	-0.016	0.051	0.028	
2	20:04:32	111.390%	1.283	1.193	100.620%	-0.026	-0.014	-0.022	-0.031	
3	20:04:51	114.701%	1.230	1.178	102.406%	-0.021	-0.015	0.028	0.012	
X		111.134%	1.279	1.192	100.163%	-0.021	-0.015	0.019	0.003	
		σ	3.701%	0.048	0.013	2.504%	0.005	0.001	0.037	
		%RSD	3.330	3.720	1.127	2.500	24.850	4.032	197.900	901.900
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	20:04:13	103.609%	-0.033	-0.016	0.014	1.109	1.049	106.724%	108.085%	
2	20:04:32	107.885%	0.006	0.003	0.013	0.966	1.049	112.212%	114.978%	
3	20:04:51	110.506%	0.037	-0.019	0.028	0.883	0.991	116.587%	116.905%	
X		107.334%	0.003	-0.011	0.018	0.986	1.030	111.841%	113.323%	
		σ	3.482%	0.035	0.012	0.008	0.114	0.034	4.942%	
		%RSD	3.244	1015.000	108.200	46.190	11.600	3.283	4.419	4.092
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	20:04:13	0.039	0.033	0.037	0.016	0.026	91.495%			
2	20:04:32	0.030	0.032	0.031	0.046	0.031	92.839%			
3	20:04:51	0.035	0.026	0.033	0.025	0.030	94.698%			
X		0.034	0.031	0.034	0.029	0.029	93.011%			
		σ	0.004	0.004	0.003	0.015	0.003	1.609%		
		%RSD	12.010	11.690	9.339	52.420	9.324	1.730		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:07:55	98.977%	-0.255	357.300	383.200	0.000	847000.000	112900.000	117900.000
2	20:08:14	99.317%	-0.279	363.900	388.900	0.000	854800.000	115000.000	121800.000
3	20:08:33	99.892%	-0.304	365.300	388.700	0.000	838500.000	114000.000	120600.000
X		99.395%	-0.279	362.200	386.900	0.000	846800.000	114000.000	120100.000
σ		0.462%	0.024	4.262	3.253	0.000	8131.000	1022.000	1973.000
%RSD		0.465	8.702	1.177	0.841	0.000	0.960	0.897	1.643
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:07:55	17.080	91.490	0.000	33320.000	33630.000	34140.000	103.847%	0.788
2	20:08:14	18.250	93.560	0.000	33640.000	34060.000	34920.000	105.871%	1.009
3	20:08:33	17.880	93.980	0.000	33080.000	33190.000	34810.000	106.846%	0.614
X		17.740	93.010	0.000	33350.000	33630.000	34620.000	105.521%	0.804
σ		0.596	1.330	0.000	276.500	433.700	421.100	1.530%	0.198
%RSD		3.361	1.430	0.000	0.829	1.290	1.216	1.450	24.610
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:07:55	1.258	0.979	2.182	40.430	105.500	0.046	-0.020	11.050
2	20:08:14	1.652	0.986	2.164	39.860	106.900	0.069	-0.042	11.050
3	20:08:33	0.728	0.905	2.217	38.930	98.810	0.051	-0.118	10.740
X		1.213	0.957	2.188	39.740	103.700	0.055	-0.060	10.950
σ		0.464	0.045	0.027	0.756	4.335	0.012	0.051	0.179
%RSD		38.250	4.724	1.226	1.902	4.178	21.720	85.690	1.637
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:07:55	0.241	1.866	2.033	1.225	4.129	5.092	0.000	671.200
2	20:08:14	0.390	1.915	1.635	1.130	4.901	6.217	0.000	662.400
3	20:08:33	0.343	2.139	1.936	0.692	4.628	4.226	0.000	650.200
X		0.325	1.973	1.868	1.016	4.553	5.179	0.000	661.300
σ		0.076	0.145	0.207	0.284	0.391	0.998	0.000	10.530
%RSD		23.490	7.375	11.090	27.980	8.598	19.280	0.000	1.593
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:07:55	108.450%	1.136	1.077	99.389%	-0.020	-0.016	-0.029	-0.022
2	20:08:14	112.415%	1.045	1.118	101.608%	-0.023	-0.015	-0.054	-0.051
3	20:08:33	115.503%	1.213	1.136	103.090%	-0.019	-0.009	0.042	0.042
X		112.123%	1.131	1.110	101.362%	-0.021	-0.013	-0.014	-0.010
σ		3.536%	0.084	0.030	1.863%	0.002	0.004	0.050	0.047
%RSD		3.153	7.440	2.688	1.838	9.959	27.170	361.100	451.900
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:07:55	104.747%	-0.104	-0.007	0.005	1.010	0.930	109.354%	110.399%
2	20:08:14	109.216%	0.033	-0.014	0.003	0.808	0.967	113.581%	115.376%
3	20:08:33	110.632%	0.007	-0.026	-0.003	0.942	0.891	116.823%	117.122%
X		108.198%	-0.021	-0.016	0.002	0.920	0.929	113.253%	114.299%
σ		3.072%	0.073	0.009	0.004	0.103	0.038	3.745%	3.489%
%RSD		2.839	345.200	59.240	221.600	11.200	4.081	3.307	3.052
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:07:55	0.018	0.015	0.025	0.018	0.018	93.820%		
2	20:08:14	0.009	0.012	0.027	0.026	0.021	95.102%		
3	20:08:33	0.022	0.010	0.005	0.030	0.025	96.144%		
X		0.016	0.013	0.019	0.025	0.021	95.022%		
σ		0.006	0.003	0.012	0.006	0.003	1.164%		
%RSD		39.980	20.530	64.410	23.800	16.220	1.225		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:11:35	98.907%	-0.279	352.700	391.900	0.000	851900.000	114800.000	121000.000
2	20:11:54	100.940%	-0.351	343.900	380.800	0.000	834500.000	114700.000	122200.000
3	20:12:13	100.557%	-0.233	363.500	395.900	0.000	846100.000	116600.000	123800.000
X		100.134%	-0.288	353.400	389.600	0.000	844100.000	115400.000	122300.000
σ		1.080%	0.060	9.827	7.819	0.000	8864.000	1081.000	1411.000
%RSD		1.079	20.690	2.781	2.007	0.000	1.050	0.937	1.153
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:11:35	60.050	224.100	0.000	33310.000	33720.000	34180.000	105.808%	3.158
2	20:11:54	63.080	224.600	0.000	33130.000	33220.000	34450.000	107.644%	3.336
3	20:12:13	62.840	223.500	0.000	33430.000	34030.000	35970.000	108.157%	3.343
X		61.990	224.100	0.000	33290.000	33660.000	34870.000	107.203%	3.279
σ		1.685	0.518	0.000	152.600	412.500	962.500	1.235%	0.105
%RSD		2.718	0.231	0.000	0.458	1.226	2.760	1.152	3.193
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:11:35	-0.418	1.158	3.915	104.100	172.800	0.078	0.046	10.430
2	20:11:54	0.092	1.066	3.974	102.800	164.400	0.083	0.082	10.730
3	20:12:13	-0.452	1.066	4.055	104.600	166.100	0.086	0.023	11.170
X		-0.259	1.097	3.982	103.800	167.800	0.082	0.050	10.780
σ		0.304	0.053	0.070	0.964	4.454	0.004	0.030	0.373
%RSD		117.600	4.821	1.767	0.928	2.654	4.464	59.820	3.458
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:11:35	0.300	1.063	0.788	0.714	5.165	4.502	0.000	655.800
2	20:11:54	0.354	1.095	0.902	0.739	4.784	3.755	0.000	652.500
3	20:12:13	0.431	1.245	1.059	0.175	4.873	4.310	0.000	658.600
X		0.362	1.134	0.916	0.543	4.941	4.189	0.000	655.600
σ		0.066	0.097	0.136	0.318	0.199	0.388	0.000	3.047
%RSD		18.210	8.580	14.880	58.670	4.033	9.260	0.000	0.465
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:11:35	113.430%	1.305	1.091	102.981%	-0.015	-0.012	-0.073	-0.063
2	20:11:54	116.875%	1.257	1.043	104.552%	-0.025	-0.013	-0.016	-0.010
3	20:12:13	117.245%	1.071	1.121	104.603%	-0.017	-0.016	-0.064	-0.050
X		115.850%	1.211	1.085	104.045%	-0.019	-0.014	-0.051	-0.041
σ		2.104%	0.124	0.040	0.922%	0.005	0.002	0.031	0.028
%RSD		1.816	10.210	3.654	0.886	27.480	16.420	60.100	67.140
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:11:35	108.591%	-0.047	-0.012	-0.015	1.222	1.037	113.085%	114.682%
2	20:11:54	111.816%	-0.061	-0.016	0.011	1.036	0.999	118.199%	118.901%
3	20:12:13	112.405%	0.007	-0.006	0.002	1.172	1.117	118.583%	120.599%
X		110.938%	-0.034	-0.011	-0.001	1.143	1.051	116.622%	118.061%
σ		2.053%	0.036	0.005	0.013	0.096	0.060	3.069%	3.047%
%RSD		1.851	106.200	47.690	1999.000	8.422	5.711	2.632	2.581
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:11:35	0.012	0.010	0.100	0.090	0.100	97.159%		
2	20:11:54	0.010	0.009	0.122	0.094	0.088	98.335%		
3	20:12:13	0.011	0.008	0.114	0.113	0.103	98.480%		
X		0.011	0.009	0.112	0.099	0.097	97.991%		
σ		0.001	0.001	0.011	0.012	0.008	0.725%		
%RSD		6.237	12.080	9.774	12.300	7.984	0.739		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:15:16	99.024%	-0.279	359.100	393.100	0.000	865100.000	116900.000	121900.000
2	20:15:35	99.800%	-0.208	359.000	391.700	0.000	851700.000	115600.000	121400.000
3	20:15:54	103.357%	-0.259	357.900	378.100	0.000	837700.000	114800.000	121600.000
x		100.727%	-0.249	358.700	387.600	0.000	851500.000	115800.000	121600.000
σ		2.310%	0.036	0.711	8.315	0.000	13700.000	1080.000	281.300
%RSD		2.294	14.660	0.198	2.145	0.000	1.609	0.933	0.231
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:15:16	25.140	130.200	0.000	34280.000	34540.000	36470.000	105.098%	1.505
2	20:15:35	25.550	132.100	0.000	33340.000	33800.000	35850.000	107.742%	1.154
3	20:15:54	24.660	131.100	0.000	33310.000	33710.000	35630.000	109.189%	1.392
x		25.120	131.100	0.000	33640.000	34020.000	35990.000	107.343%	1.350
σ		0.447	0.965	0.000	556.200	453.900	435.500	2.075%	0.180
%RSD		1.780	0.736	0.000	1.653	1.334	1.210	1.933	13.300
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:15:16	1.389	0.968	3.237	56.190	125.000	0.047	-0.023	9.757
2	20:15:35	-0.511	0.932	3.112	55.160	117.300	0.059	0.137	10.230
3	20:15:54	-0.060	0.976	3.164	54.220	124.700	0.044	-0.099	10.230
x		0.273	0.958	3.171	55.190	122.300	0.050	0.005	10.070
σ		0.993	0.023	0.063	0.982	4.377	0.008	0.121	0.275
%RSD		364.300	2.424	1.982	1.779	3.578	16.130	2314.000	2.729
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:15:16	0.186	1.233	1.177	2.620	4.180	5.587	0.000	670.200
2	20:15:35	0.245	1.128	1.179	1.165	4.572	6.214	0.000	659.900
3	20:15:54	0.251	1.268	0.962	2.459	4.732	5.154	0.000	655.700
x		0.227	1.210	1.106	2.081	4.495	5.652	0.000	661.900
σ		0.036	0.073	0.125	0.798	0.284	0.533	0.000	7.499
%RSD		15.790	6.050	11.300	38.330	6.318	9.429	0.000	1.133
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:15:16	110.043%	1.111	1.100	100.709%	-0.023	-0.017	0.043	0.007
2	20:15:35	114.452%	1.197	1.015	103.194%	-0.021	-0.013	0.050	0.024
3	20:15:54	117.819%	1.025	0.949	104.656%	-0.018	-0.013	-0.009	-0.015
x		114.105%	1.111	1.021	102.853%	-0.021	-0.015	0.028	0.005
σ		3.899%	0.086	0.076	1.995%	0.003	0.002	0.032	0.020
%RSD		3.417	7.735	7.433	1.940	12.130	15.550	116.900	357.400
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:15:16	106.849%	-0.044	-0.029	0.017	0.922	0.924	110.705%	111.359%
2	20:15:35	110.027%	0.016	-0.021	0.010	1.138	0.944	115.962%	116.960%
3	20:15:54	112.529%	-0.036	-0.003	0.011	1.143	1.062	116.653%	117.986%
x		109.802%	-0.021	-0.018	0.013	1.068	0.976	114.440%	115.435%
σ		2.846%	0.033	0.013	0.004	0.126	0.074	3.253%	3.567%
%RSD		2.592	155.300	75.840	31.550	11.810	7.625	2.843	3.090
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:15:16	0.005	0.003	0.047	0.052	0.047	93.485%		
2	20:15:35	0.008	0.005	0.072	0.049	0.047	95.563%		
3	20:15:54	0.006	0.002	0.064	0.045	0.049	96.318%		
x		0.006	0.003	0.061	0.048	0.048	95.122%		
σ		0.001	0.002	0.013	0.003	0.001	1.467%		
%RSD		21.300	54.160	20.750	6.579	2.857	1.542		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:18:57	100.973%	-0.257	365.000	385.200	0.000	827100.000	113300.000	119400.000
2	20:19:16	102.442%	-0.305	354.200	386.800	0.000	819700.000	113300.000	120200.000
3	20:19:35	101.720%	-0.258	346.700	384.100	0.000	825000.000	115400.000	122900.000
X		101.712%	-0.273	355.300	385.400	0.000	823900.000	114000.000	120800.000
σ		0.734%	0.027	9.159	1.394	0.000	3804.000	1198.000	1820.000
%RSD		0.722	10.010	2.578	0.362	0.000	0.462	1.051	1.506
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:18:57	41.170	438.900	0.000	33080.000	32970.000	33560.000	108.139%	1.456
2	20:19:16	43.210	448.800	0.000	32840.000	32790.000	33730.000	110.535%	1.465
3	20:19:35	42.180	458.500	0.000	32820.000	33260.000	34110.000	110.999%	1.387
X		42.180	448.700	0.000	32910.000	33000.000	33800.000	109.891%	1.436
σ		1.019	9.796	0.000	142.200	236.400	280.500	1.535%	0.043
%RSD		2.415	2.183	0.000	0.432	0.716	0.830	1.397	2.963
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:18:57	-0.390	1.008	10.470	54.970	116.400	0.065	-0.011	9.285
2	20:19:16	1.756	0.961	10.510	53.080	113.500	0.056	0.033	9.946
3	20:19:35	1.665	1.027	10.490	53.490	111.500	0.066	0.083	9.923
X		1.010	0.999	10.490	53.850	113.800	0.063	0.035	9.718
σ		1.214	0.034	0.024	0.996	2.481	0.005	0.047	0.375
%RSD		120.100	3.422	0.229	1.849	2.180	8.644	134.400	3.859
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:18:57	0.043	1.850	1.676	0.924	4.601	3.099	0.000	655.000
2	20:19:16	0.168	1.911	1.852	1.428	4.198	4.424	0.000	643.900
3	20:19:35	0.094	1.995	1.447	1.923	5.147	4.536	0.000	631.600
X		0.102	1.919	1.658	1.425	4.649	4.020	0.000	643.500
σ		0.063	0.073	0.203	0.500	0.476	0.799	0.000	11.670
%RSD		61.740	3.781	12.270	35.080	10.240	19.880	0.000	1.814
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:18:57	114.908%	1.913	1.697	104.546%	-0.021	-0.018	0.005	-0.001
2	20:19:16	118.485%	1.680	1.774	106.376%	-0.017	-0.015	-0.041	-0.030
3	20:19:35	122.168%	1.608	1.818	108.447%	-0.027	-0.023	-0.054	-0.047
X		118.520%	1.734	1.763	106.456%	-0.022	-0.019	-0.030	-0.026
σ		3.630%	0.159	0.061	1.952%	0.005	0.004	0.031	0.023
%RSD		3.063	9.186	3.471	1.833	22.090	22.760	104.000	89.780
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:18:57	110.193%	-0.126	0.038	0.063	4.005	3.566	114.950%	116.890%
2	20:19:16	113.378%	-0.038	0.036	0.061	3.735	3.540	118.835%	120.282%
3	20:19:35	117.407%	-0.046	0.031	0.048	3.675	3.453	121.086%	122.455%
X		113.659%	-0.070	0.035	0.057	3.805	3.520	118.290%	119.876%
σ		3.615%	0.049	0.004	0.008	0.175	0.059	3.104%	2.804%
%RSD		3.181	70.090	10.970	14.290	4.609	1.679	2.624	2.339
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:18:57	0.003	0.001	0.076	0.063	0.064	98.506%		
2	20:19:16	-0.004	-0.004	0.059	0.071	0.060	100.085%		
3	20:19:35	0.005	-0.003	0.066	0.069	0.060	100.672%		
X		0.002	-0.002	0.067	0.068	0.061	99.754%		
σ		0.005	0.003	0.009	0.004	0.002	1.120%		
%RSD		276.900	122.200	13.030	6.213	3.201	1.123		

CCV 1241000 7/16/2014 8:25:24 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	20:25:24	91.545%	100.700	100.500	101.300	0.000	49990.000	51880.000	53670.000
2	20:25:43	96.754%	100.900	97.910	99.440	0.000	47820.000	50680.000	52910.000
3	20:26:02	93.113%	101.900	104.700	104.600	0.000	49270.000	53110.000	55300.000
X		93.804%	101.174%	101.029%	101.753%	0.000	98.052%	103.780%	107.923%
σ		2.672%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.848	0.615	3.386	2.547	0.000	2.250	2.337	2.259
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:25:24	532.800	5377.000	0.000	50090.000	48600.000	50080.000	100.879%	97.870
2	20:25:43	526.700	5284.000	0.000	49430.000	48500.000	49740.000	101.916%	97.300
3	20:26:02	559.100	5509.000	0.000	50520.000	49380.000	51140.000	101.456%	100.900
X		107.908%	107.796%	0.000	100.026%	97.652%	100.641%	101.417%	98.700%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.519%	n/a
%RSD		3.188	2.101	0.000	1.099	0.988	1.448	0.512	1.981
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:25:24	100.600	102.200	521.800	26280.000	25670.000	101.600	102.600	102.200
2	20:25:43	101.600	103.300	515.900	26220.000	26110.000	102.800	103.400	103.500
3	20:26:02	104.500	105.700	530.600	26700.000	26550.000	103.800	103.800	105.200
X		102.240%	103.705%	104.553%	105.609%	104.436%	102.750%	103.280%	103.629%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.001	1.732	1.415	0.985	1.679	1.067	0.610	1.452
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:25:24	100.600	103.000	101.400	101.400	104.900	105.200	0.000	101.300
2	20:25:43	102.500	101.900	102.400	102.200	105.500	104.800	0.000	101.700
3	20:26:02	103.600	105.000	101.900	103.700	105.200	103.600	0.000	102.800
X		102.231%	103.267%	101.916%	102.423%	105.197%	104.551%	0.000	101.945%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.509	1.521	0.472	1.115	0.263	0.796	0.000	0.746
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:25:24	101.848%	100.200	102.200	96.798%	100.700	100.900	102.600	103.000
2	20:25:43	105.896%	105.700	104.700	98.125%	101.500	102.400	102.200	103.400
3	20:26:02	107.624%	106.600	106.900	99.215%	103.500	103.500	104.100	104.400
X		105.123%	104.138%	104.617%	98.046%	101.912%	102.256%	102.954%	103.618%
σ		2.965%	n/a	n/a	1.210%	n/a	n/a	n/a	n/a
%RSD		2.820	3.303	2.262	1.235	1.387	1.305	0.960	0.702
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:25:24	102.089%	99.540	98.720	98.420	100.500	100.600	105.368%	106.076%
2	20:25:43	105.473%	101.400	101.100	100.300	102.600	103.600	109.815%	111.059%
3	20:26:02	107.676%	101.800	100.900	100.900	102.300	102.000	112.592%	113.565%
X		105.079%	100.932%	100.253%	99.874%	101.818%	102.088%	109.258%	110.233%
σ		2.814%	n/a	n/a	n/a	n/a	n/a	3.644%	3.812%
%RSD		2.678	1.211	1.331	1.309	1.092	1.454	3.335	3.458
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:25:24	97.380	97.810	96.720	97.160	96.730	101.331%		
2	20:25:43	102.900	102.900	103.400	102.600	103.000	100.351%		
3	20:26:02	106.200	107.300	106.800	107.000	107.300	99.421%		
X		102.172%	102.676%	102.311%	102.235%	102.327%	100.368%		
σ		n/a	n/a	n/a	n/a	n/a	0.955%		
%RSD		4.370	4.644	5.007	4.804	5.177	0.952		

CCB5 7/16/2014 8:31:54 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	20:32:13	100.637%	-0.351	0.956	-0.294	0.000	43.190	2.993	2.559
2	20:32:32	102.215%	-0.258	-0.967	0.024	0.000	42.130	2.454	3.451
3	20:32:51	102.111%	-0.164	1.709	0.248	0.000	43.860	3.140	2.971
x		101.654%	-0.258	0.566	-0.007	0.000	43.060	2.863	2.994
σ		0.883%	0.093	1.380	0.273	0.000	0.875	0.361	0.447
%RSD		0.868	36.260	243.700	3780.000	0.000	2.033	12.620	14.920
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:32:13	-0.553	4.487	0.000	19.550	-2.063	24.490	102.268%	-0.047
2	20:32:32	-0.540	3.985	0.000	20.010	2.396	28.590	103.519%	-0.099
3	20:32:51	-0.520	6.115	0.000	21.790	4.602	31.080	104.121%	-0.198
x		-0.538	4.862	0.000	20.450	1.645	28.050	103.303%	-0.115
σ		0.017	1.113	0.000	1.185	3.395	3.330	0.945%	0.076
%RSD		3.084	22.890	0.000	5.797	206.400	11.870	0.915	66.710
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:32:13	0.156	0.038	0.034	3.718	5.103	-0.009	-0.038	0.702
2	20:32:32	0.036	-0.002	0.043	2.202	1.740	-0.005	0.003	0.801
3	20:32:51	0.212	-0.047	0.028	1.045	3.380	-0.004	0.045	0.792
x		0.135	-0.003	0.035	2.322	3.408	-0.006	0.003	0.765
σ		0.090	0.043	0.007	1.341	1.682	0.003	0.041	0.055
%RSD		66.770	1237.000	21.050	57.750	49.350	47.440	1180.000	7.160
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:32:13	-0.063	0.206	0.236	0.271	2.078	0.672	0.000	0.044
2	20:32:32	-0.050	0.148	0.236	0.117	2.575	-0.292	0.000	0.048
3	20:32:51	-0.052	0.209	0.184	-0.301	2.698	0.162	0.000	0.039
x		-0.055	0.188	0.219	0.029	2.450	0.181	0.000	0.044
σ		0.007	0.034	0.030	0.296	0.328	0.482	0.000	0.005
%RSD		12.310	18.210	13.760	1020.000	13.400	266.800	0.000	11.200
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:32:13	107.782%	0.210	0.220	109.113%	-0.011	-0.009	0.021	0.018
2	20:32:32	111.345%	0.188	0.180	109.752%	-0.000	0.000	-0.009	-0.001
3	20:32:51	112.282%	0.232	0.125	111.379%	-0.006	-0.003	-0.037	-0.045
x		110.470%	0.210	0.175	110.081%	-0.006	-0.004	-0.009	-0.009
σ		2.375%	0.022	0.048	1.168%	0.005	0.005	0.029	0.032
%RSD		2.149	10.580	27.220	1.061	93.240	116.400	334.700	348.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:32:13	108.330%	-0.339	0.128	0.188	-0.031	-0.011	108.649%	108.898%
2	20:32:32	110.422%	-0.328	0.116	0.158	0.008	-0.016	111.077%	110.492%
3	20:32:51	112.507%	-0.354	0.138	0.117	0.007	-0.007	112.883%	113.517%
x		110.420%	-0.341	0.127	0.154	-0.005	-0.011	110.870%	110.969%
σ		2.089%	0.013	0.011	0.036	0.022	0.004	2.125%	2.346%
%RSD		1.891	3.813	8.578	23.180	411.500	37.340	1.916	2.114
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:32:13	0.005	0.000	-0.008	0.006	-0.008	106.968%		
2	20:32:32	0.006	0.004	0.006	-0.001	-0.005	106.854%		
3	20:32:51	0.010	0.005	-0.001	-0.010	-0.006	106.356%		
x		0.007	0.003	-0.001	-0.002	-0.006	106.726%		
σ		0.002	0.003	0.007	0.008	0.001	0.325%		
%RSD		34.690	86.850	540.700	467.600	19.920	0.305		

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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	20:35:57	95.596%	-0.227	345.800	377.200	0.000	831700.000	110600.000	115300.000
2	20:36:16	98.833%	-0.327	344.400	376.200	0.000	809500.000	109900.000	115000.000
3	20:36:35	98.824%	-0.207	358.200	384.600	0.000	824800.000	112800.000	119100.000
X		97.751%	-0.254	349.500	379.300	0.000	822000.000	111100.000	116400.000
σ		1.866%	0.064	7.542	4.594	0.000	11380.000	1491.000	2272.000
%RSD		1.909	25.410	2.158	1.211	0.000	1.384	1.342	1.951
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:35:57	0.111	310.100	0.000	33100.000	33220.000	33640.000	101.886%	0.029
2	20:36:16	-0.125	311.300	0.000	32650.000	32720.000	33530.000	104.694%	0.193
3	20:36:35	0.088	321.400	0.000	33110.000	33590.000	34910.000	105.732%	0.237
X		0.025	314.300	0.000	32950.000	33180.000	34030.000	104.104%	0.153
σ		0.130	6.165	0.000	260.700	440.400	768.900	1.989%	0.110
%RSD		522.000	1.962	0.000	0.791	1.327	2.260	1.911	71.740
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:35:57	3.036	0.702	9.796	15.770	79.870	0.059	0.067	12.570
2	20:36:16	1.653	0.728	10.010	15.330	74.580	0.047	-0.027	13.330
3	20:36:35	0.011	0.846	10.170	14.960	74.850	0.027	-0.063	13.370
X		1.566	0.759	9.993	15.350	76.430	0.044	-0.008	13.090
σ		1.514	0.076	0.190	0.407	2.982	0.016	0.067	0.449
%RSD		96.680	10.070	1.897	2.653	3.901	36.510	848.100	3.432
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:35:57	0.165	1.016	0.957	1.729	5.462	3.319	0.000	649.000
2	20:36:16	0.172	1.100	1.008	0.488	5.611	3.135	0.000	636.500
3	20:36:35	0.117	1.022	1.018	0.306	5.839	2.144	0.000	634.500
X		0.152	1.046	0.995	0.841	5.637	2.866	0.000	640.000
σ		0.030	0.047	0.033	0.774	0.190	0.632	0.000	7.814
%RSD		19.790	4.485	3.296	92.080	3.374	22.060	0.000	1.221
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:35:57	106.604%	1.834	1.809	98.329%	-0.012	-0.007	0.010	0.010
2	20:36:16	111.643%	1.684	1.639	101.666%	-0.014	-0.020	-0.065	-0.040
3	20:36:35	114.806%	1.846	1.701	103.280%	-0.021	-0.009	-0.043	-0.032
X		111.018%	1.788	1.716	101.092%	-0.015	-0.012	-0.032	-0.021
σ		4.137%	0.090	0.086	2.525%	0.005	0.007	0.039	0.027
%RSD		3.726	5.041	5.007	2.498	31.650	60.490	118.900	128.900
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:35:57	103.740%	-0.016	0.074	0.081	3.554	3.778	107.548%	109.727%
2	20:36:16	109.019%	-0.047	0.099	0.093	3.605	3.306	112.944%	113.938%
3	20:36:35	110.735%	-0.045	0.082	0.123	3.612	3.436	116.719%	117.551%
X		107.831%	-0.036	0.085	0.099	3.590	3.507	112.404%	113.739%
σ		3.645%	0.017	0.013	0.022	0.032	0.244	4.609%	3.916%
%RSD		3.381	47.950	14.930	21.930	0.886	6.964	4.101	3.443
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:35:57	-0.002	-0.005	0.008	0.004	0.001	95.482%		
2	20:36:16	-0.006	-0.009	-0.000	0.017	0.001	96.338%		
3	20:36:35	-0.003	-0.003	-0.007	0.000	-0.001	97.003%		
X		-0.004	-0.005	0.000	0.007	-0.000	96.275%		
σ		0.002	0.003	0.007	0.009	0.001	0.763%		
%RSD		56.620	51.760	2137.000	125.600	1193.000	0.792		

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7/16/2014 8:39:19 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	20:39:38	96.749%	-0.278	348.800	370.900	0.000	845900.000	113700.000	119900.000
2	20:39:57	98.099%	-0.206	343.900	380.500	0.000	843500.000	113100.000	118900.000
3	20:40:17	102.072%	-0.235	342.500	365.400	0.000	819700.000	111200.000	117700.000
X		98.973%	-0.239	345.100	372.300	0.000	836400.000	112700.000	118900.000
σ		2.767%	0.036	3.321	7.635	0.000	14500.000	1275.000	1099.000
%RSD		2.796	15.030	0.962	2.051	0.000	1.733	1.131	0.924
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:39:38	242.100	1484.000	0.000	35080.000	33750.000	35250.000	104.098%	12.570
2	20:39:57	243.400	1487.000	0.000	34470.000	33420.000	34730.000	107.150%	11.940
3	20:40:17	241.000	1477.000	0.000	34030.000	32410.000	33650.000	108.285%	12.070
X		242.200	1483.000	0.000	34530.000	33190.000	34540.000	106.511%	12.190
σ		1.182	5.223	0.000	530.800	696.100	814.100	2.166%	0.331
%RSD		0.488	0.352	0.000	1.537	2.097	2.357	2.033	2.714
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:39:38	2.896	1.596	6.248	379.700	434.200	0.119	0.167	12.890
2	20:39:57	3.241	1.593	6.110	376.500	437.700	0.143	0.296	12.330
3	20:40:17	2.735	1.626	6.116	376.800	429.700	0.117	0.217	13.080
X		2.957	1.605	6.158	377.600	433.900	0.127	0.227	12.770
σ		0.259	0.018	0.078	1.753	4.016	0.014	0.065	0.387
%RSD		8.755	1.146	1.264	0.464	0.925	11.430	28.690	3.033
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:39:38	0.500	2.126	2.105	2.939	5.618	3.669	0.000	650.600
2	20:39:57	0.604	1.994	1.791	2.865	5.360	3.417	0.000	645.300
3	20:40:17	0.624	2.431	2.230	2.747	6.174	3.097	0.000	639.700
X		0.576	2.184	2.042	2.850	5.717	3.394	0.000	645.200
σ		0.067	0.224	0.226	0.096	0.416	0.287	0.000	5.428
%RSD		11.560	10.270	11.090	3.384	7.270	8.452	0.000	0.841
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:39:38	111.479%	4.033	3.881	101.576%	-0.011	-0.009	0.020	0.014
2	20:39:57	114.491%	4.050	3.939	102.730%	-0.015	-0.006	0.003	-0.024
3	20:40:17	117.098%	3.996	4.296	104.168%	-0.014	-0.001	-0.004	-0.015
X		114.356%	4.026	4.039	102.825%	-0.013	-0.005	0.006	-0.008
σ		2.812%	0.027	0.224	1.299%	0.002	0.004	0.013	0.020
%RSD		2.459	0.683	5.556	1.263	17.470	74.280	201.600	234.300
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:39:38	106.917%	0.043	0.109	0.145	7.026	6.667	111.468%	113.148%
2	20:39:57	109.872%	0.108	0.075	0.107	6.908	6.936	115.601%	117.159%
3	20:40:17	113.394%	-0.005	0.090	0.144	6.865	6.860	118.334%	119.548%
X		110.061%	0.049	0.091	0.132	6.933	6.821	115.134%	116.618%
σ		3.243%	0.057	0.017	0.022	0.084	0.139	3.456%	3.234%
%RSD		2.946	117.200	18.910	16.630	1.208	2.039	3.002	2.773
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:39:38	-0.006	-0.005	0.453	0.444	0.441	96.212%		
2	20:39:57	-0.003	-0.002	0.486	0.425	0.453	97.184%		
3	20:40:17	-0.000	-0.007	0.464	0.411	0.455	98.069%		
X		-0.003	-0.005	0.467	0.426	0.450	97.155%		
σ		0.003	0.002	0.017	0.016	0.007	0.929%		
%RSD		87.830	50.590	3.597	3.849	1.597	0.957		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:43:20	95.889%	-0.252	353.800	387.600	0.000	860500.000	114800.000	120000.000
2	20:43:39	99.261%	-0.160	337.300	370.700	0.000	835200.000	112900.000	119100.000
3	20:43:58	100.381%	-0.257	338.400	379.100	0.000	833900.000	113300.000	120300.000
X		98.510%	-0.223	343.200	379.100	0.000	843200.000	113700.000	119800.000
σ		2.338%	0.055	9.226	8.442	0.000	15010.000	1010.000	615.000
%RSD		2.373	24.530	2.689	2.227	0.000	1.780	0.889	0.513
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:43:20	1.624	921.900	0.000	35040.000	33070.000	33850.000	104.841%	0.631
2	20:43:39	1.861	930.600	0.000	34590.000	33030.000	34960.000	107.348%	0.492
3	20:43:58	1.678	934.300	0.000	34330.000	32520.000	33810.000	108.498%	0.460
X		1.721	928.900	0.000	34650.000	32870.000	34210.000	106.895%	0.528
σ		0.124	6.383	0.000	359.200	308.600	649.600	1.870%	0.091
%RSD		7.205	0.687	0.000	1.037	0.939	1.899	1.749	17.240
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:43:20	1.840	0.921	3.827	27.020	90.290	0.032	1.176	10.980
2	20:43:39	3.415	0.900	4.051	24.910	80.970	0.049	1.116	11.170
3	20:43:58	2.520	0.903	3.854	24.070	85.420	0.026	1.337	11.500
X		2.592	0.908	3.911	25.330	85.560	0.036	1.210	11.220
σ		0.790	0.012	0.122	1.518	4.664	0.012	0.115	0.262
%RSD		30.490	1.267	3.126	5.993	5.451	33.240	9.472	2.339
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:43:20	0.216	1.669	1.580	2.722	5.711	4.702	0.000	663.100
2	20:43:39	0.187	1.685	1.529	2.609	5.186	4.539	0.000	649.000
3	20:43:58	0.282	1.464	1.435	3.227	6.277	3.416	0.000	643.200
X		0.228	1.606	1.515	2.853	5.725	4.219	0.000	651.800
σ		0.049	0.123	0.074	0.329	0.545	0.700	0.000	10.220
%RSD		21.350	7.666	4.867	11.540	9.528	16.600	0.000	1.569
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:43:20	110.441%	3.941	4.015	100.846%	-0.021	-0.014	-0.006	-0.008
2	20:43:39	115.300%	4.076	3.999	103.282%	-0.019	-0.016	-0.005	-0.017
3	20:43:58	117.364%	3.947	3.938	104.750%	-0.024	-0.019	0.032	0.025
X		114.368%	3.988	3.984	102.959%	-0.021	-0.017	0.007	0.000
σ		3.554%	0.076	0.041	1.972%	0.002	0.002	0.022	0.022
%RSD		3.108	1.915	1.022	1.915	10.360	14.090	305.200	22480.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:43:20	106.677%	-0.051	0.078	0.113	6.176	5.996	110.296%	110.994%
2	20:43:39	110.345%	-0.071	0.066	0.073	6.346	5.755	115.531%	116.841%
3	20:43:58	111.839%	-0.033	0.099	0.106	5.722	6.128	117.780%	119.284%
X		109.620%	-0.052	0.081	0.097	6.081	5.960	114.535%	115.706%
σ		2.657%	0.019	0.017	0.021	0.323	0.189	3.840%	4.260%
%RSD		2.423	37.050	20.640	21.740	5.308	3.170	3.353	3.682
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:43:20	-0.006	-0.007	0.009	0.025	0.011	94.354%		
2	20:43:39	-0.007	-0.011	0.002	0.021	0.015	96.898%		
3	20:43:58	-0.009	-0.004	0.018	0.018	0.015	97.814%		
X		-0.007	-0.008	0.010	0.022	0.013	96.355%		
σ		0.002	0.003	0.008	0.004	0.002	1.792%		
%RSD		22.200	43.070	80.350	16.660	18.350	1.860		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:47:02	98.240%	-0.279	347.800	377.800	0.000	846100.000	114900.000	121200.000
2	20:47:21	99.258%	-0.303	348.500	384.300	0.000	842500.000	115400.000	122800.000
3	20:47:41	102.360%	-0.282	354.000	377.600	0.000	829700.000	114900.000	121800.000
X		99.952%	-0.288	350.100	379.900	0.000	839400.000	115100.000	121900.000
σ		2.146%	0.013	3.406	3.797	0.000	8649.000	296.100	824.800
%RSD		2.147	4.684	0.973	0.999	0.000	1.030	0.257	0.676
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:47:02	29.830	487.300	0.000	34330.000	31790.000	32500.000	108.871%	1.729
2	20:47:21	31.180	498.000	0.000	34130.000	31660.000	33490.000	111.143%	1.204
3	20:47:41	31.080	486.900	0.000	33890.000	32120.000	32680.000	112.454%	1.141
X		30.700	490.800	0.000	34120.000	31860.000	32890.000	110.823%	1.358
σ		0.752	6.311	0.000	221.900	233.500	527.900	1.813%	0.323
%RSD		2.449	1.286	0.000	0.650	0.733	1.605	1.636	23.760
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:47:02	0.867	0.886	13.910	65.240	123.200	0.035	-0.005	10.580
2	20:47:21	0.794	0.882	13.650	65.080	120.300	0.043	0.012	10.430
3	20:47:41	1.372	0.920	13.860	65.200	122.600	0.053	-0.045	11.260
X		1.011	0.896	13.810	65.180	122.100	0.043	-0.013	10.760
σ		0.315	0.021	0.136	0.084	1.552	0.009	0.029	0.443
%RSD		31.130	2.310	0.983	0.129	1.271	20.510	231.000	4.114
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:47:02	0.212	1.069	0.749	0.945	6.419	3.886	0.000	646.700
2	20:47:21	0.196	1.011	0.957	1.506	7.164	4.868	0.000	631.500
3	20:47:41	0.276	0.816	1.000	0.650	6.741	3.785	0.000	631.100
X		0.228	0.965	0.902	1.034	6.775	4.180	0.000	636.400
σ		0.042	0.133	0.134	0.435	0.374	0.598	0.000	8.908
%RSD		18.550	13.740	14.860	42.080	5.516	14.310	0.000	1.400
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:47:02	112.493%	4.236	3.860	105.260%	-0.022	-0.019	-0.039	-0.021
2	20:47:21	117.478%	4.061	4.183	107.605%	-0.027	-0.018	0.023	-0.001
3	20:47:41	119.963%	4.114	4.089	109.548%	-0.010	-0.009	-0.046	-0.030
X		116.645%	4.137	4.044	107.471%	-0.020	-0.015	-0.021	-0.017
σ		3.804%	0.090	0.167	2.147%	0.009	0.006	0.038	0.015
%RSD		3.262	2.178	4.119	1.998	44.290	37.340	182.800	88.080
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:47:02	111.073%	-0.117	0.117	0.118	3.583	3.824	115.633%	116.199%
2	20:47:21	115.917%	-0.097	0.068	0.075	3.981	3.824	120.327%	121.038%
3	20:47:41	117.926%	-0.158	0.103	0.105	3.831	3.750	121.621%	123.194%
X		114.972%	-0.124	0.096	0.099	3.798	3.799	119.194%	120.143%
σ		3.523%	0.031	0.025	0.022	0.201	0.043	3.151%	3.582%
%RSD		3.064	25.080	26.290	22.200	5.286	1.121	2.644	2.982
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:47:02	-0.004	-0.013	0.037	0.031	0.027	98.623%		
2	20:47:21	-0.008	-0.011	0.029	0.020	0.028	101.006%		
3	20:47:41	-0.006	-0.011	0.050	0.027	0.040	101.543%		
X		-0.006	-0.012	0.038	0.026	0.032	100.391%		
σ		0.002	0.001	0.011	0.006	0.007	1.555%		
%RSD		34.030	10.450	27.510	23.100	22.410	1.549		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:50:44	99.728%	-0.304	349.600	379.500	0.000	856400.000	115000.000	120300.000
2	20:51:03	101.831%	-0.235	352.800	383.000	0.000	848100.000	114600.000	121400.000
3	20:51:23	103.683%	-0.237	346.100	377.700	0.000	837300.000	114600.000	121700.000
X		101.747%	-0.258	349.500	380.000	0.000	847300.000	114700.000	121100.000
σ		1.979%	0.039	3.365	2.727	0.000	9576.000	268.700	727.100
%RSD		1.945	15.200	0.963	0.718	0.000	1.130	0.234	0.600
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:50:44	0.148	388.800	0.000	34770.000	32820.000	33150.000	110.089%	0.057
2	20:51:03	1.390	391.600	0.000	34520.000	32090.000	33180.000	111.328%	0.237
3	20:51:23	0.062	393.200	0.000	34440.000	32000.000	33110.000	112.293%	0.210
X		0.533	391.200	0.000	34580.000	32300.000	33150.000	111.236%	0.168
σ		0.743	2.195	0.000	170.800	446.700	35.120	1.105%	0.097
%RSD		139.400	0.561	0.000	0.494	1.383	0.106	0.993	57.860
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:50:44	0.062	0.870	13.690	20.550	79.520	0.040	-0.063	10.220
2	20:51:03	0.975	0.929	13.950	19.240	78.430	0.035	-0.020	10.580
3	20:51:23	0.129	0.978	14.020	18.390	78.560	0.026	-0.050	10.600
X		0.389	0.926	13.890	19.400	78.840	0.034	-0.044	10.470
σ		0.509	0.054	0.175	1.089	0.596	0.007	0.022	0.218
%RSD		130.900	5.863	1.261	5.615	0.755	21.050	49.930	2.083
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:50:44	0.222	1.293	0.884	0.759	6.655	3.465	0.000	655.300
2	20:51:03	0.116	1.322	1.046	0.755	6.405	3.473	0.000	648.200
3	20:51:23	0.164	1.317	1.059	-0.138	7.199	1.904	0.000	645.900
X		0.167	1.311	0.997	0.459	6.753	2.947	0.000	649.800
σ		0.054	0.015	0.098	0.517	0.406	0.904	0.000	4.894
%RSD		32.000	1.179	9.793	112.700	6.010	30.660	0.000	0.753
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:50:44	111.375%	4.153	4.100	105.103%	-0.024	-0.016	-0.044	-0.037
2	20:51:03	115.138%	4.302	4.319	106.482%	-0.024	-0.007	0.026	0.014
3	20:51:23	118.105%	4.292	4.323	108.349%	-0.017	-0.015	0.021	0.005
X		114.873%	4.249	4.247	106.644%	-0.022	-0.013	0.001	-0.006
σ		3.373%	0.083	0.128	1.629%	0.004	0.005	0.039	0.027
%RSD		2.936	1.951	3.007	1.528	16.890	40.530	3656.000	471.100
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:50:44	110.276%	-0.061	0.076	0.092	3.978	3.790	114.080%	115.388%
2	20:51:03	113.964%	-0.080	0.065	0.089	3.525	3.500	118.335%	119.794%
3	20:51:23	115.768%	-0.099	0.088	0.146	3.967	3.944	121.472%	122.187%
X		113.336%	-0.080	0.076	0.109	3.823	3.745	117.962%	119.123%
σ		2.799%	0.019	0.012	0.032	0.259	0.225	3.710%	3.449%
%RSD		2.470	23.940	15.320	29.210	6.760	6.018	3.145	2.895
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:50:44	0.002	-0.010	-0.009	-0.001	-0.008	96.768%		
2	20:51:03	-0.007	-0.007	-0.006	-0.001	-0.008	98.137%		
3	20:51:23	-0.004	-0.007	-0.006	0.000	-0.009	98.920%		
X		-0.003	-0.008	-0.007	-0.001	-0.008	97.942%		
σ		0.005	0.002	0.002	0.001	0.000	1.090%		
%RSD		141.000	22.980	28.640	93.430	5.320	1.113		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:54:27	97.852%	-0.230	346.500	362.400	0.000	817500.000	110200.000	116600.000
2	20:54:46	98.120%	-0.279	356.600	372.600	0.000	809700.000	111400.000	118600.000
3	20:55:05	100.559%	-0.328	334.700	372.100	0.000	795700.000	111300.000	118400.000
X		98.844%	-0.279	346.000	369.000	0.000	807600.000	111000.000	117900.000
σ		1.491%	0.049	10.950	5.753	0.000	11030.000	657.400	1126.000
%RSD		1.509	17.530	3.164	1.559	0.000	1.366	0.593	0.955
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:54:27	813.400	2658.000	0.000	33940.000	32860.000	34530.000	106.499%	40.100
2	20:54:46	815.900	2690.000	0.000	33870.000	33050.000	33670.000	108.056%	38.730
3	20:55:05	833.900	2718.000	0.000	33430.000	32500.000	33400.000	109.527%	39.970
X		821.000	2689.000	0.000	33750.000	32810.000	33860.000	108.027%	39.600
σ		11.180	29.660	0.000	277.900	279.300	591.900	1.514%	0.755
%RSD		1.362	1.103	0.000	0.824	0.851	1.748	1.402	1.906
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:54:27	5.215	3.402	19.650	1218.000	1232.000	0.324	0.838	12.160
2	20:54:46	5.661	3.368	19.840	1213.000	1249.000	0.328	0.825	13.000
3	20:55:05	4.742	3.335	19.770	1224.000	1234.000	0.390	0.782	13.580
X		5.206	3.368	19.750	1218.000	1238.000	0.347	0.815	12.920
σ		0.460	0.033	0.093	5.596	9.349	0.037	0.030	0.715
%RSD		8.825	0.994	0.472	0.459	0.755	10.700	3.630	5.536
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:54:27	1.306	6.671	6.452	2.909	7.363	3.744	0.000	655.600
2	20:54:46	1.260	6.336	6.153	2.948	6.936	4.960	0.000	647.700
3	20:55:05	1.344	6.721	6.241	3.108	7.791	4.623	0.000	650.800
X		1.303	6.576	6.282	2.988	7.363	4.442	0.000	651.400
σ		0.042	0.209	0.154	0.106	0.427	0.628	0.000	3.985
%RSD		3.231	3.183	2.444	3.538	5.805	14.130	0.000	0.612
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:54:27	110.876%	2.853	2.751	103.315%	-0.013	0.018	0.005	-0.006
2	20:54:46	114.397%	2.973	2.597	105.396%	-0.001	0.007	-0.075	-0.043
3	20:55:05	115.425%	2.747	2.764	106.183%	-0.002	0.013	-0.012	-0.035
X		113.566%	2.857	2.704	104.965%	-0.005	0.013	-0.027	-0.028
σ		2.385%	0.113	0.093	1.482%	0.006	0.005	0.042	0.019
%RSD		2.100	3.957	3.430	1.412	120.000	42.560	156.200	69.080
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:54:27	109.068%	0.111	0.087	0.143	8.639	8.532	114.267%	115.047%
2	20:54:46	112.284%	0.042	0.134	0.166	8.888	8.590	118.156%	120.500%
3	20:55:05	113.449%	0.113	0.122	0.129	8.741	8.659	122.263%	122.911%
X		111.601%	0.089	0.114	0.146	8.756	8.594	118.229%	119.486%
σ		2.269%	0.040	0.024	0.018	0.125	0.064	3.998%	4.029%
%RSD		2.033	45.680	21.240	12.590	1.430	0.743	3.382	3.372
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:54:27	0.001	0.001	1.712	1.541	1.619	98.306%		
2	20:54:46	0.009	-0.005	1.778	1.554	1.696	100.027%		
3	20:55:05	0.005	-0.002	1.721	1.583	1.671	101.459%		
X		0.005	-0.002	1.737	1.560	1.662	99.931%		
σ		0.004	0.003	0.036	0.022	0.039	1.579%		
%RSD		86.920	152.100	2.061	1.385	2.376	1.580		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:58:10	101.065%	-0.328	341.800	372.400	0.000	829600.000	112800.000	119500.000
2	20:58:29	103.425%	-0.259	352.600	371.100	0.000	818800.000	112100.000	119500.000
3	20:58:48	103.130%	-0.282	345.100	378.100	0.000	818500.000	113300.000	120300.000
X		102.540%	-0.290	346.500	373.800	0.000	822300.000	112700.000	119800.000
σ		1.286%	0.035	5.539	3.740	0.000	6334.000	633.300	469.500
%RSD		1.254	12.010	1.598	1.000	0.000	0.770	0.562	0.392
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:58:10	2.528	811.500	0.000	34490.000	33010.000	33750.000	109.682%	0.408
2	20:58:29	2.473	815.400	0.000	34240.000	32610.000	35160.000	111.696%	0.373
3	20:58:48	2.462	823.400	0.000	34120.000	33150.000	34780.000	113.898%	0.608
X		2.488	816.800	0.000	34280.000	32920.000	34560.000	111.758%	0.463
σ		0.035	6.039	0.000	186.700	281.600	729.300	2.109%	0.127
%RSD		1.422	0.739	0.000	0.545	0.855	2.110	1.887	27.440
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:58:10	4.154	0.907	8.356	27.780	90.810	0.032	-0.058	10.510
2	20:58:29	3.496	0.934	8.346	26.020	87.050	0.022	-0.114	10.150
3	20:58:48	3.003	0.938	8.594	24.290	85.090	0.036	-0.024	10.040
X		3.551	0.926	8.432	26.030	87.650	0.030	-0.065	10.230
σ		0.577	0.016	0.141	1.744	2.904	0.007	0.045	0.248
%RSD		16.260	1.771	1.667	6.700	3.313	23.480	69.410	2.424
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:58:10	0.135	1.233	1.087	2.405	7.030	3.866	0.000	667.600
2	20:58:29	0.105	1.125	0.943	1.158	6.823	2.964	0.000	657.100
3	20:58:48	0.102	1.158	0.967	2.582	7.940	3.173	0.000	654.600
X		0.114	1.172	0.999	2.048	7.264	3.334	0.000	659.800
σ		0.018	0.055	0.078	0.776	0.594	0.472	0.000	6.899
%RSD		15.850	4.712	7.775	37.900	8.182	14.170	0.000	1.046
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:58:10	112.805%	2.721	2.655	106.616%	-0.017	-0.014	-0.013	-0.023
2	20:58:29	117.849%	2.821	2.780	109.320%	-0.017	-0.012	-0.002	-0.014
3	20:58:48	120.121%	2.837	2.737	110.039%	-0.025	-0.017	-0.045	-0.040
X		116.925%	2.793	2.724	108.659%	-0.020	-0.014	-0.020	-0.026
σ		3.744%	0.063	0.063	1.805%	0.005	0.002	0.022	0.013
%RSD		3.202	2.255	2.329	1.661	23.440	15.350	112.000	52.580
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:58:10	111.795%	-0.148	0.096	0.115	5.563	5.783	115.460%	117.526%
2	20:58:29	114.596%	-0.100	0.119	0.100	5.403	5.925	120.568%	121.949%
3	20:58:48	118.649%	-0.097	0.106	0.113	5.458	5.934	121.906%	124.054%
X		115.013%	-0.115	0.107	0.110	5.475	5.880	119.311%	121.177%
σ		3.446%	0.029	0.012	0.008	0.081	0.085	3.402%	3.332%
%RSD		2.996	24.890	10.730	7.295	1.481	1.438	2.851	2.750
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:58:10	-0.007	-0.008	0.014	0.019	0.005	99.232%		
2	20:58:29	0.000	-0.009	0.009	0.010	0.010	100.755%		
3	20:58:48	-0.010	-0.008	0.010	0.015	0.005	100.124%		
X		-0.006	-0.008	0.011	0.015	0.007	100.037%		
σ		0.005	0.000	0.002	0.004	0.003	0.765%		
%RSD		93.150	3.610	21.830	29.510	41.440	0.765		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:01:54	93.848%	-0.301	332.100	368.500	0.000	819900.000	112600.000	119300.000
2	21:02:14	97.007%	-0.131	343.200	370.100	0.000	793700.000	110800.000	117800.000
3	21:02:34	96.022%	-0.129	344.800	365.800	0.000	796200.000	111700.000	118100.000
	X	95.626%	-0.187	340.000	368.100	0.000	803200.000	111700.000	118400.000
	σ	1.616%	0.099	6.929	2.195	0.000	14450.000	865.000	806.100
	%RSD	1.690	52.810	2.038	0.596	0.000	1.799	0.775	0.681
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:01:54	3714.000	7362.000	0.000	34590.000	32820.000	34570.000	102.287%	162.700
2	21:02:14	3681.000	7292.000	0.000	33830.000	32370.000	33190.000	105.229%	164.000
3	21:02:34	3703.000	7335.000	0.000	33820.000	31940.000	33310.000	105.081%	166.600
	X	3699.000	7330.000	0.000	34080.000	32370.000	33690.000	104.199%	164.400
	σ	16.650	35.280	0.000	439.900	439.900	762.100	1.657%	1.979
	%RSD	0.450	0.481	0.000	1.291	1.359	2.262	1.590	1.203
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:01:54	10.610	10.880	60.660	5267.000	5063.000	1.465	4.042	18.910
2	21:02:14	12.000	10.710	60.030	5144.000	5046.000	1.413	4.090	19.240
3	21:02:34	10.960	10.650	60.250	5184.000	5035.000	1.571	4.257	19.600
	X	11.190	10.750	60.310	5199.000	5048.000	1.483	4.130	19.250
	σ	0.721	0.120	0.318	62.810	14.120	0.081	0.113	0.345
	%RSD	6.440	1.120	0.528	1.208	0.280	5.456	2.735	1.794
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:01:54	4.880	80.330	80.470	6.742	9.129	4.169	0.000	649.200
2	21:02:14	4.565	77.330	77.840	7.206	8.772	3.541	0.000	625.100
3	21:02:34	4.740	76.420	78.330	7.087	9.595	3.027	0.000	629.400
	X	4.728	78.030	78.880	7.011	9.166	3.579	0.000	634.600
	σ	0.158	2.049	1.399	0.241	0.413	0.572	0.000	12.870
	%RSD	3.335	2.626	1.773	3.439	4.504	15.990	0.000	2.028
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:01:54	108.366%	3.785	4.068	99.954%	0.047	0.053	0.023	0.026
2	21:02:14	113.574%	3.909	3.766	101.511%	0.060	0.054	0.112	0.121
3	21:02:34	113.805%	3.977	4.049	102.161%	0.069	0.044	0.054	0.063
	X	111.915%	3.890	3.961	101.209%	0.059	0.050	0.063	0.070
	σ	3.076%	0.097	0.170	1.134%	0.011	0.006	0.045	0.048
	%RSD	2.749	2.500	4.278	1.121	19.350	11.620	72.200	68.510
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:01:54	104.995%	0.379	0.081	0.141	16.890	16.090	112.852%	113.497%
2	21:02:14	109.569%	0.406	0.120	0.131	16.480	16.630	115.898%	117.493%
3	21:02:34	110.282%	0.381	0.132	0.135	16.970	16.400	117.562%	118.468%
	X	108.282%	0.388	0.111	0.135	16.780	16.370	115.437%	116.486%
	σ	2.869%	0.015	0.027	0.005	0.261	0.269	2.389%	2.634%
	%RSD	2.649	3.909	24.140	4.038	1.557	1.644	2.070	2.261
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:01:54	0.023	0.036	5.764	5.179	5.439	96.360%		
2	21:02:14	0.039	0.028	5.821	5.333	5.595	97.580%		
3	21:02:34	0.032	0.035	5.828	5.482	5.650	97.372%		
	X	0.031	0.033	5.804	5.331	5.561	97.104%		
	σ	0.008	0.004	0.035	0.151	0.110	0.653%		
	%RSD	25.870	13.560	0.604	2.841	1.969	0.672		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:05:38	95.124%	-0.276	398.600	430.200	0.000	353900.000	49900.000	53070.000
2	21:05:57	96.173%	-0.227	401.400	431.300	0.000	344500.000	48830.000	52320.000
3	21:06:16	95.006%	-0.151	404.600	434.600	0.000	348400.000	49700.000	53560.000
	X	95.434%	-0.218	401.500	432.000	0.000	348900.000	49470.000	52990.000
	σ	0.642%	0.063	3.038	2.283	0.000	4703.000	566.400	626.400
	%RSD	0.673	28.960	0.757	0.529	0.000	1.348	1.145	1.182
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:05:38	55.560	2285.000	0.000	9459.000	27840.000	28510.000	98.040%	0.402
2	21:05:57	55.640	2275.000	0.000	9189.000	27060.000	27760.000	101.066%	0.308
3	21:06:16	56.220	2320.000	0.000	9298.000	27330.000	28440.000	99.889%	0.467
	X	55.810	2293.000	0.000	9316.000	27410.000	28240.000	99.665%	0.392
	σ	0.363	23.620	0.000	135.800	396.500	412.900	1.525%	0.080
	%RSD	0.650	1.030	0.000	1.458	1.447	1.462	1.530	20.380
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:05:38	0.054	1.168	1267.000	27090.000	26180.000	5.837	3.846	9.266
2	21:05:57	0.069	1.259	1228.000	26110.000	25520.000	5.687	3.669	9.672
3	21:06:16	0.238	1.257	1244.000	26490.000	26070.000	5.685	3.636	9.734
	X	0.120	1.228	1246.000	26560.000	25920.000	5.736	3.717	9.558
	σ	0.102	0.052	19.370	490.400	354.700	0.087	0.113	0.254
	%RSD	84.780	4.223	1.554	1.846	1.368	1.523	3.031	2.660
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:05:38	0.557	4489.000	4470.000	5.083	9.291	1.270	0.000	274.900
2	21:05:57	0.380	4341.000	4286.000	4.918	8.128	0.883	0.000	271.100
3	21:06:16	0.329	4383.000	4358.000	5.168	9.392	0.902	0.000	275.000
	X	0.422	4404.000	4371.000	5.056	8.937	1.018	0.000	273.700
	σ	0.120	76.410	92.760	0.127	0.703	0.218	0.000	2.254
	%RSD	28.340	1.735	2.122	2.516	7.864	21.430	0.000	0.823
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:05:38	108.351%	0.849	0.740	99.403%	-0.005	0.001	19.570	19.970
2	21:05:57	111.805%	0.909	0.779	100.718%	-0.011	0.001	19.590	19.750
3	21:06:16	112.298%	0.846	0.798	100.501%	-0.019	-0.000	18.840	19.470
	X	110.818%	0.868	0.772	100.207%	-0.012	0.001	19.330	19.730
	σ	2.151%	0.036	0.030	0.705%	0.007	0.001	0.429	0.253
	%RSD	1.941	4.124	3.827	0.703	63.690	132.800	2.218	1.281
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:05:38	104.579%	0.009	-0.005	0.045	10.910	11.200	111.910%	114.420%
2	21:05:57	108.709%	0.175	0.005	0.034	10.770	10.950	116.135%	117.647%
3	21:06:16	109.791%	0.096	0.006	0.034	11.140	11.030	116.036%	117.822%
	X	107.693%	0.093	0.002	0.038	10.940	11.060	114.694%	116.630%
	σ	2.751%	0.083	0.006	0.006	0.187	0.125	2.411%	1.915%
	%RSD	2.554	88.730	297.100	16.740	1.707	1.131	2.102	1.642
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:05:38	-0.008	-0.010	0.191	0.232	0.206	99.298%		
2	21:05:57	-0.006	-0.008	0.211	0.217	0.208	101.920%		
3	21:06:16	-0.012	-0.010	0.231	0.181	0.200	99.568%		
	X	-0.009	-0.010	0.211	0.210	0.205	100.262%		
	σ	0.003	0.002	0.020	0.026	0.004	1.442%		
	%RSD	38.260	16.100	9.262	12.490	2.009	1.438		

180-34298-C-2-B SD@25 7/16/2014 9:08:59 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	21:09:19	93.510%	-0.275	79.450	90.310	0.000	74770.000	9672.000	10250.000
2	21:09:38	95.390%	-0.276	80.150	88.670	0.000	72700.000	9572.000	10230.000
3	21:09:57	96.196%	-0.302	84.500	88.830	0.000	72120.000	9586.000	10270.000
X		95.032%	-0.284	81.370	89.270	0.000	73200.000	9610.000	10250.000
σ		1.378%	0.015	2.735	0.906	0.000	1392.000	54.110	18.340
%RSD		1.450	5.324	3.362	1.015	0.000	1.901	0.563	0.179
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:09:19	10.310	455.500	0.000	2001.000	5610.000	5784.000	96.125%	-0.063
2	21:09:38	10.730	450.500	0.000	1956.000	5455.000	5752.000	98.512%	0.192
3	21:09:57	10.600	450.100	0.000	1940.000	5762.000	5715.000	99.439%	0.163
X		10.550	452.100	0.000	1966.000	5609.000	5750.000	98.025%	0.097
σ		0.216	3.005	0.000	31.460	153.400	34.390	1.710%	0.139
%RSD		2.049	0.665	0.000	1.600	2.735	0.598	1.744	143.300
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:09:19	-0.252	0.326	249.900	5692.000	5415.000	1.204	0.795	3.710
2	21:09:38	0.155	0.343	246.700	5521.000	5301.000	1.224	0.715	3.661
3	21:09:57	0.068	0.316	244.900	5470.000	5269.000	1.239	0.585	3.676
X		-0.010	0.328	247.100	5561.000	5329.000	1.222	0.699	3.682
σ		0.214	0.014	2.543	116.400	76.840	0.017	0.106	0.025
%RSD		2185.000	4.282	1.029	2.093	1.442	1.421	15.170	0.691
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:09:19	-0.011	933.200	936.000	1.521	6.460	0.401	0.000	56.150
2	21:09:38	0.053	915.100	909.600	0.518	6.091	-0.720	0.000	54.530
3	21:09:57	0.006	914.000	907.400	0.944	5.641	-0.172	0.000	54.100
X		0.016	920.700	917.600	0.994	6.064	-0.164	0.000	54.930
σ		0.033	10.800	15.920	0.503	0.410	0.561	0.000	1.080
%RSD		206.000	1.173	1.735	50.590	6.765	342.500	0.000	1.967
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:09:19	103.578%	0.255	0.164	101.939%	-0.011	-0.010	3.588	3.915
2	21:09:38	109.051%	0.205	0.167	103.235%	-0.014	-0.015	4.007	3.997
3	21:09:57	110.621%	0.189	0.177	104.750%	-0.024	-0.012	3.809	4.045
X		107.750%	0.216	0.169	103.308%	-0.016	-0.012	3.801	3.986
σ		3.697%	0.035	0.007	1.407%	0.007	0.002	0.209	0.066
%RSD		3.431	16.040	4.126	1.362	42.530	19.350	5.509	1.656
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:09:19	103.012%	-0.383	-0.041	-0.013	2.349	2.201	107.296%	109.078%
2	21:09:38	107.335%	-0.366	-0.041	-0.011	2.004	2.125	111.662%	113.167%
3	21:09:57	110.030%	-0.363	-0.040	-0.008	2.030	2.285	113.519%	115.059%
X		106.792%	-0.371	-0.040	-0.011	2.128	2.204	110.826%	112.435%
σ		3.541%	0.011	0.001	0.003	0.192	0.080	3.195%	3.057%
%RSD		3.315	2.948	1.987	25.580	9.025	3.635	2.883	2.719
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:09:19	-0.007	-0.012	0.032	0.011	0.023	102.572%		
2	21:09:38	-0.006	-0.009	0.040	0.029	0.034	102.029%		
3	21:09:57	-0.010	-0.009	0.030	0.041	0.032	102.653%		
X		-0.008	-0.010	0.034	0.027	0.030	102.418%		
σ		0.002	0.002	0.005	0.015	0.005	0.340%		
%RSD		24.690	18.770	15.710	55.790	18.100	0.332		

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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	21:15:45	93.636%	99.690	100.700	99.030	0.000	49090.000	51730.000	53440.000
2	21:16:05	94.721%	102.000	93.490	102.800	0.000	48430.000	52130.000	54010.000
3	21:16:24	92.740%	105.800	103.900	105.900	0.000	49170.000	52820.000	55040.000
X		93.699%	102.494%	99.370%	102.578%	0.000	97.786%	104.454%	108.329%
σ		0.992%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.059	2.997	5.364	3.348	0.000	0.833	1.052	1.495
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:15:45	528.400	5337.000	0.000	49820.000	47470.000	49720.000	104.285%	94.640
2	21:16:05	541.400	5437.000	0.000	49760.000	47780.000	49570.000	104.802%	97.680
3	21:16:24	554.800	5492.000	0.000	49740.000	47920.000	49430.000	105.828%	97.670
X		108.305%	108.442%	0.000	99.549%	95.443%	99.148%	104.972%	96.662%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.785%	n/a
%RSD		2.439	1.444	0.000	0.085	0.478	0.287	0.748	1.811
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:15:45	100.800	101.300	519.800	26190.000	25300.000	101.000	101.200	101.700
2	21:16:05	101.600	103.900	513.800	26220.000	26040.000	102.000	102.800	103.700
3	21:16:24	102.400	103.200	521.100	26170.000	26020.000	102.300	100.300	102.700
X		101.617%	102.820%	103.643%	104.767%	103.140%	101.763%	101.434%	102.689%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.788	1.308	0.743	0.107	1.646	0.650	1.255	1.009
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:15:45	100.500	99.660	98.050	101.300	105.500	102.500	0.000	102.000
2	21:16:05	102.400	101.000	101.600	102.700	106.700	103.000	0.000	101.100
3	21:16:24	101.500	102.600	101.400	101.600	105.900	104.900	0.000	102.500
X		101.443%	101.108%	100.366%	101.857%	106.014%	103.492%	0.000	101.858%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.908	1.470	2.004	0.703	0.585	1.223	0.000	0.729
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:15:45	104.053%	101.300	102.200	99.457%	99.530	100.900	101.400	103.900
2	21:16:05	108.637%	105.500	105.500	101.261%	101.500	101.100	101.000	103.300
3	21:16:24	110.575%	105.100	106.700	101.610%	102.600	102.300	102.900	104.200
X		107.755%	103.981%	104.805%	100.776%	101.197%	101.409%	101.796%	103.797%
σ		3.349%	n/a	n/a	1.156%	n/a	n/a	n/a	n/a
%RSD		3.108	2.212	2.243	1.147	1.537	0.751	0.985	0.425
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:15:45	103.356%	100.300	99.890	99.450	101.500	102.300	107.929%	109.136%
2	21:16:05	108.059%	100.700	100.100	99.240	102.000	102.100	113.292%	112.946%
3	21:16:24	109.616%	100.800	101.100	100.500	102.700	102.300	114.269%	115.058%
X		107.010%	100.619%	100.353%	99.721%	102.054%	102.238%	111.830%	112.380%
σ		3.259%	n/a	n/a	n/a	n/a	n/a	3.414%	3.001%
%RSD		3.046	0.295	0.620	0.656	0.600	0.093	3.052	2.670
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:15:45	96.350	96.810	95.790	96.050	95.730	104.798%		
2	21:16:05	102.700	102.400	101.600	101.800	102.000	103.340%		
3	21:16:24	104.200	104.200	104.100	103.700	104.200	102.563%		
X		101.081%	101.109%	100.482%	100.488%	100.642%	103.567%		
σ		n/a	n/a	n/a	n/a	n/a	1.135%		
%RSD		4.125	3.787	4.237	3.944	4.360	1.096		

CCB6 7/16/2014 9:22:16 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	21:22:35	99.343%	-0.231	-0.197	-0.010	0.000	71.960	4.240	3.211
2	21:22:54	101.729%	-0.281	1.836	-0.863	0.000	65.110	3.814	3.447
3	21:23:13	101.030%	-0.257	-0.366	-0.403	0.000	70.790	3.789	3.475
X		100.701%	-0.256	0.424	-0.425	0.000	69.290	3.948	3.378
σ		1.226%	0.025	1.225	0.427	0.000	3.666	0.254	0.145
%RSD		1.218	9.656	288.900	100.400	0.000	5.291	6.428	4.293
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:22:35	-0.492	4.022	0.000	26.760	4.519	55.820	104.638%	0.071
2	21:22:54	-0.574	3.788	0.000	25.980	11.210	61.300	105.489%	0.020
3	21:23:13	-0.571	4.249	0.000	27.180	-5.207	68.690	107.490%	-0.127
X		-0.546	4.020	0.000	26.640	3.506	61.930	105.872%	-0.012
σ		0.047	0.231	0.000	0.608	8.254	6.460	1.464%	0.103
%RSD		8.579	5.738	0.000	2.282	235.400	10.430	1.383	845.500
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:22:35	0.022	-0.021	0.046	3.743	4.913	0.001	-0.004	1.928
2	21:22:54	-0.004	-0.018	0.043	3.220	1.065	-0.004	0.008	1.829
3	21:23:13	-0.063	0.017	0.039	1.676	1.928	-0.003	0.007	1.782
X		-0.015	-0.008	0.043	2.879	2.635	-0.002	0.003	1.846
σ		0.043	0.021	0.004	1.075	2.019	0.002	0.007	0.075
%RSD		289.300	279.400	8.406	37.320	76.610	114.100	196.100	4.043
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:22:35	-0.087	0.281	0.135	0.004	4.428	0.159	0.000	0.026
2	21:22:54	-0.027	0.238	0.139	-0.021	5.039	-0.144	0.000	0.042
3	21:23:13	-0.002	0.328	0.164	-0.106	4.746	-0.410	0.000	0.048
X		-0.039	0.282	0.146	-0.041	4.738	-0.132	0.000	0.039
σ		0.044	0.045	0.016	0.057	0.305	0.285	0.000	0.011
%RSD		113.100	16.050	10.740	139.200	6.447	216.100	0.000	29.530
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:22:35	110.967%	0.177	0.178	112.243%	-0.016	-0.012	-0.057	-0.042
2	21:22:54	114.478%	0.155	0.143	114.448%	-0.023	-0.010	0.007	0.006
3	21:23:13	114.928%	0.175	0.138	114.689%	-0.015	-0.003	0.012	0.003
X		113.458%	0.169	0.153	113.793%	-0.018	-0.009	-0.013	-0.011
σ		2.169%	0.012	0.022	1.348%	0.004	0.005	0.038	0.027
%RSD		1.911	7.216	14.080	1.184	22.780	53.660	304.000	249.400
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:22:35	110.785%	-0.399	0.101	0.105	-0.015	-0.015	110.411%	111.245%
2	21:22:54	113.652%	-0.346	0.086	0.101	0.022	-0.012	114.445%	114.665%
3	21:23:13	113.650%	-0.374	0.093	0.118	-0.008	-0.012	115.545%	116.040%
X		112.696%	-0.373	0.093	0.108	-0.001	-0.013	113.467%	113.983%
σ		1.655%	0.026	0.008	0.009	0.020	0.002	2.703%	2.469%
%RSD		1.468	7.090	8.211	8.453	2559.000	15.570	2.383	2.166
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:22:35	-0.010	-0.002	-0.004	-0.001	-0.009	110.641%		
2	21:22:54	-0.002	-0.004	-0.007	0.002	-0.008	111.506%		
3	21:23:13	-0.004	-0.002	-0.009	-0.008	-0.012	112.673%		
X		-0.005	-0.003	-0.007	-0.003	-0.010	111.607%		
σ		0.004	0.001	0.002	0.005	0.002	1.020%		
%RSD		81.510	26.790	35.670	204.400	23.520	0.914		

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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	21:26:19	94.344%	-0.200	344.000	357.100	0.000	842000.000	111000.000	116200.000
2	21:26:38	95.826%	-0.277	332.400	366.400	0.000	849400.000	112900.000	118300.000
3	21:26:57	97.183%	-0.205	343.500	369.500	0.000	838200.000	113000.000	118900.000
X		95.784%	-0.227	340.000	364.300	0.000	843200.000	112300.000	117800.000
σ		1.420%	0.043	6.545	6.502	0.000	5689.000	1129.000	1434.000
%RSD		1.482	18.960	1.925	1.784	0.000	0.675	1.005	1.218
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:26:19	0.671	1015.000	0.000	35250.000	32180.000	33040.000	101.267%	0.560
2	21:26:38	0.735	1036.000	0.000	35410.000	33300.000	33780.000	103.321%	0.322
3	21:26:57	0.583	1052.000	0.000	35010.000	32570.000	33390.000	105.694%	0.503
X		0.663	1034.000	0.000	35220.000	32690.000	33410.000	103.427%	0.462
σ		0.077	18.430	0.000	200.300	566.100	369.200	2.216%	0.125
%RSD		11.570	1.782	0.000	0.569	1.732	1.105	2.142	27.000
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:26:19	1.626	0.757	15.560	31.720	89.880	0.040	-0.048	13.430
2	21:26:38	1.869	0.780	16.120	30.180	90.060	0.044	-0.113	14.020
3	21:26:57	0.127	0.886	15.760	28.300	90.540	0.036	-0.071	13.830
X		1.207	0.807	15.810	30.060	90.160	0.040	-0.077	13.760
σ		0.944	0.069	0.284	1.712	0.340	0.004	0.033	0.301
%RSD		78.140	8.526	1.795	5.696	0.377	10.640	42.430	2.186
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:26:19	0.124	1.486	0.984	4.208	7.506	3.461	0.000	643.500
2	21:26:38	0.229	1.420	1.338	5.072	7.508	2.068	0.000	632.400
3	21:26:57	0.031	1.351	1.211	3.998	7.923	2.603	0.000	636.800
X		0.128	1.419	1.177	4.426	7.645	2.711	0.000	637.600
σ		0.099	0.068	0.179	0.569	0.240	0.703	0.000	5.573
%RSD		77.220	4.772	15.230	12.860	3.138	25.920	0.000	0.874
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:26:19	106.644%	3.430	3.817	98.400%	-0.014	-0.011	0.015	0.015
2	21:26:38	111.670%	3.653	3.740	100.912%	-0.014	-0.019	-0.030	-0.020
3	21:26:57	113.987%	4.126	3.884	103.147%	-0.022	-0.018	-0.035	-0.023
X		110.767%	3.736	3.814	100.820%	-0.017	-0.016	-0.017	-0.010
σ		3.754%	0.356	0.072	2.375%	0.005	0.004	0.028	0.021
%RSD		3.389	9.522	1.887	2.356	28.520	25.920	165.800	218.900
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:26:19	103.563%	-0.070	0.214	0.174	6.225	6.475	107.027%	107.788%
2	21:26:38	107.443%	-0.027	0.178	0.211	6.360	6.550	110.756%	112.594%
3	21:26:57	111.053%	0.022	0.173	0.158	6.348	6.284	115.463%	116.230%
X		107.353%	-0.025	0.188	0.181	6.311	6.436	111.082%	112.204%
σ		3.746%	0.046	0.022	0.027	0.074	0.137	4.227%	4.234%
%RSD		3.489	184.300	11.890	15.180	1.178	2.135	3.806	3.774
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:26:19	-0.001	-0.008	0.016	0.017	0.017	94.060%		
2	21:26:38	-0.007	-0.007	0.011	0.012	0.012	94.354%		
3	21:26:57	-0.004	-0.010	0.023	0.009	0.014	96.562%		
X		-0.004	-0.008	0.017	0.013	0.014	94.992%		
σ		0.003	0.001	0.006	0.004	0.002	1.367%		
%RSD		78.890	16.560	38.870	31.420	16.390	1.439		

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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	21:30:00	93.483%	-0.249	339.100	356.900	0.000	3703.000	5527.000	5881.000
2	21:30:19	97.731%	-0.131	340.900	354.500	0.000	3598.000	5518.000	5923.000
3	21:30:38	97.830%	-0.059	336.800	354.700	0.000	3570.000	5497.000	5912.000
X		96.348%	-0.146	338.900	355.300	0.000	3624.000	5514.000	5905.000
σ		2.482%	0.096	2.057	1.358	0.000	69.960	15.480	21.700
%RSD		2.576	65.750	0.607	0.382	0.000	1.930	0.281	0.367
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:30:00	2430.000	6685.000	0.000	1621.000	7716.000	7895.000	97.148%	21.680
2	21:30:19	2459.000	6747.000	0.000	1603.000	7546.000	8015.000	98.089%	22.060
3	21:30:38	2413.000	6624.000	0.000	1592.000	7834.000	7938.000	99.873%	23.160
X		2434.000	6685.000	0.000	1605.000	7699.000	7949.000	98.370%	22.300
σ		22.920	61.700	0.000	14.500	145.000	60.490	1.384%	0.768
%RSD		0.942	0.923	0.000	0.903	1.883	0.761	1.407	3.446
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:30:00	15.940	6.425	50.710	2235.000	2115.000	2.990	9.610	6.565
2	21:30:19	18.460	6.460	51.470	2255.000	2121.000	3.103	10.250	6.289
3	21:30:38	15.840	6.403	51.180	2222.000	2113.000	3.080	10.730	6.269
X		16.750	6.430	51.120	2237.000	2116.000	3.058	10.200	6.374
σ		1.485	0.029	0.385	16.490	3.937	0.059	0.563	0.166
%RSD		8.869	0.448	0.752	0.737	0.186	1.944	5.523	2.596
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:30:00	2.994	471.800	470.400	8.677	7.499	-0.079	0.000	44.270
2	21:30:19	3.121	477.700	475.700	7.808	6.768	0.835	0.000	44.870
3	21:30:38	3.016	469.700	468.600	7.639	7.950	0.206	0.000	44.700
X		3.044	473.100	471.600	8.041	7.405	0.321	0.000	44.620
σ		0.068	4.140	3.655	0.557	0.597	0.468	0.000	0.313
%RSD		2.233	0.875	0.775	6.927	8.056	145.800	0.000	0.703
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:30:00	107.878%	0.743	0.681	105.776%	-0.014	-0.017	0.558	0.585
2	21:30:19	109.978%	0.695	0.689	105.878%	-0.021	-0.013	0.685	0.746
3	21:30:38	113.028%	0.704	0.656	107.741%	-0.028	-0.012	0.615	0.613
X		110.295%	0.714	0.676	106.465%	-0.021	-0.014	0.619	0.648
σ		2.589%	0.026	0.017	1.106%	0.007	0.003	0.063	0.086
%RSD		2.348	3.593	2.538	1.039	33.060	19.690	10.210	13.300
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:30:00	105.203%	-0.027	0.337	0.363	13.640	12.790	109.267%	110.688%
2	21:30:19	107.316%	-0.012	0.297	0.314	13.320	13.340	111.923%	112.512%
3	21:30:38	109.412%	-0.049	0.282	0.337	12.600	12.830	114.868%	115.640%
X		107.310%	-0.029	0.305	0.338	13.190	12.990	112.019%	112.947%
σ		2.105%	0.019	0.028	0.025	0.529	0.309	2.802%	2.504%
%RSD		1.961	63.030	9.192	7.294	4.009	2.378	2.501	2.217
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:30:00	0.006	0.010	5.156	4.802	4.958	104.982%		
2	21:30:19	0.012	0.009	5.222	4.824	5.054	106.471%		
3	21:30:38	0.005	0.007	5.172	4.951	5.037	108.084%		
X		0.008	0.008	5.183	4.859	5.016	106.513%		
σ		0.004	0.001	0.034	0.080	0.051	1.551%		
%RSD		46.500	16.090	0.665	1.653	1.025	1.456		

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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	21:33:41	95.602%	-0.276	50.550	52.090	0.000	1816.000	1379.000	1469.000
2	21:34:00	96.751%	-0.351	48.710	53.890	0.000	1786.000	1383.000	1484.000
3	21:34:19	96.098%	-0.351	51.380	51.380	0.000	1794.000	1395.000	1489.000
X		96.150%	-0.326	50.210	52.460	0.000	1799.000	1386.000	1480.000
σ		0.576%	0.043	1.362	1.296	0.000	15.080	8.291	10.570
%RSD		0.599	13.260	2.713	2.471	0.000	0.838	0.598	0.714
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:33:41	219.700	1663.000	0.000	1752.000	6011.000	6264.000	96.624%	3.318
2	21:34:00	226.200	1674.000	0.000	1730.000	6114.000	6268.000	97.114%	2.615
3	21:34:19	224.800	1669.000	0.000	1704.000	5969.000	6202.000	97.185%	3.373
X		223.600	1668.000	0.000	1729.000	6031.000	6245.000	96.974%	3.102
σ		3.426	5.711	0.000	24.080	74.460	36.860	0.306%	0.422
%RSD		1.532	0.342	0.000	1.393	1.235	0.590	0.315	13.620
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:33:41	28.900	1.872	12.220	545.200	542.100	0.794	2.047	4.316
2	21:34:00	30.770	1.854	12.230	544.000	540.200	0.770	2.197	4.113
3	21:34:19	30.540	1.791	12.570	542.200	547.800	0.744	2.084	4.401
X		30.070	1.839	12.340	543.800	543.400	0.769	2.109	4.277
σ		1.022	0.042	0.201	1.513	3.931	0.025	0.078	0.148
%RSD		3.400	2.311	1.629	0.278	0.724	3.274	3.703	3.456
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:33:41	2.037	7.516	7.423	16.870	6.358	0.403	0.000	28.500
2	21:34:00	1.949	6.903	7.391	17.410	7.309	-0.444	0.000	28.200
3	21:34:19	1.749	7.793	8.175	16.850	7.136	-0.320	0.000	28.220
X		1.911	7.404	7.663	17.040	6.934	-0.120	0.000	28.310
σ		0.147	0.455	0.443	0.322	0.506	0.457	0.000	0.171
%RSD		7.708	6.147	5.785	1.886	7.304	380.400	0.000	0.603
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:33:41	105.485%	1.523	1.376	105.185%	-0.021	-0.017	0.011	0.013
2	21:34:00	107.426%	1.435	1.527	105.379%	-0.021	-0.009	0.050	0.050
3	21:34:19	108.769%	1.552	1.484	105.554%	-0.021	-0.013	-0.007	-0.017
X		107.227%	1.503	1.462	105.373%	-0.021	-0.013	0.018	0.016
σ		1.651%	0.061	0.078	0.185%	0.000	0.004	0.029	0.033
%RSD		1.540	4.071	5.319	0.175	0.177	32.410	159.100	213.800
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:33:41	104.751%	-0.090	0.988	1.035	4.773	4.841	106.945%	109.068%
2	21:34:00	105.668%	-0.118	1.078	1.067	4.680	4.736	110.128%	111.257%
3	21:34:19	106.118%	-0.058	1.115	1.056	4.886	4.510	110.774%	111.847%
X		105.512%	-0.088	1.060	1.053	4.779	4.696	109.282%	110.724%
σ		0.697%	0.030	0.065	0.016	0.103	0.169	2.050%	1.464%
%RSD		0.660	34.110	6.154	1.558	2.158	3.597	1.875	1.323
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:33:41	-0.003	0.000	1.454	1.350	1.426	105.157%		
2	21:34:00	0.001	-0.003	1.439	1.364	1.413	105.395%		
3	21:34:19	0.004	0.001	1.470	1.327	1.393	105.997%		
X		0.001	-0.000	1.454	1.347	1.411	105.516%		
σ		0.004	0.002	0.015	0.019	0.017	0.433%		
%RSD		511.900	415.700	1.056	1.394	1.191	0.410		

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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	21:37:22	89.377%	-0.218	416.600	433.800	0.000	357300.000	49230.000	52040.000	
2	21:37:41	91.738%	-0.221	412.600	426.900	0.000	350000.000	49190.000	52440.000	
3	21:38:00	90.650%	-0.272	405.800	435.100	0.000	352200.000	50200.000	53550.000	
X		90.588%	-0.237	411.700	431.900	0.000	353200.000	49540.000	52670.000	
		σ	1.182%	0.031	5.458	4.399	0.000	3701.000	573.400	784.700
		%RSD	1.305	12.880	1.326	1.018	0.000	1.048	1.157	1.490
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	21:37:22	61.470	2275.000	0.000	9472.000	27520.000	28270.000	92.567%	0.246	
2	21:37:41	63.270	2299.000	0.000	9426.000	27390.000	28400.000	93.633%	0.377	
3	21:38:00	65.420	2337.000	0.000	9401.000	27890.000	28730.000	94.007%	0.510	
X		63.390	2304.000	0.000	9433.000	27600.000	28470.000	93.402%	0.378	
		σ	1.978	31.020	0.000	35.750	257.000	236.300	0.747%	0.132
		%RSD	3.120	1.347	0.000	0.379	0.931	0.830	0.800	34.900
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	21:37:22	1.373	1.055	1260.000	27020.000	25950.000	5.861	3.747	8.341	
2	21:37:41	0.527	0.978	1264.000	26950.000	26220.000	5.808	3.553	9.420	
3	21:38:00	0.089	0.987	1279.000	27380.000	26690.000	6.019	3.772	10.320	
X		0.663	1.007	1268.000	27120.000	26290.000	5.896	3.691	9.361	
		σ	0.653	0.042	10.440	230.100	374.500	0.110	0.120	0.992
		%RSD	98.500	4.177	0.823	0.848	1.425	1.868	3.241	10.600
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	21:37:22	0.367	4528.000	4378.000	5.414	7.234	0.658	0.000	273.000	
2	21:37:41	0.502	4487.000	4470.000	5.027	7.509	1.842	0.000	273.700	
3	21:38:00	0.415	4538.000	4461.000	4.820	8.148	1.358	0.000	279.400	
X		0.428	4518.000	4436.000	5.087	7.630	1.286	0.000	275.400	
		σ	0.068	27.060	50.860	0.301	0.469	0.596	0.000	3.505
		%RSD	15.940	0.599	1.146	5.924	6.152	46.310	0.000	1.273
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	21:37:22	101.886%	0.830	0.780	94.107%	-0.014	-0.007	19.660	20.330	
2	21:37:41	105.180%	0.921	0.900	95.834%	-0.023	-0.018	19.950	20.160	
3	21:38:00	105.439%	0.945	0.720	95.449%	-0.027	-0.022	20.260	20.540	
X		104.168%	0.899	0.800	95.130%	-0.021	-0.016	19.960	20.340	
		σ	1.981%	0.061	0.092	0.907%	0.007	0.007	0.299	0.190
		%RSD	1.901	6.778	11.490	0.953	32.900	47.160	1.500	0.933
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	21:37:22	98.657%	-0.041	0.029	0.052	11.370	10.990	104.708%	106.399%	
2	21:37:41	102.030%	0.063	0.027	0.059	11.050	10.790	109.305%	111.865%	
3	21:38:00	102.402%	-0.009	0.022	0.047	11.100	11.200	110.568%	112.542%	
X		101.030%	0.004	0.026	0.053	11.170	11.000	108.194%	110.269%	
		σ	2.063%	0.053	0.003	0.006	0.174	0.205	3.084%	3.368%
		%RSD	2.042	1250.000	13.010	11.530	1.562	1.863	2.850	3.054
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	21:37:22	-0.007	-0.011	0.174	0.185	0.184	93.874%			
2	21:37:41	-0.012	-0.011	0.197	0.200	0.201	95.234%			
3	21:38:00	-0.008	-0.011	0.221	0.170	0.198	96.147%			
X		-0.009	-0.011	0.197	0.185	0.194	95.085%			
		σ	0.003	0.000	0.023	0.015	0.009	1.144%		
		%RSD	30.170	4.206	11.760	8.124	4.750	1.203		

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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	21:41:03	109.117%	48.190	971.600	1027.000	0.000	44760.000	52490.000	56350.000
2	21:41:22	110.620%	47.320	995.200	1035.000	0.000	44010.000	52270.000	56720.000
3	21:41:41	112.039%	47.800	964.300	1046.000	0.000	43860.000	53070.000	57040.000
X		110.592%	47.770	977.100	1036.000	0.000	44210.000	52610.000	56710.000
σ		1.461%	0.437	16.150	9.742	0.000	481.200	411.700	345.800
%RSD		1.321	0.914	1.653	0.940	0.000	1.089	0.783	0.610
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:41:03	2296.000	10780.000	0.000	47220.000	46400.000	50200.000	107.203%	957.900
2	21:41:22	2312.000	10800.000	0.000	46560.000	46700.000	49720.000	109.194%	974.100
3	21:41:41	2324.000	10810.000	0.000	46510.000	46850.000	49770.000	110.596%	978.500
X		2311.000	10790.000	0.000	46760.000	46650.000	49900.000	108.998%	970.200
σ		13.890	15.960	0.000	395.900	230.400	263.200	1.705%	10.840
%RSD		0.601	0.148	0.000	0.847	0.494	0.527	1.564	1.117
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:41:03	506.500	205.400	506.000	1050.000	1112.000	478.100	475.800	238.400
2	21:41:22	512.300	207.400	516.100	1034.000	1108.000	478.200	477.900	239.200
3	21:41:41	513.400	207.400	513.800	1029.000	1099.000	478.500	473.700	237.600
X		510.700	206.700	512.000	1038.000	1106.000	478.300	475.800	238.400
σ		3.716	1.161	5.281	10.890	6.703	0.205	2.054	0.777
%RSD		0.728	0.562	1.032	1.050	0.606	0.043	0.432	0.326
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:41:03	235.400	483.500	476.000	37.370	18.420	8.997	0.000	1006.000
2	21:41:22	237.300	481.400	480.600	37.250	17.740	9.173	0.000	993.700
3	21:41:41	237.000	480.300	478.300	37.770	17.370	10.490	0.000	1000.000
X		236.600	481.700	478.300	37.460	17.840	9.554	0.000	1000.000
σ		1.052	1.604	2.315	0.273	0.529	0.817	0.000	6.300
%RSD		0.445	0.333	0.484	0.729	2.966	8.555	0.000	0.630
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:41:03	116.337%	1028.000	1034.000	106.599%	48.720	49.520	51.180	44.450
2	21:41:22	119.891%	1036.000	1042.000	108.548%	49.160	49.440	50.740	45.780
3	21:41:41	121.565%	1052.000	1068.000	109.112%	49.370	49.640	50.280	47.060
X		119.264%	1039.000	1048.000	108.086%	49.080	49.530	50.730	45.760
σ		2.670%	11.990	17.600	1.319%	0.335	0.101	0.447	1.309
%RSD		2.239	1.155	1.679	1.220	0.682	0.204	0.882	2.860
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:41:03	110.245%	2022.000	504.000	503.500	1970.000	1967.000	116.760%	119.277%
2	21:41:22	113.371%	2001.000	503.800	503.000	1964.000	1963.000	121.895%	123.449%
3	21:41:41	115.123%	1997.000	506.800	506.100	1982.000	1987.000	121.951%	123.454%
X		112.913%	2007.000	504.900	504.200	1972.000	1973.000	120.202%	122.060%
σ		2.471%	13.690	1.694	1.676	9.001	12.460	2.981%	2.410%
%RSD		2.188	0.682	0.336	0.332	0.457	0.631	2.480	1.975
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:41:03	46.160	46.710	19.250	19.500	19.420	109.396%		
2	21:41:22	48.030	47.760	19.840	20.080	19.970	110.582%		
3	21:41:41	48.710	49.120	20.060	20.360	20.350	109.847%		
X		47.640	47.870	19.720	19.980	19.920	109.942%		
σ		1.320	1.210	0.421	0.438	0.467	0.599%		
%RSD		2.772	2.528	2.137	2.191	2.343	0.545		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:47:51	104.582%	-0.237	0.466	0.841	0.000	49.440	0.009	-0.025
2	21:48:10	106.454%	-0.351	2.088	0.936	0.000	48.830	0.475	0.345
3	21:48:29	106.677%	-0.194	1.398	1.034	0.000	51.560	0.394	0.249
X		105.904%	-0.261	1.317	0.937	0.000	49.950	0.293	0.190
σ		1.150%	0.081	0.814	0.096	0.000	1.434	0.250	0.192
%RSD		1.086	31.080	61.830	10.290	0.000	2.870	85.220	101.100
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:47:51	-0.515	2.503	0.000	23.120	11.440	45.070	104.541%	-0.076
2	21:48:10	-0.492	1.873	0.000	24.720	4.457	39.040	104.509%	-0.002
3	21:48:29	-0.417	2.114	0.000	21.800	-5.140	41.530	106.686%	0.065
X		-0.475	2.163	0.000	23.210	3.585	41.880	105.245%	-0.004
σ		0.051	0.318	0.000	1.465	8.323	3.026	1.248%	0.070
%RSD		10.830	14.710	0.000	6.312	232.200	7.226	1.186	1591.000
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:47:51	-0.390	0.267	0.005	-2.986	-3.184	-0.015	0.009	1.583
2	21:48:10	-0.037	0.266	0.034	-3.204	-5.496	-0.014	0.071	1.674
3	21:48:29	-0.300	0.258	0.037	-4.461	-5.492	-0.015	0.034	1.700
X		-0.242	0.263	0.026	-3.550	-4.724	-0.015	0.038	1.652
σ		0.183	0.005	0.018	0.796	1.333	0.001	0.031	0.061
%RSD		75.580	1.929	69.390	22.430	28.230	5.754	82.030	3.712
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:47:51	-0.029	0.713	0.667	0.423	5.474	-0.611	0.000	0.008
2	21:48:10	0.016	0.817	0.845	0.166	5.492	0.541	0.000	0.005
3	21:48:29	-0.066	0.638	0.698	0.004	4.988	0.070	0.000	0.009
X		-0.026	0.722	0.737	0.198	5.318	0.000	0.000	0.007
σ		0.041	0.090	0.095	0.212	0.286	0.579	0.000	0.002
%RSD		154.400	12.400	12.940	107.200	5.383	192900.000	0.000	28.540
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:47:51	112.284%	0.659	0.568	109.269%	-0.024	-0.015	-0.061	-0.040
2	21:48:10	114.336%	0.553	0.521	109.951%	-0.015	-0.015	-0.079	-0.059
3	21:48:29	117.218%	0.572	0.400	112.639%	-0.021	-0.008	-0.111	-0.102
X		114.613%	0.595	0.496	110.620%	-0.020	-0.013	-0.084	-0.067
σ		2.479%	0.057	0.087	1.782%	0.005	0.004	0.026	0.032
%RSD		2.163	9.543	17.490	1.611	23.920	29.400	30.610	47.490
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:47:51	106.591%	0.008	-0.026	-0.026	-0.007	-0.028	107.491%	108.462%
2	21:48:10	108.462%	-0.071	-0.035	-0.013	0.008	-0.006	110.769%	110.793%
3	21:48:29	110.776%	-0.093	-0.033	-0.023	-0.023	-0.016	111.823%	113.235%
X		108.610%	-0.052	-0.031	-0.020	-0.007	-0.017	110.028%	110.830%
σ		2.097%	0.053	0.005	0.007	0.016	0.011	2.259%	2.387%
%RSD		1.930	101.400	15.530	32.470	214.200	65.640	2.053	2.154
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:47:51	0.061	0.049	-0.012	-0.015	-0.015	108.029%		
2	21:48:10	0.073	0.062	-0.013	-0.011	-0.015	106.749%		
3	21:48:29	0.039	0.050	-0.008	0.001	-0.011	109.087%		
X		0.058	0.054	-0.011	-0.009	-0.013	107.955%		
σ		0.017	0.007	0.002	0.008	0.002	1.171%		
%RSD		30.090	13.510	20.020	96.630	14.190	1.084		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:33	101.722%	-0.092	46.910	49.220	0.000	51590.000	19950.000	21390.000
2	21:51:52	102.842%	-0.165	47.830	49.820	0.000	51060.000	19930.000	21400.000
3	21:52:12	103.466%	-0.143	49.320	50.450	0.000	51030.000	20000.000	21640.000
X		102.677%	-0.134	48.020	49.830	0.000	51230.000	19960.000	21480.000
σ		0.884%	0.037	1.217	0.616	0.000	313.100	35.530	141.900
%RSD		0.861	27.960	2.534	1.235	0.000	0.611	0.178	0.661
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:33	3764.000	8300.000	0.000	6291.000	82770.000	90180.000	99.201%	51.260
2	21:51:52	3800.000	8208.000	0.000	6246.000	83350.000	89050.000	101.194%	52.590
3	21:52:12	3828.000	8245.000	0.000	6225.000	83670.000	88850.000	102.577%	69.660
X		3797.000	8251.000	0.000	6254.000	83260.000	89360.000	100.991%	57.840
σ		31.880	46.200	0.000	33.360	460.100	718.000	1.697%	10.260
%RSD		0.839	0.560	0.000	0.533	0.553	0.803	1.681	17.740
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:33	4.672	9.720	192.600	5852.000	5648.000	3.522	3.925	13.700
2	21:51:52	7.351	9.690	192.800	5753.000	5607.000	3.519	3.787	13.320
3	21:52:12	7.518	9.644	192.600	5730.000	5609.000	3.441	3.675	13.110
X		6.514	9.685	192.600	5779.000	5621.000	3.494	3.796	13.370
σ		1.597	0.038	0.117	64.730	22.850	0.046	0.125	0.298
%RSD		24.520	0.396	0.061	1.120	0.406	1.318	3.303	2.232
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:33	11.400	66.260	65.420	0.595	7.116	0.190	0.000	191.900
2	21:51:52	11.550	67.750	64.280	0.820	6.563	-0.648	0.000	193.100
3	21:52:12	11.250	66.130	66.770	1.748	6.941	0.290	0.000	191.300
X		11.400	66.710	65.490	1.054	6.874	-0.056	0.000	192.100
σ		0.150	0.898	1.243	0.611	0.283	0.515	0.000	0.928
%RSD		1.318	1.347	1.898	57.980	4.114	921.000	0.000	0.483
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:33	109.805%	6.544	6.709	102.276%	0.001	0.021	0.272	0.262
2	21:51:52	112.332%	6.843	6.825	103.412%	0.000	0.023	0.217	0.219
3	21:52:12	114.647%	6.898	6.652	104.810%	0.013	0.027	0.213	0.190
X		112.262%	6.762	6.729	103.499%	0.005	0.024	0.234	0.224
σ		2.422%	0.191	0.088	1.269%	0.008	0.003	0.033	0.036
%RSD		2.157	2.823	1.307	1.226	157.500	12.080	14.070	16.190
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:33	102.767%	3.541	0.312	0.350	72.740	72.930	107.755%	110.013%
2	21:51:52	105.654%	3.300	0.312	0.377	73.060	73.090	111.583%	113.122%
3	21:52:12	107.229%	3.283	0.344	0.374	73.180	72.360	113.374%	115.024%
X		105.217%	3.375	0.323	0.367	72.990	72.790	110.904%	112.720%
σ		2.263%	0.145	0.018	0.015	0.226	0.386	2.871%	2.530%
%RSD		2.151	4.284	5.713	3.995	0.310	0.530	2.588	2.244
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:51:33	0.080	0.056	15.290	14.180	14.640	104.363%		
2	21:51:52	0.078	0.080	15.890	14.950	15.290	103.485%		
3	21:52:12	0.063	0.076	16.090	14.860	15.520	104.175%		
X		0.074	0.071	15.760	14.660	15.150	104.008%		
σ		0.009	0.013	0.419	0.418	0.459	0.462%		
%RSD		12.180	17.920	2.661	2.849	3.028	0.445		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	21:55:16	104.971%	-0.169	44.930	46.760	0.000	45220.000	20370.000	22000.000	
2	21:55:35	108.947%	-0.241	42.380	46.900	0.000	43900.000	20050.000	21700.000	
3	21:55:54	108.276%	-0.196	45.110	45.040	0.000	44410.000	20290.000	21980.000	
X		107.398%	-0.202	44.140	46.230	0.000	44510.000	20240.000	21890.000	
		σ	2.128%	0.037	1.525	1.039	0.000	664.100	168.100	170.300
		%RSD	1.982	18.090	3.455	2.247	0.000	1.492	0.831	0.778
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	21:55:16	6.146	5453.000	0.000	4214.000	85740.000	93390.000	101.836%	1.508	
2	21:55:35	6.386	5388.000	0.000	4127.000	84590.000	92350.000	103.912%	1.252	
3	21:55:54	5.941	5438.000	0.000	4124.000	84690.000	92020.000	105.288%	1.257	
X		6.158	5426.000	0.000	4155.000	85010.000	92590.000	103.679%	1.339	
		σ	0.223	33.730	0.000	50.980	635.800	713.100	1.738%	0.146
		%RSD	3.623	0.622	0.000	1.227	0.748	0.770	1.676	10.930
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	21:55:16	0.719	4.370	38.010	8.776	202.400	0.137	0.033	2.153	
2	21:55:35	-0.375	4.238	37.970	8.117	193.400	0.134	-0.048	1.947	
3	21:55:54	0.141	4.144	37.810	7.746	196.300	0.137	0.007	1.963	
X		0.162	4.251	37.930	8.213	197.400	0.136	-0.003	2.021	
		σ	0.547	0.114	0.107	0.522	4.580	0.001	0.041	0.115
		%RSD	338.800	2.678	0.282	6.353	2.320	0.992	1585.000	5.667
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	21:55:16	0.575	2.547	2.865	0.998	6.303	1.057	0.000	203.400	
2	21:55:35	0.554	2.715	2.497	-0.044	7.070	0.579	0.000	205.300	
3	21:55:54	0.388	2.838	2.409	0.167	6.151	0.859	0.000	206.800	
X		0.506	2.700	2.590	0.374	6.508	0.831	0.000	205.100	
		σ	0.103	0.146	0.242	0.551	0.492	0.240	0.000	1.724
		%RSD	20.270	5.405	9.337	147.400	7.568	28.870	0.000	0.841
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	21:55:16	110.006%	2.613	2.481	105.224%	-0.021	-0.015	-0.027	-0.036	
2	21:55:35	113.089%	2.454	2.399	106.145%	-0.018	-0.011	0.054	0.054	
3	21:55:54	113.842%	2.650	2.530	106.299%	-0.020	-0.011	0.058	0.033	
X		112.312%	2.572	2.470	105.889%	-0.020	-0.012	0.028	0.017	
		σ	2.033%	0.104	0.066	0.581%	0.001	0.002	0.048	0.047
		%RSD	1.810	4.051	2.692	0.549	6.494	19.590	171.700	276.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	21:55:16	105.309%	2.488	0.065	0.108	39.540	39.880	109.849%	110.703%	
2	21:55:35	108.463%	2.529	0.081	0.116	40.430	39.940	113.147%	114.335%	
3	21:55:54	108.118%	2.612	0.080	0.114	41.270	40.450	114.068%	114.983%	
X		107.297%	2.543	0.075	0.113	40.410	40.090	112.355%	113.340%	
		σ	1.730%	0.063	0.009	0.005	0.867	0.313	2.218%	2.307%
		%RSD	1.612	2.474	12.180	4.022	2.146	0.780	1.974	2.035
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	21:55:16	0.021	0.020	0.022	0.029	0.026	103.366%			
2	21:55:35	0.032	0.026	0.035	0.037	0.029	105.482%			
3	21:55:54	0.023	0.026	0.017	0.036	0.019	106.130%			
X		0.025	0.024	0.024	0.034	0.025	104.993%			
		σ	0.006	0.003	0.009	0.004	0.005	1.446%		
		%RSD	24.030	13.840	37.010	12.310	19.020	1.377		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:58:58	96.372%	-0.178	8.559	8.573	0.000	9334.000	3862.000	4151.000
2	21:59:18	99.682%	-0.279	8.071	7.958	0.000	9143.000	3838.000	4075.000
3	21:59:37	98.063%	-0.327	7.371	8.544	0.000	9114.000	3869.000	4144.000
X		98.039%	-0.261	8.000	8.358	0.000	9197.000	3856.000	4123.000
σ		1.655%	0.076	0.597	0.347	0.000	119.700	16.180	41.660
%RSD		1.688	29.180	7.466	4.154	0.000	1.302	0.420	1.010
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:58:58	1.417	1036.000	0.000	834.900	17030.000	17630.000	96.057%	0.230
2	21:59:18	0.818	1027.000	0.000	829.100	16930.000	17690.000	97.617%	0.196
3	21:59:37	0.817	1040.000	0.000	820.300	17100.000	17540.000	99.098%	0.164
X		1.018	1034.000	0.000	828.100	17020.000	17620.000	97.591%	0.197
σ		0.346	6.799	0.000	7.317	86.700	72.470	1.520%	0.033
%RSD		34.010	0.657	0.000	0.884	0.509	0.411	1.558	16.690
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:58:58	0.234	1.248	7.428	0.879	35.900	0.029	0.019	1.345
2	21:59:18	0.110	1.175	7.514	0.408	35.690	0.002	0.231	1.331
3	21:59:37	0.418	1.185	7.568	0.514	35.670	0.011	0.001	1.495
X		0.254	1.203	7.503	0.600	35.750	0.014	0.084	1.391
σ		0.155	0.039	0.071	0.247	0.124	0.014	0.128	0.091
%RSD		61.020	3.267	0.941	41.150	0.345	99.690	152.800	6.542
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:58:58	0.149	0.902	0.923	0.524	6.164	0.497	0.000	40.970
2	21:59:18	-0.042	0.784	0.569	0.691	5.371	0.294	0.000	40.090
3	21:59:37	0.009	0.854	0.703	-0.615	5.142	-0.137	0.000	39.980
X		0.039	0.847	0.732	0.200	5.559	0.218	0.000	40.340
σ		0.099	0.059	0.179	0.711	0.536	0.324	0.000	0.543
%RSD		256.600	7.007	24.480	355.600	9.650	148.400	0.000	1.347
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:58:58	103.937%	0.584	0.504	103.185%	-0.016	-0.007	-0.034	-0.017
2	21:59:18	106.480%	0.586	0.541	104.416%	-0.017	-0.013	-0.053	-0.042
3	21:59:37	108.849%	0.534	0.525	106.190%	-0.021	-0.015	0.019	0.000
X		106.422%	0.568	0.523	104.597%	-0.018	-0.012	-0.023	-0.020
σ		2.457%	0.029	0.018	1.511%	0.003	0.004	0.037	0.021
%RSD		2.309	5.175	3.529	1.444	14.480	35.320	165.300	107.600
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:58:58	101.906%	-0.105	-0.023	-0.001	7.550	7.941	105.862%	106.826%
2	21:59:18	105.097%	-0.114	-0.017	0.001	7.880	8.094	109.915%	110.536%
3	21:59:37	107.401%	-0.165	-0.022	-0.003	8.031	8.310	111.813%	111.607%
X		104.801%	-0.128	-0.020	-0.001	7.821	8.115	109.197%	109.656%
σ		2.759%	0.032	0.003	0.002	0.246	0.186	3.040%	2.509%
%RSD		2.633	25.210	16.440	203.100	3.147	2.288	2.784	2.288
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:58:58	0.007	0.004	0.021	0.014	0.014	103.008%		
2	21:59:18	0.017	0.001	0.027	0.010	0.013	103.996%		
3	21:59:37	-0.004	0.009	0.011	0.012	0.009	105.214%		
X		0.007	0.005	0.020	0.012	0.012	104.073%		
σ		0.010	0.004	0.008	0.002	0.002	1.105%		
%RSD		157.500	88.410	43.120	18.190	19.660	1.062		

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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	22:02:42	101.441%	47.210	1030.000	1114.000	0.000	92200.000	73870.000	79750.000
2	22:03:01	102.245%	47.650	1065.000	1116.000	0.000	90720.000	73420.000	78940.000
3	22:03:20	104.238%	48.950	1052.000	1117.000	0.000	89930.000	73400.000	78680.000
X		102.641%	47.940	1049.000	1116.000	0.000	90950.000	73560.000	79120.000
σ		1.440%	0.901	17.570	1.464	0.000	1152.000	267.800	561.000
%RSD		1.403	1.879	1.675	0.131	0.000	1.267	0.364	0.709
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:02:42	2335.000	16300.000	0.000	52890.000	137000.000	146400.000	99.543%	998.000
2	22:03:01	2319.000	16240.000	0.000	51430.000	135400.000	142700.000	103.699%	976.700
3	22:03:20	2317.000	16140.000	0.000	51400.000	135600.000	142200.000	104.143%	993.700
X		2323.000	16230.000	0.000	51910.000	136000.000	143800.000	102.462%	989.500
σ		10.050	80.970	0.000	854.300	839.300	2302.000	2.537%	11.260
%RSD		0.433	0.499	0.000	1.646	0.617	1.602	2.476	1.138
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:02:42	518.300	212.500	554.500	1080.000	1345.000	485.500	479.000	238.400
2	22:03:01	513.000	210.000	556.200	1050.000	1321.000	480.900	476.200	236.000
3	22:03:20	513.800	212.000	559.800	1048.000	1314.000	479.600	472.600	234.900
X		515.000	211.500	556.800	1059.000	1327.000	482.000	475.900	236.400
σ		2.843	1.301	2.672	17.720	16.050	3.112	3.249	1.779
%RSD		0.552	0.615	0.480	1.673	1.209	0.646	0.683	0.752
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:02:42	237.000	475.500	467.600	37.540	17.660	8.983	0.000	1233.000
2	22:03:01	234.000	480.300	468.300	38.040	15.970	9.985	0.000	1230.000
3	22:03:20	232.700	476.600	467.700	36.150	16.260	11.520	0.000	1214.000
X		234.600	477.500	467.900	37.240	16.630	10.160	0.000	1226.000
σ		2.214	2.493	0.367	0.978	0.903	1.276	0.000	10.190
%RSD		0.944	0.522	0.079	2.626	5.428	12.560	0.000	0.832
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:02:42	108.497%	1041.000	1052.000	99.898%	48.850	48.920	51.130	44.620
2	22:03:01	111.186%	1053.000	1072.000	100.410%	49.250	49.300	49.580	44.430
3	22:03:20	114.170%	1058.000	1074.000	101.677%	49.910	49.470	50.460	45.160
X		111.284%	1051.000	1066.000	100.662%	49.340	49.230	50.390	44.740
σ		2.838%	8.732	12.040	0.916%	0.533	0.283	0.775	0.375
%RSD		2.550	0.831	1.129	0.910	1.080	0.576	1.538	0.838
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:02:42	102.327%	2075.000	511.600	508.900	2027.000	2022.000	109.254%	110.884%
2	22:03:01	106.665%	2022.000	504.700	508.200	2016.000	2008.000	114.545%	115.308%
3	22:03:20	107.206%	2036.000	513.400	510.700	2041.000	2020.000	115.863%	117.387%
X		105.399%	2044.000	509.900	509.300	2028.000	2017.000	113.221%	114.526%
σ		2.675%	27.500	4.595	1.295	12.610	7.816	3.498%	3.321%
%RSD		2.538	1.345	0.901	0.254	0.622	0.388	3.090	2.900
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:02:42	47.670	47.830	19.550	19.970	19.780	99.942%		
2	22:03:01	48.910	48.730	19.790	20.200	19.980	101.208%		
3	22:03:20	49.330	49.320	20.360	20.190	20.330	101.829%		
X		48.640	48.630	19.900	20.120	20.030	100.993%		
σ		0.859	0.751	0.415	0.130	0.277	0.961%		
%RSD		1.767	1.545	2.084	0.648	1.384	0.952		

CCV 1241000 7/16/2014 10:06:05 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	22:06:05	94.915%	94.120	94.770	106.700	0.000	47830.000	51050.000	53440.000
2	22:06:24	96.630%	97.470	106.800	100.500	0.000	47440.000	50960.000	53380.000
3	22:06:43	95.841%	96.480	104.000	105.900	0.000	47650.000	52030.000	54710.000
X		95.796%	96.024%	101.836%	104.385%	0.000	95.280%	102.692%	107.690%
σ		0.858%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.896	1.790	6.162	3.231	0.000	0.413	1.161	1.395
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:06:05	527.500	5389.000	0.000	50240.000	48890.000	50890.000	96.005%	100.100
2	22:06:24	533.800	5393.000	0.000	49770.000	48420.000	50410.000	97.120%	98.310
3	22:06:43	548.200	5471.000	0.000	49740.000	48730.000	50850.000	97.180%	99.510
X		107.300%	108.351%	0.000	99.840%	97.358%	101.435%	96.768%	99.306%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.661%	n/a
%RSD		1.985	0.854	0.000	0.560	0.495	0.524	0.683	0.923
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:06:05	102.400	102.900	515.100	26790.000	25970.000	102.200	103.400	102.200
2	22:06:24	103.600	104.600	523.600	26680.000	26190.000	102.600	102.800	103.800
3	22:06:43	105.400	107.200	525.300	26740.000	26440.000	102.800	104.400	103.500
X		103.796%	104.906%	104.268%	106.960%	104.811%	102.518%	103.506%	103.158%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.460	2.067	1.045	0.210	0.892	0.329	0.781	0.795
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:06:05	103.300	102.800	102.300	101.700	108.200	102.000	0.000	102.700
2	22:06:24	102.800	104.500	100.500	103.200	111.100	104.500	0.000	102.800
3	22:06:43	102.200	102.100	99.980	103.200	107.900	103.300	0.000	102.200
X		102.751%	103.153%	100.940%	102.675%	109.068%	103.275%	0.000	102.572%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.523	1.202	1.198	0.858	1.598	1.213	0.000	0.306
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:06:05	97.865%	105.100	105.600	93.975%	101.000	101.200	101.700	103.500
2	22:06:24	101.149%	109.000	108.500	95.041%	101.900	103.500	103.100	104.400
3	22:06:43	103.824%	109.300	109.200	96.700%	102.400	101.900	103.100	103.000
X		100.946%	107.834%	107.774%	95.239%	101.760%	102.217%	102.644%	103.595%
σ		2.985%	n/a	n/a	1.373%	n/a	n/a	n/a	n/a
%RSD		2.957	2.166	1.762	1.442	0.707	1.164	0.758	0.695
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:06:05	97.791%	102.100	98.710	99.410	102.400	100.600	101.630%	102.674%
2	22:06:24	100.610%	103.600	100.500	101.700	101.000	101.600	106.057%	107.241%
3	22:06:43	103.138%	101.300	99.570	100.200	102.900	102.100	108.701%	110.854%
X		100.513%	102.287%	99.595%	100.427%	102.116%	101.420%	105.463%	106.923%
σ		2.675%	n/a	n/a	n/a	n/a	n/a	3.573%	4.099%
%RSD		2.661	1.139	0.903	1.150	0.966	0.765	3.388	3.834
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:06:05	100.600	99.880	99.250	99.640	99.350	97.581%		
2	22:06:24	104.600	104.800	104.300	104.100	103.900	97.714%		
3	22:06:43	105.400	106.000	105.000	106.100	105.600	97.842%		
X		103.509%	103.573%	102.848%	103.292%	102.961%	97.712%		
σ		n/a	n/a	n/a	n/a	n/a	0.130%		
%RSD		2.471	3.141	3.051	3.218	3.145	0.133		

CCB7 7/16/2014 10:12:34 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	22:12:54	97.105%	-0.154	0.622	-0.080	0.000	45.980	4.550	3.823
2	22:13:13	97.201%	-0.351	1.467	-0.065	0.000	51.400	4.068	3.288
3	22:13:32	98.160%	-0.254	-0.154	0.332	0.000	50.140	3.999	3.912
X		97.489%	-0.253	0.645	0.062	0.000	49.170	4.206	3.674
σ		0.584%	0.098	0.811	0.234	0.000	2.836	0.300	0.338
%RSD		0.599	38.850	125.700	375.600	0.000	5.768	7.129	9.192
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:12:54	-0.342	5.837	0.000	32.360	-11.110	38.860	97.531%	0.040
2	22:13:13	-0.479	6.517	0.000	32.870	-6.358	39.450	99.117%	-0.119
3	22:13:32	-0.452	5.494	0.000	30.610	7.810	40.490	101.015%	-0.020
X		-0.424	5.949	0.000	31.950	-3.219	39.600	99.221%	-0.033
σ		0.072	0.521	0.000	1.186	9.842	0.822	1.744%	0.080
%RSD		17.050	8.753	0.000	3.713	305.800	2.077	1.758	243.400
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:12:54	0.228	0.081	0.060	3.342	4.565	0.005	-0.019	1.392
2	22:13:13	0.285	0.133	0.086	2.259	1.925	-0.006	0.023	1.392
3	22:13:32	0.103	0.135	0.071	0.984	0.688	-0.002	0.071	1.279
X		0.205	0.116	0.072	2.195	2.393	-0.001	0.025	1.355
σ		0.093	0.031	0.013	1.180	1.980	0.006	0.045	0.065
%RSD		45.150	26.300	18.030	53.780	82.770	778.900	180.300	4.816
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:12:54	-0.075	0.257	0.236	-0.554	5.262	-1.176	0.000	0.047
2	22:13:13	-0.038	0.282	0.381	0.259	5.579	0.252	0.000	0.049
3	22:13:32	0.018	0.317	0.371	0.087	5.275	1.362	0.000	0.045
X		-0.031	0.285	0.329	-0.069	5.372	0.146	0.000	0.047
σ		0.047	0.030	0.081	0.429	0.179	1.272	0.000	0.002
%RSD		149.500	10.690	24.570	619.100	3.339	872.100	0.000	4.275
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:12:54	102.029%	0.489	0.488	105.090%	-0.010	0.000	0.003	-0.011
2	22:13:13	106.131%	0.432	0.407	107.730%	-0.011	-0.009	-0.080	-0.050
3	22:13:32	108.013%	0.387	0.393	108.039%	-0.008	-0.005	-0.012	-0.012
X		105.391%	0.436	0.429	106.953%	-0.010	-0.005	-0.030	-0.025
σ		3.060%	0.051	0.051	1.621%	0.002	0.005	0.044	0.022
%RSD		2.903	11.740	11.930	1.515	20.160	98.690	147.000	90.310
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:12:54	102.438%	-0.229	0.098	0.140	-0.023	-0.014	103.321%	103.759%
2	22:13:13	104.887%	-0.240	0.089	0.130	0.001	0.022	107.376%	107.350%
3	22:13:32	107.114%	-0.267	0.101	0.137	-0.015	0.003	109.313%	109.417%
X		104.813%	-0.245	0.096	0.136	-0.012	0.004	106.670%	106.842%
σ		2.339%	0.020	0.006	0.005	0.012	0.018	3.058%	2.863%
%RSD		2.231	8.078	6.217	4.006	101.300	480.000	2.867	2.679
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:12:54	0.045	0.043	-0.008	0.007	-0.002	105.099%		
2	22:13:13	0.040	0.042	0.001	-0.002	-0.003	104.957%		
3	22:13:32	0.048	0.042	-0.005	-0.002	0.000	106.045%		
X		0.044	0.042	-0.004	0.001	-0.001	105.367%		
σ		0.004	0.001	0.005	0.005	0.002	0.591%		
%RSD		8.791	1.976	130.200	789.600	121.600	0.561		

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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	22:16:38	99.553%	49.940	1010.000	1063.000	0.000	89490.000	71920.000	77020.000
2	22:16:58	100.872%	48.030	1022.000	1096.000	0.000	88550.000	72170.000	77600.000
3	22:17:17	104.014%	47.010	1039.000	1074.000	0.000	87260.000	71650.000	77390.000
X		101.480%	48.330	1024.000	1078.000	0.000	88430.000	71910.000	77340.000
σ		2.292%	1.491	14.380	16.570	0.000	1120.000	257.300	293.000
%RSD		2.258	3.084	1.404	1.538	0.000	1.267	0.358	0.379
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:16:38	2284.000	15770.000	0.000	51400.000	132300.000	141700.000	99.515%	979.000
2	22:16:58	2275.000	15840.000	0.000	50510.000	132100.000	139500.000	103.508%	966.900
3	22:17:17	2284.000	15760.000	0.000	50000.000	132600.000	139200.000	105.223%	952.800
X		2281.000	15790.000	0.000	50640.000	132300.000	140100.000	102.749%	966.200
σ		5.019	41.330	0.000	709.600	247.000	1379.000	2.929%	13.120
%RSD		0.220	0.262	0.000	1.401	0.187	0.985	2.850	1.358
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:16:38	508.900	207.900	539.200	1056.000	1314.000	476.800	465.800	231.600
2	22:16:58	504.200	205.200	545.500	1033.000	1282.000	472.200	461.100	230.300
3	22:17:17	508.000	206.800	545.400	1031.000	1299.000	472.300	464.200	230.500
X		507.100	206.600	543.400	1040.000	1298.000	473.800	463.700	230.800
σ		2.484	1.364	3.620	14.110	16.330	2.622	2.386	0.684
%RSD		0.490	0.660	0.666	1.357	1.258	0.553	0.515	0.296
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:16:38	229.800	464.300	464.200	38.530	17.580	11.590	0.000	1221.000
2	22:16:58	229.800	465.100	465.300	36.970	16.860	9.617	0.000	1197.000
3	22:17:17	228.200	469.400	463.100	39.660	16.540	11.320	0.000	1198.000
X		229.300	466.200	464.200	38.390	17.000	10.840	0.000	1206.000
σ		0.964	2.779	1.059	1.352	0.532	1.067	0.000	13.560
%RSD		0.420	0.596	0.228	3.521	3.129	9.844	0.000	1.124
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:16:38	108.429%	1019.000	1031.000	99.730%	47.200	48.310	49.300	43.860
2	22:16:58	113.866%	1033.000	1050.000	102.128%	47.820	48.420	49.120	44.430
3	22:17:17	115.507%	1052.000	1055.000	103.441%	48.180	48.130	50.090	45.390
X		112.600%	1035.000	1045.000	101.766%	47.740	48.280	49.500	44.560
σ		3.705%	16.740	13.010	1.882%	0.495	0.146	0.517	0.772
%RSD		3.290	1.618	1.245	1.849	1.037	0.302	1.045	1.732
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:16:38	102.715%	2035.000	498.000	502.500	1980.000	1974.000	111.237%	111.520%
2	22:16:58	107.568%	2003.000	499.200	497.700	1984.000	1975.000	115.569%	116.598%
3	22:17:17	110.055%	1966.000	494.000	497.700	1985.000	1971.000	118.325%	119.323%
X		106.779%	2001.000	497.100	499.300	1983.000	1973.000	115.044%	115.814%
σ		3.733%	34.850	2.674	2.787	2.595	2.406	3.573%	3.960%
%RSD		3.496	1.741	0.538	0.558	0.131	0.122	3.106	3.419
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:16:38	46.230	46.830	19.460	19.640	19.430	101.980%		
2	22:16:58	48.110	48.260	20.130	20.130	20.100	102.338%		
3	22:17:17	48.390	48.710	19.930	20.230	20.200	105.144%		
X		47.580	47.930	19.840	20.000	19.910	103.154%		
σ		1.176	0.982	0.344	0.315	0.419	1.732%		
%RSD		2.471	2.049	1.734	1.575	2.103	1.679		

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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	22:20:20	105.461%	-0.101	54.560	56.570	0.000	50040.000	20910.000	22360.000	
2	22:20:39	105.465%	-0.237	50.440	53.250	0.000	49700.000	20780.000	22440.000	
3	22:20:58	106.315%	-0.126	54.600	54.230	0.000	49170.000	20720.000	22520.000	
X		105.747%	-0.155	53.200	54.680	0.000	49640.000	20800.000	22440.000	
		σ	0.492%	0.073	2.389	1.706	0.000	438.500	95.750	76.810
		%RSD	0.465	47.110	4.491	3.120	0.000	0.883	0.460	0.342
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	22:20:20	3.775	5267.000	0.000	4822.000	90660.000	98460.000	98.651%	1.046	
2	22:20:39	3.682	5260.000	0.000	4745.000	88930.000	96350.000	101.011%	1.067	
3	22:20:58	3.891	5239.000	0.000	4710.000	89180.000	95540.000	102.202%	1.277	
X		3.783	5255.000	0.000	4759.000	89590.000	96780.000	100.621%	1.130	
		σ	0.105	14.390	0.000	57.480	935.200	1509.000	1.807%	0.128
		%RSD	2.768	0.274	0.000	1.208	1.044	1.559	1.796	11.300
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	22:20:20	0.673	7.346	0.395	6.026	213.800	0.146	-0.020	2.295	
2	22:20:39	-0.210	7.511	0.422	5.419	205.200	0.088	0.017	2.404	
3	22:20:58	0.093	7.302	0.356	3.783	202.700	0.105	-0.199	2.344	
X		0.186	7.386	0.391	5.076	207.200	0.113	-0.067	2.348	
		σ	0.449	0.111	0.033	1.160	5.811	0.030	0.115	0.054
		%RSD	241.800	1.496	8.484	22.850	2.804	26.250	171.600	2.317
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	22:20:20	1.269	12.710	13.350	0.792	5.487	0.992	0.000	209.200	
2	22:20:39	1.109	12.380	13.090	-1.094	6.671	1.919	0.000	208.900	
3	22:20:58	0.941	12.790	12.920	0.422	5.685	0.361	0.000	208.900	
X		1.106	12.630	13.120	0.040	5.947	1.091	0.000	209.000	
		σ	0.164	0.221	0.217	1.000	0.634	0.783	0.000	0.144
		%RSD	14.810	1.751	1.652	2498.000	10.660	71.820	0.000	0.069
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	22:20:20	106.830%	7.350	7.559	102.710%	-0.019	-0.014	0.011	-0.047	
2	22:20:39	110.572%	6.812	6.787	104.406%	-0.017	-0.006	-0.051	-0.063	
3	22:20:58	111.147%	6.145	6.397	104.370%	-0.019	-0.012	0.023	0.002	
X		109.516%	6.769	6.914	103.829%	-0.018	-0.011	-0.006	-0.036	
		σ	2.344%	0.603	0.592	0.969%	0.002	0.004	0.040	0.034
		%RSD	2.140	8.912	8.554	0.933	8.232	40.030	672.500	94.650
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	22:20:20	101.627%	4.197	0.168	0.179	46.890	45.670	107.499%	108.453%	
2	22:20:39	105.815%	3.565	0.157	0.199	46.570	45.840	110.414%	112.354%	
3	22:20:58	105.697%	3.359	0.137	0.152	45.730	46.290	111.370%	112.999%	
X		104.380%	3.707	0.154	0.177	46.400	45.930	109.761%	111.269%	
		σ	2.384%	0.437	0.016	0.024	0.599	0.319	2.016%	2.460%
		%RSD	2.284	11.780	10.080	13.440	1.292	0.694	1.837	2.211
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	22:20:20	0.276	0.241	0.128	0.103	0.116	99.786%			
2	22:20:39	0.232	0.225	0.086	0.114	0.101	101.673%			
3	22:20:58	0.202	0.195	0.098	0.087	0.099	102.703%			
X		0.236	0.220	0.104	0.101	0.105	101.387%			
		σ	0.037	0.023	0.022	0.013	0.009	1.480%		
		%RSD	15.750	10.420	21.050	13.040	8.859	1.460		

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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	22:24:01	102.443%	-0.211	51.590	49.340	0.000	46320.000	21070.000	22840.000
2	22:24:20	104.852%	-0.260	50.260	49.560	0.000	45460.000	20930.000	22810.000
3	22:24:40	105.403%	-0.192	48.960	51.420	0.000	45450.000	20960.000	22750.000
X		104.233%	-0.221	50.270	50.110	0.000	45740.000	20990.000	22800.000
σ		1.574%	0.035	1.313	1.140	0.000	498.500	76.390	43.420
%RSD		1.510	15.820	2.612	2.275	0.000	1.090	0.364	0.190
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:24:01	5.883	5483.000	0.000	4118.000	87150.000	95930.000	99.582%	1.035
2	22:24:20	6.060	5425.000	0.000	4061.000	87510.000	94620.000	101.175%	1.040
3	22:24:40	6.025	5420.000	0.000	4060.000	87830.000	95290.000	101.640%	1.134
X		5.989	5443.000	0.000	4080.000	87500.000	95280.000	100.799%	1.069
σ		0.094	34.720	0.000	33.170	339.400	654.400	1.079%	0.056
%RSD		1.564	0.638	0.000	0.813	0.388	0.687	1.071	5.224
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:24:01	-1.517	4.665	40.460	10.760	207.800	0.705	0.358	2.203
2	22:24:20	1.238	4.771	40.310	10.400	203.400	0.709	0.407	1.813
3	22:24:40	-0.399	4.678	40.700	10.840	204.000	0.733	0.581	1.862
X		-0.226	4.704	40.490	10.670	205.100	0.716	0.449	1.959
σ		1.386	0.058	0.195	0.232	2.350	0.015	0.117	0.212
%RSD		612.300	1.226	0.481	2.172	1.146	2.128	26.060	10.840
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:24:01	0.788	7.420	6.799	0.778	5.212	1.888	0.000	207.900
2	22:24:20	1.008	7.008	7.451	0.956	5.813	2.456	0.000	206.400
3	22:24:40	0.955	7.145	6.945	1.436	5.277	1.035	0.000	207.800
X		0.917	7.191	7.065	1.057	5.434	1.793	0.000	207.400
σ		0.115	0.209	0.342	0.340	0.330	0.715	0.000	0.815
%RSD		12.530	2.913	4.842	32.170	6.073	39.900	0.000	0.393
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:24:01	107.312%	3.985	3.743	103.009%	-0.026	-0.010	-0.059	-0.034
2	22:24:20	110.081%	4.301	3.988	103.829%	-0.019	-0.007	-0.020	0.003
3	22:24:40	111.613%	3.897	3.939	104.382%	-0.013	-0.010	-0.092	-0.071
X		109.669%	4.061	3.890	103.740%	-0.019	-0.009	-0.057	-0.034
σ		2.180%	0.212	0.130	0.691%	0.007	0.002	0.036	0.037
%RSD		1.988	5.228	3.330	0.666	35.150	18.230	63.210	107.400
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:24:01	101.845%	2.663	0.121	0.124	40.900	42.290	106.901%	109.169%
2	22:24:20	104.800%	2.452	0.142	0.129	42.200	42.180	111.450%	112.431%
3	22:24:40	107.370%	2.488	0.113	0.134	41.850	41.180	113.042%	114.181%
X		104.671%	2.534	0.125	0.129	41.650	41.880	110.464%	111.927%
σ		2.765%	0.113	0.015	0.005	0.671	0.608	3.187%	2.543%
%RSD		2.642	4.465	12.060	3.857	1.611	1.452	2.885	2.272
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:24:01	0.064	0.059	0.105	0.103	0.096	102.808%		
2	22:24:20	0.074	0.057	0.085	0.083	0.087	104.458%		
3	22:24:40	0.067	0.064	0.099	0.095	0.092	105.277%		
X		0.068	0.060	0.096	0.094	0.092	104.181%		
σ		0.005	0.003	0.010	0.010	0.005	1.258%		
%RSD		7.304	5.457	10.480	10.790	5.170	1.207		

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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	22:27:43	103.598%	-0.212	44.390	48.960	0.000	53410.000	20210.000	21670.000	
2	22:28:02	104.379%	-0.259	50.090	50.980	0.000	53340.000	20130.000	21790.000	
3	22:28:21	102.694%	-0.235	52.230	52.570	0.000	53690.000	20560.000	22140.000	
X		103.557%	-0.235	48.900	50.840	0.000	53480.000	20300.000	21870.000	
		σ	0.843%	0.024	4.052	1.810	0.000	183.900	227.500	242.400
		%RSD	0.814	9.990	8.285	3.561	0.000	0.344	1.121	1.109
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	22:27:43	2.645	4688.000	0.000	5501.000	85560.000	94040.000	98.768%	1.227	
2	22:28:02	2.995	4711.000	0.000	5441.000	85500.000	93060.000	99.930%	1.030	
3	22:28:21	2.986	4725.000	0.000	5443.000	86810.000	93150.000	100.430%	0.871	
X		2.875	4708.000	0.000	5462.000	85960.000	93420.000	99.709%	1.042	
		σ	0.199	18.330	0.000	34.100	740.300	542.100	0.853%	0.178
		%RSD	6.929	0.389	0.000	0.624	0.861	0.580	0.855	17.090
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	22:27:43	-0.004	8.381	0.487	24.340	221.400	0.104	-0.025	9.549	
2	22:28:02	-0.394	8.720	0.501	23.410	217.700	0.106	-0.045	9.051	
3	22:28:21	-0.274	8.500	0.534	23.430	217.000	0.095	0.015	9.330	
X		-0.224	8.534	0.507	23.730	218.700	0.102	-0.019	9.310	
		σ	0.200	0.172	0.024	0.534	2.367	0.006	0.030	0.250
		%RSD	89.250	2.015	4.678	2.249	1.082	5.738	163.500	2.685
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	22:27:43	8.750	8.155	7.894	0.544	5.111	-0.169	0.000	201.400	
2	22:28:02	8.336	7.927	7.596	-1.998	5.184	-0.254	0.000	200.200	
3	22:28:21	7.968	8.342	8.203	-1.502	5.727	0.549	0.000	201.300	
X		8.351	8.141	7.898	-0.985	5.341	0.042	0.000	201.000	
		σ	0.391	0.208	0.304	1.347	0.337	0.441	0.000	0.686
		%RSD	4.680	2.554	3.847	136.700	6.304	1046.000	0.000	0.341
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	22:27:43	105.428%	11.760	11.810	101.641%	-0.012	-0.011	0.008	-0.021	
2	22:28:02	108.763%	11.650	12.180	101.887%	-0.019	-0.013	-0.031	-0.028	
3	22:28:21	109.334%	11.880	11.980	102.520%	-0.018	-0.009	-0.032	-0.010	
X		107.842%	11.760	11.990	102.016%	-0.016	-0.011	-0.018	-0.020	
		σ	2.110%	0.113	0.183	0.453%	0.004	0.002	0.023	0.009
		%RSD	1.956	0.959	1.525	0.444	23.760	19.830	125.200	46.440
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	22:27:43	101.407%	2.067	0.132	0.119	41.010	41.260	105.381%	107.601%	
2	22:28:02	103.614%	1.890	0.133	0.135	41.910	41.220	108.675%	110.408%	
3	22:28:21	104.588%	1.959	0.118	0.150	41.240	41.920	110.844%	111.547%	
X		103.203%	1.972	0.128	0.135	41.390	41.470	108.300%	109.852%	
		σ	1.630%	0.089	0.008	0.015	0.469	0.391	2.751%	2.031%
		%RSD	1.579	4.533	6.256	11.420	1.133	0.942	2.540	1.849
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	22:27:43	0.048	0.047	0.901	0.765	0.812	100.749%			
2	22:28:02	0.036	0.052	0.948	0.799	0.848	100.400%			
3	22:28:21	0.046	0.055	0.902	0.867	0.860	100.901%			
X		0.043	0.051	0.917	0.810	0.840	100.684%			
		σ	0.006	0.004	0.027	0.052	0.025	0.257%		
		%RSD	14.260	8.173	2.901	6.404	3.014	0.255		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:31:24	99.589%	-0.183	60.080	63.820	0.000	75370.000	20330.000	21970.000
2	22:31:43	99.453%	-0.279	62.460	64.850	0.000	75240.000	20620.000	22130.000
3	22:32:03	102.057%	-0.234	63.550	63.870	0.000	74100.000	20340.000	22200.000
X		100.366%	-0.232	62.030	64.180	0.000	74900.000	20430.000	22100.000
σ		1.466%	0.048	1.775	0.578	0.000	698.800	164.800	114.200
%RSD		1.460	20.780	2.862	0.901	0.000	0.933	0.807	0.517
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:31:24	75.720	6727.000	0.000	21380.000	64870.000	70710.000	95.495%	2.212
2	22:31:43	76.940	6801.000	0.000	21110.000	64170.000	70790.000	96.928%	2.147
3	22:32:03	77.250	6734.000	0.000	20830.000	64350.000	69910.000	98.342%	2.399
X		76.640	6754.000	0.000	21110.000	64460.000	70470.000	96.922%	2.253
σ		0.811	41.010	0.000	274.500	363.300	488.600	1.423%	0.131
%RSD		1.058	0.607	0.000	1.301	0.564	0.693	1.468	5.804
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:31:24	-0.607	30.060	5.634	67.600	211.500	0.227	0.676	2.059
2	22:31:43	1.055	30.320	5.491	68.330	215.300	0.196	0.507	2.114
3	22:32:03	1.672	30.260	5.629	66.930	202.800	0.223	0.544	2.005
X		0.707	30.210	5.585	67.620	209.900	0.215	0.576	2.059
σ		1.178	0.140	0.081	0.704	6.381	0.017	0.089	0.054
%RSD		166.700	0.465	1.450	1.040	3.040	7.945	15.450	2.641
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:31:24	1.081	9.711	10.800	-0.233	5.104	-0.169	0.000	168.700
2	22:31:43	0.902	9.988	10.070	2.196	4.927	0.355	0.000	168.500
3	22:32:03	1.060	9.864	9.864	-1.062	4.794	0.214	0.000	168.600
X		1.014	9.854	10.250	0.301	4.942	0.133	0.000	168.600
σ		0.098	0.139	0.494	1.693	0.155	0.271	0.000	0.107
%RSD		9.630	1.410	4.822	563.100	3.141	203.700	0.000	0.063
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:31:24	102.764%	0.926	0.891	98.551%	-0.008	-0.012	-0.050	-0.027
2	22:31:43	106.676%	0.996	0.930	100.171%	-0.015	-0.008	-0.050	-0.028
3	22:32:03	107.905%	1.072	0.997	100.988%	-0.015	-0.011	-0.003	-0.021
X		105.782%	0.998	0.939	99.903%	-0.012	-0.011	-0.035	-0.025
σ		2.684%	0.073	0.054	1.240%	0.004	0.002	0.027	0.004
%RSD		2.538	7.316	5.721	1.241	29.400	20.420	78.410	14.180
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:31:24	97.979%	1.600	0.733	0.749	48.550	48.740	104.379%	105.413%
2	22:31:43	101.660%	1.624	0.754	0.715	48.500	48.410	107.421%	109.173%
3	22:32:03	102.440%	1.610	0.740	0.708	48.380	48.830	109.948%	110.796%
X		100.693%	1.611	0.742	0.724	48.480	48.660	107.249%	108.461%
σ		2.383%	0.012	0.011	0.022	0.086	0.220	2.788%	2.761%
%RSD		2.366	0.769	1.432	3.028	0.177	0.451	2.600	2.546
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:31:24	0.025	0.025	0.112	0.128	0.123	98.321%		
2	22:31:43	0.032	0.021	0.162	0.124	0.137	100.186%		
3	22:32:03	0.020	0.020	0.156	0.121	0.133	101.019%		
X		0.025	0.022	0.143	0.124	0.131	99.842%		
σ		0.006	0.003	0.028	0.003	0.007	1.382%		
%RSD		23.810	11.950	19.200	2.749	5.681	1.384		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:35:06	100.671%	-0.161	51.380	46.400	0.000	57330.000	23810.000	25640.000
2	22:35:25	101.861%	-0.257	45.900	47.970	0.000	56580.000	23630.000	25780.000
3	22:35:44	103.120%	-0.142	44.840	47.510	0.000	56170.000	23630.000	25630.000
X		101.884%	-0.187	47.380	47.290	0.000	56690.000	23690.000	25680.000
σ		1.225%	0.062	3.510	0.808	0.000	588.700	102.000	83.400
%RSD		1.202	33.030	7.408	1.709	0.000	1.038	0.430	0.325
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:35:06	30.170	4318.000	0.000	14360.000	87250.000	94510.000	97.577%	1.426
2	22:35:25	32.870	4339.000	0.000	14200.000	86180.000	93710.000	99.385%	1.319
3	22:35:44	31.370	4314.000	0.000	14040.000	86380.000	93700.000	100.611%	1.554
X		31.470	4324.000	0.000	14200.000	86600.000	93970.000	99.191%	1.433
σ		1.351	12.980	0.000	159.900	568.900	463.200	1.526%	0.118
%RSD		4.294	0.300	0.000	1.126	0.657	0.493	1.539	8.214
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:35:06	-1.033	13.150	14.030	142.600	366.900	0.243	0.543	2.109
2	22:35:25	0.048	13.400	14.050	142.800	372.000	0.289	0.393	2.036
3	22:35:44	1.393	13.360	14.280	141.900	372.400	0.241	0.488	2.057
X		0.136	13.300	14.120	142.400	370.500	0.258	0.475	2.067
σ		1.215	0.133	0.139	0.454	3.049	0.027	0.076	0.038
%RSD		893.100	0.998	0.982	0.319	0.823	10.590	15.970	1.820
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:35:06	1.133	30.510	30.870	-0.006	4.520	0.653	0.000	223.300
2	22:35:25	0.970	30.380	30.720	0.817	4.620	-0.439	0.000	222.600
3	22:35:44	1.065	31.800	31.730	0.979	4.761	0.107	0.000	224.900
X		1.056	30.890	31.110	0.597	4.634	0.107	0.000	223.600
σ		0.082	0.785	0.545	0.528	0.121	0.546	0.000	1.214
%RSD		7.759	2.542	1.751	88.450	2.614	511.300	0.000	0.543
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:35:06	105.998%	0.322	0.295	100.872%	-0.007	-0.002	-0.020	-0.031
2	22:35:25	108.170%	0.325	0.336	102.275%	-0.011	0.005	-0.020	-0.000
3	22:35:44	109.257%	0.386	0.319	102.020%	-0.014	-0.003	-0.013	-0.010
X		107.808%	0.344	0.316	101.722%	-0.011	-0.000	-0.018	-0.014
σ		1.659%	0.036	0.020	0.747%	0.003	0.004	0.004	0.016
%RSD		1.539	10.540	6.452	0.734	29.040	5029.000	23.610	115.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:35:06	101.066%	1.546	0.181	0.230	71.490	70.950	107.683%	108.895%
2	22:35:25	103.509%	1.373	0.170	0.184	70.080	70.000	111.040%	112.113%
3	22:35:44	105.115%	1.512	0.187	0.212	71.140	71.040	111.307%	112.983%
X		103.230%	1.477	0.179	0.209	70.900	70.670	110.010%	111.330%
σ		2.039%	0.091	0.009	0.023	0.735	0.576	2.020%	2.153%
%RSD		1.975	6.190	4.989	10.910	1.037	0.814	1.836	1.934
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:35:06	0.031	0.029	0.375	0.375	0.355	101.047%		
2	22:35:25	0.040	0.031	0.389	0.332	0.342	101.742%		
3	22:35:44	0.038	0.041	0.334	0.350	0.335	102.294%		
X		0.037	0.034	0.366	0.352	0.344	101.694%		
σ		0.005	0.006	0.029	0.022	0.010	0.625%		
%RSD		13.010	18.740	7.879	6.104	2.979	0.614		

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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	22:38:47	101.309%	-0.257	38.150	44.150	0.000	57720.000	22660.000	24340.000	
2	22:39:06	100.300%	-0.184	41.410	44.300	0.000	57690.000	23070.000	24860.000	
3	22:39:25	103.250%	-0.212	40.110	44.820	0.000	56680.000	22890.000	24700.000	
X		101.620%	-0.218	39.890	44.420	0.000	57360.000	22870.000	24630.000	
		σ	1.499%	0.036	1.643	0.356	592.900	207.400	262.700	
		%RSD	1.475	16.770	4.119	0.802	0.000	1.034	0.907	1.066
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	22:38:47	17.200	4326.000	0.000	12370.000	86800.000	94330.000	96.573%	2.529	
2	22:39:06	17.950	4410.000	0.000	12210.000	86390.000	93530.000	98.355%	1.777	
3	22:39:25	18.250	4328.000	0.000	12230.000	86440.000	94160.000	99.246%	1.681	
X		17.800	4355.000	0.000	12270.000	86540.000	94010.000	98.058%	1.996	
		σ	0.540	47.690	0.000	84.260	222.600	420.700	1.361%	0.464
		%RSD	3.036	1.095	0.000	0.687	0.257	0.448	1.388	23.260
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	22:38:47	-0.119	13.290	53.920	123.600	365.800	0.226	-0.008	4.656	
2	22:39:06	-0.859	13.190	53.870	123.000	351.200	0.220	0.044	4.626	
3	22:39:25	1.206	13.540	54.410	124.100	359.700	0.203	-0.005	4.393	
X		0.076	13.340	54.070	123.600	358.900	0.216	0.011	4.558	
		σ	1.046	0.178	0.300	0.545	7.305	0.012	0.029	0.144
		%RSD	1374.000	1.337	0.554	0.441	2.035	5.448	273.400	3.162
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	22:38:47	3.496	119.300	119.500	2.965	4.298	0.535	0.000	219.300	
2	22:39:06	3.724	121.800	119.500	1.592	4.435	0.284	0.000	221.200	
3	22:39:25	3.767	120.700	119.500	0.852	4.691	0.039	0.000	219.900	
X		3.663	120.600	119.500	1.803	4.475	0.286	0.000	220.100	
		σ	0.145	1.252	0.033	1.072	0.200	0.248	0.000	0.966
		%RSD	3.972	1.038	0.028	59.470	4.457	86.710	0.000	0.439
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	22:38:47	103.686%	0.422	0.365	99.215%	0.016	0.006	0.003	0.004	
2	22:39:06	106.610%	0.447	0.476	99.526%	0.003	0.022	-0.062	-0.046	
3	22:39:25	108.352%	0.507	0.427	101.371%	-0.003	0.014	-0.012	0.001	
X		106.216%	0.459	0.423	100.037%	0.005	0.014	-0.024	-0.014	
		σ	2.357%	0.043	0.056	1.166%	0.010	0.008	0.034	0.028
		%RSD	2.219	9.461	13.180	1.165	191.500	58.350	141.600	201.700
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	22:38:47	99.490%	1.359	0.097	0.158	70.490	69.610	105.008%	105.600%	
2	22:39:06	101.785%	1.489	0.108	0.138	70.090	70.260	108.662%	109.653%	
3	22:39:25	102.989%	1.327	0.091	0.126	70.140	69.730	109.713%	110.874%	
X		101.421%	1.391	0.099	0.141	70.240	69.860	107.794%	108.709%	
		σ	1.777%	0.086	0.009	0.016	0.221	0.346	2.470%	2.761%
		%RSD	1.752	6.171	8.778	11.630	0.315	0.495	2.291	2.540
Run	Time	203TI	205TI	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	22:38:47	0.028	0.016	4.881	4.423	4.675	97.896%			
2	22:39:06	0.022	0.023	5.010	4.595	4.775	99.683%			
3	22:39:25	0.024	0.023	4.847	4.731	4.736	100.532%			
X		0.024	0.021	4.913	4.583	4.729	99.370%			
		σ	0.003	0.004	0.086	0.154	0.051	1.345%		
		%RSD	12.090	20.680	1.749	3.368	1.070	1.354		

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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	22:42:29	99.551%	-0.135	46.470	47.740	0.000	45910.000	20560.000	22190.000
2	22:42:48	99.941%	-0.136	43.480	47.510	0.000	46040.000	20750.000	22280.000
3	22:43:07	100.710%	-0.209	44.070	47.210	0.000	45090.000	20630.000	22380.000
X		100.068%	-0.160	44.680	47.490	0.000	45680.000	20650.000	22280.000
σ		0.590%	0.042	1.579	0.263	0.000	513.500	96.390	99.340
%RSD		0.589	26.550	3.534	0.554	0.000	1.124	0.467	0.446
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:42:29	4.311	5506.000	0.000	4224.000	87070.000	94760.000	96.727%	1.098
2	22:42:48	4.581	5513.000	0.000	4228.000	86830.000	94570.000	97.914%	0.925
3	22:43:07	4.439	5483.000	0.000	4201.000	87160.000	93540.000	98.698%	1.096
X		4.444	5500.000	0.000	4218.000	87020.000	94290.000	97.780%	1.040
σ		0.135	15.260	0.000	14.450	171.700	658.900	0.992%	0.100
%RSD		3.045	0.277	0.000	0.343	0.197	0.699	1.015	9.581
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:42:29	0.810	4.344	38.170	6.389	233.100	0.117	0.034	1.553
2	22:42:48	1.174	4.367	38.400	5.672	225.200	0.156	0.022	1.365
3	22:43:07	0.091	4.356	38.390	4.791	232.100	0.136	-0.006	1.320
X		0.692	4.356	38.320	5.617	230.100	0.136	0.016	1.413
σ		0.551	0.011	0.130	0.800	4.281	0.019	0.021	0.124
%RSD		79.630	0.263	0.339	14.250	1.860	14.200	126.100	8.763
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:42:29	0.332	6.057	5.756	-0.214	4.300	0.591	0.000	206.000
2	22:42:48	0.537	5.765	5.439	1.590	4.222	1.200	0.000	207.100
3	22:43:07	0.429	5.541	5.365	0.044	3.855	0.908	0.000	205.300
X		0.432	5.788	5.520	0.473	4.126	0.900	0.000	206.100
σ		0.103	0.259	0.208	0.975	0.238	0.304	0.000	0.949
%RSD		23.720	4.475	3.763	206.100	5.759	33.830	0.000	0.460
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:42:29	103.947%	2.438	2.350	100.409%	-0.013	-0.016	-0.043	-0.046
2	22:42:48	107.272%	2.518	2.310	101.316%	-0.023	-0.019	-0.040	-0.030
3	22:43:07	108.757%	2.356	2.257	101.974%	-0.021	-0.014	0.038	-0.012
X		106.659%	2.437	2.306	101.233%	-0.019	-0.016	-0.015	-0.029
σ		2.463%	0.081	0.047	0.786%	0.005	0.002	0.046	0.017
%RSD		2.309	3.321	2.022	0.776	27.810	13.830	304.500	57.430
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:42:29	100.780%	1.081	0.046	0.053	40.640	40.410	105.340%	107.598%
2	22:42:48	102.989%	1.156	0.036	0.056	40.760	39.690	108.552%	109.909%
3	22:43:07	103.710%	0.987	0.015	0.057	40.420	40.530	110.826%	112.059%
X		102.493%	1.075	0.032	0.055	40.610	40.210	108.239%	109.855%
σ		1.527%	0.084	0.015	0.002	0.174	0.457	2.756%	2.231%
%RSD		1.489	7.856	47.870	4.399	0.428	1.137	2.547	2.031
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:42:29	0.005	0.009	0.011	0.012	0.009	101.303%		
2	22:42:48	0.017	0.015	0.016	0.019	0.009	101.961%		
3	22:43:07	0.017	0.014	0.016	0.014	0.014	102.791%		
X		0.013	0.013	0.014	0.015	0.011	102.018%		
σ		0.007	0.003	0.003	0.004	0.003	0.746%		
%RSD		52.820	24.740	22.030	26.650	27.510	0.731		

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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	22:46:11	100.484%	-0.256	49.300	54.310	0.000	48320.000	19390.000	20840.000	
2	22:46:31	104.871%	-0.168	45.720	53.780	0.000	47330.000	19190.000	20670.000	
3	22:46:50	102.622%	-0.281	48.160	54.650	0.000	47460.000	19460.000	21010.000	
X		102.659%	-0.235	47.730	54.250	0.000	47700.000	19350.000	20840.000	
		σ	2.194%	0.059	1.826	0.441	0.000	535.000	143.300	167.400
		%RSD	2.137	25.260	3.827	0.813	0.000	1.121	0.741	0.803
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	22:46:11	260.600	5012.000	0.000	6752.000	74340.000	80140.000	96.200%	4.263	
2	22:46:31	267.500	4982.000	0.000	6629.000	73950.000	79600.000	98.449%	4.496	
3	22:46:50	264.700	5033.000	0.000	6617.000	73630.000	79040.000	98.987%	3.876	
X		264.300	5009.000	0.000	6666.000	73970.000	79590.000	97.879%	4.212	
		σ	3.459	25.740	0.000	74.500	357.500	552.200	1.479%	0.313
		%RSD	1.309	0.514	0.000	1.118	0.483	0.694	1.511	7.440
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	22:46:11	1.025	6.383	90.270	472.900	661.100	0.829	2.386	3.426	
2	22:46:31	2.171	6.776	89.050	471.800	656.100	0.849	2.462	3.484	
3	22:46:50	-3.790	6.852	89.800	492.600	650.600	0.765	2.375	3.201	
X		-0.198	6.670	89.710	479.100	655.900	0.814	2.408	3.370	
		σ	3.163	0.252	0.611	11.710	5.238	0.044	0.048	0.150
		%RSD	1595.000	3.773	0.681	2.443	0.798	5.387	1.975	4.440
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	22:46:11	2.958	38.290	38.310	-0.138	4.262	0.041	0.000	190.500	
2	22:46:31	2.539	38.090	38.000	0.160	3.979	-0.838	0.000	191.200	
3	22:46:50	2.444	37.270	38.590	0.116	4.275	-0.242	0.000	191.200	
X		2.647	37.880	38.300	0.046	4.172	-0.347	0.000	191.000	
		σ	0.274	0.541	0.294	0.161	0.167	0.448	0.000	0.418
		%RSD	10.340	1.427	0.769	350.500	4.005	129.400	0.000	0.219
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	22:46:11	104.837%	0.229	0.230	99.233%	-0.007	0.004	0.019	0.008	
2	22:46:31	108.063%	0.227	0.222	100.760%	-0.003	0.004	-0.055	-0.058	
3	22:46:50	109.722%	0.233	0.239	101.382%	0.002	-0.007	0.046	0.027	
X		107.541%	0.230	0.230	100.458%	-0.003	0.000	0.003	-0.008	
		σ	2.484%	0.003	0.008	1.106%	0.005	0.006	0.052	0.045
		%RSD	2.310	1.383	3.592	1.101	178.000	2054.000	1662.000	571.200
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	22:46:11	99.663%	1.479	0.149	0.180	43.240	42.950	104.328%	106.263%	
2	22:46:31	102.761%	1.346	0.190	0.160	42.210	42.310	107.642%	110.185%	
3	22:46:50	102.563%	1.437	0.178	0.202	42.940	42.930	110.020%	111.722%	
X		101.663%	1.421	0.172	0.181	42.800	42.730	107.330%	109.390%	
		σ	1.735%	0.068	0.021	0.021	0.531	0.363	2.859%	2.815%
		%RSD	1.706	4.803	12.040	11.700	1.240	0.849	2.663	2.573
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	22:46:11	0.018	0.014	1.401	1.258	1.321	98.711%			
2	22:46:31	0.028	0.017	1.368	1.307	1.357	100.500%			
3	22:46:50	0.016	0.010	1.476	1.300	1.393	100.719%			
X		0.021	0.014	1.415	1.288	1.357	99.976%			
		σ	0.007	0.003	0.055	0.026	0.036	1.102%		
		%RSD	33.450	24.180	3.905	2.037	2.656	1.102		

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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	22:49:54	95.844%	-0.301	26.550	30.670	0.000	33300.000	17370.000	18690.000
2	22:50:13	96.300%	-0.252	26.250	31.760	0.000	33250.000	17550.000	18860.000
3	22:50:32	97.237%	-0.204	32.240	32.540	0.000	32890.000	17540.000	18950.000
X		96.460%	-0.252	28.350	31.660	0.000	33150.000	17480.000	18840.000
σ		0.711%	0.049	3.374	0.940	0.000	220.600	102.000	132.900
%RSD		0.737	19.350	11.900	2.969	0.000	0.665	0.583	0.706
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:49:54	69.260	6008.000	0.000	8109.000	118300.000	128400.000	94.443%	1.644
2	22:50:13	74.810	6058.000	0.000	8020.000	118100.000	127500.000	95.822%	1.669
3	22:50:32	68.030	6049.000	0.000	7967.000	118100.000	128400.000	96.125%	1.371
X		70.700	6038.000	0.000	8032.000	118200.000	128100.000	95.463%	1.561
σ		3.613	26.580	0.000	71.530	126.600	540.800	0.897%	0.166
%RSD		5.110	0.440	0.000	0.891	0.107	0.422	0.939	10.600
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:49:54	-0.272	3.912	41.470	128.300	424.400	0.344	-0.043	1.402
2	22:50:13	-2.873	3.939	41.740	127.200	424.600	0.295	0.038	1.433
3	22:50:32	-0.393	3.912	41.770	127.500	434.300	0.351	0.092	1.384
X		-1.179	3.921	41.660	127.700	427.800	0.330	0.029	1.406
σ		1.468	0.016	0.170	0.581	5.643	0.031	0.068	0.025
%RSD		124.500	0.399	0.407	0.455	1.319	9.242	234.500	1.763
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:49:54	0.659	91.910	90.180	-0.536	3.903	0.151	0.000	260.400
2	22:50:13	0.580	91.260	91.980	-0.350	3.274	-0.818	0.000	258.900
3	22:50:32	0.689	92.010	89.110	-0.690	3.770	-1.201	0.000	261.200
X		0.643	91.730	90.420	-0.525	3.649	-0.623	0.000	260.100
σ		0.056	0.405	1.448	0.170	0.331	0.697	0.000	1.167
%RSD		8.754	0.442	1.601	32.420	9.082	111.900	0.000	0.449
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:49:54	101.716%	0.306	0.298	97.813%	0.007	-0.003	-0.017	-0.029
2	22:50:13	105.091%	0.307	0.310	99.266%	-0.006	-0.000	-0.050	-0.016
3	22:50:32	106.023%	0.379	0.333	99.851%	0.004	0.004	0.060	0.056
X		104.277%	0.331	0.314	98.976%	0.002	0.000	-0.003	0.004
σ		2.266%	0.041	0.018	1.049%	0.007	0.003	0.056	0.046
%RSD		2.173	12.530	5.663	1.060	376.600	3436.000	2206.000	1131.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:49:54	97.949%	0.734	0.096	0.096	57.320	57.840	103.617%	105.279%
2	22:50:13	100.463%	0.685	0.073	0.075	56.150	57.540	106.369%	108.385%
3	22:50:32	102.094%	0.661	0.064	0.096	57.360	57.180	108.229%	110.467%
X		100.169%	0.693	0.078	0.089	56.940	57.520	106.071%	108.044%
σ		2.088%	0.037	0.017	0.012	0.685	0.335	2.320%	2.611%
%RSD		2.085	5.410	21.270	13.930	1.204	0.582	2.188	2.417
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:49:54	0.002	-0.002	0.251	0.223	0.223	98.873%		
2	22:50:13	0.000	0.003	0.239	0.222	0.231	100.698%		
3	22:50:32	0.006	0.000	0.234	0.227	0.228	101.005%		
X		0.003	0.000	0.241	0.224	0.227	100.192%		
σ		0.003	0.003	0.009	0.002	0.004	1.153%		
%RSD		109.300	652.500	3.662	1.087	1.830	1.151		

CCV 1241000 7/16/2014 10:53:17 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	22:53:17	92.313%	94.970	88.750	96.120	0.000	48240.000	50830.000	52710.000
2	22:53:36	95.342%	93.230	94.470	97.290	0.000	47010.000	50010.000	52020.000
3	22:53:55	93.586%	98.360	93.360	96.550	0.000	47730.000	50690.000	53090.000
x		93.747%	95.522%	92.195%	96.652%	0.000	95.318%	101.021%	105.218%
σ		1.521%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.622	2.734	3.290	0.614	0.000	1.293	0.869	1.036
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:53:17	514.500	5267.000	0.000	50350.000	48850.000	51240.000	91.065%	97.940
2	22:53:36	518.400	5227.000	0.000	49570.000	48290.000	50590.000	92.769%	98.510
3	22:53:55	529.800	5291.000	0.000	49680.000	48820.000	50540.000	93.536%	99.870
x		104.180%	105.234%	0.000	99.733%	97.306%	101.577%	92.456%	98.773%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.265%	n/a
%RSD		1.527	0.607	0.000	0.843	0.638	0.774	1.368	1.001
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:53:17	102.200	104.000	514.400	26960.000	25910.000	101.900	100.900	101.900
2	22:53:36	102.400	104.600	519.300	26830.000	26290.000	102.600	103.300	103.600
3	22:53:55	102.900	104.500	521.200	26640.000	26330.000	102.700	103.700	103.300
x		102.483%	104.348%	103.656%	107.240%	104.721%	102.371%	102.629%	102.956%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.349	0.259	0.672	0.601	0.884	0.422	1.455	0.907
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:53:17	102.100	101.400	102.300	100.400	106.600	100.300	0.000	103.200
2	22:53:36	102.900	103.700	101.700	102.500	110.800	102.600	0.000	104.200
3	22:53:55	103.100	103.000	103.500	100.800	107.100	103.500	0.000	103.900
x		102.739%	102.684%	102.490%	101.243%	108.196%	102.138%	0.000	103.803%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.508	1.118	0.880	1.134	2.132	1.615	0.000	0.492
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:53:17	91.748%	101.300	101.400	88.065%	102.000	101.900	102.200	105.500
2	22:53:36	93.543%	105.200	106.800	88.662%	103.200	104.000	105.500	106.300
3	22:53:55	95.558%	105.400	107.700	90.001%	102.600	104.300	103.000	106.600
x		93.617%	103.950%	105.297%	88.909%	102.623%	103.427%	103.555%	106.168%
σ		1.906%	n/a	n/a	0.991%	n/a	n/a	n/a	n/a
%RSD		2.036	2.209	3.221	1.115	0.568	1.249	1.675	0.540
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:53:17	90.494%	102.300	101.200	101.200	104.000	103.500	96.238%	97.205%
2	22:53:36	93.387%	102.000	101.400	101.500	102.800	104.200	99.394%	100.987%
3	22:53:55	95.566%	101.700	101.700	101.700	103.400	102.800	101.566%	102.307%
x		93.149%	102.025%	101.430%	101.464%	103.383%	103.507%	99.066%	100.166%
σ		2.544%	n/a	n/a	n/a	n/a	n/a	2.679%	2.648%
%RSD		2.731	0.320	0.212	0.277	0.550	0.706	2.705	2.644
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:53:17	99.830	99.570	99.370	100.000	99.260	93.211%		
2	22:53:36	104.100	104.600	103.900	104.400	103.900	92.783%		
3	22:53:55	106.700	107.400	106.100	107.700	107.100	91.953%		
x		103.550%	103.859%	103.142%	104.026%	103.422%	92.649%		
σ		n/a	n/a	n/a	n/a	n/a	0.640%		
%RSD		3.367	3.811	3.335	3.700	3.831	0.690		

CCB8 7/16/2014 10:59:47 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	23:00:06	92.946%	-0.300	-0.483	-1.187	0.000	42.720	4.457	3.689	
2	23:00:25	94.732%	-0.225	-1.289	-1.481	0.000	38.050	3.816	3.772	
3	23:00:44	96.131%	-0.301	-0.573	-1.647	0.000	36.470	4.949	3.975	
X		94.603%	-0.275	-0.782	-1.438	0.000	39.080	4.407	3.812	
		σ	1.597%	0.044	0.442	0.233	0.000	3.246	0.568	0.147
		%RSD	1.688	15.850	56.540	16.200	0.000	8.307	12.900	3.858
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	23:00:06	-0.351	4.889	0.000	35.460	-2.516	24.710	91.519%	0.001	
2	23:00:25	-0.337	3.683	0.000	36.590	-0.348	23.280	93.667%	-0.032	
3	23:00:44	-0.497	5.519	0.000	33.750	9.606	27.150	94.896%	-0.061	
X		-0.395	4.697	0.000	35.270	2.247	25.050	93.361%	-0.031	
		σ	0.089	0.933	0.000	1.428	6.464	1.709%	0.031	
		%RSD	22.400	19.860	0.000	4.050	287.600	7.799	1.831	101.100
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	23:00:06	0.264	0.210	0.061	1.174	4.499	-0.001	0.088	1.100	
2	23:00:25	0.606	0.237	0.060	-0.429	1.709	-0.002	0.060	1.143	
3	23:00:44	-0.149	0.149	0.079	-1.697	1.983	-0.005	0.027	1.218	
X		0.240	0.199	0.067	-0.317	2.731	-0.003	0.058	1.154	
		σ	0.378	0.045	0.010	1.438	0.002	0.031	0.060	
		%RSD	157.300	22.730	15.710	453.400	56.320	71.900	52.430	5.161
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	23:00:06	-0.064	0.330	0.375	0.832	4.609	-0.876	0.000	0.043	
2	23:00:25	-0.123	0.401	0.251	-0.011	3.783	0.964	0.000	0.050	
3	23:00:44	-0.011	0.195	0.409	-0.067	3.574	-0.799	0.000	0.047	
X		-0.066	0.309	0.345	0.251	3.989	-0.237	0.000	0.047	
		σ	0.056	0.104	0.083	0.503	0.547	1.041	0.000	0.004
		%RSD	85.000	33.750	24.110	200.200	13.720	439.300	0.000	7.632
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	23:00:06	100.592%	0.144	0.160	99.732%	-0.013	-0.014	0.035	0.016	
2	23:00:25	104.103%	0.098	0.153	101.076%	-0.023	-0.014	0.037	0.021	
3	23:00:44	105.565%	0.151	0.201	101.964%	-0.015	-0.004	0.017	0.007	
X		103.420%	0.131	0.171	100.924%	-0.017	-0.011	0.029	0.015	
		σ	2.556%	0.029	0.025	1.124%	0.006	0.006	0.011	0.007
		%RSD	2.472	22.130	14.860	1.113	32.770	55.460	36.830	49.530
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	23:00:06	97.066%	-0.342	0.119	0.110	0.013	-0.013	99.766%	100.680%	
2	23:00:25	99.589%	-0.369	0.122	0.147	-0.005	-0.009	101.892%	102.812%	
3	23:00:44	101.084%	-0.365	0.119	0.104	0.011	-0.014	104.072%	105.633%	
X		99.246%	-0.358	0.120	0.121	0.006	-0.012	101.910%	103.041%	
		σ	2.031%	0.015	0.002	0.023	0.010	0.003	2.153%	2.484%
		%RSD	2.046	4.109	1.514	19.150	164.800	23.910	2.112	2.411
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	23:00:06	0.006	0.003	-0.010	0.006	-0.008	102.051%			
2	23:00:25	0.007	0.002	-0.003	0.010	0.001	102.730%			
3	23:00:44	0.003	0.003	-0.009	0.002	-0.010	103.857%			
X		0.005	0.002	-0.007	0.006	-0.006	102.879%			
		σ	0.002	0.000	0.004	0.004	0.006	0.912%		
		%RSD	40.180	19.570	54.360	67.940	96.570	0.886		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:03:51	96.805%	-0.252	69.230	69.180	0.000	62950.000	16470.000	17630.000
2	23:04:10	97.961%	-0.229	66.010	72.210	0.000	62440.000	16780.000	17900.000
3	23:04:29	100.703%	-0.232	60.820	69.300	0.000	61380.000	16570.000	17750.000
x		98.490%	-0.238	65.360	70.230	0.000	62250.000	16610.000	17760.000
σ		2.002%	0.013	4.242	1.718	0.000	803.200	157.100	136.300
%RSD		2.033	5.280	6.491	2.446	0.000	1.290	0.946	0.767
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:03:51	25.050	5103.000	0.000	10670.000	122700.000	133000.000	93.798%	1.576
2	23:04:10	26.510	5151.000	0.000	10640.000	122400.000	132800.000	95.543%	1.809
3	23:04:29	26.080	5090.000	0.000	10500.000	121800.000	130900.000	98.027%	1.523
x		25.880	5115.000	0.000	10600.000	122300.000	132200.000	95.789%	1.636
σ		0.750	32.370	0.000	93.150	467.200	1144.000	2.125%	0.152
%RSD		2.897	0.633	0.000	0.878	0.382	0.866	2.219	9.289
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:03:51	0.716	32.070	12.520	48.940	324.500	0.605	0.570	2.176
2	23:04:10	-0.723	33.100	12.470	49.010	329.900	0.649	0.652	2.032
3	23:04:29	-0.583	32.220	12.370	48.100	329.500	0.596	0.619	2.086
x		-0.197	32.470	12.450	48.680	328.000	0.617	0.613	2.098
σ		0.793	0.558	0.076	0.505	3.026	0.028	0.041	0.073
%RSD		403.100	1.718	0.612	1.036	0.923	4.597	6.758	3.463
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:03:51	0.789	10.080	9.781	0.762	4.537	0.640	0.000	253.200
2	23:04:10	0.836	9.686	9.967	1.629	4.853	0.863	0.000	254.800
3	23:04:29	0.752	9.082	9.467	1.702	4.403	0.855	0.000	253.700
x		0.792	9.617	9.738	1.364	4.598	0.786	0.000	253.900
σ		0.042	0.504	0.253	0.523	0.231	0.126	0.000	0.858
%RSD		5.285	5.244	2.596	38.350	5.033	16.070	0.000	0.338
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:03:51	99.969%	1.547	1.547	96.887%	-0.015	-0.012	-0.008	-0.009
2	23:04:10	103.976%	1.498	1.407	98.332%	-0.010	0.001	-0.041	-0.024
3	23:04:29	106.244%	1.547	1.392	99.989%	-0.023	-0.008	-0.014	-0.020
x		103.396%	1.531	1.449	98.403%	-0.016	-0.006	-0.021	-0.018
σ		3.178%	0.028	0.086	1.552%	0.007	0.007	0.018	0.008
%RSD		3.073	1.847	5.909	1.577	41.410	107.200	84.840	43.140
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:03:51	96.771%	1.125	0.301	0.349	66.420	65.140	102.465%	103.524%
2	23:04:10	100.541%	1.012	0.259	0.271	68.710	67.390	105.861%	107.352%
3	23:04:29	102.116%	0.959	0.214	0.241	66.560	66.400	107.752%	109.078%
x		99.809%	1.032	0.258	0.287	67.230	66.310	105.359%	106.651%
σ		2.747%	0.085	0.044	0.056	1.285	1.129	2.679%	2.843%
%RSD		2.752	8.222	16.890	19.450	1.911	1.703	2.542	2.665
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:03:51	0.005	0.010	0.092	0.084	0.084	96.721%		
2	23:04:10	0.010	0.006	0.096	0.095	0.091	97.820%		
3	23:04:29	0.005	0.004	0.118	0.076	0.106	99.507%		
x		0.007	0.007	0.102	0.085	0.093	98.016%		
σ		0.003	0.003	0.014	0.010	0.011	1.404%		
%RSD		38.630	40.220	14.140	11.520	12.120	1.432		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:34	103.643%	-0.235	27.320	26.070	0.000	82.440	1.740	1.766
2	23:07:53	106.227%	-0.238	25.830	27.900	0.000	73.550	2.250	2.217
3	23:08:12	105.983%	-0.261	23.360	26.630	0.000	83.250	1.542	1.757
X		105.284%	-0.245	25.500	26.870	0.000	79.750	1.844	1.913
σ		1.426%	0.014	1.997	0.939	0.000	5.380	0.365	0.263
%RSD		1.355	5.657	7.832	3.493	0.000	6.747	19.810	13.740
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:34	11.380	25.680	0.000	47.650	35.700	93.320	98.060%	1.707
2	23:07:53	10.880	25.470	0.000	43.500	35.000	104.400	99.234%	1.296
3	23:08:12	10.800	26.290	0.000	46.900	27.110	111.900	100.481%	1.709
X		11.020	25.820	0.000	46.020	32.610	103.200	99.258%	1.570
σ		0.314	0.428	0.000	2.213	4.768	9.350	1.211%	0.237
%RSD		2.849	1.658	0.000	4.808	14.620	9.060	1.220	15.130
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:34	0.966	2.260	0.127	0.096	-0.039	-0.012	0.212	1.323
2	23:07:53	-3.038	2.364	0.080	-0.317	-1.851	-0.017	0.132	1.207
3	23:08:12	-0.072	2.408	0.102	-1.174	0.614	-0.020	0.143	1.156
X		-0.715	2.344	0.103	-0.465	-0.425	-0.016	0.162	1.228
σ		2.078	0.076	0.023	0.647	1.277	0.004	0.043	0.086
%RSD		290.700	3.226	22.370	139.300	300.300	24.450	26.470	6.963
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:34	0.314	3.639	3.581	1.097	4.222	0.428	0.000	0.108
2	23:07:53	0.301	3.632	3.356	-1.071	3.676	0.534	0.000	0.122
3	23:08:12	0.236	3.609	3.605	-0.628	3.508	-0.613	0.000	0.111
X		0.284	3.626	3.514	-0.201	3.802	0.116	0.000	0.114
σ		0.042	0.016	0.137	1.145	0.373	0.634	0.000	0.007
%RSD		14.810	0.435	3.898	570.500	9.812	544.700	0.000	6.302
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:34	103.929%	0.037	0.034	104.223%	-0.028	-0.017	-0.042	-0.034
2	23:07:53	107.328%	0.102	0.043	105.227%	-0.019	-0.017	-0.035	-0.036
3	23:08:12	109.919%	0.073	0.039	106.683%	-0.020	-0.009	-0.050	-0.035
X		107.059%	0.071	0.039	105.378%	-0.022	-0.015	-0.042	-0.035
σ		3.005%	0.033	0.005	1.237%	0.005	0.005	0.008	0.001
%RSD		2.806	46.460	12.250	1.174	21.240	33.410	18.280	3.080
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:34	101.089%	0.557	0.084	0.110	0.002	0.029	104.924%	105.204%
2	23:07:53	103.804%	0.602	0.079	0.108	-0.015	-0.005	106.796%	109.457%
3	23:08:12	104.863%	0.499	0.065	0.076	0.025	-0.015	108.954%	111.618%
X		103.252%	0.552	0.076	0.098	0.004	0.003	106.891%	108.760%
σ		1.947%	0.052	0.010	0.019	0.020	0.023	2.016%	3.264%
%RSD		1.885	9.361	12.640	19.600	462.300	778.000	1.886	3.001
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:07:34	-0.006	-0.008	0.002	-0.002	-0.003	104.829%		
2	23:07:53	-0.005	-0.008	0.001	-0.001	-0.004	105.237%		
3	23:08:12	0.002	-0.007	0.008	-0.005	-0.006	106.180%		
X		-0.003	-0.008	0.004	-0.003	-0.004	105.415%		
σ		0.004	0.000	0.004	0.002	0.002	0.693%		
%RSD		132.400	4.624	103.400	73.780	38.180	0.657		

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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	23:14:20	95.506%	-0.200	-1.044	-1.619	0.000	29.960	0.190	0.624
2	23:14:39	94.936%	-0.326	-0.659	-1.262	0.000	37.100	0.416	0.494
3	23:14:58	98.619%	-0.229	-1.233	-1.611	0.000	29.840	0.982	0.456
X		96.353%	-0.252	-0.979	-1.497	0.000	32.300	0.529	0.525
σ		1.982%	0.066	0.292	0.204	0.000	4.156	0.408	0.088
%RSD		2.057	26.090	29.890	13.610	0.000	12.870	77.070	16.800
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:14:20	0.467	6.850	0.000	36.910	46.130	70.590	90.028%	0.289
2	23:14:39	0.355	7.770	0.000	38.990	61.160	69.400	91.329%	0.253
3	23:14:58	0.480	7.089	0.000	35.710	46.810	80.930	92.684%	0.356
X		0.434	7.236	0.000	37.210	51.370	73.640	91.347%	0.299
σ		0.069	0.477	0.000	1.660	8.485	6.341	1.328%	0.053
%RSD		15.920	6.599	0.000	4.460	16.520	8.611	1.454	17.530
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:14:20	-0.076	0.932	0.070	-2.407	-1.140	-0.011	0.199	1.181
2	23:14:39	1.544	1.130	0.087	-2.128	-0.351	-0.013	0.161	0.958
3	23:14:58	-0.494	1.078	0.089	-3.536	-3.025	-0.011	0.110	0.994
X		0.325	1.047	0.082	-2.690	-1.505	-0.012	0.157	1.044
σ		1.077	0.102	0.011	0.746	1.374	0.001	0.045	0.120
%RSD		331.700	9.786	12.790	27.720	91.280	8.428	28.600	11.450
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:14:20	0.013	1.298	1.309	1.002	3.406	0.265	0.000	0.058
2	23:14:39	0.052	1.405	1.339	0.219	2.923	-0.113	0.000	0.063
3	23:14:58	0.081	1.141	1.302	0.281	3.142	0.050	0.000	0.063
X		0.049	1.282	1.317	0.501	3.157	0.067	0.000	0.061
σ		0.034	0.133	0.020	0.435	0.242	0.189	0.000	0.003
%RSD		69.770	10.360	1.484	86.940	7.659	281.200	0.000	4.248
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:14:20	95.116%	0.077	0.033	97.304%	-0.023	-0.014	-0.040	-0.036
2	23:14:39	98.731%	0.107	0.071	99.779%	-0.017	-0.014	0.015	-0.012
3	23:14:58	99.690%	0.111	0.025	100.309%	-0.020	-0.022	-0.055	-0.082
X		97.846%	0.098	0.043	99.131%	-0.020	-0.016	-0.027	-0.043
σ		2.412%	0.019	0.024	1.604%	0.003	0.005	0.037	0.036
%RSD		2.465	18.860	56.590	1.618	14.030	27.670	137.800	82.350
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:14:20	94.232%	7.879	0.010	0.009	0.014	0.008	97.064%	98.469%
2	23:14:39	97.170%	7.444	-0.010	0.015	0.047	-0.013	100.648%	101.659%
3	23:14:58	97.706%	7.923	-0.010	0.025	-0.005	-0.013	102.825%	103.344%
X		96.369%	7.749	-0.003	0.016	0.019	-0.006	100.179%	101.157%
σ		1.870%	0.265	0.012	0.008	0.026	0.012	2.909%	2.476%
%RSD		1.941	3.416	365.500	50.830	142.500	207.700	2.904	2.447
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:14:20	0.008	-0.007	-0.008	-0.008	-0.011	97.869%		
2	23:14:39	-0.008	-0.009	-0.003	-0.004	-0.009	98.891%		
3	23:14:58	-0.004	-0.005	-0.011	0.005	-0.009	99.835%		
X		-0.001	-0.007	-0.007	-0.002	-0.010	98.865%		
σ		0.008	0.002	0.004	0.007	0.001	0.983%		
%RSD		568.400	29.200	53.420	320.800	13.960	0.994		

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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	23:18:02	105.794%	47.110	1001.000	1072.000	0.000	45700.000	53490.000	57880.000
2	23:18:21	108.482%	48.130	1042.000	1095.000	0.000	45520.000	53390.000	57750.000
3	23:18:40	111.443%	47.280	1020.000	1087.000	0.000	44840.000	53050.000	57600.000
X		108.573%	47.510	1021.000	1085.000	0.000	45350.000	53310.000	57740.000
σ		2.826%	0.544	20.130	11.460	0.000	455.800	231.600	138.900
%RSD		2.603	1.144	1.972	1.056	0.000	1.005	0.434	0.241
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:18:02	2333.000	10640.000	0.000	48820.000	48650.000	51920.000	100.107%	1001.000
2	23:18:21	2323.000	10630.000	0.000	48030.000	47820.000	51100.000	103.858%	1005.000
3	23:18:40	2322.000	10560.000	0.000	47650.000	48160.000	51030.000	105.196%	993.700
X		2326.000	10610.000	0.000	48170.000	48210.000	51350.000	103.053%	999.900
σ		6.221	43.670	0.000	598.600	417.200	494.300	2.638%	5.853
%RSD		0.268	0.412	0.000	1.243	0.865	0.963	2.560	0.585
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:18:02	519.800	212.600	535.100	1071.000	1117.000	483.200	474.500	234.900
2	23:18:21	527.400	213.300	529.300	1051.000	1122.000	483.900	472.700	235.800
3	23:18:40	523.900	214.500	529.300	1055.000	1138.000	485.500	477.100	237.100
X		523.700	213.500	531.200	1059.000	1125.000	484.200	474.800	235.900
σ		3.767	0.936	3.350	10.700	10.690	1.158	2.215	1.094
%RSD		0.719	0.438	0.631	1.010	0.950	0.239	0.467	0.464
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:18:02	234.600	456.600	454.900	34.000	12.680	9.282	0.000	1039.000
2	23:18:21	235.500	463.100	458.200	36.760	11.900	8.558	0.000	1026.000
3	23:18:40	236.900	458.700	455.200	34.420	12.400	9.000	0.000	1023.000
X		235.600	459.500	456.100	35.060	12.320	8.947	0.000	1029.000
σ		1.162	3.355	1.808	1.485	0.394	0.365	0.000	8.335
%RSD		0.493	0.730	0.397	4.237	3.194	4.080	0.000	0.810
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:18:02	107.512%	1062.000	1072.000	99.674%	49.580	49.860	49.040	43.230
2	23:18:21	111.857%	1072.000	1079.000	101.702%	49.300	49.980	49.710	43.710
3	23:18:40	113.514%	1077.000	1085.000	101.931%	49.790	49.890	50.650	44.930
X		110.961%	1070.000	1079.000	101.102%	49.560	49.910	49.800	43.960
σ		3.100%	7.379	6.656	1.242%	0.246	0.063	0.811	0.879
%RSD		2.793	0.689	0.617	1.228	0.496	0.126	1.629	2.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:18:02	101.033%	2147.000	501.900	502.900	1998.000	1986.000	110.296%	111.203%
2	23:18:21	105.988%	2085.000	502.200	501.300	1986.000	1965.000	114.491%	115.954%
3	23:18:40	107.149%	2087.000	507.200	503.200	1992.000	1980.000	115.815%	117.157%
X		104.723%	2106.000	503.800	502.500	1992.000	1977.000	113.534%	114.771%
σ		3.248%	35.430	2.940	1.024	5.701	10.550	2.881%	3.148%
%RSD		3.102	1.682	0.584	0.204	0.286	0.533	2.538	2.743
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:18:02	47.540	48.200	19.680	19.700	19.560	103.504%		
2	23:18:21	49.220	49.510	19.980	20.200	20.120	104.313%		
3	23:18:40	49.540	49.630	20.130	20.440	20.270	104.919%		
X		48.770	49.120	19.930	20.110	19.980	104.245%		
σ		1.074	0.797	0.228	0.378	0.377	0.710%		
%RSD		2.201	1.623	1.143	1.878	1.885	0.681		

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Run	Time	6Li ppb	9Be ppb	10B ppb	11B ppb	13C ppb	23Na ppb	25Mg ppb	26Mg ppb
1	23:21:44	107.085%	48.480	1056.000	1114.000	0.000	46870.000	53450.000	57230.000
2	23:22:03	109.041%	50.920	1046.000	1112.000	0.000	46090.000	53300.000	57220.000
3	23:22:22	110.717%	50.470	1065.000	1119.000	0.000	45790.000	53130.000	57160.000
x		108.948%	49.960	1056.000	1115.000	0.000	46250.000	53290.000	57210.000
σ		1.818%	1.299	9.710	3.355	0.000	557.100	158.500	36.540
%RSD		1.669	2.601	0.920	0.301	0.000	1.205	0.297	0.064
Run	Time	27Al ppb	28Si ppb	37Cl ppb	39K ppb	43Ca ppb	44Ca ppb	45Sc ppb	47Ti ppb
1	23:21:44	2328.000	10770.000	0.000	49150.000	48860.000	52580.000	100.562%	999.000
2	23:22:03	2331.000	10690.000	0.000	48400.000	48990.000	51820.000	102.632%	1004.000
3	23:22:22	2338.000	10730.000	0.000	48420.000	48710.000	51710.000	103.725%	1005.000
x		2332.000	10730.000	0.000	48660.000	48860.000	52040.000	102.307%	1003.000
σ		4.930	40.730	0.000	425.100	139.300	472.800	1.606%	3.246
%RSD		0.211	0.380	0.000	0.874	0.285	0.909	1.570	0.324
Run	Time	51V ppb	52Cr ppb	55Mn ppb	56Fe ppb	57Fe ppb	59Co ppb	60Ni ppb	63Cu ppb
1	23:21:44	530.100	217.100	523.600	1090.000	1153.000	499.100	497.300	242.100
2	23:22:03	535.000	217.300	537.000	1075.000	1149.000	500.200	493.600	241.500
3	23:22:22	530.700	218.800	533.000	1070.000	1133.000	500.500	492.000	241.600
x		531.900	217.700	531.200	1079.000	1145.000	499.900	494.300	241.700
σ		2.628	0.909	6.859	10.410	10.760	0.766	2.725	0.329
%RSD		0.494	0.417	1.291	0.965	0.940	0.153	0.551	0.136
Run	Time	65Cu ppb	66Zn ppb	68Zn ppb	75As ppb	78Se ppb	82Se ppb	83Kr ppb	88Sr ppb
1	23:21:44	241.100	465.300	463.700	37.150	11.640	7.786	0.000	1046.000
2	23:22:03	241.800	468.500	463.600	38.460	11.090	9.845	0.000	1031.000
3	23:22:22	241.600	463.700	463.100	36.500	11.700	10.350	0.000	1030.000
x		241.500	465.800	463.500	37.370	11.480	9.328	0.000	1036.000
σ		0.409	2.466	0.329	0.997	0.336	1.359	0.000	9.004
%RSD		0.169	0.529	0.071	2.668	2.925	14.570	0.000	0.869
Run	Time	89Y ppb	95Mo ppb	98Mo ppb	103Rh ppb	107Ag ppb	109Ag ppb	111Cd ppb	114Cd ppb
1	23:21:44	106.420%	1070.000	1074.000	99.158%	49.860	49.770	50.720	44.400
2	23:22:03	109.586%	1079.000	1085.000	100.016%	50.830	51.330	50.100	46.030
3	23:22:22	110.873%	1082.000	1093.000	100.558%	50.080	50.730	50.990	44.780
x		108.960%	1077.000	1084.000	99.911%	50.250	50.610	50.600	45.070
σ		2.291%	5.951	9.532	0.706%	0.509	0.787	0.457	0.852
%RSD		2.103	0.553	0.879	0.707	1.014	1.555	0.903	1.891
Run	Time	115In ppb	118Sn ppb	121Sb ppb	123Sb ppb	135Ba ppb	137Ba ppb	159Tb ppb	165Ho ppb
1	23:21:44	101.613%	2146.000	502.300	499.000	2005.000	1983.000	109.488%	110.184%
2	23:22:03	104.091%	2105.000	501.500	500.800	2004.000	1996.000	111.963%	114.051%
3	23:22:22	106.208%	2077.000	499.900	497.200	2002.000	1998.000	112.631%	115.550%
x		103.971%	2109.000	501.200	499.000	2004.000	1992.000	111.361%	113.262%
σ		2.300%	34.820	1.226	1.826	1.452	8.201	1.656%	2.769%
%RSD		2.212	1.651	0.245	0.366	0.072	0.412	1.487	2.445
Run	Time	203Tl ppb	205Tl ppb	206Pb ppb	207Pb ppb	208Pb ppb	209Bi ppb		
1	23:21:44	49.650	50.380	20.090	20.100	20.230	98.192%		
2	23:22:03	50.710	51.130	20.650	20.610	20.710	99.495%		
3	23:22:22	51.850	51.850	20.770	21.090	20.960	99.496%		
x		50.730	51.120	20.510	20.600	20.630	99.061%		
σ		1.099	0.735	0.365	0.495	0.367	0.753%		
%RSD		2.166	1.437	1.779	2.401	1.779	0.760		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:25:25	95.126%	-0.125	17.860	17.220	0.000	10930.000	5152.000	5479.000
2	23:25:44	95.653%	-0.201	14.120	14.770	0.000	10780.000	5158.000	5554.000
3	23:26:04	96.843%	-0.252	11.100	12.630	0.000	10550.000	5161.000	5550.000
x		95.874%	-0.193	14.360	14.870	0.000	10750.000	5157.000	5528.000
σ		0.880%	0.064	3.386	2.296	0.000	190.100	4.444	42.080
%RSD		0.917	33.240	23.580	15.430	0.000	1.768	0.086	0.761
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:25:25	215.400	406.100	0.000	28750.000	291100.000	314300.000	94.313%	66.490
2	23:25:44	216.000	399.800	0.000	28140.000	289900.000	309200.000	95.402%	64.650
3	23:26:04	212.700	393.000	0.000	27910.000	287200.000	308200.000	95.441%	64.750
x		214.700	399.600	0.000	28270.000	289400.000	310600.000	95.052%	65.300
σ		1.782	6.526	0.000	433.000	2011.000	3269.000	0.641%	1.032
%RSD		0.830	1.633	0.000	1.532	0.695	1.053	0.674	1.580
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:25:25	0.838	0.848	378.200	709.600	1327.000	1.065	0.861	388.000
2	23:25:44	2.250	1.128	379.800	697.900	1303.000	1.051	0.913	384.500
3	23:26:04	-0.518	1.152	379.900	694.100	1300.000	1.003	0.696	383.200
x		0.857	1.042	379.300	700.500	1310.000	1.040	0.823	385.200
σ		1.384	0.169	0.969	8.033	14.860	0.033	0.114	2.500
%RSD		161.600	16.210	0.256	1.147	1.134	3.141	13.820	0.649
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:25:25	388.100	227.000	228.500	3.699	4.447	2.870	0.000	2820.000
2	23:25:44	385.900	228.500	228.500	3.499	4.403	2.952	0.000	2792.000
3	23:26:04	380.500	223.500	228.000	5.285	5.716	2.621	0.000	2769.000
x		384.800	226.300	228.300	4.161	4.855	2.814	0.000	2794.000
σ		3.901	2.607	0.287	0.978	0.746	0.172	0.000	25.610
%RSD		1.014	1.152	0.126	23.510	15.360	6.110	0.000	0.917
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:25:25	101.681%	1.988	2.078	95.777%	0.943	1.013	11.760	11.980
2	23:25:44	103.908%	1.944	1.892	96.389%	0.956	0.889	11.410	11.640
3	23:26:04	105.265%	1.467	1.664	96.586%	0.996	0.924	11.610	11.630
x		103.618%	1.800	1.878	96.251%	0.965	0.942	11.590	11.750
σ		1.810%	0.289	0.208	0.422%	0.028	0.064	0.176	0.198
%RSD		1.746	16.040	11.060	0.438	2.871	6.772	1.519	1.685
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:25:25	96.445%	38.910	0.247	0.363	223.900	227.500	104.461%	106.093%
2	23:25:44	100.519%	37.540	0.187	0.346	223.800	222.100	107.499%	108.876%
3	23:26:04	100.689%	38.070	0.199	0.341	227.900	225.500	108.380%	110.710%
x		99.217%	38.180	0.211	0.350	225.200	225.100	106.780%	108.560%
σ		2.403%	0.692	0.032	0.012	2.379	2.755	2.056%	2.324%
%RSD		2.422	1.812	15.010	3.394	1.056	1.224	1.925	2.141
Run	Time	203TI	205TI	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:25:25	0.253	0.234	3.911	3.473	3.648	96.901%		
2	23:25:44	0.192	0.215	3.895	3.552	3.658	99.027%		
3	23:26:04	0.208	0.206	3.708	3.606	3.655	99.575%		
x		0.218	0.218	3.838	3.544	3.654	98.501%		
σ		0.032	0.014	0.113	0.067	0.005	1.412%		
%RSD		14.480	6.555	2.944	1.887	0.140	1.434		

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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	23:29:07	93.370%	-0.146	9.595	7.772	0.000	11050.000	5471.000	5858.000
2	23:29:26	95.078%	-0.175	8.870	7.838	0.000	10860.000	5485.000	5900.000
3	23:29:45	94.745%	-0.225	6.634	7.861	0.000	10750.000	5524.000	5936.000
x		94.397%	-0.182	8.366	7.824	0.000	10890.000	5493.000	5898.000
σ		0.906%	0.040	1.543	0.046	0.000	152.100	27.450	39.020
%RSD		0.959	21.900	18.450	0.592	0.000	1.397	0.500	0.661
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:29:07	160.800	311.600	0.000	19820.000	340800.000	366200.000	91.627%	47.500
2	23:29:26	158.900	311.300	0.000	19730.000	340500.000	364200.000	92.854%	47.550
3	23:29:45	158.600	306.800	0.000	19570.000	338900.000	363100.000	93.606%	45.690
x		159.400	309.900	0.000	19700.000	340100.000	364500.000	92.696%	46.910
σ		1.211	2.697	0.000	123.800	1039.000	1581.000	0.999%	1.061
%RSD		0.760	0.870	0.000	0.628	0.306	0.434	1.078	2.262
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:29:07	1.917	1.666	368.300	863.800	1566.000	0.898	0.032	253.400
2	23:29:26	0.056	1.955	368.400	855.600	1552.000	0.872	0.151	253.000
3	23:29:45	1.028	1.854	367.600	845.500	1553.000	0.842	0.036	247.800
x		1.000	1.825	368.100	854.900	1557.000	0.871	0.073	251.400
σ		0.930	0.147	0.400	9.165	7.740	0.028	0.067	3.076
%RSD		93.030	8.048	0.109	1.072	0.497	3.248	92.120	1.224
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:29:07	252.300	170.500	172.000	4.534	4.257	1.070	0.000	3098.000
2	23:29:26	254.100	171.700	172.700	4.280	3.301	0.852	0.000	3059.000
3	23:29:45	252.200	171.100	172.500	3.151	3.629	1.109	0.000	3018.000
x		252.900	171.100	172.400	3.988	3.729	1.010	0.000	3058.000
σ		1.040	0.596	0.370	0.736	0.486	0.139	0.000	39.770
%RSD		0.411	0.349	0.214	18.450	13.030	13.710	0.000	1.301
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:29:07	98.403%	0.827	0.832	92.878%	0.618	0.684	7.230	6.892
2	23:29:26	101.328%	0.865	0.864	93.379%	0.647	0.611	6.766	6.947
3	23:29:45	102.473%	0.699	0.791	94.796%	0.608	0.623	6.665	6.911
x		100.735%	0.797	0.829	93.684%	0.624	0.639	6.887	6.917
σ		2.099%	0.087	0.036	0.995%	0.021	0.039	0.301	0.028
%RSD		2.084	10.880	4.401	1.062	3.302	6.146	4.372	0.403
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:29:07	95.149%	36.590	0.143	0.219	176.900	175.700	101.509%	102.845%
2	23:29:26	95.951%	37.040	0.145	0.251	179.400	178.800	104.505%	106.547%
3	23:29:45	98.448%	36.190	0.099	0.271	177.600	176.000	106.223%	107.938%
x		96.516%	36.610	0.129	0.247	178.000	176.800	104.079%	105.777%
σ		1.720%	0.424	0.026	0.026	1.251	1.710	2.386%	2.633%
%RSD		1.782	1.158	19.940	10.500	0.703	0.967	2.292	2.489
Run	Time	203TI	205TI	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:29:07	0.107	0.104	1.884	1.766	1.822	95.827%		
2	23:29:26	0.094	0.101	1.940	1.790	1.844	95.694%		
3	23:29:45	0.103	0.096	1.898	1.889	1.860	96.595%		
x		0.102	0.100	1.907	1.815	1.842	96.039%		
σ		0.006	0.004	0.029	0.065	0.019	0.486%		
%RSD		6.371	3.883	1.543	3.577	1.027	0.506		

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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	23:32:49	89.385%	-0.324	6.157	5.181	0.000	14710.000	3843.000	4104.000
2	23:33:08	91.440%	-0.299	6.348	5.072	0.000	14500.000	3872.000	4114.000
3	23:33:27	90.366%	-0.272	4.335	5.804	0.000	14610.000	3883.000	4218.000
X		90.397%	-0.298	5.613	5.352	0.000	14610.000	3866.000	4145.000
σ		1.028%	0.026	1.111	0.395	0.000	101.000	20.820	62.800
%RSD		1.137	8.814	19.800	7.376	0.000	0.691	0.538	1.515
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:32:49	232.200	393.000	0.000	18840.000	299900.000	324600.000	88.136%	43.170
2	23:33:08	234.200	387.800	0.000	18650.000	300200.000	321000.000	89.321%	40.680
3	23:33:27	240.300	399.000	0.000	18520.000	299400.000	320300.000	89.895%	38.700
X		235.600	393.200	0.000	18670.000	299800.000	322000.000	89.118%	40.850
σ		4.215	5.612	0.000	158.600	400.800	2344.000	0.897%	2.242
%RSD		1.789	1.427	0.000	0.850	0.134	0.728	1.006	5.490
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:32:49	1.522	1.405	396.800	1139.000	1744.000	0.872	-0.102	302.400
2	23:33:08	-1.405	1.582	399.900	1131.000	1717.000	0.880	-0.017	300.900
3	23:33:27	3.114	1.410	399.600	1116.000	1715.000	0.832	0.021	298.500
X		1.077	1.466	398.800	1129.000	1725.000	0.862	-0.032	300.600
σ		2.292	0.101	1.709	11.880	16.180	0.026	0.063	1.978
%RSD		212.800	6.896	0.428	1.052	0.938	2.970	193.600	0.658
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:32:49	301.700	179.200	179.600	5.453	2.983	1.075	0.000	2565.000
2	23:33:08	300.000	178.900	179.700	2.581	2.991	1.906	0.000	2534.000
3	23:33:27	298.000	178.000	177.100	4.490	2.784	0.780	0.000	2496.000
X		299.900	178.700	178.800	4.175	2.919	1.254	0.000	2532.000
σ		1.816	0.577	1.483	1.461	0.117	0.584	0.000	34.460
%RSD		0.605	0.323	0.829	35.010	4.024	46.550	0.000	1.361
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:32:49	95.259%	0.607	0.594	90.531%	0.578	0.660	11.920	12.970
2	23:33:08	98.270%	0.602	0.549	91.750%	0.637	0.639	12.220	12.510
3	23:33:27	99.840%	0.639	0.643	92.584%	0.644	0.582	12.370	12.310
X		97.790%	0.616	0.596	91.622%	0.620	0.627	12.170	12.600
σ		2.328%	0.020	0.047	1.033%	0.036	0.040	0.230	0.338
%RSD		2.381	3.205	7.892	1.127	5.877	6.421	1.892	2.680
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:32:49	91.775%	36.930	0.108	0.179	106.400	105.100	98.168%	99.841%
2	23:33:08	94.347%	36.760	0.079	0.174	107.400	107.900	101.945%	103.311%
3	23:33:27	95.712%	37.050	0.104	0.178	107.700	106.000	103.419%	104.463%
X		93.945%	36.910	0.097	0.177	107.200	106.300	101.178%	102.538%
σ		1.999%	0.150	0.016	0.002	0.726	1.438	2.708%	2.406%
%RSD		2.128	0.406	16.490	1.257	0.678	1.352	2.677	2.346
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:32:49	0.116	0.108	1.762	1.555	1.639	93.345%		
2	23:33:08	0.088	0.102	1.791	1.560	1.692	94.522%		
3	23:33:27	0.123	0.107	1.825	1.617	1.706	95.175%		
X		0.109	0.106	1.793	1.577	1.679	94.347%		
σ		0.018	0.003	0.032	0.034	0.035	0.927%		
%RSD		16.990	3.128	1.770	2.174	2.101	0.983		

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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	23:36:30	93.516%	-0.223	1.682	1.456	0.000	6004.000	1930.000	2081.000
2	23:36:50	94.135%	-0.249	2.665	1.283	0.000	5946.000	1940.000	2117.000
3	23:37:09	96.154%	-0.251	1.801	1.234	0.000	5897.000	1959.000	2107.000
X		94.602%	-0.241	2.049	1.325	0.000	5949.000	1943.000	2101.000
σ		1.380%	0.016	0.536	0.117	0.000	53.710	14.760	18.380
%RSD		1.458	6.564	26.160	8.796	0.000	0.903	0.759	0.875
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:36:30	91.540	202.600	0.000	12390.000	45930.000	50330.000	89.437%	29.730
2	23:36:50	94.060	214.700	0.000	12290.000	46010.000	50020.000	90.318%	30.460
3	23:37:09	89.230	213.900	0.000	12170.000	46010.000	49690.000	91.418%	29.510
X		91.610	210.400	0.000	12280.000	45980.000	50010.000	90.391%	29.900
σ		2.414	6.741	0.000	108.400	47.000	319.800	0.992%	0.502
%RSD		2.635	3.204	0.000	0.882	0.102	0.639	1.098	1.679
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:36:30	0.040	0.620	80.950	307.500	412.500	0.305	0.997	127.600
2	23:36:50	0.929	0.704	81.860	309.300	387.900	0.274	1.224	126.600
3	23:37:09	1.069	0.853	81.570	307.100	406.400	0.278	1.026	127.700
X		0.679	0.726	81.460	308.000	402.300	0.286	1.082	127.300
σ		0.558	0.118	0.463	1.205	12.810	0.017	0.124	0.599
%RSD		82.170	16.200	0.569	0.391	3.184	5.847	11.410	0.471
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:36:30	127.500	107.900	106.100	1.450	3.362	0.159	0.000	415.400
2	23:36:50	127.000	106.600	106.400	1.092	3.100	1.832	0.000	415.800
3	23:37:09	126.200	105.400	105.100	1.250	2.942	1.042	0.000	415.700
X		126.900	106.600	105.800	1.264	3.135	1.011	0.000	415.600
σ		0.640	1.288	0.684	0.179	0.212	0.837	0.000	0.169
%RSD		0.505	1.208	0.646	14.160	6.758	82.810	0.000	0.041
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:36:30	97.585%	0.303	0.273	95.461%	0.268	0.261	2.983	3.220
2	23:36:50	99.910%	0.283	0.307	96.084%	0.317	0.306	3.183	3.166
3	23:37:09	101.402%	0.298	0.277	97.039%	0.270	0.255	3.308	3.317
X		99.632%	0.295	0.285	96.194%	0.285	0.274	3.158	3.235
σ		1.923%	0.010	0.018	0.795%	0.028	0.028	0.164	0.076
%RSD		1.930	3.527	6.441	0.826	9.705	10.270	5.183	2.363
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:36:30	94.814%	34.780	0.052	0.077	27.550	28.190	101.659%	102.823%
2	23:36:50	96.928%	34.330	0.051	0.122	27.490	27.530	103.713%	105.478%
3	23:37:09	97.882%	34.550	0.053	0.120	28.130	27.690	105.751%	107.625%
X		96.541%	34.550	0.052	0.106	27.720	27.810	103.708%	105.309%
σ		1.570%	0.223	0.001	0.025	0.357	0.344	2.046%	2.405%
%RSD		1.626	0.644	1.868	23.770	1.289	1.238	1.973	2.284
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:36:30	0.028	0.028	0.718	0.726	0.738	99.656%		
2	23:36:50	0.023	0.024	0.833	0.741	0.772	100.825%		
3	23:37:09	0.034	0.033	0.846	0.781	0.784	100.883%		
X		0.028	0.029	0.799	0.750	0.765	100.455%		
σ		0.006	0.005	0.070	0.029	0.024	0.692%		
%RSD		20.240	16.360	8.803	3.826	3.139	0.689		

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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	23:40:13	89.016%	-0.243	-0.084	-0.566	0.000	1261.000	374.500	392.100	
2	23:40:32	89.205%	-0.271	-0.629	-0.949	0.000	1250.000	390.800	402.600	
3	23:40:51	90.755%	-0.298	-0.671	-0.827	0.000	1230.000	372.000	395.800	
X		89.659%	-0.271	-0.461	-0.780	0.000	1247.000	379.100	396.800	
		σ	0.954%	0.027	0.328	0.196	0.000	15.860	10.180	5.333
		%RSD	1.064	10.150	71.040	25.050	0.000	1.272	2.685	1.344
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	23:40:13	16.550	44.500	0.000	2568.000	9099.000	9470.000	84.342%	4.412	
2	23:40:32	17.290	39.520	0.000	2552.000	9495.000	9538.000	85.150%	4.485	
3	23:40:51	17.550	39.120	0.000	2524.000	9338.000	9391.000	86.110%	4.197	
X		17.130	41.040	0.000	2548.000	9311.000	9466.000	85.201%	4.365	
		σ	0.519	2.998	0.000	22.370	199.300	73.740	0.885%	0.150
		%RSD	3.027	7.306	0.000	0.878	2.140	0.779	1.039	3.441
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	23:40:13	1.110	0.689	15.860	61.750	80.490	0.054	0.247	26.590	
2	23:40:32	0.918	0.689	16.120	60.960	79.010	0.049	0.314	26.960	
3	23:40:51	-0.855	0.542	16.340	58.180	83.560	0.050	0.183	26.350	
X		0.391	0.640	16.110	60.300	81.020	0.051	0.248	26.630	
		σ	1.083	0.085	0.237	1.875	2.322	0.002	0.065	0.307
		%RSD	277.100	13.210	1.473	3.110	2.866	4.652	26.330	1.152
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	23:40:13	26.490	22.460	22.730	-0.564	3.173	-1.210	0.000	82.550	
2	23:40:32	25.920	22.220	23.520	0.339	2.530	-0.540	0.000	81.360	
3	23:40:51	26.550	21.650	22.920	-0.116	2.607	0.580	0.000	82.260	
X		26.320	22.110	23.060	-0.114	2.770	-0.390	0.000	82.060	
		σ	0.346	0.416	0.408	0.452	0.351	0.904	0.000	0.623
		%RSD	1.315	1.883	1.772	397.300	12.670	231.900	0.000	0.759
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	23:40:13	90.556%	0.093	0.070	92.593%	0.049	0.047	0.542	0.620	
2	23:40:32	92.729%	0.106	0.080	93.881%	0.038	0.044	0.692	0.615	
3	23:40:51	93.372%	0.105	0.080	94.233%	0.025	0.061	0.619	0.567	
X		92.219%	0.101	0.077	93.569%	0.037	0.050	0.618	0.601	
		σ	1.475%	0.007	0.006	0.863%	0.012	0.009	0.075	0.029
		%RSD	1.600	7.144	7.545	0.923	31.540	18.180	12.090	4.899
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	23:40:13	89.714%	6.408	-0.016	-0.009	4.975	5.123	94.288%	95.771%	
2	23:40:32	91.946%	6.253	-0.027	-0.021	5.551	5.671	97.441%	97.480%	
3	23:40:51	93.220%	6.399	-0.023	-0.015	5.141	5.723	97.775%	99.289%	
X		91.627%	6.353	-0.022	-0.015	5.222	5.506	96.501%	97.513%	
		σ	1.775%	0.087	0.006	0.006	0.297	0.333	1.924%	1.759%
		%RSD	1.937	1.368	25.920	39.400	5.683	6.041	1.994	1.804
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	23:40:13	0.009	0.003	0.158	0.098	0.125	95.156%			
2	23:40:32	0.002	0.004	0.162	0.120	0.134	96.218%			
3	23:40:51	0.001	0.001	0.137	0.157	0.131	96.772%			
X		0.004	0.003	0.152	0.125	0.130	96.049%			
		σ	0.004	0.002	0.013	0.030	0.004	0.821%		
		%RSD	101.900	56.080	8.828	23.980	3.198	0.855		

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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	23:43:36	87.881%	96.990	90.730	94.850	0.000	48030.000	50490.000	52250.000
2	23:43:55	88.554%	99.310	96.350	97.500	0.000	47930.000	50790.000	52620.000
3	23:44:14	89.440%	94.620	95.240	97.400	0.000	47280.000	50670.000	52610.000
X		88.625%	96.975%	94.106%	96.585%	0.000	95.495%	101.292%	104.989%
σ		0.782%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.882	2.420	3.162	1.553	0.000	0.850	0.299	0.403
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:43:36	508.600	5223.000	0.000	50340.000	48240.000	51220.000	86.224%	99.850
2	23:43:55	523.300	5234.000	0.000	49680.000	48420.000	50540.000	88.036%	98.160
3	23:44:14	521.600	5220.000	0.000	49670.000	49110.000	50620.000	88.750%	94.030
X		103.570%	104.516%	0.000	99.791%	97.178%	101.587%	87.670%	97.344%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.302%	n/a
%RSD		1.563	0.139	0.000	0.776	0.947	0.733	1.485	3.077
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:43:36	101.300	102.500	515.600	27110.000	25930.000	100.900	101.100	100.900
2	23:43:55	102.500	104.200	516.700	26730.000	26040.000	101.300	102.600	101.700
3	23:44:14	103.400	104.600	520.300	26710.000	26140.000	101.400	101.500	101.600
X		102.396%	103.755%	103.512%	107.402%	104.144%	101.192%	101.728%	101.422%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.054	1.051	0.471	0.833	0.412	0.267	0.747	0.433
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:43:36	101.500	100.200	101.200	100.100	105.800	101.100	0.000	103.800
2	23:43:55	100.600	104.300	103.600	102.900	105.400	106.600	0.000	103.900
3	23:44:14	101.000	102.900	102.000	101.700	107.800	102.200	0.000	104.400
X		101.031%	102.471%	102.250%	101.581%	106.322%	103.286%	0.000	104.041%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.455	2.011	1.178	1.367	1.182	2.821	0.000	0.319
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:43:36	86.377%	103.000	101.500	84.021%	99.580	101.500	103.300	105.000
2	23:43:55	89.563%	104.900	104.800	85.308%	101.800	103.400	105.500	104.900
3	23:44:14	91.291%	107.600	108.300	85.799%	102.300	104.300	103.600	106.400
X		89.077%	105.149%	104.878%	85.043%	101.198%	103.058%	104.149%	105.428%
σ		2.493%	n/a	n/a	0.918%	n/a	n/a	n/a	n/a
%RSD		2.798	2.163	3.239	1.080	1.409	1.411	1.133	0.792
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:43:36	85.998%	103.500	102.000	101.200	103.300	103.700	91.182%	92.588%
2	23:43:55	90.143%	102.300	102.100	101.000	100.500	103.300	96.267%	97.264%
3	23:44:14	91.754%	104.000	103.300	102.800	104.300	103.900	98.017%	99.884%
X		89.298%	103.263%	102.464%	101.702%	102.701%	103.613%	95.155%	96.579%
σ		2.970%	n/a	n/a	n/a	n/a	n/a	3.551%	3.696%
%RSD		3.325	0.852	0.738	0.973	1.917	0.287	3.731	3.827
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:43:36	98.870	99.340	98.590	99.110	98.780	90.017%		
2	23:43:55	103.000	103.300	102.900	102.800	102.900	91.311%		
3	23:44:14	105.300	106.100	105.100	105.700	105.600	91.145%		
X		102.407%	102.898%	102.190%	102.559%	102.432%	90.824%		
σ		n/a	n/a	n/a	n/a	n/a	0.704%		
%RSD		3.193	3.282	3.228	3.245	3.366	0.775		

CCB9 7/16/2014 11:50:05 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	23:50:24	88.944%	-0.243	-1.966	-1.429	0.000	32.030	3.789	3.452
2	23:50:43	89.431%	-0.271	-1.305	-1.472	0.000	36.010	4.164	3.647
3	23:51:03	89.234%	-0.351	-1.035	-0.697	0.000	39.600	3.913	4.225
X		89.203%	-0.288	-1.435	-1.199	0.000	35.880	3.955	3.774
σ		0.245%	0.056	0.479	0.436	0.000	3.785	0.191	0.402
%RSD		0.275	19.430	33.390	36.310	0.000	10.550	4.828	10.650
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:24	-0.522	4.426	0.000	39.870	-1.131	6.389	85.036%	-0.162
2	23:50:43	-0.195	4.061	0.000	37.230	-4.128	10.150	85.802%	-0.014
3	23:51:03	-0.418	4.014	0.000	39.340	-7.015	10.390	86.227%	0.074
X		-0.379	4.167	0.000	38.810	-4.091	8.977	85.688%	-0.034
σ		0.167	0.226	0.000	1.397	2.942	2.244	0.603%	0.119
%RSD		44.160	5.422	0.000	3.598	71.920	25.000	0.704	352.900
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:24	0.518	0.299	0.047	-0.572	3.771	-0.001	0.054	0.817
2	23:50:43	0.534	0.243	0.054	-1.042	5.031	-0.007	0.112	1.014
3	23:51:03	0.523	0.255	0.044	-2.055	5.279	0.003	0.060	0.995
X		0.525	0.265	0.048	-1.223	4.694	-0.002	0.075	0.942
σ		0.008	0.029	0.005	0.758	0.809	0.005	0.032	0.109
%RSD		1.474	11.090	10.010	61.980	17.230	319.700	42.700	11.540
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:24	-0.112	0.278	0.373	0.303	3.293	-0.178	0.000	0.050
2	23:50:43	-0.071	0.384	0.207	0.448	2.763	-0.764	0.000	0.044
3	23:51:03	-0.102	0.277	0.348	0.304	3.777	0.240	0.000	0.049
X		-0.095	0.313	0.310	0.352	3.278	-0.234	0.000	0.047
σ		0.021	0.061	0.090	0.084	0.507	0.504	0.000	0.003
%RSD		22.340	19.670	28.950	23.770	15.480	215.500	0.000	6.597
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:24	88.439%	0.207	0.162	91.511%	-0.009	-0.006	-0.060	-0.051
2	23:50:43	90.150%	0.177	0.159	92.839%	-0.005	-0.010	0.021	0.013
3	23:51:03	91.235%	0.123	0.160	93.449%	-0.001	-0.002	-0.046	-0.034
X		89.942%	0.169	0.160	92.600%	-0.005	-0.006	-0.029	-0.024
σ		1.410%	0.042	0.002	0.991%	0.004	0.004	0.043	0.033
%RSD		1.567	25.150	0.964	1.070	85.000	65.670	151.000	136.700
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:24	88.916%	-0.381	0.116	0.133	-0.031	-0.021	91.847%	92.156%
2	23:50:43	90.848%	-0.382	0.092	0.101	0.006	0.005	93.811%	95.773%
3	23:51:03	92.994%	-0.383	0.103	0.065	0.005	-0.022	95.537%	96.728%
X		90.919%	-0.382	0.104	0.100	-0.006	-0.013	93.731%	94.886%
σ		2.040%	0.001	0.012	0.034	0.021	0.015	1.846%	2.411%
%RSD		2.244	0.176	11.740	34.040	330.800	118.000	1.970	2.541
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:50:24	0.002	0.002	0.002	-0.009	-0.008	96.147%		
2	23:50:43	0.000	0.001	-0.013	-0.005	-0.011	96.324%		
3	23:51:03	0.001	0.001	0.001	-0.002	-0.008	97.236%		
X		0.001	0.001	-0.003	-0.005	-0.009	96.569%		
σ		0.001	0.001	0.008	0.003	0.002	0.584%		
%RSD		88.900	73.020	243.500	64.060	24.810	0.605		

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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	23:54:09	90.344%	-0.272	6.074	4.201	0.000	12560.000	5173.000	5470.000	
2	23:54:28	92.495%	-0.222	5.475	5.175	0.000	12380.000	5161.000	5523.000	
3	23:54:48	95.286%	-0.200	5.853	5.345	0.000	12150.000	5084.000	5459.000	
X		92.708%	-0.231	5.801	4.907	0.000	12360.000	5139.000	5484.000	
		σ	2.478%	0.037	0.303	0.617	0.000	207.500	48.150	33.960
		%RSD	2.673	15.840	5.225	12.580	0.000	1.679	0.937	0.619
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	23:54:09	554.400	814.100	0.000	23190.000	279400.000	304900.000	87.604%	67.670	
2	23:54:28	559.900	810.700	0.000	22940.000	280200.000	302400.000	89.398%	65.040	
3	23:54:48	555.800	816.800	0.000	22550.000	279100.000	299100.000	91.604%	62.580	
X		556.700	813.900	0.000	22890.000	279500.000	302100.000	89.535%	65.090	
		σ	2.893	3.062	0.000	322.300	556.700	2909.000	2.003%	2.545
		%RSD	0.520	0.376	0.000	1.408	0.199	0.963	2.238	3.909
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	23:54:09	1.183	1.262	295.300	2287.000	2756.000	1.160	1.208	355.600	
2	23:54:28	1.259	1.453	293.600	2254.000	2711.000	1.114	1.010	354.000	
3	23:54:48	1.690	1.517	294.600	2219.000	2718.000	1.099	0.911	350.500	
X		1.377	1.411	294.500	2253.000	2728.000	1.124	1.043	353.400	
		σ	0.273	0.133	0.872	34.030	24.160	0.031	0.151	2.636
		%RSD	19.840	9.395	0.296	1.510	0.885	2.791	14.520	0.746
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	23:54:09	353.300	212.500	210.600	4.492	4.947	2.177	0.000	2790.000	
2	23:54:28	351.200	213.300	212.200	4.724	4.913	1.843	0.000	2718.000	
3	23:54:48	353.300	213.400	212.500	5.538	4.538	2.311	0.000	2714.000	
X		352.600	213.000	211.800	4.918	4.799	2.110	0.000	2741.000	
		σ	1.225	0.494	0.995	0.549	0.227	0.241	0.000	42.310
		%RSD	0.347	0.232	0.470	11.160	4.731	11.430	0.000	1.544
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	23:54:09	96.049%	0.779	0.813	91.221%	0.968	0.938	13.420	14.120	
2	23:54:28	99.486%	0.794	0.719	92.472%	1.043	1.005	13.840	13.910	
3	23:54:48	100.593%	0.795	0.721	93.215%	1.075	0.931	13.760	13.840	
X		98.710%	0.789	0.751	92.303%	1.029	0.958	13.670	13.950	
		σ	2.370%	0.009	0.054	1.007%	0.055	0.041	0.221	0.145
		%RSD	2.401	1.104	7.194	1.091	5.334	4.283	1.615	1.039
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	23:54:09	91.661%	37.310	0.420	0.547	165.400	160.800	98.950%	100.674%	
2	23:54:28	94.794%	37.040	0.366	0.385	160.500	162.000	103.468%	103.965%	
3	23:54:48	96.592%	36.700	0.364	0.365	161.500	161.500	104.050%	105.903%	
X		94.349%	37.020	0.383	0.432	162.500	161.400	102.156%	103.514%	
		σ	2.495%	0.304	0.032	0.100	2.583	0.584	2.792%	2.643%
		%RSD	2.645	0.821	8.328	23.160	1.590	0.362	2.733	2.553
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	23:54:09	0.057	0.049	6.015	5.721	5.796	95.146%			
2	23:54:28	0.054	0.048	6.297	5.905	6.071	96.443%			
3	23:54:48	0.059	0.056	6.287	5.801	6.067	97.482%			
X		0.056	0.051	6.200	5.809	5.978	96.357%			
		σ	0.003	0.004	0.160	0.093	0.157	1.171%		
		%RSD	4.649	8.394	2.580	1.593	2.631	1.215		

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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	23:57:51	89.320%	-0.244	6.433	7.613	0.000	16120.000	7699.000	8218.000
2	23:58:10	90.834%	-0.298	8.109	8.092	0.000	15880.000	7716.000	8273.000
3	23:58:29	92.914%	-0.274	7.743	8.749	0.000	15590.000	7720.000	8193.000
X		91.022%	-0.272	7.429	8.151	0.000	15860.000	7712.000	8228.000
σ		1.804%	0.027	0.881	0.570	0.000	268.100	11.340	40.910
%RSD		1.982	10.020	11.860	6.998	0.000	1.690	0.147	0.497
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:57:51	128.700	296.400	0.000	16550.000	411500.000	441100.000	87.851%	52.620
2	23:58:10	127.300	287.700	0.000	16190.000	405400.000	433200.000	89.433%	49.450
3	23:58:29	130.500	288.600	0.000	16030.000	404700.000	431900.000	90.341%	50.310
X		128.800	290.900	0.000	16250.000	407200.000	435400.000	89.208%	50.790
σ		1.608	4.769	0.000	265.900	3694.000	4959.000	1.260%	1.640
%RSD		1.248	1.639	0.000	1.636	0.907	1.139	1.413	3.228
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:57:51	-0.296	0.638	552.800	649.900	1577.000	1.402	0.494	241.800
2	23:58:10	-1.072	0.567	550.600	645.100	1525.000	1.435	0.142	239.500
3	23:58:29	0.882	0.853	554.700	649.500	1539.000	1.399	0.417	239.000
X		-0.162	0.686	552.700	648.100	1547.000	1.412	0.351	240.100
σ		0.984	0.149	2.029	2.677	26.700	0.020	0.185	1.482
%RSD		607.100	21.740	0.367	0.413	1.726	1.439	52.700	0.617
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:57:51	242.400	266.800	265.700	3.941	4.684	1.841	0.000	3892.000
2	23:58:10	241.600	263.800	266.400	4.871	5.316	3.801	0.000	3837.000
3	23:58:29	239.800	265.900	263.200	5.133	4.392	3.783	0.000	3805.000
X		241.300	265.500	265.100	4.648	4.797	3.142	0.000	3845.000
σ		1.341	1.527	1.704	0.626	0.472	1.127	0.000	43.970
%RSD		0.556	0.575	0.643	13.470	9.849	35.860	0.000	1.144
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:57:51	95.052%	0.673	0.661	89.394%	0.331	0.353	41.280	41.970
2	23:58:10	97.084%	0.616	0.645	90.541%	0.389	0.352	40.970	41.710
3	23:58:29	99.292%	0.685	0.609	91.335%	0.373	0.424	39.950	41.950
X		97.143%	0.658	0.638	90.423%	0.364	0.376	40.730	41.880
σ		2.121%	0.037	0.027	0.976%	0.030	0.041	0.696	0.144
%RSD		2.183	5.634	4.217	1.079	8.248	10.930	1.709	0.343
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:57:51	90.888%	35.910	0.145	0.277	191.900	191.200	97.860%	99.372%
2	23:58:10	93.699%	35.780	0.134	0.262	191.100	188.000	102.400%	103.476%
3	23:58:29	95.651%	36.130	0.157	0.294	191.000	188.500	103.730%	105.302%
X		93.413%	35.940	0.145	0.278	191.300	189.200	101.330%	102.717%
σ		2.394%	0.179	0.012	0.016	0.477	1.705	3.078%	3.037%
%RSD		2.563	0.499	8.150	5.685	0.249	0.901	3.037	2.957
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:57:51	0.085	0.084	1.929	1.753	1.873	92.043%		
2	23:58:10	0.101	0.089	1.918	1.796	1.868	92.846%		
3	23:58:29	0.109	0.100	1.967	1.761	1.877	93.737%		
X		0.098	0.091	1.938	1.770	1.873	92.875%		
σ		0.012	0.008	0.026	0.023	0.004	0.847%		
%RSD		12.170	8.683	1.334	1.301	0.240	0.912		

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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	00:01:34	90.899%	-0.219	3.661	3.095	0.000	11890.000	5170.000	5528.000
2	00:01:53	90.844%	-0.246	2.338	3.109	0.000	11670.000	5240.000	5630.000
3	00:02:13	91.080%	-0.220	2.058	3.029	0.000	11720.000	5278.000	5711.000
X		90.941%	-0.228	2.685	3.078	0.000	11760.000	5229.000	5623.000
σ		0.124%	0.015	0.856	0.043	0.000	111.900	54.950	92.040
%RSD		0.136	6.623	31.880	1.397	0.000	0.952	1.051	1.637
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:01:34	38.520	143.500	0.000	23070.000	222300.000	242900.000	87.327%	49.370
2	00:01:53	41.770	141.700	0.000	22660.000	222300.000	240500.000	88.963%	48.260
3	00:02:13	37.420	137.500	0.000	22570.000	222600.000	239400.000	89.859%	47.490
X		39.240	140.900	0.000	22770.000	222400.000	240900.000	88.717%	48.370
σ		2.262	3.112	0.000	265.300	165.600	1779.000	1.284%	0.947
%RSD		5.766	2.209	0.000	1.165	0.074	0.739	1.447	1.957
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:01:34	0.160	-0.339	236.800	155.400	654.200	0.653	-0.266	288.800
2	00:01:53	0.738	-0.404	236.000	154.700	655.700	0.683	-0.178	287.200
3	00:02:13	0.139	-0.227	236.000	153.700	639.800	0.662	-0.238	285.700
X		0.346	-0.323	236.200	154.600	649.900	0.666	-0.228	287.300
σ		0.340	0.089	0.439	0.844	8.779	0.015	0.045	1.544
%RSD		98.320	27.620	0.186	0.546	1.351	2.315	19.650	0.538
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:01:34	286.900	227.200	226.300	5.354	3.120	1.404	0.000	1923.000
2	00:01:53	286.100	223.500	226.400	4.868	4.280	0.572	0.000	1889.000
3	00:02:13	285.300	226.300	227.800	4.079	3.660	0.966	0.000	1878.000
X		286.100	225.700	226.900	4.767	3.687	0.981	0.000	1896.000
σ		0.801	1.923	0.843	0.643	0.580	0.416	0.000	23.270
%RSD		0.280	0.852	0.372	13.500	15.730	42.470	0.000	1.227
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:01:34	95.529%	0.339	0.489	91.523%	0.603	0.593	32.220	33.670
2	00:01:53	98.632%	0.499	0.458	92.742%	0.558	0.601	32.620	33.380
3	00:02:13	99.858%	0.484	0.464	93.071%	0.604	0.620	32.170	33.380
X		98.006%	0.441	0.471	92.445%	0.589	0.605	32.340	33.480
σ		2.231%	0.089	0.016	0.816%	0.026	0.014	0.245	0.169
%RSD		2.276	20.090	3.498	0.882	4.466	2.288	0.758	0.505
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:01:34	92.040%	35.630	0.072	0.137	116.000	114.500	100.072%	101.725%
2	00:01:53	95.076%	35.320	0.068	0.152	116.200	113.600	103.258%	104.897%
3	00:02:13	95.920%	35.600	0.070	0.125	117.600	115.500	104.265%	106.742%
X		94.345%	35.520	0.070	0.138	116.600	114.600	102.532%	104.454%
σ		2.040%	0.170	0.002	0.013	0.851	0.975	2.189%	2.538%
%RSD		2.163	0.480	3.026	9.676	0.730	0.851	2.135	2.430
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:01:34	0.095	0.098	1.970	1.805	1.904	95.752%		
2	00:01:53	0.097	0.099	1.987	1.913	1.955	97.497%		
3	00:02:13	0.103	0.085	2.047	1.902	1.950	98.218%		
X		0.098	0.094	2.001	1.873	1.937	97.156%		
σ		0.004	0.007	0.040	0.059	0.028	1.268%		
%RSD		4.176	7.971	2.022	3.163	1.439	1.305		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:05:18	85.890%	-0.268	10.550	11.940	0.000	16730.000	12200.000	13020.000
2	00:05:37	86.992%	-0.269	11.180	11.180	0.000	16470.000	12190.000	12940.000
3	00:05:56	88.979%	-0.163	10.880	10.050	0.000	16150.000	12010.000	12900.000
X		87.287%	-0.233	10.870	11.050	0.000	16450.000	12130.000	12950.000
σ		1.566%	0.061	0.312	0.949	0.000	288.700	107.600	65.510
%RSD		1.794	26.040	2.873	8.588	0.000	1.755	0.887	0.506
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:05:18	155.500	337.900	0.000	20730.000	569100.000	611200.000	85.182%	64.290
2	00:05:37	156.100	327.800	0.000	20140.000	560000.000	598600.000	87.641%	63.770
3	00:05:56	158.400	333.000	0.000	20010.000	562400.000	596700.000	87.984%	60.970
X		156.700	332.900	0.000	20290.000	563800.000	602200.000	86.936%	63.010
σ		1.552	5.048	0.000	383.300	4726.000	7899.000	1.528%	1.782
%RSD		0.991	1.516	0.000	1.889	0.838	1.312	1.758	2.828
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:05:18	-1.318	-0.160	834.800	914.400	2137.000	1.259	-0.318	268.500
2	00:05:37	-0.438	-0.033	819.300	889.800	2073.000	1.341	-0.646	266.300
3	00:05:56	1.126	0.185	814.000	881.100	2072.000	1.339	-1.001	264.200
X		-0.210	-0.003	822.700	895.100	2094.000	1.313	-0.655	266.300
σ		1.238	0.174	10.810	17.290	37.510	0.047	0.342	2.158
%RSD		589.300	6808.000	1.314	1.932	1.792	3.556	52.200	0.810
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:05:18	267.200	277.400	274.500	4.934	3.694	2.701	0.000	5079.000
2	00:05:37	265.400	273.800	272.700	4.496	3.490	2.068	0.000	5047.000
3	00:05:56	263.200	278.700	277.600	5.681	3.536	3.443	0.000	4981.000
X		265.300	276.600	274.900	5.037	3.573	2.737	0.000	5036.000
σ		2.019	2.582	2.493	0.599	0.107	0.688	0.000	49.990
%RSD		0.761	0.933	0.907	11.890	3.005	25.150	0.000	0.993
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:05:18	93.513%	0.542	0.572	86.647%	0.464	0.450	56.730	57.190
2	00:05:37	95.770%	0.656	0.585	87.637%	0.472	0.512	55.240	57.030
3	00:05:56	96.910%	0.653	0.603	88.535%	0.496	0.487	54.810	57.120
X		95.398%	0.617	0.587	87.606%	0.477	0.483	55.590	57.110
σ		1.729%	0.065	0.015	0.944%	0.017	0.031	1.007	0.084
%RSD		1.812	10.530	2.611	1.078	3.547	6.496	1.812	0.147
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:05:18	88.757%	36.480	0.117	0.201	298.100	297.800	97.107%	97.618%
2	00:05:37	92.192%	36.280	0.120	0.259	291.200	293.900	100.383%	102.745%
3	00:05:56	93.681%	35.890	0.094	0.246	291.600	290.800	101.437%	103.924%
X		91.544%	36.220	0.110	0.235	293.600	294.200	99.642%	101.429%
σ		2.525%	0.300	0.014	0.030	3.876	3.487	2.258%	3.352%
%RSD		2.758	0.828	12.700	12.900	1.320	1.185	2.267	3.305
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:05:18	0.100	0.106	2.507	2.268	2.387	89.523%		
2	00:05:37	0.117	0.104	2.548	2.328	2.407	91.310%		
3	00:05:56	0.126	0.108	2.453	2.321	2.412	91.828%		
X		0.114	0.106	2.503	2.305	2.402	90.887%		
σ		0.013	0.002	0.047	0.033	0.013	1.209%		
%RSD		11.570	1.977	1.893	1.431	0.555	1.331		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:09:01	88.269%	-0.188	4.404	4.688	0.000	9581.000	5417.000	5802.000
2	00:09:21	87.488%	-0.269	5.130	5.168	0.000	9573.000	5546.000	5960.000
3	00:09:40	88.639%	-0.270	7.712	5.024	0.000	9402.000	5505.000	5922.000
X		88.132%	-0.243	5.748	4.960	0.000	9519.000	5490.000	5895.000
σ		0.588%	0.047	1.739	0.246	0.000	101.100	65.950	82.500
%RSD		0.667	19.380	30.240	4.967	0.000	1.063	1.201	1.400
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:09:01	103.000	237.600	0.000	15610.000	241900.000	264800.000	84.982%	45.410
2	00:09:21	105.300	257.500	0.000	15470.000	243400.000	261500.000	86.675%	45.430
3	00:09:40	105.000	251.600	0.000	15280.000	242400.000	259500.000	87.631%	44.690
X		104.400	248.900	0.000	15450.000	242600.000	262000.000	86.429%	45.180
σ		1.270	10.220	0.000	165.100	731.100	2674.000	1.342%	0.425
%RSD		1.216	4.105	0.000	1.069	0.301	1.021	1.552	0.940
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:09:01	-0.027	1.831	404.100	608.900	1151.000	0.716	0.851	234.600
2	00:09:21	-0.348	1.746	403.000	605.700	1133.000	0.769	1.283	233.000
3	00:09:40	0.629	1.909	403.900	603.300	1112.000	0.702	0.710	231.000
X		0.085	1.828	403.700	606.000	1132.000	0.729	0.948	232.900
σ		0.498	0.082	0.586	2.792	19.930	0.035	0.299	1.791
%RSD		587.200	4.466	0.145	0.461	1.761	4.787	31.530	0.769
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:09:01	235.600	250.900	252.000	3.676	3.303	1.497	0.000	2255.000
2	00:09:21	230.900	249.600	248.600	3.429	3.240	1.611	0.000	2226.000
3	00:09:40	229.500	249.800	251.200	2.452	3.233	1.873	0.000	2207.000
X		232.000	250.100	250.600	3.186	3.259	1.660	0.000	2229.000
σ		3.210	0.700	1.802	0.647	0.038	0.193	0.000	24.180
%RSD		1.384	0.280	0.719	20.330	1.176	11.610	0.000	1.085
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:09:01	93.263%	0.477	0.599	89.908%	0.373	0.393	39.190	40.630
2	00:09:21	96.715%	0.625	0.525	91.024%	0.381	0.414	40.320	40.730
3	00:09:40	98.551%	0.553	0.446	91.221%	0.427	0.424	40.660	40.830
X		96.176%	0.552	0.523	90.718%	0.394	0.411	40.060	40.730
σ		2.685%	0.074	0.076	0.708%	0.029	0.016	0.768	0.100
%RSD		2.792	13.500	14.590	0.781	7.488	3.900	1.917	0.246
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:09:01	90.437%	38.730	0.064	0.149	118.200	117.500	97.260%	99.792%
2	00:09:21	92.939%	38.250	0.090	0.137	117.400	117.800	102.153%	103.430%
3	00:09:40	94.706%	38.500	0.092	0.165	118.900	117.100	103.291%	105.113%
X		92.694%	38.490	0.082	0.150	118.200	117.500	100.901%	102.779%
σ		2.145%	0.237	0.016	0.014	0.766	0.340	3.205%	2.720%
%RSD		2.314	0.616	19.210	9.460	0.648	0.289	3.176	2.646
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:09:01	0.074	0.060	1.950	1.660	1.803	93.717%		
2	00:09:21	0.060	0.074	1.804	1.714	1.734	95.567%		
3	00:09:40	0.067	0.059	1.900	1.707	1.833	96.901%		
X		0.067	0.065	1.885	1.693	1.790	95.395%		
σ		0.007	0.008	0.074	0.029	0.051	1.599%		
%RSD		10.490	12.740	3.928	1.727	2.842	1.676		

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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	00:12:44	86.139%	-0.323	8.046	8.112	0.000	17090.000	10550.000	11340.000
2	00:13:03	84.421%	-0.295	7.804	7.841	0.000	17230.000	10840.000	11590.000
3	00:13:22	86.011%	-0.185	8.989	7.809	0.000	16910.000	10730.000	11510.000
X		85.524%	-0.268	8.280	7.920	0.000	17080.000	10710.000	11480.000
σ		0.957%	0.073	0.626	0.167	0.000	160.600	147.400	126.800
%RSD		1.119	27.370	7.560	2.104	0.000	0.941	1.377	1.105
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:12:44	288.600	512.600	0.000	26160.000	378300.000	411400.000	83.842%	74.190
2	00:13:03	302.700	503.200	0.000	26090.000	379300.000	406500.000	85.609%	75.780
3	00:13:22	296.000	505.000	0.000	25720.000	376600.000	401600.000	86.787%	69.710
X		295.800	506.900	0.000	25990.000	378100.000	406500.000	85.413%	73.230
σ		7.063	4.958	0.000	234.600	1349.000	4895.000	1.482%	3.148
%RSD		2.388	0.978	0.000	0.903	0.357	1.204	1.735	4.299
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:12:44	0.705	1.192	730.300	1346.000	2124.000	1.533	1.649	346.900
2	00:13:03	1.572	1.318	716.700	1324.000	2074.000	1.433	1.346	345.600
3	00:13:22	1.642	1.581	708.600	1300.000	2048.000	1.396	1.637	343.600
X		1.306	1.364	718.500	1324.000	2082.000	1.454	1.544	345.400
σ		0.522	0.199	10.960	22.990	38.590	0.071	0.171	1.647
%RSD		39.940	14.560	1.525	1.737	1.854	4.868	11.100	0.477
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:12:44	345.100	321.000	324.500	6.576	4.554	3.110	0.000	3766.000
2	00:13:03	345.700	324.800	322.600	5.726	4.761	3.621	0.000	3730.000
3	00:13:22	339.800	320.800	318.100	7.104	3.994	3.673	0.000	3667.000
X		343.500	322.200	321.700	6.469	4.436	3.468	0.000	3721.000
σ		3.245	2.232	3.260	0.695	0.397	0.311	0.000	50.180
%RSD		0.945	0.693	1.013	10.750	8.948	8.972	0.000	1.349
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:12:44	92.719%	0.775	0.865	87.229%	0.731	0.773	41.140	42.200
2	00:13:03	94.903%	0.892	0.842	87.777%	0.688	0.720	41.740	42.610
3	00:13:22	96.429%	0.859	0.891	88.961%	0.691	0.777	41.020	42.350
X		94.683%	0.842	0.866	87.989%	0.703	0.756	41.300	42.390
σ		1.865%	0.060	0.025	0.885%	0.024	0.032	0.389	0.209
%RSD		1.969	7.165	2.837	1.006	3.420	4.222	0.941	0.492
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:12:44	89.323%	33.980	0.109	0.231	308.200	312.200	97.911%	99.002%
2	00:13:03	90.826%	35.170	0.106	0.239	313.700	311.100	100.093%	101.994%
3	00:13:22	92.663%	34.460	0.124	0.223	312.700	308.600	101.646%	104.449%
X		90.937%	34.540	0.113	0.231	311.500	310.600	99.883%	101.815%
σ		1.673%	0.597	0.010	0.008	2.929	1.815	1.877%	2.728%
%RSD		1.840	1.729	8.798	3.481	0.940	0.584	1.879	2.679
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:12:44	0.104	0.114	3.750	3.415	3.597	92.785%		
2	00:13:03	0.106	0.105	3.690	3.395	3.562	92.713%		
3	00:13:22	0.102	0.130	3.782	3.520	3.662	95.185%		
X		0.104	0.116	3.741	3.443	3.607	93.561%		
σ		0.002	0.013	0.047	0.067	0.051	1.407%		
%RSD		1.481	10.850	1.259	1.959	1.416	1.504		

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User Pre-dilution: 1.000

Run	Time	6Li ppb	9Be ppb	10B ppb	11B ppb	13C ppb	23Na ppb	25Mg ppb	26Mg ppb
1	00:16:25	86.718%	-0.213	5.225	3.190	0.000	14050.000	3641.000	3915.000
2	00:16:44	87.616%	-0.296	4.858	4.416	0.000	13890.000	3704.000	3937.000
3	00:17:03	88.483%	-0.297	1.816	3.910	0.000	13850.000	3693.000	3965.000
x		87.606%	-0.269	3.967	3.839	0.000	13930.000	3679.000	3939.000
σ		0.883%	0.048	1.871	0.616	0.000	102.300	33.520	25.150
%RSD		1.008	17.980	47.170	16.060	0.000	0.734	0.911	0.638
Run	Time	27Al ppb	28Si ppb	37Cl ppb	39K ppb	43Ca ppb	44Ca ppb	45Sc ppb	47Ti ppb
1	00:16:25	47.620	127.700	0.000	16600.000	255300.000	280300.000	83.782%	37.310
2	00:16:44	51.850	127.300	0.000	16400.000	255800.000	275000.000	85.530%	38.870
3	00:17:03	49.990	127.100	0.000	16330.000	254400.000	275500.000	85.788%	35.760
x		49.820	127.400	0.000	16440.000	255200.000	276900.000	85.033%	37.320
σ		2.119	0.266	0.000	143.600	714.200	2930.000	1.092%	1.554
%RSD		4.254	0.209	0.000	0.874	0.280	1.058	1.284	4.165
Run	Time	51V ppb	52Cr ppb	55Mn ppb	56Fe ppb	57Fe ppb	59Co ppb	60Ni ppb	63Cu ppb
1	00:16:25	2.118	0.532	379.400	184.600	773.800	1.004	1.542	254.100
2	00:16:44	0.910	0.429	379.400	181.700	745.100	0.953	0.932	255.200
3	00:17:03	-0.276	0.659	380.500	182.500	745.000	0.898	1.168	253.700
x		0.917	0.540	379.800	183.000	754.600	0.952	1.214	254.300
σ		1.197	0.115	0.649	1.491	16.610	0.053	0.308	0.791
%RSD		130.500	21.290	0.171	0.815	2.201	5.546	25.350	0.311
Run	Time	65Cu ppb	66Zn ppb	68Zn ppb	75As ppb	78Se ppb	82Se ppb	83Kr ppb	88Sr ppb
1	00:16:25	255.200	200.200	199.200	1.237	1.987	0.009	0.000	2331.000
2	00:16:44	255.800	199.000	200.900	3.172	1.656	0.777	0.000	2308.000
3	00:17:03	254.600	201.500	201.900	1.077	2.064	1.661	0.000	2299.000
x		255.200	200.200	200.700	1.829	1.902	0.816	0.000	2313.000
σ		0.610	1.248	1.335	1.166	0.217	0.826	0.000	16.270
%RSD		0.239	0.624	0.665	63.760	11.390	101.300	0.000	0.704
Run	Time	89Y ppb	95Mo ppb	98Mo ppb	103Rh ppb	107Ag ppb	109Ag ppb	111Cd ppb	114Cd ppb
1	00:16:25	92.212%	0.358	0.348	88.245%	0.514	0.514	30.790	31.840
2	00:16:44	94.312%	0.402	0.363	89.690%	0.554	0.456	30.820	31.610
3	00:17:03	95.593%	0.306	0.319	89.596%	0.554	0.506	29.930	31.210
x		94.039%	0.355	0.343	89.177%	0.540	0.492	30.510	31.550
σ		1.707%	0.048	0.023	0.808%	0.023	0.031	0.505	0.317
%RSD		1.815	13.430	6.602	0.907	4.284	6.306	1.656	1.004
Run	Time	115In ppb	118Sn ppb	121Sb ppb	123Sb ppb	135Ba ppb	137Ba ppb	159Tb ppb	165Ho ppb
1	00:16:25	88.643%	35.710	0.049	0.137	96.350	97.060	96.966%	98.580%
2	00:16:44	91.369%	34.590	0.044	0.120	96.170	95.030	99.747%	101.772%
3	00:17:03	92.292%	35.230	0.041	0.156	97.290	96.820	100.165%	102.880%
x		90.768%	35.170	0.045	0.138	96.600	96.310	98.959%	101.077%
σ		1.898%	0.562	0.004	0.018	0.598	1.108	1.738%	2.232%
%RSD		2.091	1.597	8.606	12.790	0.619	1.151	1.757	2.209
Run	Time	203Tl ppb	205Tl ppb	206Pb ppb	207Pb ppb	208Pb ppb	209Bi ppb		
1	00:16:25	0.257	0.221	1.569	1.413	1.491	92.311%		
2	00:16:44	0.244	0.241	1.640	1.483	1.573	93.511%		
3	00:17:03	0.200	0.246	1.681	1.542	1.564	94.307%		
x		0.233	0.236	1.630	1.479	1.543	93.376%		
σ		0.030	0.013	0.057	0.064	0.045	1.005%		
%RSD		12.850	5.691	3.478	4.354	2.902	1.076		

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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	00:20:07	83.896%	-0.294	11.570	10.140	0.000	21530.000	4942.000	5298.000
2	00:20:26	85.881%	-0.184	9.306	11.110	0.000	21260.000	4966.000	5347.000
3	00:20:46	85.412%	-0.183	10.610	10.720	0.000	21300.000	5004.000	5385.000
x		85.063%	-0.221	10.500	10.660	0.000	21360.000	4970.000	5343.000
σ		1.037%	0.064	1.139	0.486	0.000	146.300	31.270	44.020
%RSD		1.220	28.910	10.850	4.562	0.000	0.685	0.629	0.824
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:20:07	104.800	294.400	0.000	18810.000	424500.000	459400.000	83.984%	41.220
2	00:20:26	107.200	279.100	0.000	18600.000	424100.000	454100.000	85.147%	40.990
3	00:20:46	109.000	272.300	0.000	18580.000	423800.000	453500.000	85.699%	40.530
x		107.000	281.900	0.000	18670.000	424100.000	455700.000	84.943%	40.910
σ		2.114	11.360	0.000	129.200	358.000	3262.000	0.876%	0.352
%RSD		1.975	4.031	0.000	0.692	0.084	0.716	1.031	0.861
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:20:07	-1.007	0.836	696.100	468.600	1412.000	1.463	0.370	387.600
2	00:20:26	-1.001	0.622	692.200	472.000	1367.000	1.545	0.090	386.800
3	00:20:46	0.843	0.889	690.900	495.700	1403.000	1.575	0.163	389.000
x		-0.388	0.782	693.100	478.800	1394.000	1.527	0.208	387.800
σ		1.066	0.141	2.719	14.790	24.160	0.058	0.145	1.086
%RSD		274.600	18.060	0.392	3.090	1.733	3.797	69.730	0.280
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:20:07	384.500	312.700	311.500	3.532	2.601	0.740	0.000	4133.000
2	00:20:26	390.500	314.700	314.400	2.687	2.475	1.348	0.000	4114.000
3	00:20:46	392.000	316.500	314.400	3.001	2.901	1.030	0.000	4042.000
x		389.000	314.600	313.400	3.073	2.659	1.039	0.000	4097.000
σ		3.965	1.918	1.683	0.427	0.219	0.304	0.000	48.410
%RSD		1.019	0.610	0.537	13.890	8.235	29.250	0.000	1.182
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:20:07	91.774%	0.388	0.392	86.645%	0.615	0.646	38.950	39.020
2	00:20:26	94.372%	0.380	0.482	87.621%	0.661	0.622	38.490	39.380
3	00:20:46	95.980%	0.390	0.405	88.332%	0.573	0.629	38.120	39.800
x		94.042%	0.386	0.426	87.533%	0.616	0.632	38.520	39.400
σ		2.122%	0.005	0.049	0.847%	0.044	0.012	0.418	0.389
%RSD		2.256	1.411	11.390	0.968	7.133	1.945	1.086	0.987
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:20:07	88.647%	34.650	0.059	0.186	129.600	129.200	97.111%	98.762%
2	00:20:26	91.395%	34.470	0.081	0.192	131.200	132.100	99.538%	101.550%
3	00:20:46	92.070%	34.570	0.073	0.218	130.800	132.200	101.107%	102.872%
x		90.704%	34.570	0.071	0.199	130.500	131.200	99.252%	101.062%
σ		1.813%	0.089	0.011	0.017	0.843	1.676	2.013%	2.098%
%RSD		1.999	0.257	15.510	8.623	0.646	1.277	2.028	2.076
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:20:07	0.167	0.228	4.296	4.005	4.126	92.002%		
2	00:20:26	0.223	0.207	4.422	3.987	4.140	92.974%		
3	00:20:46	0.207	0.207	4.492	4.146	4.353	93.722%		
x		0.199	0.214	4.403	4.046	4.206	92.899%		
σ		0.029	0.012	0.099	0.087	0.127	0.863%		
%RSD		14.340	5.649	2.253	2.152	3.020	0.929		

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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	00:23:49	81.986%	-0.351	14.080	13.830	0.000	22120.000	8692.000	9280.000	
2	00:24:08	84.298%	-0.351	13.350	14.280	0.000	21700.000	8750.000	9456.000	
3	00:24:27	85.323%	-0.267	14.250	14.360	0.000	21270.000	8649.000	9288.000	
x		83.869%	-0.323	13.890	14.160	0.000	21700.000	8697.000	9341.000	
		σ	1.710%	0.048	0.476	0.286	0.000	424.400	50.660	99.090
		%RSD	2.038	15.000	3.429	2.017	0.000	1.956	0.583	1.061
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:23:49	209.500	447.300	0.000	20140.000	588500.000	631300.000	82.642%	57.580	
2	00:24:08	208.700	436.500	0.000	19920.000	590700.000	630100.000	83.776%	55.360	
3	00:24:27	206.500	428.700	0.000	19510.000	583900.000	619800.000	85.912%	56.040	
x		208.200	437.500	0.000	19860.000	587700.000	627100.000	84.110%	56.330	
		σ	1.569	9.362	0.000	321.300	3477.000	6292.000	1.660%	1.139
		%RSD	0.753	2.140	0.000	1.618	0.592	1.003	1.974	2.022
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:23:49	2.713	0.424	895.900	841.400	2099.000	2.033	-0.024	335.200	
2	00:24:08	1.746	0.237	886.600	831.200	2076.000	1.989	-0.014	335.100	
3	00:24:27	2.340	0.524	873.900	811.000	2049.000	2.097	0.283	331.100	
x		2.266	0.395	885.500	827.900	2075.000	2.040	0.082	333.800	
		σ	0.488	0.146	11.050	15.440	24.720	0.054	0.174	2.362
		%RSD	21.520	36.890	1.248	1.865	1.191	2.659	213.200	0.708
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:23:49	333.200	257.300	257.500	2.894	3.143	1.465	0.000	6088.000	
2	00:24:08	333.300	256.700	258.100	0.643	3.066	1.128	0.000	6011.000	
3	00:24:27	331.100	257.900	252.900	3.821	2.316	1.634	0.000	5937.000	
x		332.500	257.300	256.100	2.453	2.842	1.409	0.000	6012.000	
		σ	1.199	0.577	2.859	1.635	0.457	0.258	0.000	75.340
		%RSD	0.360	0.224	1.116	66.650	16.080	18.300	0.000	1.253
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:23:49	90.817%	0.460	0.484	84.691%	0.638	0.562	34.680	36.380	
2	00:24:08	93.700%	0.534	0.415	85.588%	0.661	0.625	34.700	36.990	
3	00:24:27	95.203%	0.428	0.467	86.096%	0.600	0.667	36.140	36.630	
x		93.240%	0.474	0.455	85.458%	0.633	0.618	35.170	36.660	
		σ	2.229%	0.054	0.036	0.712%	0.031	0.053	0.840	0.307
		%RSD	2.390	11.450	7.956	0.833	4.859	8.597	2.389	0.837
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:23:49	87.543%	33.810	0.084	0.214	221.600	219.800	94.561%	96.535%	
2	00:24:08	89.828%	33.840	0.127	0.264	221.400	221.000	98.454%	100.453%	
3	00:24:27	91.339%	33.870	0.105	0.294	219.100	218.900	99.472%	100.980%	
x		89.570%	33.840	0.105	0.258	220.700	219.900	97.496%	99.322%	
		σ	1.911%	0.030	0.021	0.041	1.414	1.012	2.592%	2.428%
		%RSD	2.134	0.089	20.190	15.750	0.641	0.460	2.659	2.445
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	00:23:49	0.196	0.222	2.404	2.288	2.343	87.939%			
2	00:24:08	0.210	0.224	2.569	2.420	2.416	88.955%			
3	00:24:27	0.209	0.209	2.508	2.314	2.400	90.536%			
x		0.205	0.218	2.494	2.341	2.386	89.143%			
		σ	0.008	0.008	0.084	0.070	0.038	1.309%		
		%RSD	3.841	3.715	3.355	2.977	1.604	1.468		

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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	00:27:31	84.071%	-0.294	9.288	9.310	0.000	14840.000	5549.000	5984.000
2	00:27:50	84.210%	-0.209	10.230	8.261	0.000	14720.000	5578.000	6046.000
3	00:28:09	86.210%	-0.323	9.250	10.210	0.000	14440.000	5634.000	6039.000
X		84.830%	-0.276	9.589	9.261	0.000	14670.000	5587.000	6023.000
σ		1.197%	0.059	0.555	0.977	0.000	204.000	43.090	34.340
%RSD		1.411	21.470	5.788	10.550	0.000	1.390	0.771	0.570
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:27:31	77.960	196.400	0.000	17410.000	412800.000	449300.000	83.594%	46.460
2	00:27:50	78.510	200.300	0.000	17200.000	409600.000	443400.000	85.445%	44.110
3	00:28:09	79.450	204.200	0.000	17050.000	410600.000	439400.000	86.095%	45.170
X		78.640	200.300	0.000	17220.000	411000.000	444000.000	85.045%	45.250
σ		0.751	3.907	0.000	182.600	1612.000	4992.000	1.298%	1.176
%RSD		0.955	1.950	0.000	1.060	0.392	1.124	1.526	2.599
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:27:31	0.958	1.020	486.400	314.400	1240.000	0.851	-0.343	248.800
2	00:27:50	-1.150	0.978	487.800	313.900	1201.000	0.823	-0.776	250.000
3	00:28:09	0.363	1.186	488.300	314.800	1193.000	0.868	-0.694	246.000
X		0.057	1.062	487.500	314.300	1211.000	0.847	-0.604	248.300
σ		1.087	0.110	0.967	0.475	25.690	0.023	0.230	2.058
%RSD		1911.000	10.370	0.198	0.151	2.121	2.670	38.030	0.829
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:27:31	246.900	200.700	201.800	1.188	2.030	0.802	0.000	3587.000
2	00:27:50	248.800	202.600	202.200	2.580	2.280	0.741	0.000	3566.000
3	00:28:09	247.100	201.500	201.700	3.059	2.286	0.375	0.000	3535.000
X		247.600	201.600	201.900	2.276	2.199	0.639	0.000	3563.000
σ		1.054	0.940	0.245	0.972	0.146	0.231	0.000	26.360
%RSD		0.426	0.467	0.121	42.710	6.657	36.080	0.000	0.740
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:27:31	92.568%	0.354	0.301	87.008%	0.436	0.388	22.450	22.550
2	00:27:50	94.221%	0.432	0.382	87.699%	0.406	0.428	22.370	23.020
3	00:28:09	96.493%	0.357	0.332	88.696%	0.395	0.421	22.900	22.770
X		94.428%	0.381	0.338	87.801%	0.412	0.413	22.570	22.780
σ		1.971%	0.044	0.041	0.849%	0.021	0.021	0.286	0.236
%RSD		2.087	11.620	12.030	0.966	5.115	5.153	1.267	1.035
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:27:31	88.899%	34.130	0.056	0.172	121.600	119.800	97.500%	98.696%
2	00:27:50	91.532%	34.840	0.054	0.172	122.100	121.000	99.983%	101.776%
3	00:28:09	92.399%	34.550	0.046	0.155	122.400	123.500	101.496%	103.447%
X		90.943%	34.500	0.052	0.166	122.100	121.400	99.660%	101.306%
σ		1.823%	0.357	0.005	0.010	0.414	1.848	2.018%	2.410%
%RSD		2.004	1.034	9.749	5.904	0.339	1.522	2.025	2.379
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:27:31	0.108	0.097	1.570	1.410	1.489	92.837%		
2	00:27:50	0.105	0.100	1.584	1.492	1.527	94.088%		
3	00:28:09	0.105	0.106	1.615	1.598	1.556	94.350%		
X		0.106	0.101	1.590	1.500	1.524	93.758%		
σ		0.002	0.004	0.023	0.094	0.034	0.809%		
%RSD		1.761	4.171	1.476	6.295	2.198	0.862		

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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	00:30:54	84.294%	94.450	95.980	96.160	0.000	48150.000	50710.000	52300.000
2	00:31:13	84.970%	94.290	91.330	100.800	0.000	47830.000	50720.000	52410.000
3	00:31:32	85.799%	99.520	90.190	94.610	0.000	47670.000	50450.000	52510.000
X		85.021%	96.086%	92.502%	97.181%	0.000	95.768%	101.257%	104.811%
σ		0.754%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.887	3.093	3.317	3.297	0.000	0.509	0.308	0.204
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:54	510.500	5214.000	0.000	49880.000	47710.000	50870.000	83.984%	95.500
2	00:31:13	515.600	5236.000	0.000	49640.000	48380.000	50730.000	85.325%	91.480
3	00:31:32	518.200	5224.000	0.000	49430.000	48150.000	50530.000	85.734%	99.840
X		102.952%	104.495%	0.000	99.300%	96.160%	101.420%	85.014%	95.611%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.916%	n/a
%RSD		0.763	0.213	0.000	0.455	0.703	0.332	1.077	4.374
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:54	100.400	102.100	507.700	26840.000	25670.000	100.700	101.900	99.840
2	00:31:13	102.800	103.400	516.300	26640.000	26000.000	101.700	102.300	101.000
3	00:31:32	101.900	103.700	518.800	26710.000	26130.000	101.900	102.300	101.800
X		101.703%	103.071%	102.857%	106.920%	103.718%	101.421%	102.161%	100.902%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.203	0.804	1.132	0.377	0.910	0.629	0.246	0.999
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:54	100.000	100.300	102.100	101.200	103.900	101.500	0.000	103.900
2	00:31:13	101.000	103.400	101.000	101.600	103.700	104.400	0.000	105.100
3	00:31:32	101.400	104.100	103.500	101.100	106.200	105.200	0.000	104.900
X		100.826%	102.577%	102.220%	101.301%	104.575%	103.674%	0.000	104.659%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.721	1.993	1.226	0.260	1.309	1.891	0.000	0.616
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:54	83.284%	101.900	101.500	81.700%	100.200	102.100	102.000	105.500
2	00:31:13	86.276%	106.500	107.000	82.012%	102.400	103.800	103.700	106.500
3	00:31:32	87.159%	108.400	109.200	82.732%	102.900	102.800	105.200	104.200
X		85.573%	105.627%	105.891%	82.148%	101.792%	102.897%	103.666%	105.408%
σ		2.030%	n/a	n/a	0.529%	n/a	n/a	n/a	n/a
%RSD		2.373	3.179	3.728	0.644	1.412	0.835	1.554	1.129
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:54	83.500%	102.800	101.800	101.400	104.300	102.700	90.415%	91.919%
2	00:31:13	86.534%	102.800	102.700	101.600	104.100	104.600	93.900%	94.991%
3	00:31:32	88.678%	102.900	102.200	102.600	102.700	103.100	95.333%	96.761%
X		86.237%	102.801%	102.253%	101.869%	103.688%	103.464%	93.216%	94.557%
σ		2.602%	n/a	n/a	n/a	n/a	n/a	2.530%	2.450%
%RSD		3.017	0.050	0.420	0.654	0.859	0.987	2.714	2.591
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:30:54	99.540	99.360	99.390	99.340	99.200	89.512%		
2	00:31:13	103.800	104.900	103.800	103.700	104.100	88.501%		
3	00:31:32	105.700	106.400	105.800	106.000	105.800	88.539%		
X		103.021%	103.535%	103.012%	102.981%	103.013%	88.851%		
σ		n/a	n/a	n/a	n/a	n/a	0.573%		
%RSD		3.055	3.562	3.190	3.261	3.312	0.645		

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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	00:37:43	81.721%	-0.351	-1.573	-1.848	0.000	31.670	4.634	4.316
2	00:38:02	84.677%	-0.323	-1.063	-1.794	0.000	27.900	4.310	4.678
3	00:38:21	86.081%	-0.268	-1.233	-2.032	0.000	27.410	3.921	4.084
X		84.160%	-0.314	-1.290	-1.891	0.000	28.990	4.288	4.359
σ		2.225%	0.042	0.260	0.125	0.000	2.330	0.357	0.299
%RSD		2.644	13.530	20.120	6.597	0.000	8.038	8.327	6.861
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:37:43	-0.422	5.083	0.000	39.260	8.889	-1.034	80.989%	-0.033
2	00:38:02	-0.497	4.197	0.000	35.650	-0.559	-1.771	82.756%	-0.037
3	00:38:21	-0.477	5.186	0.000	38.070	-12.310	2.659	83.023%	-0.038
X		-0.466	4.822	0.000	37.660	-1.327	-0.049	82.256%	-0.036
σ		0.039	0.544	0.000	1.840	10.620	2.373	1.105%	0.003
%RSD		8.297	11.280	0.000	4.887	800.300	4891.000	1.344	7.226
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:37:43	0.220	0.383	0.041	0.191	8.015	-0.008	0.061	0.513
2	00:38:02	0.100	0.331	0.082	-1.325	8.093	-0.006	0.093	0.381
3	00:38:21	0.310	0.383	0.070	-2.529	4.737	-0.003	0.030	0.332
X		0.210	0.366	0.064	-1.221	6.948	-0.006	0.061	0.409
σ		0.105	0.030	0.021	1.363	1.915	0.003	0.031	0.094
%RSD		50.270	8.290	32.800	111.600	27.570	44.480	51.480	22.910
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:37:43	-0.042	0.279	0.306	-0.136	2.205	0.195	0.000	0.050
2	00:38:02	-0.086	0.223	0.348	-0.882	2.015	0.064	0.000	0.037
3	00:38:21	-0.006	0.326	0.203	-0.238	2.024	-0.990	0.000	0.048
X		-0.045	0.276	0.286	-0.419	2.081	-0.243	0.000	0.045
σ		0.040	0.051	0.075	0.404	0.107	0.650	0.000	0.007
%RSD		89.180	18.560	26.210	96.530	5.148	266.800	0.000	15.900
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:37:43	85.543%	0.155	0.165	88.598%	-0.005	-0.009	0.018	0.001
2	00:38:02	88.035%	0.155	0.180	90.277%	-0.017	0.004	0.034	0.012
3	00:38:21	89.354%	0.142	0.149	91.369%	-0.013	-0.001	-0.008	-0.018
X		87.644%	0.151	0.165	90.081%	-0.012	-0.002	0.014	-0.002
σ		1.935%	0.007	0.015	1.396%	0.006	0.007	0.021	0.015
%RSD		2.208	4.868	9.316	1.549	50.500	308.200	147.900	925.300
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:37:43	86.629%	-0.359	0.083	0.103	-0.021	-0.015	89.927%	91.310%
2	00:38:02	88.906%	-0.345	0.095	0.131	-0.021	-0.011	92.678%	93.524%
3	00:38:21	90.039%	-0.338	0.098	0.131	-0.012	-0.011	93.617%	95.066%
X		88.525%	-0.347	0.092	0.122	-0.018	-0.012	92.074%	93.300%
σ		1.737%	0.011	0.008	0.016	0.005	0.003	1.918%	1.888%
%RSD		1.962	3.129	8.745	13.170	28.710	21.500	2.083	2.024
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:37:43	0.002	-0.002	-0.010	0.004	-0.003	95.023%		
2	00:38:02	-0.002	-0.003	-0.002	-0.001	-0.004	95.775%		
3	00:38:21	0.000	-0.002	-0.005	-0.004	-0.012	97.203%		
X		-0.000	-0.002	-0.006	-0.000	-0.006	96.000%		
σ		0.002	0.000	0.004	0.004	0.005	1.107%		
%RSD		4575.000	11.960	66.590	7750.000	80.610	1.153		

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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	00:41:27	82.156%	-0.264	17.520	15.520	0.000	16570.000	8891.000	9371.000
2	00:41:46	84.150%	-0.238	14.630	14.920	0.000	16270.000	8918.000	9436.000
3	00:42:05	85.551%	-0.323	13.240	15.130	0.000	15960.000	8850.000	9494.000
X		83.952%	-0.275	15.130	15.190	0.000	16260.000	8886.000	9434.000
σ		1.706%	0.044	2.182	0.305	0.000	306.200	34.430	61.630
%RSD		2.032	15.940	14.420	2.011	0.000	1.882	0.387	0.653
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:41:27	136.900	317.700	0.000	26950.000	462500.000	499300.000	82.862%	89.090
2	00:41:46	139.000	324.000	0.000	26590.000	461900.000	496600.000	84.605%	89.780
3	00:42:05	139.300	319.600	0.000	26260.000	461000.000	491700.000	85.404%	89.510
X		138.400	320.400	0.000	26600.000	461800.000	495900.000	84.290%	89.460
σ		1.326	3.224	0.000	344.100	765.500	3840.000	1.300%	0.346
%RSD		0.958	1.006	0.000	1.294	0.166	0.774	1.542	0.387
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:41:27	0.089	-1.414	839.500	688.200	1724.000	1.455	2.054	578.300
2	00:41:46	-1.460	-1.274	835.500	693.500	1727.000	1.579	1.731	576.300
3	00:42:05	-0.708	-1.078	822.300	686.800	1685.000	1.501	1.925	570.300
X		-0.693	-1.255	832.500	689.500	1712.000	1.512	1.903	575.000
σ		0.775	0.169	8.994	3.527	23.710	0.063	0.163	4.195
%RSD		111.800	13.440	1.080	0.511	1.385	4.135	8.542	0.730
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:41:27	576.600	299.600	302.000	2.282	4.350	2.673	0.000	4902.000
2	00:41:46	578.100	301.800	296.100	3.765	4.615	3.655	0.000	4832.000
3	00:42:05	571.400	299.800	296.900	2.925	4.238	3.289	0.000	4816.000
X		575.400	300.400	298.300	2.991	4.401	3.206	0.000	4850.000
σ		3.495	1.229	3.208	0.744	0.194	0.496	0.000	45.340
%RSD		0.607	0.409	1.075	24.870	4.408	15.470	0.000	0.935
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:41:27	89.512%	0.742	0.721	84.635%	1.377	1.268	53.670	55.980
2	00:41:46	92.429%	0.663	0.654	86.601%	1.412	1.293	53.680	54.680
3	00:42:05	94.705%	0.668	0.650	86.881%	1.410	1.426	54.290	54.840
X		92.215%	0.691	0.675	86.039%	1.400	1.329	53.880	55.170
σ		2.603%	0.045	0.040	1.224%	0.020	0.085	0.354	0.711
%RSD		2.823	6.448	5.901	1.423	1.424	6.379	0.656	1.288
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:41:27	86.752%	34.740	0.452	0.599	355.700	354.300	94.167%	96.154%
2	00:41:46	89.805%	35.280	0.390	0.497	356.900	354.000	98.137%	100.500%
3	00:42:05	90.874%	34.880	0.282	0.390	356.400	354.400	99.513%	100.967%
X		89.143%	34.970	0.375	0.495	356.300	354.200	97.273%	99.207%
σ		2.139%	0.278	0.086	0.105	0.626	0.197	2.776%	2.655%
%RSD		2.400	0.796	22.930	21.110	0.176	0.056	2.854	2.676
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:41:27	0.154	0.142	5.166	4.652	4.816	89.517%		
2	00:41:46	0.164	0.135	5.192	4.783	4.888	90.496%		
3	00:42:05	0.166	0.151	5.288	4.832	4.994	91.263%		
X		0.161	0.143	5.215	4.756	4.899	90.425%		
σ		0.007	0.008	0.064	0.093	0.090	0.875%		
%RSD		4.070	5.749	1.225	1.957	1.830	0.968		

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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	00:45:09	82.054%	-0.322	72.710	82.300	0.000	193400.000	24630.000	25650.000
2	00:45:28	83.068%	-0.322	73.420	81.930	0.000	190600.000	24400.000	25620.000
3	00:45:47	85.999%	-0.323	74.330	79.190	0.000	185200.000	24080.000	25400.000
X		83.707%	-0.323	73.490	81.140	0.000	189700.000	24370.000	25560.000
σ		2.049%	0.001	0.815	1.698	0.000	4166.000	278.700	136.400
%RSD		2.447	0.208	1.110	2.093	0.000	2.196	1.144	0.534
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:45:09	1.881	21.790	0.000	7457.000	7288.000	7507.000	81.819%	0.278
2	00:45:28	1.988	21.640	0.000	7366.000	7491.000	7507.000	83.668%	0.174
3	00:45:47	1.861	21.840	0.000	7307.000	7461.000	7439.000	84.442%	0.050
X		1.910	21.760	0.000	7377.000	7413.000	7484.000	83.310%	0.167
σ		0.068	0.103	0.000	75.500	109.500	39.480	1.348%	0.114
%RSD		3.575	0.473	0.000	1.023	1.477	0.527	1.618	68.150
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:45:09	0.144	0.507	0.626	6.617	20.320	-0.004	-0.065	0.992
2	00:45:28	0.407	0.508	0.559	5.309	18.280	-0.003	0.130	1.011
3	00:45:47	0.165	0.571	0.597	5.947	21.780	-0.002	-0.020	1.035
X		0.239	0.529	0.594	5.957	20.130	-0.003	0.015	1.013
σ		0.146	0.037	0.033	0.654	1.761	0.001	0.102	0.022
%RSD		61.210	6.924	5.604	10.980	8.749	47.460	678.900	2.151
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:45:09	0.037	0.578	0.616	-0.312	1.680	1.293	0.000	139.200
2	00:45:28	0.042	0.573	0.620	0.420	1.037	-0.445	0.000	138.800
3	00:45:47	-0.057	0.623	0.694	0.122	1.866	0.838	0.000	138.200
X		0.007	0.591	0.643	0.077	1.528	0.562	0.000	138.800
σ		0.056	0.028	0.044	0.368	0.435	0.901	0.000	0.516
%RSD		761.500	4.708	6.852	478.100	28.450	160.400	0.000	0.372
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:45:09	87.136%	0.220	0.186	86.472%	-0.022	-0.021	-0.028	-0.033
2	00:45:28	90.723%	0.208	0.216	87.612%	-0.017	-0.016	-0.011	-0.021
3	00:45:47	92.290%	0.231	0.279	88.413%	-0.009	-0.016	-0.052	-0.022
X		90.050%	0.220	0.227	87.499%	-0.016	-0.018	-0.030	-0.025
σ		2.642%	0.012	0.047	0.975%	0.006	0.003	0.020	0.007
%RSD		2.934	5.251	20.850	1.115	40.100	16.080	66.910	27.060
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:45:09	86.827%	-0.323	-0.048	-0.017	0.246	0.212	92.896%	93.512%
2	00:45:28	90.353%	-0.336	-0.040	-0.016	0.144	0.229	95.778%	97.142%
3	00:45:47	91.010%	-0.325	-0.046	-0.016	0.187	0.158	98.051%	99.818%
X		89.396%	-0.328	-0.045	-0.017	0.193	0.200	95.575%	96.824%
σ		2.249%	0.007	0.004	0.001	0.051	0.037	2.583%	3.165%
%RSD		2.516	2.101	9.204	4.025	26.570	18.510	2.703	3.268
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:45:09	-0.004	-0.014	-0.005	-0.002	-0.009	90.718%		
2	00:45:28	-0.008	-0.013	-0.000	-0.006	-0.006	91.770%		
3	00:45:47	-0.012	-0.010	-0.007	-0.004	-0.009	92.320%		
X		-0.008	-0.012	-0.004	-0.004	-0.008	91.602%		
σ		0.004	0.002	0.004	0.002	0.002	0.814%		
%RSD		47.510	14.760	88.350	38.840	22.830	0.889		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:48:51	83.021%	-0.351	76.040	77.390	0.000	184300.000	23530.000	24260.000
2	00:49:10	84.606%	-0.210	77.410	81.570	0.000	181900.000	23340.000	24300.000
3	00:49:29	86.035%	-0.323	72.550	81.610	0.000	180600.000	23210.000	24400.000
X		84.554%	-0.295	75.330	80.190	0.000	182300.000	23360.000	24320.000
σ		1.508%	0.075	2.507	2.422	0.000	1874.000	160.600	74.630
%RSD		1.783	25.360	3.328	3.020	0.000	1.028	0.688	0.307
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:48:51	1.516	20.650	0.000	7131.000	7008.000	7068.000	83.635%	-0.100
2	00:49:10	1.604	21.270	0.000	7052.000	7186.000	7039.000	84.828%	0.169
3	00:49:29	1.276	20.230	0.000	7058.000	7001.000	7146.000	85.453%	0.047
X		1.465	20.720	0.000	7080.000	7065.000	7084.000	84.639%	0.039
σ		0.170	0.522	0.000	43.990	104.500	54.900	0.924%	0.135
%RSD		11.580	2.519	0.000	0.621	1.479	0.775	1.091	349.300
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:48:51	-0.005	0.375	0.628	6.436	18.050	0.004	0.094	1.326
2	00:49:10	0.204	0.423	0.572	6.167	18.720	0.004	0.104	1.349
3	00:49:29	0.452	0.383	0.576	6.305	19.790	-0.000	0.018	1.253
X		0.217	0.394	0.592	6.303	18.850	0.003	0.072	1.309
σ		0.229	0.026	0.032	0.135	0.875	0.002	0.047	0.050
%RSD		105.400	6.483	5.331	2.136	4.644	88.690	65.440	3.817
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:48:51	-0.051	0.334	0.240	0.591	2.228	1.052	0.000	132.400
2	00:49:10	-0.006	0.219	0.259	0.238	1.693	1.827	0.000	131.700
3	00:49:29	-0.096	0.325	0.273	-0.202	1.695	-0.047	0.000	131.300
X		-0.051	0.293	0.257	0.209	1.872	0.944	0.000	131.800
σ		0.045	0.064	0.017	0.397	0.308	0.941	0.000	0.554
%RSD		87.750	21.710	6.488	190.200	16.470	99.750	0.000	0.420
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:48:51	88.886%	0.270	0.179	87.924%	-0.032	-0.008	-0.047	-0.045
2	00:49:10	91.597%	0.216	0.201	88.688%	-0.017	-0.011	0.009	-0.004
3	00:49:29	93.356%	0.238	0.176	89.492%	-0.024	-0.015	-0.031	-0.039
X		91.280%	0.241	0.186	88.701%	-0.024	-0.011	-0.023	-0.030
σ		2.252%	0.027	0.013	0.784%	0.007	0.004	0.029	0.022
%RSD		2.467	11.170	7.235	0.884	29.980	32.210	124.200	74.530
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:48:51	88.688%	-0.404	-0.045	-0.018	0.241	0.148	94.524%	96.590%
2	00:49:10	91.438%	-0.418	-0.030	-0.027	0.261	0.148	96.994%	98.583%
3	00:49:29	93.418%	-0.376	-0.029	-0.019	0.139	0.200	99.019%	101.106%
X		91.182%	-0.399	-0.035	-0.021	0.213	0.166	96.845%	98.759%
σ		2.375%	0.021	0.009	0.005	0.066	0.030	2.251%	2.263%
%RSD		2.605	5.298	25.340	24.050	30.710	18.030	2.324	2.292
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:48:51	-0.009	-0.013	-0.007	-0.003	-0.013	94.127%		
2	00:49:10	-0.004	-0.013	-0.011	-0.002	-0.012	94.605%		
3	00:49:29	-0.009	-0.014	-0.006	-0.008	-0.009	94.867%		
X		-0.007	-0.013	-0.008	-0.004	-0.011	94.533%		
σ		0.003	0.001	0.003	0.003	0.002	0.375%		
%RSD		41.410	5.201	33.080	73.360	18.020	0.397		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:52:33	84.182%	-0.323	82.600	82.420	0.000	198100.000	25160.000	26040.000
2	00:52:52	83.589%	-0.265	73.680	84.960	0.000	198500.000	25440.000	26500.000
3	00:53:11	86.212%	-0.323	74.530	83.790	0.000	193900.000	25070.000	26180.000
X		84.661%	-0.304	76.940	83.730	0.000	196800.000	25230.000	26240.000
σ		1.375%	0.033	4.924	1.272	0.000	2580.000	189.800	234.700
%RSD		1.624	10.950	6.400	1.519	0.000	1.311	0.752	0.894
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:52:33	3.144	20.420	0.000	7776.000	7502.000	7710.000	83.241%	0.238
2	00:52:52	3.513	20.840	0.000	7723.000	7740.000	7752.000	83.909%	0.113
3	00:53:11	3.398	20.660	0.000	7601.000	7992.000	7746.000	84.963%	0.048
X		3.351	20.640	0.000	7700.000	7745.000	7736.000	84.037%	0.133
σ		0.189	0.207	0.000	89.860	245.000	22.370	0.868%	0.097
%RSD		5.634	1.002	0.000	1.167	3.163	0.289	1.033	72.690
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:52:33	-0.526	0.411	0.544	8.650	28.410	-0.008	0.062	1.512
2	00:52:52	0.594	0.453	0.514	9.145	23.710	0.006	0.100	1.610
3	00:53:11	0.805	0.441	0.492	8.377	24.980	-0.002	0.059	1.574
X		0.291	0.435	0.517	8.724	25.700	-0.001	0.074	1.565
σ		0.716	0.022	0.026	0.390	2.430	0.007	0.023	0.050
%RSD		245.600	4.947	5.037	4.464	9.453	492.700	31.070	3.170
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:52:33	0.031	0.503	0.553	0.365	1.054	0.993	0.000	144.000
2	00:52:52	-0.084	0.588	0.667	-0.036	2.710	0.283	0.000	143.800
3	00:53:11	0.050	0.611	0.771	0.019	1.664	0.918	0.000	143.100
X		-0.001	0.567	0.663	0.116	1.809	0.732	0.000	143.600
σ		0.072	0.057	0.109	0.217	0.838	0.390	0.000	0.506
%RSD		8851.000	9.997	16.460	186.700	46.310	53.310	0.000	0.352
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:52:33	88.631%	0.174	0.191	86.465%	-0.023	-0.007	-0.001	-0.009
2	00:52:52	90.979%	0.292	0.197	87.926%	-0.024	-0.021	0.019	0.013
3	00:53:11	92.526%	0.261	0.203	89.077%	-0.021	-0.015	-0.010	-0.010
X		90.712%	0.243	0.197	87.823%	-0.023	-0.014	0.003	-0.002
σ		1.961%	0.061	0.006	1.309%	0.002	0.007	0.015	0.013
%RSD		2.162	25.150	2.840	1.490	7.664	48.580	526.700	601.900
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:52:33	87.485%	-0.340	-0.033	-0.036	0.206	0.183	93.319%	94.405%
2	00:52:52	90.622%	-0.399	-0.045	-0.018	0.189	0.191	96.860%	97.753%
3	00:53:11	92.530%	-0.345	-0.047	-0.030	0.276	0.157	97.891%	99.592%
X		90.212%	-0.362	-0.042	-0.028	0.224	0.177	96.023%	97.250%
σ		2.547%	0.033	0.008	0.009	0.046	0.018	2.398%	2.630%
%RSD		2.823	9.040	19.390	31.570	20.460	10.150	2.497	2.704
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:52:33	-0.010	-0.013	-0.011	-0.003	-0.010	92.244%		
2	00:52:52	-0.012	-0.013	-0.011	-0.007	-0.013	91.681%		
3	00:53:11	-0.005	-0.009	-0.007	-0.001	-0.005	92.441%		
X		-0.009	-0.011	-0.009	-0.004	-0.009	92.122%		
σ		0.004	0.002	0.002	0.003	0.004	0.394%		
%RSD		42.960	15.510	23.610	80.500	43.900	0.428		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:56:16	83.536%	-0.294	74.900	82.630	0.000	189100.000	24070.000	24970.000
2	00:56:35	84.375%	-0.294	74.940	82.190	0.000	187400.000	24170.000	25190.000
3	00:56:54	83.673%	-0.351	79.720	84.330	0.000	188200.000	24260.000	25400.000
X		83.861%	-0.313	76.520	83.050	0.000	188200.000	24170.000	25190.000
σ		0.450%	0.033	2.771	1.130	0.000	836.900	93.980	212.700
%RSD		0.536	10.490	3.622	1.360	0.000	0.445	0.389	0.845
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:56:16	12.390	45.000	0.000	7377.000	7553.000	7333.000	83.532%	0.542
2	00:56:35	11.690	45.800	0.000	7281.000	7199.000	7325.000	84.645%	0.441
3	00:56:54	12.040	45.820	0.000	7272.000	7507.000	7405.000	85.387%	0.525
X		12.040	45.540	0.000	7310.000	7419.000	7355.000	84.521%	0.503
σ		0.353	0.468	0.000	58.290	192.600	44.150	0.933%	0.054
%RSD		2.929	1.029	0.000	0.797	2.596	0.600	1.104	10.750
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:56:16	0.101	0.463	0.867	22.190	37.680	0.004	0.061	1.385
2	00:56:35	0.336	0.460	0.940	22.290	40.470	-0.007	0.026	1.468
3	00:56:54	-0.808	0.321	0.827	22.270	37.880	0.009	-0.065	1.709
X		-0.124	0.415	0.878	22.250	38.680	0.002	0.007	1.521
σ		0.604	0.081	0.057	0.054	1.554	0.008	0.065	0.168
%RSD		487.700	19.570	6.518	0.243	4.018	405.300	878.300	11.040
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:56:16	-0.096	0.395	0.438	-0.054	1.851	0.944	0.000	136.900
2	00:56:35	-0.079	0.442	0.350	-0.322	2.704	1.881	0.000	136.300
3	00:56:54	-0.104	0.442	0.442	-0.111	2.185	0.978	0.000	135.600
X		-0.093	0.426	0.410	-0.163	2.247	1.267	0.000	136.300
σ		0.013	0.027	0.052	0.141	0.430	0.532	0.000	0.629
%RSD		13.480	6.370	12.660	86.970	19.120	41.960	0.000	0.462
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:56:16	89.132%	0.210	0.154	87.843%	-0.015	-0.011	-0.020	-0.024
2	00:56:35	92.344%	0.162	0.178	88.933%	-0.019	-0.013	-0.001	-0.014
3	00:56:54	94.120%	0.205	0.153	90.135%	-0.025	-0.015	-0.031	-0.035
X		91.865%	0.192	0.162	88.970%	-0.020	-0.013	-0.018	-0.024
σ		2.528%	0.026	0.014	1.147%	0.005	0.002	0.015	0.011
%RSD		2.752	13.740	8.753	1.289	25.490	14.460	85.460	43.640
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:56:16	89.754%	-0.370	-0.040	-0.031	0.304	0.226	94.749%	97.214%
2	00:56:35	92.430%	-0.350	-0.049	-0.023	0.247	0.263	98.850%	100.369%
3	00:56:54	93.550%	-0.391	-0.034	-0.021	0.208	0.208	100.576%	102.671%
X		91.911%	-0.370	-0.041	-0.025	0.253	0.232	98.058%	100.085%
σ		1.950%	0.020	0.007	0.005	0.048	0.028	2.993%	2.740%
%RSD		2.122	5.525	18.040	21.380	19.020	11.950	3.053	2.737
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:56:16	-0.009	-0.013	0.008	0.014	0.003	95.165%		
2	00:56:35	-0.010	-0.012	-0.002	0.007	-0.000	95.588%		
3	00:56:54	-0.010	-0.014	0.028	0.020	0.011	96.503%		
X		-0.010	-0.013	0.011	0.014	0.005	95.752%		
σ		0.001	0.001	0.015	0.007	0.006	0.684%		
%RSD		6.492	8.482	136.600	50.750	124.500	0.714		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:59:58	86.310%	-0.296	69.420	78.690	0.000	186900.000	23750.000	24570.000
2	01:00:17	85.473%	-0.295	76.910	81.490	0.000	187400.000	23770.000	24790.000
3	01:00:36	86.876%	-0.324	77.030	81.140	0.000	184300.000	23560.000	24570.000
X		86.220%	-0.305	74.450	80.440	0.000	186200.000	23690.000	24650.000
σ		0.706%	0.016	4.359	1.526	0.000	1689.000	114.500	128.500
%RSD		0.819	5.336	5.854	1.897	0.000	0.907	0.483	0.521
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:59:58	4.517	26.210	0.000	7349.000	7263.000	7329.000	84.040%	0.143
2	01:00:17	4.313	27.640	0.000	7233.000	7288.000	7366.000	85.321%	0.167
3	01:00:36	4.525	30.920	0.000	7232.000	7579.000	7288.000	86.216%	0.252
X		4.452	28.260	0.000	7271.000	7376.000	7328.000	85.192%	0.187
σ		0.120	2.415	0.000	67.190	175.900	39.170	1.094%	0.057
%RSD		2.705	8.545	0.000	0.924	2.384	0.534	1.284	30.620
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:59:58	-0.418	0.365	0.714	12.900	28.220	-0.009	0.010	1.487
2	01:00:17	0.688	0.375	0.679	12.230	25.170	-0.010	-0.053	1.454
3	01:00:36	-0.031	0.379	0.729	11.790	24.000	0.002	0.018	1.596
X		0.080	0.373	0.707	12.310	25.790	-0.006	-0.008	1.513
σ		0.561	0.007	0.026	0.559	2.176	0.006	0.039	0.075
%RSD		702.500	1.954	3.633	4.539	8.434	111.500	467.900	4.928
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:59:58	-0.002	0.617	0.495	0.378	2.565	1.157	0.000	134.800
2	01:00:17	-0.007	0.390	0.496	0.333	0.809	0.376	0.000	137.200
3	01:00:36	-0.061	0.374	0.562	0.653	1.865	0.794	0.000	136.300
X		-0.023	0.460	0.517	0.454	1.746	0.776	0.000	136.100
σ		0.033	0.136	0.039	0.173	0.884	0.391	0.000	1.180
%RSD		139.800	29.560	7.501	38.150	50.610	50.370	0.000	0.867
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:59:58	89.939%	0.176	0.159	88.054%	-0.019	-0.016	-0.071	-0.058
2	01:00:17	91.554%	0.216	0.170	88.709%	-0.019	-0.011	0.013	-0.002
3	01:00:36	93.030%	0.192	0.183	89.178%	-0.021	-0.010	-0.077	-0.063
X		91.508%	0.195	0.171	88.647%	-0.019	-0.012	-0.045	-0.041
σ		1.546%	0.020	0.012	0.564%	0.001	0.003	0.051	0.034
%RSD		1.690	10.190	7.102	0.636	5.354	27.160	112.300	81.790
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:59:58	90.040%	-0.313	-0.033	-0.027	0.183	0.220	94.871%	95.654%
2	01:00:17	91.465%	-0.321	-0.041	-0.021	0.269	0.179	97.694%	98.562%
3	01:00:36	93.356%	-0.313	-0.043	-0.019	0.246	0.226	98.983%	100.089%
X		91.620%	-0.316	-0.039	-0.022	0.232	0.208	97.182%	98.101%
σ		1.663%	0.005	0.005	0.004	0.045	0.026	2.103%	2.253%
%RSD		1.816	1.518	12.600	18.870	19.220	12.360	2.164	2.297
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:59:58	-0.012	-0.014	0.007	-0.007	-0.004	93.509%		
2	01:00:17	-0.010	-0.011	-0.000	0.007	-0.003	92.876%		
3	01:00:36	-0.010	-0.013	-0.002	-0.002	-0.001	93.571%		
X		-0.011	-0.013	0.002	-0.001	-0.003	93.319%		
σ		0.001	0.002	0.005	0.007	0.001	0.384%		
%RSD		11.360	12.810	286.700	1414.000	50.210	0.412		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:03:41	83.142%	-0.265	69.930	74.210	0.000	176100.000	22600.000	23460.000
2	01:04:00	86.052%	-0.268	71.890	74.910	0.000	172600.000	22130.000	23100.000
3	01:04:19	85.714%	-0.268	67.030	75.580	0.000	171600.000	22280.000	23360.000
X		84.969%	-0.267	69.620	74.900	0.000	173400.000	22340.000	23310.000
σ		1.591%	0.002	2.444	0.687	0.000	2362.000	237.700	182.300
%RSD		1.873	0.584	3.511	0.917	0.000	1.362	1.064	0.782
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:03:41	7.938	85.830	0.000	6939.000	6764.000	6826.000	83.622%	0.267
2	01:04:00	7.248	83.740	0.000	6816.000	6738.000	6799.000	84.942%	0.199
3	01:04:19	7.587	84.680	0.000	6773.000	6838.000	6790.000	86.353%	0.044
X		7.591	84.750	0.000	6842.000	6780.000	6805.000	84.972%	0.170
σ		0.345	1.049	0.000	85.900	51.500	18.940	1.366%	0.114
%RSD		4.546	1.238	0.000	1.255	0.760	0.278	1.607	67.240
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:03:41	0.051	0.357	2.210	12.160	27.090	-0.008	0.035	1.400
2	01:04:00	0.407	0.366	2.119	11.420	23.320	-0.010	-0.012	1.522
3	01:04:19	0.216	0.371	2.160	11.320	21.150	0.002	-0.033	1.729
X		0.225	0.365	2.163	11.630	23.850	-0.006	-0.003	1.550
σ		0.178	0.007	0.046	0.457	3.006	0.006	0.034	0.166
%RSD		79.390	1.876	2.119	3.932	12.600	110.900	1075.000	10.730
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:03:41	-0.060	0.849	0.716	0.271	2.419	0.462	0.000	127.100
2	01:04:00	-0.101	0.734	0.895	0.634	2.441	1.223	0.000	126.500
3	01:04:19	-0.026	0.736	0.727	0.381	2.849	0.571	0.000	127.500
X		-0.062	0.773	0.779	0.429	2.570	0.752	0.000	127.100
σ		0.037	0.066	0.101	0.186	0.242	0.412	0.000	0.502
%RSD		60.200	8.495	12.920	43.480	9.415	54.780	0.000	0.395
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:03:41	89.630%	0.439	0.223	88.003%	-0.020	-0.006	-0.030	-0.030
2	01:04:00	91.923%	0.325	0.346	89.333%	-0.017	-0.018	0.001	-0.005
3	01:04:19	93.390%	0.335	0.350	90.536%	-0.019	-0.015	-0.051	-0.046
X		91.648%	0.366	0.306	89.291%	-0.019	-0.013	-0.027	-0.027
σ		1.895%	0.063	0.072	1.267%	0.002	0.006	0.026	0.021
%RSD		2.068	17.310	23.570	1.419	7.937	48.300	99.350	77.150
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:03:41	89.783%	-0.365	-0.030	-0.020	0.721	0.668	95.024%	96.380%
2	01:04:00	92.220%	-0.340	-0.036	-0.002	0.697	0.757	98.883%	99.919%
3	01:04:19	93.044%	-0.332	-0.033	-0.013	0.724	0.802	100.586%	101.432%
X		91.683%	-0.346	-0.033	-0.011	0.714	0.742	98.164%	99.244%
σ		1.696%	0.017	0.003	0.009	0.015	0.068	2.850%	2.593%
%RSD		1.849	5.011	9.046	82.380	2.051	9.203	2.903	2.613
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:03:41	-0.010	-0.013	-0.002	0.017	0.000	94.719%		
2	01:04:00	-0.010	-0.013	0.006	0.007	0.002	94.470%		
3	01:04:19	-0.009	-0.014	0.009	0.007	0.006	95.010%		
X		-0.010	-0.013	0.004	0.010	0.003	94.733%		
σ		0.001	0.000	0.006	0.006	0.003	0.271%		
%RSD		5.953	3.439	134.600	57.420	104.200	0.286		

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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	01:07:23	84.387%	-0.323	73.210	78.570	0.000	181000.000	22960.000	23970.000
2	01:07:43	84.784%	-0.351	77.180	78.640	0.000	180500.000	23210.000	24160.000
3	01:08:03	85.892%	-0.323	75.090	80.260	0.000	180100.000	23140.000	24240.000
x		85.021%	-0.333	75.160	79.160	0.000	180600.000	23100.000	24120.000
σ		0.780%	0.016	1.985	0.955	0.000	466.600	127.000	134.800
%RSD		0.917	4.872	2.641	1.206	0.000	0.258	0.550	0.559
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:07:23	-0.629	64.140	0.000	7147.000	6848.000	7062.000	85.017%	-0.042
2	01:07:43	-0.519	62.680	0.000	7121.000	7078.000	7068.000	85.663%	-0.163
3	01:08:03	-0.533	65.170	0.000	7087.000	7099.000	7062.000	86.100%	-0.044
x		-0.561	64.000	0.000	7118.000	7008.000	7064.000	85.593%	-0.083
σ		0.060	1.253	0.000	30.080	139.300	3.353	0.544%	0.069
%RSD		10.670	1.957	0.000	0.423	1.988	0.047	0.636	83.270
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:07:23	-0.459	0.315	2.164	4.030	16.080	-0.007	0.091	1.533
2	01:07:43	0.243	0.410	2.273	4.099	15.010	-0.014	0.008	1.655
3	01:08:03	-0.292	0.352	2.178	3.554	14.920	-0.004	0.092	1.593
x		-0.169	0.359	2.205	3.895	15.340	-0.008	0.064	1.594
σ		0.366	0.048	0.059	0.297	0.644	0.005	0.048	0.061
%RSD		216.400	13.380	2.679	7.621	4.202	65.270	75.250	3.831
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:07:23	-0.055	0.283	0.393	0.312	2.178	0.965	0.000	130.900
2	01:07:43	-0.060	0.505	0.426	0.143	1.954	0.437	0.000	132.100
3	01:08:03	-0.032	0.366	0.371	-0.120	1.960	-0.146	0.000	132.400
x		-0.049	0.385	0.397	0.112	2.031	0.419	0.000	131.800
σ		0.014	0.112	0.028	0.218	0.127	0.556	0.000	0.822
%RSD		29.550	29.140	7.003	195.100	6.273	132.700	0.000	0.624
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:07:23	89.816%	0.395	0.311	88.293%	-0.017	-0.020	-0.015	-0.014
2	01:07:43	92.612%	0.355	0.330	89.296%	-0.027	-0.021	0.003	0.001
3	01:08:03	93.208%	0.405	0.331	89.530%	-0.013	-0.018	-0.030	-0.029
x		91.879%	0.385	0.324	89.040%	-0.019	-0.020	-0.014	-0.014
σ		1.811%	0.027	0.011	0.657%	0.007	0.002	0.017	0.015
%RSD		1.971	6.927	3.499	0.738	38.820	8.386	119.200	106.200
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:07:23	89.582%	-0.390	-0.028	-0.018	0.665	0.688	95.570%	96.596%
2	01:07:43	91.905%	-0.371	-0.041	-0.010	0.761	0.738	99.038%	100.079%
3	01:08:03	92.959%	-0.376	-0.031	-0.017	0.834	0.706	99.611%	101.179%
x		91.482%	-0.379	-0.033	-0.015	0.753	0.710	98.073%	99.285%
σ		1.728%	0.010	0.007	0.004	0.085	0.025	2.187%	2.392%
%RSD		1.889	2.596	20.000	28.750	11.300	3.542	2.230	2.410
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:07:23	-0.011	-0.013	-0.014	-0.002	-0.015	95.385%		
2	01:07:43	-0.011	-0.012	-0.016	-0.008	-0.013	95.649%		
3	01:08:03	-0.011	-0.015	-0.016	-0.009	-0.013	94.351%		
x		-0.011	-0.013	-0.015	-0.006	-0.014	95.128%		
σ		0.000	0.001	0.001	0.004	0.001	0.686%		
%RSD		0.150	9.768	9.549	60.920	9.419	0.722		

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User Pre-dilution: 1.000

Run	Time	6Li ppb	9Be ppb	10B ppb	11B ppb	13C ppb	23Na ppb	25Mg ppb	26Mg ppb
1	01:11:06	82.434%	-0.235	66.090	76.890	0.000	185900.000	23250.000	24090.000
2	01:11:25	84.123%	-0.209	70.220	76.330	0.000	183100.000	23090.000	24000.000
3	01:11:45	85.235%	-0.267	73.900	74.990	0.000	179500.000	22870.000	23820.000
X		83.931%	-0.237	70.070	76.070	0.000	182900.000	23070.000	23970.000
σ		1.411%	0.029	3.908	0.972	0.000	3213.000	191.100	140.700
%RSD		1.681	12.220	5.577	1.277	0.000	1.757	0.828	0.587
Run	Time	27Al ppb	28Si ppb	37Cl ppb	39K ppb	43Ca ppb	44Ca ppb	45Sc ppb	47Ti ppb
1	01:11:06	48.240	304.200	0.000	7533.000	7073.000	7113.000	82.863%	2.677
2	01:11:25	49.160	295.700	0.000	7430.000	7072.000	7113.000	84.480%	2.831
3	01:11:45	47.580	294.900	0.000	7386.000	7045.000	7140.000	85.267%	2.503
X		48.330	298.200	0.000	7450.000	7063.000	7122.000	84.203%	2.670
σ		0.794	5.149	0.000	75.660	15.770	15.780	1.225%	0.165
%RSD		1.643	1.726	0.000	1.016	0.223	0.222	1.455	6.160
Run	Time	51V ppb	52Cr ppb	55Mn ppb	56Fe ppb	57Fe ppb	59Co ppb	60Ni ppb	63Cu ppb
1	01:11:06	0.258	0.527	1.318	80.030	89.580	0.010	0.069	2.040
2	01:11:25	0.421	0.471	1.312	80.260	93.720	0.011	0.020	2.006
3	01:11:45	0.100	0.510	1.364	80.340	92.720	0.004	0.044	2.043
X		0.260	0.503	1.331	80.210	92.010	0.008	0.044	2.029
σ		0.161	0.029	0.028	0.165	2.162	0.004	0.024	0.021
%RSD		61.790	5.761	2.138	0.205	2.350	49.350	55.440	1.024
Run	Time	65Cu ppb	66Zn ppb	68Zn ppb	75As ppb	78Se ppb	82Se ppb	83Kr ppb	88Sr ppb
1	01:11:06	0.011	0.586	0.727	0.542	2.036	0.790	0.000	131.000
2	01:11:25	0.032	0.636	0.565	0.142	1.874	-0.543	0.000	133.400
3	01:11:45	0.005	0.668	0.659	0.944	2.729	0.445	0.000	130.300
X		0.016	0.630	0.650	0.543	2.213	0.230	0.000	131.600
σ		0.014	0.041	0.081	0.401	0.454	0.692	0.000	1.639
%RSD		87.200	6.565	12.460	73.940	20.500	300.200	0.000	1.245
Run	Time	89Y ppb	95Mo ppb	98Mo ppb	103Rh ppb	107Ag ppb	109Ag ppb	111Cd ppb	114Cd ppb
1	01:11:06	88.280%	0.735	0.887	86.696%	-0.015	-0.018	-0.043	-0.038
2	01:11:25	91.161%	0.748	0.793	87.879%	-0.014	-0.004	0.069	0.038
3	01:11:45	92.838%	0.748	0.777	88.694%	-0.013	-0.011	0.033	0.015
X		90.760%	0.744	0.819	87.757%	-0.014	-0.011	0.020	0.005
σ		2.305%	0.008	0.060	1.004%	0.001	0.007	0.057	0.039
%RSD		2.540	1.037	7.273	1.144	9.642	60.200	292.100	813.300
Run	Time	115In ppb	118Sn ppb	121Sb ppb	123Sb ppb	135Ba ppb	137Ba ppb	159Tb ppb	165Ho ppb
1	01:11:06	88.303%	-0.362	-0.024	-0.018	1.402	1.304	93.801%	95.002%
2	01:11:25	90.625%	-0.352	-0.022	-0.010	1.346	1.435	96.384%	98.811%
3	01:11:45	93.204%	-0.351	-0.026	-0.006	1.445	1.326	97.309%	99.737%
X		90.711%	-0.355	-0.024	-0.011	1.397	1.355	95.831%	97.850%
σ		2.452%	0.006	0.002	0.006	0.050	0.070	1.818%	2.510%
%RSD		2.703	1.791	9.134	53.920	3.547	5.195	1.897	2.565
Run	Time	203Tl ppb	205Tl ppb	206Pb ppb	207Pb ppb	208Pb ppb	209Bi ppb		
1	01:11:06	-0.012	-0.011	0.092	0.073	0.076	93.104%		
2	01:11:25	-0.011	-0.012	0.099	0.073	0.094	92.879%		
3	01:11:45	-0.009	-0.013	0.089	0.078	0.079	93.845%		
X		-0.011	-0.012	0.093	0.074	0.083	93.276%		
σ		0.002	0.001	0.005	0.003	0.010	0.505%		
%RSD		14.820	9.286	5.590	3.753	11.790	0.542		

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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	01:14:48	82.436%	-0.293	75.060	80.830	0.000	188200.000	23760.000	24640.000
2	01:15:07	84.407%	-0.238	72.490	75.880	0.000	185400.000	23350.000	24590.000
3	01:15:27	86.422%	-0.296	67.200	75.900	0.000	180500.000	23170.000	24330.000
X		84.422%	-0.276	71.590	77.530	0.000	184700.000	23430.000	24520.000
σ		1.993%	0.033	4.007	2.852	0.000	3923.000	298.500	164.300
%RSD		2.360	11.850	5.597	3.679	0.000	2.124	1.274	0.670
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:14:48	-0.262	191.000	0.000	7623.000	7186.000	7232.000	84.050%	0.173
2	01:15:07	-0.295	187.200	0.000	7589.000	7265.000	7238.000	85.030%	0.168
3	01:15:27	-0.450	186.300	0.000	7461.000	7104.000	7184.000	86.332%	0.014
X		-0.336	188.100	0.000	7558.000	7185.000	7218.000	85.137%	0.118
σ		0.101	2.485	0.000	85.420	80.440	29.700	1.145%	0.090
%RSD		29.930	1.321	0.000	1.130	1.120	0.411	1.345	76.170
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:14:48	0.013	0.346	0.809	6.403	18.720	-0.005	-0.050	1.882
2	01:15:07	-0.637	0.284	0.874	5.874	18.560	-0.014	-0.010	1.783
3	01:15:27	0.621	0.321	0.863	5.316	20.430	-0.000	0.107	2.116
X		-0.001	0.317	0.849	5.864	19.240	-0.006	0.016	1.927
σ		0.629	0.031	0.035	0.543	1.037	0.007	0.082	0.171
%RSD		46860.000	9.789	4.074	9.266	5.391	109.200	513.500	8.871
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:14:48	-0.053	0.312	0.376	0.732	2.323	1.787	0.000	133.800
2	01:15:07	-0.080	0.405	0.464	0.966	2.642	0.720	0.000	134.000
3	01:15:27	-0.041	0.387	0.327	0.950	2.129	0.750	0.000	132.000
X		-0.058	0.368	0.389	0.883	2.365	1.086	0.000	133.300
σ		0.020	0.049	0.069	0.131	0.259	0.607	0.000	1.064
%RSD		33.970	13.360	17.830	14.780	10.950	55.960	0.000	0.799
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:14:48	89.849%	0.680	0.876	87.940%	-0.025	-0.016	-0.033	-0.021
2	01:15:07	92.691%	0.891	0.794	89.536%	-0.024	-0.010	0.089	0.067
3	01:15:27	94.344%	0.806	0.872	90.448%	-0.018	-0.013	-0.016	-0.011
X		92.294%	0.792	0.847	89.308%	-0.022	-0.013	0.013	0.012
σ		2.274%	0.107	0.046	1.270%	0.004	0.003	0.066	0.049
%RSD		2.463	13.440	5.477	1.422	18.330	24.710	492.700	422.500
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:14:48	90.162%	-0.363	-0.033	-0.007	1.292	1.243	95.237%	97.112%
2	01:15:07	92.819%	-0.361	-0.022	-0.019	1.077	1.219	99.304%	100.489%
3	01:15:27	94.409%	-0.349	-0.036	0.002	1.211	1.271	100.490%	102.070%
X		92.463%	-0.358	-0.031	-0.008	1.194	1.244	98.344%	99.891%
σ		2.146%	0.008	0.007	0.010	0.109	0.026	2.755%	2.533%
%RSD		2.321	2.132	23.630	129.000	9.090	2.084	2.801	2.535
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:14:48	-0.009	-0.014	0.054	0.036	0.046	95.487%		
2	01:15:07	-0.011	-0.013	0.057	0.061	0.057	95.978%		
3	01:15:27	-0.010	-0.013	0.031	0.052	0.046	95.873%		
X		-0.010	-0.014	0.047	0.050	0.050	95.779%		
σ		0.001	0.001	0.015	0.013	0.006	0.258%		
%RSD		10.410	5.411	30.750	25.300	11.960	0.270		

CCV 1241000 7/17/2014 1:18:11 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	01:18:11	81.722%	98.350	92.500	95.020	0.000	49910.000	51410.000	52260.000
2	01:18:30	84.529%	96.040	90.320	97.790	0.000	49150.000	50910.000	51920.000
3	01:18:49	84.978%	96.620	95.110	101.900	0.000	49580.000	51590.000	53280.000
X		83.743%	97.004%	92.645%	98.228%	0.000	99.095%	102.606%	104.973%
σ		1.764%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.107	1.242	2.589	3.513	0.000	0.763	0.689	1.342
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:18:11	508.900	5229.000	0.000	51040.000	48430.000	50900.000	85.573%	94.830
2	01:18:30	514.000	5199.000	0.000	50850.000	48670.000	51080.000	85.756%	100.600
3	01:18:49	524.300	5315.000	0.000	51480.000	50510.000	51960.000	85.270%	99.540
X		103.145%	104.954%	0.000	102.244%	98.412%	102.634%	85.533%	98.331%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.245%	n/a
%RSD		1.517	1.146	0.000	0.639	2.317	1.107	0.287	3.133
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:18:11	100.100	101.900	507.600	26780.000	25780.000	101.900	103.000	103.300
2	01:18:30	101.000	102.200	514.900	26720.000	26140.000	103.000	106.000	104.600
3	01:18:49	105.100	106.500	529.900	27390.000	27000.000	106.500	104.700	106.400
X		102.078%	103.531%	103.490%	107.865%	105.218%	103.792%	104.560%	104.759%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.619	2.458	2.191	1.379	2.374	2.276	1.424	1.493
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:18:11	102.500	102.200	102.300	104.200	108.100	106.500	0.000	105.600
2	01:18:30	105.200	103.200	103.100	104.600	108.700	105.500	0.000	106.200
3	01:18:49	105.400	104.700	107.600	106.000	109.400	105.300	0.000	107.200
X		104.383%	103.368%	104.354%	104.931%	108.723%	105.754%	0.000	106.324%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.550	1.221	2.714	0.880	0.633	0.615	0.000	0.770
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:18:11	82.701%	102.500	103.300	81.223%	102.500	102.400	104.800	105.300
2	01:18:30	85.450%	106.300	106.200	81.900%	103.900	103.600	105.200	107.900
3	01:18:49	86.346%	111.400	109.100	81.932%	105.600	106.600	107.100	107.000
X		84.832%	106.754%	106.176%	81.685%	104.022%	104.216%	105.694%	106.729%
σ		1.899%	n/a	n/a	0.400%	n/a	n/a	n/a	n/a
%RSD		2.239	4.205	2.752	0.490	1.482	2.041	1.139	1.222
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:18:11	84.938%	102.200	101.700	101.400	102.000	102.900	90.899%	91.849%
2	01:18:30	87.796%	103.200	102.800	101.600	103.700	103.800	94.848%	95.754%
3	01:18:49	88.086%	105.300	104.900	104.600	106.300	106.200	95.198%	96.234%
X		86.940%	103.574%	103.123%	102.554%	103.981%	104.327%	93.648%	94.612%
σ		1.740%	n/a	n/a	n/a	n/a	n/a	2.387%	2.405%
%RSD		2.001	1.542	1.566	1.767	2.065	1.626	2.549	2.542
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:18:11	98.840	99.120	98.220	98.990	98.190	91.144%		
2	01:18:30	103.100	103.600	103.000	102.600	103.200	90.493%		
3	01:18:49	107.800	108.100	108.200	108.800	108.000	88.784%		
X		103.249%	103.611%	103.142%	103.473%	103.151%	90.140%		
σ		n/a	n/a	n/a	n/a	n/a	1.219%		
%RSD		4.357	4.346	4.840	4.809	4.780	1.352		

180-34285-D-10-B@50 7/17/2014 1:28:25 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:28:44	81.535%	-0.263	70.520	75.610	0.000	188500.000	23030.000	23550.000
2	01:29:03	81.732%	-0.264	63.670	76.400	0.000	183500.000	22860.000	23640.000
3	01:29:24	80.953%	-0.263	68.940	75.800	0.000	184500.000	23110.000	23950.000
X		81.407%	-0.263	67.710	75.940	0.000	185500.000	23000.000	23710.000
σ		0.405%	0.000	3.590	0.411	0.000	2656.000	128.000	210.500
%RSD		0.497	0.147	5.302	0.541	0.000	1.432	0.556	0.888
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:28:44	4.618	92.810	0.000	7517.000	6923.000	6823.000	80.143%	0.097
2	01:29:03	5.427	94.670	0.000	7366.000	6608.000	6850.000	81.681%	0.341
3	01:29:24	5.444	96.640	0.000	7355.000	6670.000	6889.000	81.761%	0.527
X		5.163	94.710	0.000	7413.000	6734.000	6854.000	81.195%	0.322
σ		0.472	1.915	0.000	90.420	167.100	33.050	0.912%	0.216
%RSD		9.149	2.022	0.000	1.220	2.481	0.482	1.123	67.130
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:28:44	0.458	0.226	2.897	11.170	30.200	-0.002	0.034	4.686
2	01:29:03	0.217	0.341	2.925	11.450	27.920	-0.003	0.024	5.104
3	01:29:24	0.270	0.279	2.907	11.830	28.520	-0.003	0.076	5.072
X		0.315	0.282	2.909	11.480	28.880	-0.003	0.045	4.954
σ		0.127	0.058	0.014	0.331	1.185	0.000	0.028	0.233
%RSD		40.270	20.490	0.489	2.880	4.102	10.940	61.790	4.693
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:28:44	0.007	0.228	0.238	0.589	3.224	0.365	0.000	126.600
2	01:29:03	-0.038	0.435	0.220	0.316	2.555	0.518	0.000	125.300
3	01:29:24	-0.033	0.269	0.312	0.335	2.751	0.240	0.000	126.600
X		-0.021	0.311	0.256	0.413	2.843	0.374	0.000	126.200
σ		0.025	0.110	0.049	0.153	0.344	0.139	0.000	0.744
%RSD		118.200	35.230	19.050	36.980	12.090	37.180	0.000	0.589
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:28:44	84.651%	0.864	0.835	83.260%	-0.016	-0.010	0.026	0.010
2	01:29:03	87.008%	1.021	0.850	84.634%	-0.028	-0.007	0.054	0.029
3	01:29:24	88.724%	0.944	0.848	85.549%	-0.027	-0.019	-0.053	-0.051
X		86.794%	0.943	0.844	84.481%	-0.024	-0.012	0.009	-0.004
σ		2.045%	0.079	0.008	1.152%	0.007	0.006	0.055	0.042
%RSD		2.356	8.341	0.990	1.364	27.930	53.120	603.500	987.700
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:28:44	83.639%	-0.275	0.058	0.057	0.723	0.743	89.618%	91.372%
2	01:29:03	86.499%	-0.291	0.039	0.079	0.888	0.836	93.031%	94.000%
3	01:29:24	89.473%	-0.296	0.036	0.047	0.908	0.679	95.236%	96.217%
X		86.537%	-0.287	0.044	0.061	0.839	0.753	92.628%	93.863%
σ		2.918%	0.011	0.012	0.017	0.102	0.079	2.830%	2.425%
%RSD		3.371	3.861	26.120	27.330	12.120	10.450	3.055	2.584
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:28:44	-0.010	-0.010	0.014	-0.010	-0.001	92.941%		
2	01:29:03	-0.008	-0.011	0.011	0.015	0.008	91.978%		
3	01:29:24	-0.005	-0.014	0.005	0.003	-0.002	92.349%		
X		-0.007	-0.012	0.010	0.003	0.002	92.422%		
σ		0.003	0.002	0.005	0.013	0.006	0.486%		
%RSD		36.080	17.760	46.120	473.300	376.900	0.525		

CCB12 7/17/2014 2:08:23 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	02:08:42	83.901%	-0.294	-2.039	-2.050	0.000	57.080	3.227	4.269
2	02:09:01	82.334%	-0.293	-1.731	-2.175	0.000	64.270	4.557	3.997
3	02:09:21	84.090%	-0.294	-1.619	-2.178	0.000	63.420	3.788	4.222
X		83.442%	-0.294	-1.796	-2.134	0.000	61.590	3.857	4.163
σ		0.964%	0.001	0.218	0.073	0.000	3.929	0.668	0.146
%RSD		1.155	0.214	12.120	3.422	0.000	6.380	17.310	3.500
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:08:42	-0.564	4.156	0.000	32.290	-6.357	-14.200	82.437%	-0.036
2	02:09:01	-0.407	5.004	0.000	32.510	5.337	-14.320	82.757%	-0.068
3	02:09:21	-0.535	4.417	0.000	32.430	10.820	-16.770	83.702%	-0.100
X		-0.502	4.526	0.000	32.410	3.268	-15.100	82.965%	-0.068
σ		0.084	0.434	0.000	0.109	8.775	1.451	0.658%	0.032
%RSD		16.670	9.600	0.000	0.337	268.600	9.610	0.793	47.040
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:08:42	0.267	0.049	0.029	-0.738	5.010	-0.005	0.005	1.329
2	02:09:01	0.474	0.006	0.024	-0.928	3.332	0.006	0.012	0.996
3	02:09:21	0.087	0.040	0.064	-2.650	4.386	0.000	0.037	1.092
X		0.276	0.032	0.039	-1.439	4.242	0.001	0.018	1.139
σ		0.194	0.022	0.022	1.053	0.848	0.005	0.017	0.171
%RSD		70.270	70.540	56.240	73.220	20.000	775.200	93.020	15.050
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:08:42	-0.069	0.379	0.184	0.016	2.041	-0.228	0.000	0.041
2	02:09:01	-0.064	0.222	0.217	0.494	1.824	0.830	0.000	0.044
3	02:09:21	-0.098	0.380	0.382	-0.040	1.381	0.309	0.000	0.068
X		-0.077	0.327	0.261	0.157	1.749	0.303	0.000	0.051
σ		0.018	0.091	0.106	0.293	0.336	0.529	0.000	0.015
%RSD		23.630	27.860	40.470	187.400	19.240	174.400	0.000	29.570
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:08:42	86.862%	0.141	0.158	90.508%	-0.006	-0.006	0.028	0.013
2	02:09:01	88.783%	0.207	0.159	91.002%	-0.014	-0.010	-0.058	-0.046
3	02:09:21	91.027%	0.165	0.106	92.787%	-0.004	-0.008	0.041	0.040
X		88.891%	0.171	0.141	91.432%	-0.008	-0.008	0.004	0.003
σ		2.085%	0.034	0.030	1.199%	0.006	0.002	0.053	0.044
%RSD		2.345	19.650	21.400	1.311	69.400	21.850	1432.000	1710.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:08:42	88.814%	-0.389	0.120	0.156	0.007	-0.021	90.665%	92.520%
2	02:09:01	89.271%	-0.361	0.087	0.128	-0.003	0.021	93.451%	94.411%
3	02:09:21	92.110%	-0.381	0.125	0.110	-0.003	-0.006	95.571%	96.271%
X		90.065%	-0.377	0.111	0.131	0.000	-0.002	93.229%	94.401%
σ		1.786%	0.014	0.021	0.024	0.006	0.021	2.461%	1.875%
%RSD		1.983	3.712	18.580	17.980	1758.000	994.900	2.639	1.987
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:08:42	0.006	-0.002	0.001	0.006	-0.005	98.438%		
2	02:09:01	0.002	-0.004	-0.004	-0.005	-0.012	98.742%		
3	02:09:21	0.001	0.004	-0.002	-0.005	-0.009	98.920%		
X		0.003	-0.001	-0.002	-0.002	-0.009	98.700%		
σ		0.003	0.004	0.003	0.006	0.003	0.244%		
%RSD		92.620	597.600	154.100	422.100	38.110	0.247		

Performance Report

Sample details

Sample name : ITUNE

Acquired at : 7/16/2014 3:48:01 PM

Report name : EPA ILMO5.2/6020A 2.1 [3/15/2013 11:49:53 AM]

Mass Calibration verification

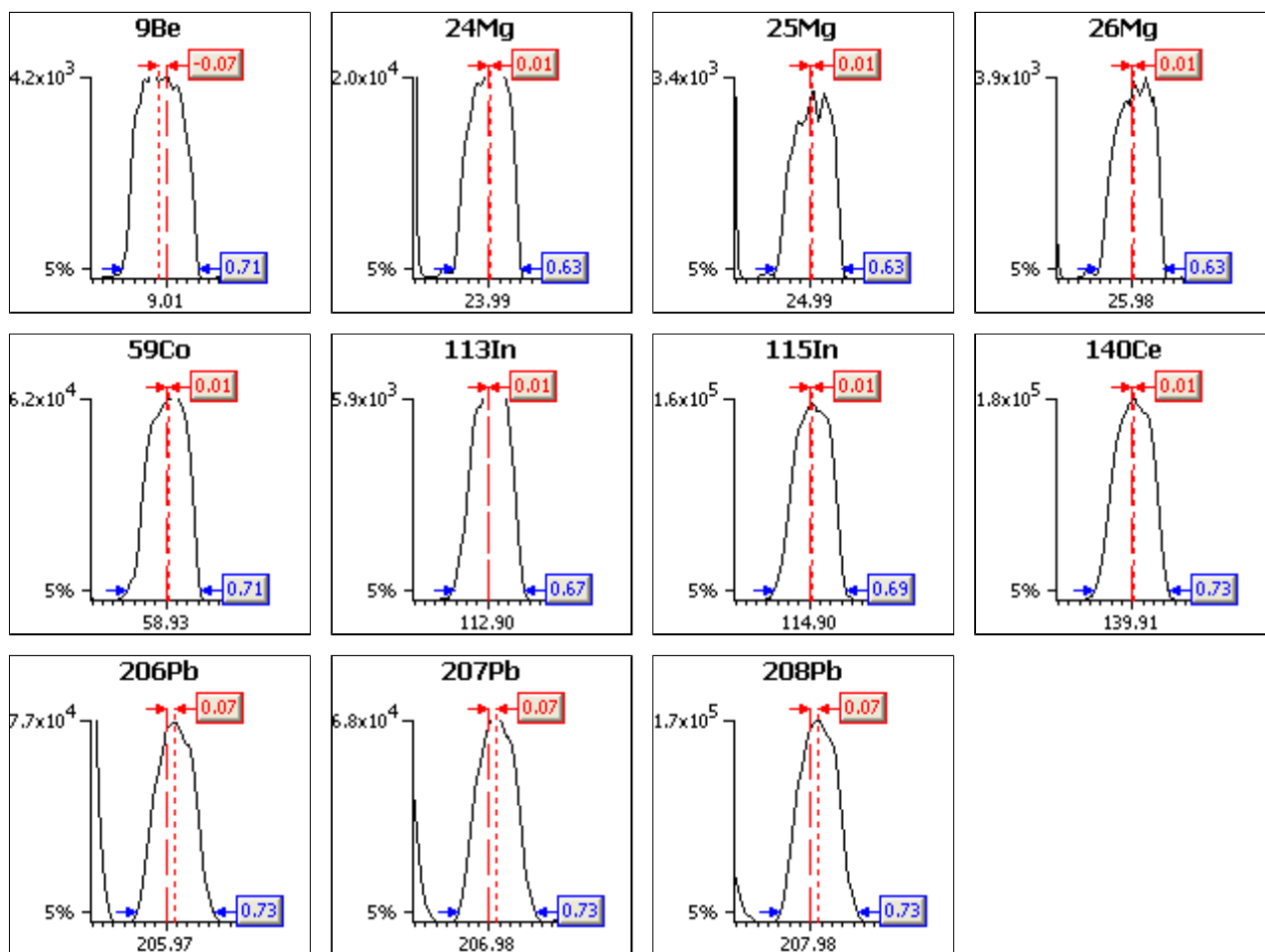
Acquisition parameters

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	0.63	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	0.67	0.01
115In	0.90	0.45	0.10	0.69	0.01
140Ce	0.90	0.45	0.10	0.73	0.01
206Pb	0.90	0.45	0.10	0.73	0.07
207Pb	0.90	0.45	0.10	0.73	0.07
208Pb	0.90	0.45	0.10	0.73	0.07

Sample details

Sample name : ITUNE

Acquired at : 7/16/2014 3:48:01 PM

Report name : EPA ILM05.2/6020A 2.1 [3/15/2013 11:49:53 AM]

Tune conditions

Major		Minor		Global		Add. Gases	
Extraction	-184	Lens 2	-32.2	Standard resolution	n/a	He/H2	0.00
Lens 1	2.0	Lens 3	-187.5	High resolution	n/a	He/NH3	0.00
Focus	22.7	Forward power	1404	Analogue Detector	n/a		
D1	-50.2	Horizontal	85	PC Detector	n/a		
Pole Bias	-1.0	Vertical	8				
Hexapole Bias	-3.0	D2	-198				
Nebuliser	0.77	DA	-80.0				
Sampling Depth	200	Cool	13.0				
		Auxiliary	1.00				

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	3:48:49 PM	1	4355	23543	2947	3736	213349	63885	1
2	3:50:15 PM	1	4345	23525	2956	3774	212735	64722	2
3	3:51:40 PM	1	4153	23526	2957	3715	211471	64255	3
4	3:53:05 PM	2	4198	23387	3045	3789	212023	64465	4
5	3:54:30 PM	1	4325	23445	2979	3713	211795	64188	3
x		1	4275	23485	2977	3745	212274	64303	3
σ		0.41	92.99	66.63	39.96	34.48	759.08	313.03	1.28
%RSD		31.160	2.175	0.284	1.342	0.921	0.358	0.487	50.619

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	3:48:49 PM	18	0	6819	158071	1078	184759	2285	74737
2	3:50:15 PM	24	0	6857	159189	1099	187078	2240	74333
3	3:51:40 PM	20	0	6921	161228	1101	186344	2266	74411
4	3:53:05 PM	19	0	7021	161528	1139	187609	2193	75800
5	3:54:30 PM	19	0	6867	161345	1155	187577	2251	75812
x		20	0	6897	160272	1115	186673	2247	75019
σ		2.14	0.11	78.20	1553.87	31.49	1186.26	34.59	734.55
%RSD		10.715	51.349	1.134	0.970	2.825	0.635	1.540	0.979

Run	Time	207Pb	208Pb	220Bkg
Dwell (mSecs)		0.0	0.0	0.0
Limits	%RSD	5.0%	5.0%	-
	Countrate	>500	>500	<2500
1	3:48:49 PM	66781	161555	0
2	3:50:15 PM	67079	162417	0
3	3:51:40 PM	67161	161403	0
4	3:53:05 PM	67213	163152	0
5	3:54:30 PM	67687	164177	0
x		67184	162541	0
σ		326.88	1154.79	0.09
%RSD		0.487	0.710	46.566

Ratio results

Run	Time	156Ce O/140Ce
Ratio limits		<0.0500
1	3:48:49 PM	0
2	3:50:15 PM	0

3	3:51:40 PM	0
4	3:53:05 PM	0
5	3:54:30 PM	0
\bar{x}		0.0120
σ		0.00
%RSD		2.0794

Result : The performance report passed.

TestAmerica Pittsburgh Atomic Absorption Data for Mercury

Instrument: HG HYDRA AA

HYDRA II

Analyst Name:

Lawrence M. Drath

Analysis Date:

7/11/2014

File ID:

BYO11C #11238

Matrix:

Water

Analytical Method(s):

245.1 (7470A) / 7470AD.O.D. / 7471A / 7471A D.O.D. / 7471B

Job Number/SDG

22945

34256

34285

34298

34440

34447

34475

34556

34580

34601

34606

34643

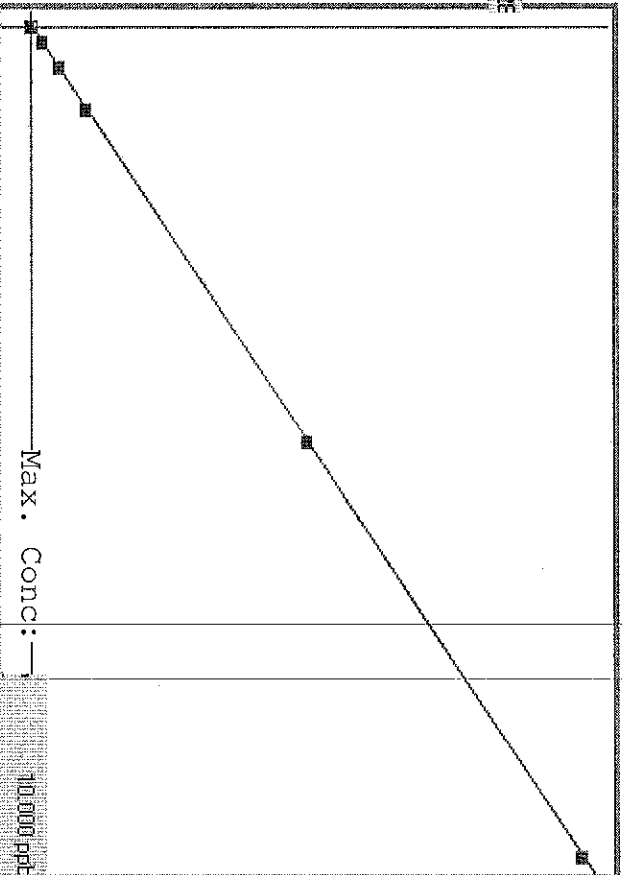
METHG

*J40711C
Jawen E. J. Syroth
7/11/2011*

Linear

µ Abs. :

89928



Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
blank	0.000	-0.018	-0.018	22	0.000	22				
.2ppb	0.200	0.194	-0.006	1927	0.0%	1927				
.5ppb	0.500	0.516	0.016	4822	0.0%	4822				
1.0ppb	1.000	0.992	-0.008	9097	0.0%	9097				
5.0ppb	5.000	5.032	0.032	45410	0.0%	45410				
10.0ppb	10.000	9.984	-0.016	89928	0.0%	89928				

A= 0.0000e+000

B= 1.1125e-004

C= 2.10255e-002

Rho= 0.9999979

Accept=Accepted

Accepted Date=

07/11/11 13:59

R40711C

Date of Analysis: 11 Jul 2014 13:46:55

Operator: Admin

Seq ID	Type	Sample ID	Extended ID	Date	Conc.	Units	Stnd Cond	μ Abs./Method	Chapter
2063	SMPL	180-34285-D-9-A - 1		11 Jul 2014 15:29:50	-0.0210	ppb	-	-7\METHG	R40711C
2064	SMPL	180-34285-D-10-A - 1		11 Jul 2014 15:31:32	-0.0149	ppb	-	48\METHG	R40711C
2065	CK STND	CCV - 1		11 Jul 2014 15:33:14	101.5%	5.0725	-	45778\METHG	R40711C
2066	CK STND	CCB - 1		11 Jul 2014 15:34:56	-0.0633	ppb	-	-387\METHG	R40711C
2067	SMPL	180-34285-D-11-A - 1		11 Jul 2014 15:37:02	-0.0241	ppb	-	-35\METHG	R40711C
2068	SMPL	180-34285-D-12-A - 1		11 Jul 2014 15:38:44	0.0954	ppb	-	1040\METHG	R40711C
2069	SMPL	180-34285-D-13-A - 1		11 Jul 2014 15:40:26	-0.0286	ppb	-	-75\METHG	R40711C
2070	SMPL	180-34285-D-14-A - 1		11 Jul 2014 15:42:09	0.2717	ppb	-	2624\METHG	R40711C
2071	SMPL	180-34285-D-15-A - 1		11 Jul 2014 15:43:51	-0.0419	ppb	-	-195\METHG	R40711C
2072	SMPL	180-34643-A-1-A - 1		11 Jul 2014 15:45:36	-0.0181	ppb	-	19\METHG	R40711C
2073	SMPL	MB 180-111134/1-A - 1		11 Jul 2014 15:47:19	-0.0176	ppb	-	24\METHG	R40711C
2074	SMPL	LCS 180-111134/2-A - 1		11 Jul 2014 15:49:01	2.5318	ppb	-	22940\METHG	R40711C
2075	SMPL	LB 180-110797/9-C - 1		11 Jul 2014 15:50:44	-0.0567	ppb	-	-328\METHG	R40711C
2076	SMPL	180-34580-A-1-M - 1		11 Jul 2014 15:52:42	-0.0181	ppb	-	19\METHG	R40711C
2077	CK STND	CCV - 1		11 Jul 2014 15:54:24	102.6%	5.1307	-	46301\METHG	R40711C
2078	CK STND	CCB - 1		11 Jul 2014 15:56:06	-0.0790	ppb	-	-528\METHG	R40711C
2079	SMPL	180-34580-A-1-N MS - 1		11 Jul 2014 15:58:09	3.8854	ppb	-	35107\METHG	R40711C
2080	SMPL	180-34580-A-1-O MSD - 1		11 Jul 2014 15:59:51	3.9891	ppb	-	36039\METHG	R40711C
2081	SMPL	180-34556-A-1-E - 1		11 Jul 2014 16:02:01	-0.0038	ppb	-	148\METHG	R40711C
2082	SMPL	MB 180-111135/1-A - 1		11 Jul 2014 16:04:12	-0.0300	ppb	-	-88\METHG	R40711C
2083	SMPL	LCS 180-111135/2-A - 1		11 Jul 2014 16:05:55	2.5439	ppb	-	23049\METHG	R40711C
2084	SMPL	LB 180-110929/10-C - 1		11 Jul 2014 16:07:37	-0.0424	ppb	-	-199\METHG	R40711C
2085	SMPL	180-34601-B-1-M - 1		11 Jul 2014 16:09:34	-0.0213	ppb	-	-9\METHG	R40711C
2086	SMPL	180-34601-B-1-N MS - 1		11 Jul 2014 16:11:17	4.4747	ppb	-	40404\METHG	R40711C
2087	SMPL	180-34601-B-1-O MSD - 1		11 Jul 2014 16:12:59	4.4018	ppb	-	39749\METHG	R40711C
2088	SMPL	180-34601-B-2-C - 1		11 Jul 2014 16:15:11	-0.0737	ppb	-	-480\METHG	R40711C
2089	CK STND	CCV - 1		11 Jul 2014 16:17:24	100.3%	5.0160	-	45270\METHG	R40711C
2090	CK STND	CCB - 1		11 Jul 2014 16:19:06	-0.0713	ppb	-	-459\METHG	R40711C
2091	SMPL	180-34601-B-3-C - 1		11 Jul 2014 16:21:11	-0.0257	ppb	-	-49\METHG	R40711C
2092	SMPL	MB 180-111136/1-A - 1		11 Jul 2014 16:22:53	-0.0214	ppb	-	-10\METHG	R40711C
2093	SMPL	LCS 180-111136/2-A - 1		11 Jul 2014 16:24:35	2.4942	ppb	-	22602\METHG	R40711C
2094	SMPL	LB 180-109783/6-F - 1		11 Jul 2014 16:26:17	-0.0649	ppb	-	-401\METHG	R40711C
2095	SMPL	200-22945-C-2-G - 1		11 Jul 2014 16:28:13	-0.0214	ppb	-	-10\METHG	R40711C
2096	SMPL	200-22945-B-2-G MS - 1		11 Jul 2014 16:29:55	4.4030	ppb	-	39760\METHG	R40711C
2097	SMPL	200-22945-A-2-I MSD - 1		11 Jul 2014 16:31:38	4.4159	ppb	-	39876\METHG	R40711C
2098	SMPL	200-22945-B-4-G - 1		11 Jul 2014 16:33:48	-0.0770	ppb	-	-510\METHG	R40711C
2099	SMPL	200-22945-B-6-G - 1		11 Jul 2014 16:35:56	-0.0231	ppb	-	-26\METHG	R40711C
2100	SMPL	MB 180-111209/1-A - 1		11 Jul 2014 16:37:38	-0.0223	ppb	-	-18\METHG	R40711C
2101	CK STND	CCV - 1		11 Jul 2014 16:39:21	102.3%	5.1131	-	46143\METHG	R40711C
2102	CK STND	CCB - 1		11 Jul 2014 16:41:03	-0.0780	ppb	-	-519\METHG	R40711C
2103	SMPL	180-34606-A-1-D - 1		11 Jul 2014 16:43:06	-0.0334	ppb	-	-118\METHG	R40711C
2104	SMPL	LCS 180-111209/2-A - 1		11 Jul 2014 16:44:49	2.3090	ppb	-	20937\METHG	R40711C
2105	SMPL	LCSD 180-111209/3-A - 1		11 Jul 2014 16:46:32	2.4069	ppb	-	21817\METHG	R40711C
2106	CK STND	CCV - 1		11 Jul 2014 16:48:31	101.7%	5.0840	-	45881\METHG	R40711C
2107	CK STND	CCB - 1		11 Jul 2014 16:50:27	-0.0793	ppb	-	-531\METHG	R40711C

*End of Run
Xavier J. F. Sgratta
7/11/2014*

Laura A McGrath
7/11/2014
Page 1 of 2

Rack	Cup	Sample ID	Extended ID	Wt.	Vol.
1	1	MB 180-111203/1-A		1.0000	1.0000
1	2	LCS 180-111203/2-A		1.0000	1.0000
1	3	180-34248-H-1-A		1.0000	1.0000
1	4	180-34248-H-2-A		1.0000	1.0000
1	5	180-34248-H-3-A		1.0000	1.0000
1	6	180-34248-H-4-A		1.0000	1.0000
1	7	180-34248-H-5-A		1.0000	1.0000
1	8	180-34248-H-6-A		1.0000	1.0000
1	9	180-34248-H-7-A		1.0000	1.0000
1	10	180-34256-D-5-A		1.0000	1.0000
1	11	180-34256-D-6-A		1.0000	1.0000
1	12	180-34256-D-7-A		1.0000	1.0000
1	13	180-34256-D-8-A		1.0000	1.0000
1	14	180-34256-D-9-A		1.0000	1.0000
1	15	180-34256-D-10-A		1.0000	1.0000
1	16	180-34256-D-11-A		1.0000	1.0000
1	17	180-34256-D-12-A		1.0000	1.0000
1	18	180-34440-C-2-C		1.0000	1.0000
1	19	180-34440-B-2-A MS		1.0000	1.0000
1	20	180-34440-B-2-B MSD		1.0000	1.0000
1	21	180-34298-C-2-A		1.0000	1.0000
1	22	180-34298-C-3-A		1.0000	1.0000
1	23	180-34298-C-4-A		1.0000	1.0000
1	24	180-34298-E-5-A		1.0000	1.0000
1	25	MB 180-111204/1-A		1.0000	1.0000
1	26	LCS 180-111204/2-A		1.0000	1.0000
1	27	LCSD 180-111204/3-A		1.0000	1.0000
1	28	180-34447-D-1-A		1.0000	1.0000
1	29	180-34447-D-2-A		1.0000	1.0000
1	30	180-34447-D-3-A		1.0000	1.0000
1	31	180-34447-D-4-A		1.0000	1.0000
1	32	180-34447-D-5-A		1.0000	1.0000
1	33	180-34447-D-6-A		1.0000	1.0000
1	34	180-34447-D-7-A		1.0000	1.0000
1	35	180-34475-C-2-A		1.0000	1.0000
1	36	180-34285-D-6-A		1.0000	1.0000
1	37	180-34285-D-7-A		1.0000	1.0000
1	38	180-34285-D-8-A		1.0000	1.0000
1	39	180-34285-D-9-A		1.0000	1.0000

Laura E McGrath
 7/11/2014
 Page 2 of 2

Rack	Cup	Sample ID	Extended ID	Wt.	Vol.
1	40	180-34285-D-10-A		1.0000	1.0000
1	41	180-34285-D-11-A		1.0000	1.0000
1	42	180-34285-D-12-A		1.0000	1.0000
1	43	180-34285-D-13-A		1.0000	1.0000
1	44	180-34285-D-14-A		1.0000	1.0000
1	45	180-34285-D-15-A		1.0000	1.0000
1	46	180-34643-A-1-A		1.0000	1.0000
1	47	MB 180-111134/1-A		1.0000	1.0000
1	48	LCS 180-111134/2-A		1.0000	1.0000
1	49	LB 180-110797/9-C		1.0000	1.0000
1	50	180-34580-A-1-M		1.0000	1.0000
1	51	180-34580-A-1-N MS		1.0000	1.0000
1	52	180-34580-A-1-O MSD		1.0000	1.0000
1	53	180-34556-A-1-E		1.0000	1.0000
1	54	MB 180-111135/1-A		1.0000	1.0000
1	55	LCS 180-111135/2-A		1.0000	1.0000
1	56	LB 180-110929/10-C		1.0000	1.0000
1	57	180-34601-B-1-M		1.0000	1.0000
1	58	180-34601-B-1-N MS		1.0000	1.0000
1	59	180-34601-B-1-O MSD		1.0000	1.0000
1	60	180-34601-B-2-C		1.0000	1.0000
2	1	180-34601-B-3-C		1.0000	1.0000
2	2	MB 180-111136/1-A		1.0000	1.0000
2	3	LCS 180-111136/2-A		1.0000	1.0000
2	4	LB 180-109783/6-F		1.0000	1.0000
2	5	200-22945-C-2-G		1.0000	1.0000
2	6	200-22945-B-2-G MS		1.0000	1.0000
2	7	200-22945-A-2-I MSD		1.0000	1.0000
2	8	200-22945-B-4-G		1.0000	1.0000
2	9	200-22945-B-6-G		1.0000	1.0000
2	10	MB 180-111209/1-A		1.0000	1.0000
2	11	180-34606-A-1-D		1.0000	1.0000
2	12	LCS 180-111209/2-A		1.0000	1.0000
2	13	LCSD 180-111209/3-A		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.: 180-34298-1

SDG No.: _____

Batch Number: 111451 Batch Start Date: 07/15/14 10:00 Batch Analyst: Swanson, Jim

Batch Method: 3005A Batch End Date: 07/15/14 14:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAPITTCPMS 00017	MTAPITTMISA 00020	MTAPITTMISC 00026	
MB 180-111451/1		3005A, 6020A		50.0 mL	50.0 mL				
LCS 180-111451/2		3005A, 6020A		50.0 mL	50.0 mL	0.5 mL	0.5 mL	0.5 mL	
LCS 180-111451/3		3005A, 6020A		50.0 mL	50.0 mL	0.5 mL	0.5 mL	0.5 mL	
180-34298-C-2	062514-DP	3005A, 6020A	R	50.0 mL	50.0 mL				
180-34298-C-3	TS04-PDM004	3005A, 6020A	R	50.0 mL	50.0 mL				
180-34298-C-4	RW20-PZP000	3005A, 6020A	R	50.0 mL	50.0 mL				
180-34298-E-5	RW20-PZM020	3005A, 6020A	R	50.0 mL	50.0 mL				

Batch Notes	
First End time	1430
Lot # of hydrochloric acid	1206674
Lot # of Nitric Acid	1241748
Hot Block ID number	#1
Oven, Bath or Block Temperature 1	95
Pipette ID	L12016111U
Person who witnessed spiking	JWS
First Start time	1000
ID number of the thermometer	IP1 cf 0.0 A2
Digestion Tube/Cup Lot #	1309271
Uncorrected Temperature	95 Celsius

Basis	Basis Description
R	Total Recoverable

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

Batch Number: 111203 Batch Start Date: 07/11/14 11:40 Batch Analyst: McGrath, Lauren E

Batch Method: 7470A Batch End Date: 07/11/14 13:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MHgworkingCal 00840			
MB 180-111203/1		7470A, 7470A		50 mL	50 mL				
LCS 180-111203/2		7470A, 7470A		50 mL	50 mL	1.25 mL			
180-34298-C-2	062514-DP	7470A, 7470A	T	50 mL	50 mL				
180-34298-C-3	TS04-PDM004	7470A, 7470A	T	50 mL	50 mL				
180-34298-C-4	RW20-PZP000	7470A, 7470A	T	50 mL	50 mL				
180-34298-E-5	RW20-PZM020	7470A, 7470A	T	50 mL	50 mL				

Batch Notes	
Hydroxylamine Hydrochloride Lot	3ML 1231239 hg disp c6
Digestion End Time	1310
Digestion Start Time	1140
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 1229303 hg disp ks4
Potassium Permanganate Lot Number	7.5ML 1229708 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	1234664
Temperature	95
ID number of the thermometer	IP29 (0.0) D2
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.: 180-34298-1

SDG No.: _____

Batch Number: 111203 Batch Start Date: 07/11/14 11:40 Batch Analyst: McGrath, Lauren E

Batch Method: 7470A Batch End Date: 07/11/14 13:10

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.: 180-34298-1

SDG No.: _____

Batch Number: 111205 Batch Start Date: 07/11/14 11:40 Batch Analyst: McGrath, Lauren E

Batch Method: 7470A Batch End Date: 07/11/14 13:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MHgworkingCal 00840	MHgWorkingicv 00821		
ICV 180-111205/7		7470A, 7470A		50 mL	50 mL		1.25 mL		
ICB 180-111205/8		7470A, 7470A		50 mL	50 mL				
CRA 180-111205/9		7470A, 7470A		50 mL	50 mL	0.1 mL			
CCV 180-111205/10		7470A, 7470A		50 mL	50 mL	2.5 mL			
CCB 180-111205/11		7470A, 7470A		50 mL	50 mL				

Batch Notes	
Hydroxylamine Hydrochloride Lot	3ML 1231239 hg disp c6
Digestion End Time	1310
Digestion Start Time	1140
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 1229303 hg disp ks4
Potassium Permanganate Lot Number	7.5ML 1229708 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	1234664
Temperature	95
ID number of the thermometer	IP29 (0.0) D2
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.: 180-34298-1

SDG No.: _____

Batch Number: 111205 Batch Start Date: 07/11/14 11:40 Batch Analyst: McGrath, Lauren E

Batch Method: 7470A Batch End Date: 07/11/14 13:10

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.

7470A

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-34298-1

SDG No.: _____

Project: Sparrows Point Trust Offshore Investigat

Client Sample ID	Lab Sample ID
<u>062514-DP</u>	<u>180-34298-2</u>
<u>TS04-PDM004</u>	<u>180-34298-3</u>
<u>RW20-PZP000</u>	<u>180-34298-4</u>
<u>RW20-PZM020</u>	<u>180-34298-5</u>

Comments:

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: 062514-DP

Lab Sample ID: 180-34298-2

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

SDG ID.:

Matrix: Water

Date Sampled: 06/25/2014 00:00

Reporting Basis: WET

Date Received: 06/26/2014 08:20

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: TS04-PDM004 Lab Sample ID: 180-34298-3

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG ID.: _____

Matrix: Water Date Sampled: 06/25/2014 13:40

Reporting Basis: WET Date Received: 06/26/2014 08:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	3.2	10	3.2	ug/L	J	B	1	9014

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: RW20-PZP000

Lab Sample ID: 180-34298-4

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

SDG ID.: _____

Matrix: Water

Date Sampled: 06/25/2014 12:50

Reporting Basis: WET

Date Received: 06/26/2014 08:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	160	10	3.2	ug/L		B	1	9014

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: RW20-PZM020

Lab Sample ID: 180-34298-5

Lab Name: TestAmerica Pittsburgh

Job No.: 180-34298-1

SDG ID.: _____

Matrix: Water

Date Sampled: 06/25/2014 10:05

Reporting Basis: WET

Date Received: 06/26/2014 08:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	3.7	10	3.2	ug/L	J	B	1	9014

2-IN
 CALIBRATION QUALITY CONTROL
 GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 SDG No.: _____
 Analyst: PGJ Batch Start Date: 07/03/2014
 Reporting Units: ug/L Analytical Batch No.: 110390

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
4	ICV	03:14	Cyanide, Total	199	200	99	90-110		WCN0.2ICV_00265
5	ICB	03:14	Cyanide, Total	ND					
6	CCV	03:31	Cyanide, Total	103	100	103	90-110		WCN0.1CCV_00267
7	CCB	03:31	Cyanide, Total	ND					
18	CCV	03:39	Cyanide, Total	102	100	102	90-110		WCN0.1CCV_00267
19	CCB	03:39	Cyanide, Total	ND					
30	CCV	03:46	Cyanide, Total	102	100	102	90-110		WCN0.1CCV_00267
31	CCB	03:46	Cyanide, Total	ND					
38	CCV	03:49	Cyanide, Total	108	100	108	90-110		WCN0.1CCV_00267
39	CCB	03:49	Cyanide, Total	ND					

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

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 110390 Date: 07/03/2014 03:32 Prep Batch: 110350 Date: 07/02/2014 13:40							
9014	MB 180-110350/4-A	Cyanide, Total	3.70	J	ug/L	10	1

7A-IN
 LAB CONTROL SAMPLE
 GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 110390		Date: 07/03/2014 03:32	Prep Batch: 110350		Date: 07/02/2014 13:40						
				LCS Source: WCN10Si_00440							
9014	LCS 180-110350/3- A	Cyanide, Total	204		ug/L	200	102	85-115			

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

7A-IN
 LOW LEVEL CONTROL SAMPLE
 GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1
 SDG No.: _____
 Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 110390		Date: 07/03/2014 03:31	Prep Batch: 110350		Date: 07/02/2014 13:40						
				LCS Source: WCN0.5L1_00433							
9014	LLCS 180-110350/1- A	Cyanide, Total	50.8		ug/L	50.0	102	90-110			

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

7A-IN
HIGH LEVEL CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 110390		Date: 07/03/2014 03:31	Prep Batch: 110350		Date: 07/02/2014 13:40						
		LCS Source: WCN10Pi_00435									
9014	HLCS 180-110350/2- A	Cyanide, Total	239		ug/L	250	96	90-110			

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

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-34298-1
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: 180-34298-1
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.: 180-34298-1

SDG No.: _____

Prep Method: 9010C

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LLCS 180-110350/1-A	07/02/2014 13:40	110350		50	50
HLCS 180-110350/2-A	07/02/2014 13:40	110350		50	50
LCS 180-110350/3-A	07/02/2014 13:40	110350		50	50
MB 180-110350/4-A	07/02/2014 13:40	110350		50	50
180-34298-2	07/02/2014 13:40	110350		50	50
180-34298-3	07/02/2014 13:40	110350		50	50
180-34298-4	07/02/2014 13:40	110350		50	50
180-34298-5	07/02/2014 13:40	110350		50	50

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

Instrument ID: KONELAB1 Method: 9014

Start Date: 07/03/2014 03:08 End Date: 07/03/2014 03:49

Lab Sample ID	D / F	Type	Time	Analytes															
				C	N														
ZZZZZZ			03:08																
ZZZZZZ			03:08																
ZZZZZZ			03:08																
ICV 180-110390/4	1		03:14	X															
ICB 180-110390/5	1		03:14	X															
CCV 180-110390/6	1		03:31	X															
CCB 180-110390/7	1		03:31	X															
LLCS 180-110350/1-A	1	T	03:31	X															
HLCS 180-110350/2-A	1	T	03:31	X															
LCS 180-110350/3-A	1	T	03:32	X															
MB 180-110350/4-A	1	T	03:32	X															
ZZZZZZ			03:32																
ZZZZZZ			03:32																
ZZZZZZ			03:32																
ZZZZZZ			03:32																
ZZZZZZ			03:32																
ZZZZZZ			03:39																
CCV 180-110390/18	1		03:39	X															
CCB 180-110390/19	1		03:39	X															
ZZZZZZ			03:39																
ZZZZZZ			03:39																
ZZZZZZ			03:39																
ZZZZZZ			03:39																
ZZZZZZ			03:39																
ZZZZZZ			03:39																
ZZZZZZ			03:39																
ZZZZZZ			03:39																
ZZZZZZ			03:39																
ZZZZZZ			03:46																
ZZZZZZ			03:46																
CCV 180-110390/30	1		03:46	X															
CCB 180-110390/31	1		03:46	X															
180-34298-2	1	T	03:46	X															
180-34298-3	1	T	03:46	X															
180-34298-4	1	T	03:46	X															
180-34298-5	1	T	03:46	X															
ZZZZZZ			03:46																
ZZZZZZ			03:46																
CCV 180-110390/38	1		03:49	X															
CCB 180-110390/39	1		03:49	X															

Prep Types
T = Total/NA

AquaKem v. 6.5 AQ2
 Results from time period:
 Thu Jul 03 04:08:15 2014
 Thu Jul 03 04:50:00 2014

J. Johnson 7/3/14

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	0.00115	mg/l	7/3/14 3:08		0		0.01052
CN 0.5	CN, T	0.00581	mg/l	7/3/14 3:08		99		0.01611
CN 0.5	CN, T	0.01086	mg/l	7/3/14 3:08		49		0.02218
CN 0.5	CN, T	0.05071	mg/l	7/3/14 3:08		9		0.07003
CN 0.5	CN, T	0.09867	mg/l	7/3/14 3:08		4		0.12762
CN 0.5	CN, T	0.24525	mg/l	7/3/14 3:08		1		0.30364
CN 0.5	CN, T	0.50254	mg/l	7/3/14 3:08		0		0.6126
ICV CN	CN, T	0.19866	mg/l	7/3/14 3:14		0		0.24769
ICB CN	CN, T	0.00014	mg/l	7/3/14 3:14		0		0.0093
CCV CN	CN, T	0.10308	mg/l	7/3/14 3:31		0		0.13292
VCCB CN	CN, T	0.00017	mg/l	7/3/14 3:31		0		0.00934
LLCS 180-110350/	CN, T	0.05078	mg/l	7/3/14 3:31		0	0	0.07012
HLCS 180-110350/	CN, T	0.23899	mg/l	7/3/14 3:32		0	0	0.29613
LCS 180-110350/3	CN, T	0.2041	mg/l	7/3/14 3:32		0	0	0.25423
MB 180-110350/4-	CN, T	0.0037	mg/l	7/3/14 3:32		0	0	0.01357
180-34248-I-1-A	CN, T	0.00271	mg/l	7/3/14 3:32		0	0	0.0124
180-34248-I-2-B	CN, T	0.00255	mg/l	7/3/14 3:32		0	0	0.0122
180-34248-I-2-E MS	CN, T	0.09029	mg/l	7/3/14 3:32		0	0	0.11757
180-34248-I-2-F MS	CN, T	0.0843	mg/l	7/3/14 3:32		0	0	0.11037
180-34248-I-3-A	CN, T	0.00225	mg/l	7/3/14 3:32		0	0	0.01184
180-34248-I-4-A	CN, T	0.00055	mg/l	7/3/14 3:39		0	0	0.0098
CCV CN	CN, T	0.10167	mg/l	7/3/14 3:39		0		0.13123
VCCB CN	CN, T	0.00005	mg/l	7/3/14 3:39		0		0.0092
180-34248-I-5-A	CN, T	0.00262	mg/l	7/3/14 3:39		0	0	0.01228
180-34248-I-6-A	CN, T	0.00345	mg/l	7/3/14 3:39		0	0	0.01328
180-34248-I-7-A	CN, T	0.00071	mg/l	7/3/14 3:39		0	0	0.00999
180-34283-I-1-A	CN, T	0.001	mg/l	7/3/14 3:39		0	0	0.01034
180-34283-I-7-A	CN, T	0.00092	mg/l	7/3/14 3:39		0	0	0.01024
180-34283-I-8-A	CN, T	0.00173	mg/l	7/3/14 3:39		0	0	0.01121
180-34283-I-9-A	CN, T	0.00294	mg/l	7/3/14 3:39		0	0	0.01266
180-34283-I-9-B	CN, T	0.09269	mg/l	7/3/14 3:39		0	0	0.12045
180-34283-I-10-A	CN, T	0.00084	mg/l	7/3/14 3:46		0	0	0.01015
180-34283-I-17-A	CN, T	0.00168	mg/l	7/3/14 3:46		0	0	0.01115
CCV CN	CN, T	0.10222	mg/l	7/3/14 3:46		0		0.13189
VCCB CN	CN, T	-0.00032	mg/l	7/3/14 3:46		0		0.00875
180-34298-D-2-A	CN, T	0.00039	mg/l	7/3/14 3:46		0	0	0.00961
180-34298-D-3-A	CN, T	0.00324	mg/l	7/3/14 3:46		0	0	0.01303
180-34298-D-4-A	CN, T	0.16463	mg/l	7/3/14 3:46		0	0	0.20683
180-34298-F-5-A	CN, T	0.00372	mg/l	7/3/14 3:46		0	0	0.01361
180-34360-C-1-A	CN, T	0.09867	mg/l	7/3/14 3:46		0	0	0.12763
180-34360-C-2-A	CN, T	0.0578	mg/l	7/3/14 3:46		0	0	0.07854
CCV CN	CN, T	0.10758	mg/l	7/3/14 3:49		0		0.13832
VCCB CN	CN, T	-0.00057	mg/l	7/3/14 3:50		0		0.00845

Laboratory
Analyzer User

P. Johnson 7314

03.07.2014 04:56

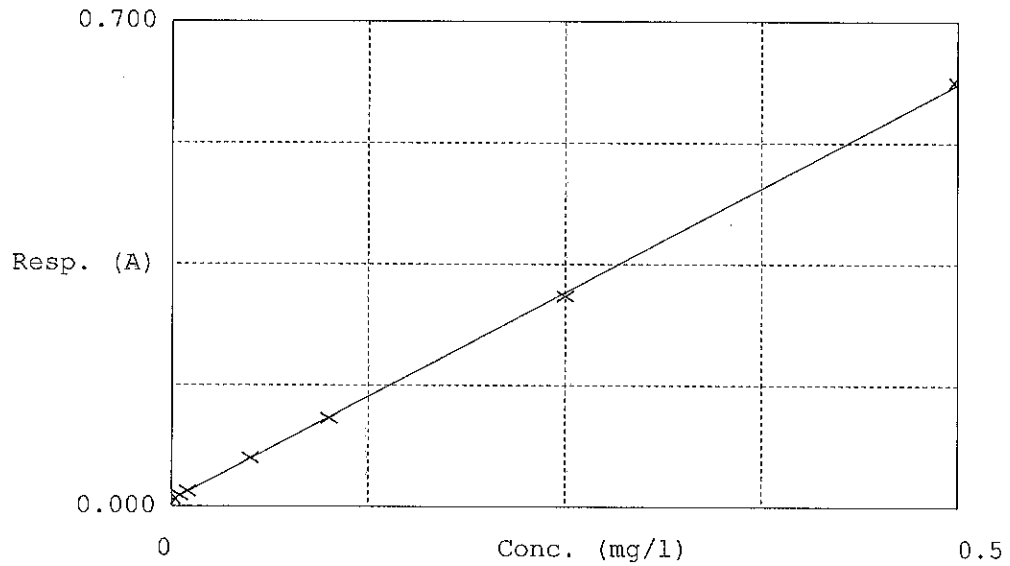
Test CN, T

Accepted 03.07.2014 04:14

Factor 0.833
Bias 0.009

Coeff. of det. 0.999834

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	CN 0.0	0.011	0.00115	0.00000	
2	CN 0.5	0.016	0.00581	0.00500	
3	CN 0.5	0.022	0.01086	0.01000	
4	CN 0.5	0.070	0.05071	0.05000	
5	CN 0.5	0.128	0.09867	0.10000	
6	CN 0.5	0.304	0.24525	0.25000	
7	CN 0.5	0.613	0.50254	0.50000	
8	ICB CN(control)	0.009	0.00014	0.00000	
9	ICV CN(control)	0.248	0.19866	0.20000	

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

Batch Number: 110350 Batch Start Date: 07/02/14 13:40 Batch Analyst: Johnson, Paul

Batch Method: 9010C Batch End Date: 07/02/14 15:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	SulfideCheck	ChlorineCheck	WCN0.5L1 00433	WCN10Pi 00435
LLCS 180-110350/1		9010C, 9014		50 mL	50 mL			5 mL	
HLCS 180-110350/2		9010C, 9014		50 mL	50 mL				1.25 mL
LCS 180-110350/3		9010C, 9014		50 mL	50 mL				
MB 180-110350/4		9010C, 9014		50 mL	50 mL				
180-34298-D-2	062514-DP	9010C, 9014	T	50 mL	50 mL	N	N		
180-34298-D-3	TS04-PDM004	9010C, 9014	T	50 mL	50 mL	N	N		
180-34298-D-4	RW20-PZP000	9010C, 9014	T	50 mL	50 mL	N	N		
180-34298-F-5	RW20-PZM020	9010C, 9014	T	50 mL	50 mL	N	N		

Lab Sample ID	Client Sample ID	Method Chain	Basis	WCN10Si 00440					
LLCS 180-110350/1		9010C, 9014							
HLCS 180-110350/2		9010C, 9014							
LCS 180-110350/3		9010C, 9014		1 mL					
MB 180-110350/4		9010C, 9014							
180-34298-D-2	062514-DP	9010C, 9014	T						
180-34298-D-3	TS04-PDM004	9010C, 9014	T						
180-34298-D-4	RW20-PZP000	9010C, 9014	T						
180-34298-F-5	RW20-PZM020	9010C, 9014	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-34298-1

SDG No.: _____

Batch Number: 110350 Batch Start Date: 07/02/14 13:40 Batch Analyst: Johnson, Paul

Batch Method: 9010C Batch End Date: 07/02/14 15:10

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,D1203183U
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.: 180-34298-1

SDG No.: _____

Batch Number: 110390 Batch Start Date: 07/03/14 03:08 Batch Analyst: Johnson, Paul

Batch Method: 9014 Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	WCN0.1CCV 00267	WCN0.2ICV 00265		
ICV 180-110390/4		9014		10 mL	10 mL		10 mL		
CCV 180-110390/6		9014		10 mL	10 mL	10 mL			
CCV 180-110390/18		9014		10 mL	10 mL	10 mL			
CCV 180-110390/30		9014		10 mL	10 mL	10 mL			
CCV 180-110390/38		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,D1203183U
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 Custody Record

Client Information Client Contact: Sanita Corum Company: EA Engineering, Science, and Technology Address: 225 Schilling Circle City: Hunt Valley State, Zip: MD, 21031 Phone: Email: sccorum@eaest.com Project Name: Sparrows Pt. Trust Offshore Investigat Site: Sparrows Pt		Lab Pmt: Gamber, Carrie L E-Mail: carrie.gamber@testamericainc.com Carrier Tracking No(s): COC No: 180-18121-4668.1 Page: Page 1 of 1 Job #:	
Due Date Requested: TAT Requested (days): <i>Standard</i> PO #: Purchase Order Requested WO #: Project #: 18013274 SSO#:		Analysis Requested Field Filtered Sample (Yes or No) Form (MS/SP/AS/ONO)	
Sample Identification RW20-PZM020 RW20-PZP000 TS04-PDM004 062514-DP 062514-TB		Total Number of Containers: 7 Special Instructions/Note: trip blank	
Sample Date: 6/25/14 Sample Time: 1205 Sample Type (C=Comp, G=grab): G Matrix (W=water, S=solid, O=wastewater, T=tissue, A=air): W	Sample Date: 6/25/14 Sample Time: 1250 Sample Type: G Matrix: W	Sample Date: 6/25/14 Sample Time: 1340 Sample Type: G Matrix: W	Sample Date: 6/25/14 Sample Time: 0815 Sample Type: G Matrix: W
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify) <i>see contract</i>		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:	
Empty Kit Relinquished by:		Method of Shipment:	
Relinquished by: <i>[Signature]</i> Date/Time: 6/25 1000 Company: EA		Received by: <i>[Signature]</i> Date/Time: 6/25/14 900 Company: TA	
Relinquished by:		Received by:	
Relinquished by:		Received by:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks:	

Shipping this tag

ORIGIN ID:DL0A (410) 584-7000
E A ENGINEERING SCIENCE & TECH
225 SCHILLING CIR
HUNT VALLEY, MD 210311102
UNITED STATES US

SHIP DATE: 25JUN14
ACTWGT: 40.2 LB
CAD: /OFFC1501
DIMS: 21x15x13 IN
BILL SENDER

Part # 159297-055488902825555704
#37908R AC/75/20/12

TO **SAMPLE RECEIVING**
TEST AMERICA PITTSBURGH
301 ALPHA DR RIDC PARK

PITTSBURGH PA 15238
(412) 983-7068 REF:

UNCORRECTED TEMP
THERMOMETER ID
CF Initials RB
PT-WI-SR-001 effective 7/26/13

37 °C

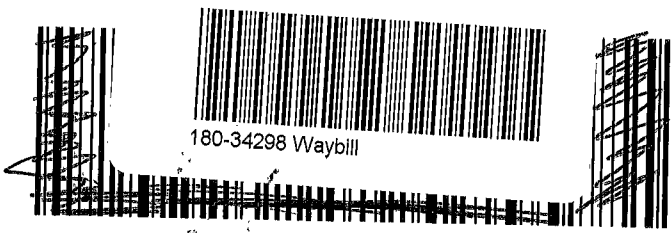


TRK# 8030 3798 7910
0200

THU - 26 JUN 10:30A
PRIORITY OVERNIGHT

NC AGCA

AHS
15238
PA-US PIT



Login Sample Receipt Checklist

Client: EA Engineering, Science, and Technology

Job Number: 180-34298-1

Login Number: 34298
List Number: 1
Creator: Butcher, Ryan M

List Source: TestAmerica Pittsburgh

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	