

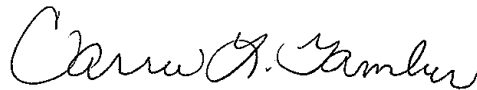
## ANALYTICAL REPORT

Job Number: 180-43409-1

Job Description: Sparrows Point Trust Offshore Investigat

For:

EA Engineering, Science, and Technology  
225 Schilling Circle  
Hunt Valley, MD 21031  
Attention: Sanita Corum



Approved for release.  
Carrie L. Gamber  
Senior Project Manager  
6/2/2015 11:38 AM

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06/02/2015  
Revision: 1

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# Definitions/Glossary

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

TestAmerica Job ID: 180-43409-1

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## Qualifiers

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### GC/MS Semi VOA

Qualifier	Qualifier Description
-----------	-----------------------

J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
---	--

### Metals

Qualifier	Qualifier Description
-----------	-----------------------

J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
---	--

### General Chemistry

Qualifier	Qualifier Description
-----------	-----------------------

J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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## Glossary

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Abbreviation	These commonly used abbreviations may or may not be present in this report.
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α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## **CASE NARRATIVE**

**Client: EA Engineering, Science, and Technology**

**Project: Sparrows Point Trust Offshore Investigation**

**Report Number: 180-43409-1 REVISED**

**NOTE: Per EA Engineering's request on June 2, 2015, cadmium has been reported for sample PW-DE01 (180-43409-1).**

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 04/24/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.1 C.

### **SEMIVOLATILES**

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

### **METALS**

The following samples was diluted due to the nature of the sample matrix: PW-DE01 (180-43409-1) and PW-F05 (180-43409-2). Elevated reporting limits (RLs) are provided.

### **GENERAL CHEMISTRY**

The following samples were diluted to bring the concentration of target analytes within the calibration range for hardness: PW-DE01 (180-43409-1) and PW-F05 (180-43409-2). Elevated reporting limits (RLs) are provided.

# Detection Summary

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

TestAmerica Job ID: 180-43409-1

## Client Sample ID: PW-DE01

## Lab Sample ID: 180-43409-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.15	J	0.19	0.021	ug/L	1		8270D LL	Total/NA
Lead	10		10	0.19	ug/L	10		6020A	Total Recoverable
Nickel	20		10	1.7	ug/L	10		6020A	Total Recoverable
Zinc	160		50	9.6	ug/L	10		6020A	Total Recoverable
Copper	11	J	20	2.4	ug/L	10		6020A	Total Recoverable
Chromium	37		20	5.4	ug/L	10		6020A	Total Recoverable
Cyanide, Total	2.5	J	10	2.5	ug/L	1		9014	Total/NA
Hardness as calcium carbonate	1800		50	15	mg/L	1		SM 2340C	Total/NA
Dissolved Organic Carbon - Duplicate	2.8		1.0	0.14	mg/L	1		SM 5310C	Dissolved

## Client Sample ID: PW-F05

## Lab Sample ID: 180-43409-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	1.1	J	1.9	0.42	ug/L	1		8270D LL	Total/NA
Lead	1.1	J	10	0.19	ug/L	10		6020A	Total Recoverable
Cyanide, Total	24		10	2.5	ug/L	1		9014	Total/NA
Hardness as calcium carbonate	1400		50	15	mg/L	1		SM 2340C	Total/NA
Dissolved Organic Carbon - Duplicate	6.7		1.0	0.14	mg/L	1		SM 5310C	Dissolved

This Detection Summary does not include radiochemical test results.

# Client Sample Results

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

TestAmerica Job ID: 180-43409-1

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

**Client Sample ID: PW-DE01**  
**Date Collected: 04/23/15 12:30**  
**Date Received: 04/24/15 08:30**

**Lab Sample ID: 180-43409-1**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		0.19	0.018	ug/L		04/30/15 10:29	05/08/15 13:12	1
Benzo[a]anthracene	ND		0.19	0.034	ug/L		04/30/15 10:29	05/08/15 13:12	1
Benzo[b]fluoranthene	ND		0.19	0.045	ug/L		04/30/15 10:29	05/08/15 13:12	1
Benzo[k]fluoranthene	ND		0.19	0.028	ug/L		04/30/15 10:29	05/08/15 13:12	1
Benzo[g,h,i]perylene	ND		0.19	0.027	ug/L		04/30/15 10:29	05/08/15 13:12	1
Benzo[a]pyrene	ND		0.19	0.026	ug/L		04/30/15 10:29	05/08/15 13:12	1
Chrysene	ND		0.19	0.029	ug/L		04/30/15 10:29	05/08/15 13:12	1
Dibenz(a,h)anthracene	ND		0.19	0.025	ug/L		04/30/15 10:29	05/08/15 13:12	1
Fluoranthene	ND		0.19	0.020	ug/L		04/30/15 10:29	05/08/15 13:12	1
Fluorene	ND		0.19	0.022	ug/L		04/30/15 10:29	05/08/15 13:12	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.040	ug/L		04/30/15 10:29	05/08/15 13:12	1
Phenanthrene	ND		0.19	0.038	ug/L		04/30/15 10:29	05/08/15 13:12	1
Pyrene	ND		0.19	0.021	ug/L		04/30/15 10:29	05/08/15 13:12	1
Acenaphthene	ND		0.19	0.027	ug/L		04/30/15 10:29	05/08/15 13:12	1
Acenaphthylene	ND		0.19	0.020	ug/L		04/30/15 10:29	05/08/15 13:12	1
<b>Naphthalene</b>	<b>0.15</b>	<b>J</b>	0.19	0.021	ug/L		04/30/15 10:29	05/08/15 13:12	1
Bis(2-ethylhexyl) phthalate	ND		1.9	0.41	ug/L		04/30/15 10:29	05/08/15 13:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	42		27 - 114				04/30/15 10:29	05/08/15 13:12	1
2-Fluorobiphenyl	47		28 - 109				04/30/15 10:29	05/08/15 13:12	1
Terphenyl-d14 (Surr)	41		20 - 118				04/30/15 10:29	05/08/15 13:12	1
2-Fluorophenol (Surr)	41		20 - 105				04/30/15 10:29	05/08/15 13:12	1
2,4,6-Tribromophenol (Surr)	49		30 - 118				04/30/15 10:29	05/08/15 13:12	1
Phenol-d5 (Surr)	48		25 - 105				04/30/15 10:29	05/08/15 13:12	1



# Client Sample Results

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

TestAmerica Job ID: 180-43409-1

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

**Client Sample ID: PW-F05**  
**Date Collected: 04/23/15 15:00**  
**Date Received: 04/24/15 08:30**

**Lab Sample ID: 180-43409-2**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		0.19	0.018	ug/L		04/30/15 10:29	05/08/15 13:38	1
Benzo[a]anthracene	ND		0.19	0.035	ug/L		04/30/15 10:29	05/08/15 13:38	1
Benzo[b]fluoranthene	ND		0.19	0.047	ug/L		04/30/15 10:29	05/08/15 13:38	1
Benzo[k]fluoranthene	ND		0.19	0.029	ug/L		04/30/15 10:29	05/08/15 13:38	1
Benzo[g,h,i]perylene	ND		0.19	0.028	ug/L		04/30/15 10:29	05/08/15 13:38	1
Benzo[a]pyrene	ND		0.19	0.027	ug/L		04/30/15 10:29	05/08/15 13:38	1
Chrysene	ND		0.19	0.030	ug/L		04/30/15 10:29	05/08/15 13:38	1
Dibenz(a,h)anthracene	ND		0.19	0.026	ug/L		04/30/15 10:29	05/08/15 13:38	1
Fluoranthene	ND		0.19	0.020	ug/L		04/30/15 10:29	05/08/15 13:38	1
Fluorene	ND		0.19	0.023	ug/L		04/30/15 10:29	05/08/15 13:38	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.042	ug/L		04/30/15 10:29	05/08/15 13:38	1
Phenanthrene	ND		0.19	0.040	ug/L		04/30/15 10:29	05/08/15 13:38	1
Pyrene	ND		0.19	0.022	ug/L		04/30/15 10:29	05/08/15 13:38	1
Acenaphthene	ND		0.19	0.028	ug/L		04/30/15 10:29	05/08/15 13:38	1
Acenaphthylene	ND		0.19	0.021	ug/L		04/30/15 10:29	05/08/15 13:38	1
Naphthalene	ND		0.19	0.022	ug/L		04/30/15 10:29	05/08/15 13:38	1
<b>Bis(2-ethylhexyl) phthalate</b>	<b>1.1</b>	<b>J</b>	1.9	0.42	ug/L		04/30/15 10:29	05/08/15 13:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	39		27 - 114	04/30/15 10:29	05/08/15 13:38	1
2-Fluorobiphenyl	45		28 - 109	04/30/15 10:29	05/08/15 13:38	1
Terphenyl-d14 (Surr)	35		20 - 118	04/30/15 10:29	05/08/15 13:38	1
2-Fluorophenol (Surr)	36		20 - 105	04/30/15 10:29	05/08/15 13:38	1
2,4,6-Tribromophenol (Surr)	56		30 - 118	04/30/15 10:29	05/08/15 13:38	1
Phenol-d5 (Surr)	45		25 - 105	04/30/15 10:29	05/08/15 13:38	1

# Client Sample Results

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

TestAmerica Job ID: 180-43409-1

## Method: 6020A - Metals (ICP/MS) - Total Recoverable

Client Sample ID: PW-DE01  
Date Collected: 04/23/15 12:30  
Date Received: 04/24/15 08:30

Lab Sample ID: 180-43409-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	10		10	0.19	ug/L		04/28/15 11:24	05/01/15 16:08	10
Nickel	20		10	1.7	ug/L		04/28/15 11:24	05/01/15 16:08	10
Zinc	160		50	9.6	ug/L		04/28/15 11:24	05/01/15 16:08	10
Copper	11	J	20	2.4	ug/L		04/28/15 11:24	05/01/15 16:08	10
Chromium	37		20	5.4	ug/L		04/28/15 11:24	05/01/15 16:08	10
Cadmium	ND		10	1.1	ug/L		04/28/15 11:24	05/01/15 16:08	10

# Client Sample Results

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

TestAmerica Job ID: 180-43409-1

## Method: 6020A - Metals (ICP/MS) - Total Recoverable

Client Sample ID: PW-F05  
Date Collected: 04/23/15 15:00  
Date Received: 04/24/15 08:30

Lab Sample ID: 180-43409-2  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.1	J	10	0.19	ug/L		04/28/15 11:24	05/01/15 16:12	10
Nickel	ND		10	1.7	ug/L		04/28/15 11:24	05/01/15 16:12	10
Zinc	ND		50	9.6	ug/L		04/28/15 11:24	05/01/15 16:12	10
Copper	ND		20	2.4	ug/L		04/28/15 11:24	05/01/15 16:12	10
Chromium	ND		20	5.4	ug/L		04/28/15 11:24	05/01/15 16:12	10

# Client Sample Results

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

TestAmerica Job ID: 180-43409-1

## General Chemistry

Client Sample ID: PW-DE01  
Date Collected: 04/23/15 12:30  
Date Received: 04/24/15 08:30

Lab Sample ID: 180-43409-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	2.5	J	10	2.5	ug/L		05/06/15 13:00	05/06/15 15:54	1
Hardness as calcium carbonate	1800		50	15	mg/L			05/02/15 08:05	1

# Client Sample Results

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

TestAmerica Job ID: 180-43409-1

## General Chemistry

Client Sample ID: PW-F05  
Date Collected: 04/23/15 15:00  
Date Received: 04/24/15 08:30

Lab Sample ID: 180-43409-2  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	24		10	2.5	ug/L		05/06/15 13:00	05/06/15 15:57	1
Hardness as calcium carbonate	1400		50	15	mg/L			05/02/15 08:12	1

# Client Sample Results

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

TestAmerica Job ID: 180-43409-1

## General Chemistry - Dissolved

Client Sample ID: PW-DE01  
Date Collected: 04/23/15 12:30  
Date Received: 04/24/15 08:30

Lab Sample ID: 180-43409-1  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Duplicate	2.8		1.0	0.14	mg/L			05/06/15 07:39	1

# Client Sample Results

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

TestAmerica Job ID: 180-43409-1

## General Chemistry - Dissolved

Client Sample ID: PW-F05  
Date Collected: 04/23/15 15:00  
Date Received: 04/24/15 08:30

Lab Sample ID: 180-43409-2  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Duplicate	6.7		1.0	0.14	mg/L			05/06/15 07:52	1

## Default Detection Limits

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

TestAmerica Job ID: 180-43409-1

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

Analyte	RL	MDL	Units	Method
Acenaphthene	0.20	0.029	ug/L	8270D LL
Acenaphthylene	0.20	0.022	ug/L	8270D LL
Anthracene	0.20	0.019	ug/L	8270D LL
Benzo[a]anthracene	0.20	0.037	ug/L	8270D LL
Benzo[a]pyrene	0.20	0.028	ug/L	8270D LL
Benzo[b]fluoranthene	0.20	0.049	ug/L	8270D LL
Benzo[g,h,i]perylene	0.20	0.029	ug/L	8270D LL
Benzo[k]fluoranthene	0.20	0.030	ug/L	8270D LL
Bis(2-ethylhexyl) phthalate	2.0	0.44	ug/L	8270D LL
Chrysene	0.20	0.031	ug/L	8270D LL
Dibenz(a,h)anthracene	0.20	0.027	ug/L	8270D LL
Fluoranthene	0.20	0.021	ug/L	8270D LL
Fluorene	0.20	0.024	ug/L	8270D LL
Indeno[1,2,3-cd]pyrene	0.20	0.043	ug/L	8270D LL
Naphthalene	0.20	0.023	ug/L	8270D LL
Phenanthrene	0.20	0.042	ug/L	8270D LL
Pyrene	0.20	0.023	ug/L	8270D LL

### Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	RL	MDL	Units	Method
Cadmium	1.0	0.11	ug/L	6020A
Chromium	2.0	0.54	ug/L	6020A
Copper	2.0	0.24	ug/L	6020A
Lead	1.0	0.019	ug/L	6020A
Nickel	1.0	0.17	ug/L	6020A
Zinc	5.0	0.96	ug/L	6020A

### General Chemistry

Analyte	RL	MDL	Units	Method
Cyanide, Total	10	2.5	ug/L	9014
Hardness as calcium carbonate	5.0	1.5	mg/L	SM 2340C

### General Chemistry - Dissolved

Analyte	RL	MDL	Units	Method
Dissolved Organic Carbon - Duplicate	1.0	0.14	mg/L	SM 5310C



# Surrogate Summary

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

TestAmerica Job ID: 180-43409-1

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

**Matrix: Water**

**Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		NBZ (27-114)	FBP (28-109)	TPH (20-118)	2FP (20-105)	TBP (30-118)	PHL (25-105)
180-43409-1	PW-DE01	42	47	41	41	49	48
180-43409-2	PW-F05	39	45	35	36	56	45
LCS 180-140150/2-A	Lab Control Sample	63	64	62	62	65	69
MB 180-140150/1-A	Method Blank	63	66	77	63	62	73

## Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)

FBP = 2-Fluorobiphenyl

TPH = Terphenyl-d14 (Surr)

2FP = 2-Fluorophenol (Surr)

TBP = 2,4,6-Tribromophenol (Surr)

PHL = Phenol-d5 (Surr)

# QC Sample Results

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

TestAmerica Job ID: 180-43409-1

## Method: 8270D LL - Semivolatle Organic Compounds by GC/MS - Low Level

**Lab Sample ID: MB 180-140150/1-A**  
**Matrix: Water**  
**Analysis Batch: 140564**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 140150**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Anthracene	ND		0.20	0.019	ug/L		04/30/15 10:29	05/05/15 11:09	1
Benzo[a]anthracene	ND		0.20	0.037	ug/L		04/30/15 10:29	05/05/15 11:09	1
Benzo[b]fluoranthene	ND		0.20	0.049	ug/L		04/30/15 10:29	05/05/15 11:09	1
Benzo[k]fluoranthene	ND		0.20	0.030	ug/L		04/30/15 10:29	05/05/15 11:09	1
Benzo[g,h,i]perylene	ND		0.20	0.029	ug/L		04/30/15 10:29	05/05/15 11:09	1
Benzo[a]pyrene	ND		0.20	0.028	ug/L		04/30/15 10:29	05/05/15 11:09	1
Chrysene	ND		0.20	0.031	ug/L		04/30/15 10:29	05/05/15 11:09	1
Dibenz(a,h)anthracene	ND		0.20	0.027	ug/L		04/30/15 10:29	05/05/15 11:09	1
Fluoranthene	ND		0.20	0.021	ug/L		04/30/15 10:29	05/05/15 11:09	1
Fluorene	ND		0.20	0.024	ug/L		04/30/15 10:29	05/05/15 11:09	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		04/30/15 10:29	05/05/15 11:09	1
Phenanthrene	ND		0.20	0.042	ug/L		04/30/15 10:29	05/05/15 11:09	1
Pyrene	ND		0.20	0.023	ug/L		04/30/15 10:29	05/05/15 11:09	1
Acenaphthene	ND		0.20	0.029	ug/L		04/30/15 10:29	05/05/15 11:09	1
Acenaphthylene	ND		0.20	0.022	ug/L		04/30/15 10:29	05/05/15 11:09	1
Naphthalene	ND		0.20	0.023	ug/L		04/30/15 10:29	05/05/15 11:09	1
Bis(2-ethylhexyl) phthalate	ND		2.0	0.44	ug/L		04/30/15 10:29	05/05/15 11:09	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Nitrobenzene-d5 (Surr)	63		27 - 114	04/30/15 10:29	05/05/15 11:09	1
2-Fluorobiphenyl	66		28 - 109	04/30/15 10:29	05/05/15 11:09	1
Terphenyl-d14 (Surr)	77		20 - 118	04/30/15 10:29	05/05/15 11:09	1
2-Fluorophenol (Surr)	63		20 - 105	04/30/15 10:29	05/05/15 11:09	1
2,4,6-Tribromophenol (Surr)	62		30 - 118	04/30/15 10:29	05/05/15 11:09	1
Phenol-d5 (Surr)	73		25 - 105	04/30/15 10:29	05/05/15 11:09	1

**Lab Sample ID: LCS 180-140150/2-A**  
**Matrix: Water**  
**Analysis Batch: 140564**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 140150**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Benzo[a]anthracene	20.0	14.1		ug/L		71	50 - 100
Benzo[b]fluoranthene	20.0	15.2		ug/L		76	43 - 100
Benzo[k]fluoranthene	20.0	15.7		ug/L		78	47 - 100
Benzo[g,h,i]perylene	20.0	15.3		ug/L		76	48 - 100
Benzo[a]pyrene	20.0	15.5		ug/L		77	47 - 100
Chrysene	20.0	13.7		ug/L		68	49 - 100
Dibenz(a,h)anthracene	20.0	15.6		ug/L		78	48 - 100
Fluoranthene	20.0	13.7		ug/L		69	48 - 100
Fluorene	20.0	14.2		ug/L		71	48 - 100
Indeno[1,2,3-cd]pyrene	20.0	15.7		ug/L		79	47 - 100
Phenanthrene	20.0	14.4		ug/L		72	48 - 100
Pyrene	20.0	14.7		ug/L		74	44 - 100
Acenaphthene	20.0	13.2		ug/L		66	47 - 100
Acenaphthylene	20.0	13.7		ug/L		69	47 - 100
Naphthalene	20.0	12.8		ug/L		64	44 - 100
Bis(2-ethylhexyl) phthalate	20.0	14.7		ug/L		73	35 - 118

TestAmerica Pittsburgh

# QC Sample Results

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

TestAmerica Job ID: 180-43409-1

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Nitrobenzene-d5 (Surr)	63		27 - 114
2-Fluorobiphenyl	64		28 - 109
Terphenyl-d14 (Surr)	62		20 - 118
2-Fluorophenol (Surr)	62		20 - 105
2,4,6-Tribromophenol (Surr)	65		30 - 118
Phenol-d5 (Surr)	69		25 - 105

## Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 180-139894/1-A  
 Matrix: Water  
 Analysis Batch: 140450

Client Sample ID: Method Blank  
 Prep Type: Total Recoverable  
 Prep Batch: 139894

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	ND		1.0	0.019	ug/L		04/28/15 11:24	05/01/15 14:12	1
Nickel	ND		1.0	0.17	ug/L		04/28/15 11:24	05/01/15 14:12	1
Zinc	ND		5.0	0.96	ug/L		04/28/15 11:24	05/01/15 14:12	1
Copper	ND		2.0	0.24	ug/L		04/28/15 11:24	05/01/15 14:12	1
Chromium	ND		2.0	0.54	ug/L		04/28/15 11:24	05/01/15 14:12	1
Cadmium	ND		1.0	0.11	ug/L		04/28/15 11:24	05/01/15 14:12	1

Lab Sample ID: LCS 180-139894/2-A  
 Matrix: Water  
 Analysis Batch: 140450

Client Sample ID: Lab Control Sample  
 Prep Type: Total Recoverable  
 Prep Batch: 139894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Nickel	500	511		ug/L		102	80 - 120	
Zinc	500	514		ug/L		103	80 - 120	
Copper	250	260		ug/L		104	80 - 120	
Chromium	200	209		ug/L		104	80 - 120	
Cadmium	50.0	49.8		ug/L		100	80 - 120	

## Method: 9014 - Cyanide

Lab Sample ID: MB 180-140701/4-A  
 Matrix: Water  
 Analysis Batch: 140787

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 140701

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Cyanide, Total	ND		10	2.5	ug/L		05/06/15 13:00	05/06/15 15:20	1

Lab Sample ID: HLCS 180-140701/2-A  
 Matrix: Water  
 Analysis Batch: 140787

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 140701

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec.	Limits

# QC Sample Results

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

TestAmerica Job ID: 180-43409-1

## Method: 9014 - Cyanide (Continued)

**Lab Sample ID: LCS 180-140701/3-A**  
**Matrix: Water**  
**Analysis Batch: 140787**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 140701**  
**%Rec.**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Cyanide, Total	200	186		ug/L		93	85 - 115

**Lab Sample ID: LLCS 180-140701/1-A**  
**Matrix: Water**  
**Analysis Batch: 140787**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 140701**  
**%Rec.**

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	Limits
Cyanide, Total	50.0	52.6		ug/L		105	90 - 110

## Method: SM 2340C - Hardness, Total (mg/l as CaC03)

**Lab Sample ID: MB 180-140330/2**  
**Matrix: Water**  
**Analysis Batch: 140330**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		5.0	1.5	mg/L			05/02/15 07:41	1

**Lab Sample ID: LCS 180-140330/1**  
**Matrix: Water**  
**Analysis Batch: 140330**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	50.0	50.0		mg/L		100	90 - 110

## Method: SM 5310C - Organic Carbon, Dissolved (DOC)

**Lab Sample ID: MB 180-140690/6**  
**Matrix: Water**  
**Analysis Batch: 140690**

**Client Sample ID: Method Blank**  
**Prep Type: Dissolved**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Duplicate	ND		1.0	0.14	mg/L			05/06/15 06:45	1

**Lab Sample ID: LCS 180-140690/4**  
**Matrix: Water**  
**Analysis Batch: 140690**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Dissolved**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon - Duplicate	20.0	20.1		mg/L		100	80 - 120

**Lab Sample ID: LCSD 180-140690/5**  
**Matrix: Water**  
**Analysis Batch: 140690**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Dissolved**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Organic Carbon - Duplicate	20.0	19.6		mg/L		98	80 - 120	2	20

TestAmerica Pittsburgh

# QC Association Summary

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

TestAmerica Job ID: 180-43409-1

## GC/MS Semi VOA

### Prep Batch: 140150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43409-1	PW-DE01	Total/NA	Water	3520C	
180-43409-2	PW-F05	Total/NA	Water	3520C	
LCS 180-140150/2-A	Lab Control Sample	Total/NA	Water	3520C	
MB 180-140150/1-A	Method Blank	Total/NA	Water	3520C	

### Analysis Batch: 140564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-140150/2-A	Lab Control Sample	Total/NA	Water	8270D LL	140150
MB 180-140150/1-A	Method Blank	Total/NA	Water	8270D LL	140150

### Analysis Batch: 140958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43409-1	PW-DE01	Total/NA	Water	8270D LL	140150
180-43409-2	PW-F05	Total/NA	Water	8270D LL	140150

## Metals

### Prep Batch: 139894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43409-1	PW-DE01	Total Recoverable	Water	3005A	
180-43409-2	PW-F05	Total Recoverable	Water	3005A	
LCS 180-139894/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 180-139894/1-A	Method Blank	Total Recoverable	Water	3005A	

### Analysis Batch: 140450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43409-1	PW-DE01	Total Recoverable	Water	6020A	139894
180-43409-2	PW-F05	Total Recoverable	Water	6020A	139894
CRI 180-140450/7	DL		Water	6020A	
CRI 180-140450/76	DL		Water	6020A	
ICSA 180-140450/8	ICS		Water	6020A	
ICSAB 180-140450/9	ICS		Water	6020A	
LCS 180-139894/2-A	Lab Control Sample	Total Recoverable	Water	6020A	139894
MB 180-139894/1-A	Method Blank	Total Recoverable	Water	6020A	139894

## General Chemistry

### Analysis Batch: 140330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43409-1	PW-DE01	Total/NA	Water	SM 2340C	
180-43409-2	PW-F05	Total/NA	Water	SM 2340C	
LCS 180-140330/1	Lab Control Sample	Total/NA	Water	SM 2340C	
MB 180-140330/2	Method Blank	Total/NA	Water	SM 2340C	

### Filtration Batch: 140559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43409-1	PW-DE01	Dissolved	Water	FILTRATION	
180-43409-2	PW-F05	Dissolved	Water	FILTRATION	

# QC Association Summary

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

TestAmerica Job ID: 180-43409-1

## General Chemistry (Continued)

### Analysis Batch: 140690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43409-1	PW-DE01	Dissolved	Water	SM 5310C	140559
180-43409-2	PW-F05	Dissolved	Water	SM 5310C	140559
LCS 180-140690/4	Lab Control Sample	Dissolved	Water	SM 5310C	
LCSD 180-140690/5	Lab Control Sample Dup	Dissolved	Water	SM 5310C	
MB 180-140690/6	Method Blank	Dissolved	Water	SM 5310C	

### Prep Batch: 140701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43409-1	PW-DE01	Total/NA	Water	9010C	
180-43409-2	PW-F05	Total/NA	Water	9010C	
HLCS 180-140701/2-A	Lab Control Sample	Total/NA	Water	9010C	
LCS 180-140701/3-A	Lab Control Sample	Total/NA	Water	9010C	
LLCS 180-140701/1-A	Lab Control Sample	Total/NA	Water	9010C	
MB 180-140701/4-A	Method Blank	Total/NA	Water	9010C	

### Analysis Batch: 140787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43409-1	PW-DE01	Total/NA	Water	9014	140701
180-43409-2	PW-F05	Total/NA	Water	9014	140701
HLCS 180-140701/2-A	Lab Control Sample	Total/NA	Water	9014	140701
LCS 180-140701/3-A	Lab Control Sample	Total/NA	Water	9014	140701
LLCS 180-140701/1-A	Lab Control Sample	Total/NA	Water	9014	140701
MB 180-140701/4-A	Method Blank	Total/NA	Water	9014	140701

# Lab Chronicle

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

TestAmerica Job ID: 180-43409-1

**Client Sample ID: PW-DE01**

**Lab Sample ID: 180-43409-1**

**Date Collected: 04/23/15 12:30**

**Matrix: Water**

**Date Received: 04/24/15 08:30**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			270 mL	0.25 mL	140150	04/30/15 10:29	BJT	TAL PIT
Total/NA	Analysis	8270D LL Instrument ID: CH732		1	270 mL	0.25 mL	140958	05/08/15 13:12	VVP	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	139894	04/28/15 11:24	AB1	TAL PIT
Total Recoverable	Analysis	6020A Instrument ID: M		10	50 mL	50 mL	140450	05/01/15 16:08	CNF	TAL PIT
Total/NA	Prep	9010C			50 mL	50 mL	140701	05/06/15 13:00	PGJ	TAL PIT
Total/NA	Analysis	9014 Instrument ID: SEAL2		1	50 mL	50 mL	140787	05/06/15 15:54	PGJ	TAL PIT
Total/NA	Analysis	SM 2340C Instrument ID: NOEQUIP		1	5 mL	50 mL	140330	05/02/15 08:05	CAK	TAL PIT
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	140559	05/05/15 08:16	SLM	TAL PIT
Dissolved	Analysis	SM 5310C Instrument ID: TOC1030		1			140690	05/06/15 07:39	CLL	TAL PIT

**Client Sample ID: PW-F05**

**Lab Sample ID: 180-43409-2**

**Date Collected: 04/23/15 15:00**

**Matrix: Water**

**Date Received: 04/24/15 08:30**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			260 mL	0.25 mL	140150	04/30/15 10:29	BJT	TAL PIT
Total/NA	Analysis	8270D LL Instrument ID: CH732		1	260 mL	0.25 mL	140958	05/08/15 13:38	VVP	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	139894	04/28/15 11:24	AB1	TAL PIT
Total Recoverable	Analysis	6020A Instrument ID: M		10	50 mL	50 mL	140450	05/01/15 16:12	CNF	TAL PIT
Total/NA	Prep	9010C			50 mL	50 mL	140701	05/06/15 13:00	PGJ	TAL PIT
Total/NA	Analysis	9014 Instrument ID: SEAL2		1	50 mL	50 mL	140787	05/06/15 15:57	PGJ	TAL PIT
Total/NA	Analysis	SM 2340C Instrument ID: NOEQUIP		1	5 mL	50 mL	140330	05/02/15 08:12	CAK	TAL PIT
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	140559	05/05/15 08:16	SLM	TAL PIT
Dissolved	Analysis	SM 5310C Instrument ID: TOC1030		1			140690	05/06/15 07:52	CLL	TAL PIT

**Laboratory References:**

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

# Lab Chronicle

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

TestAmerica Job ID: 180-43409-1

## Analyst References:

Lab: TAL PIT

Batch Type: Filtration

SLM = Sarah McCann

Batch Type: Prep

AB1 = Ashwin Baikadi

BJT = Bill Trout

PGJ = Paul Johnson

Batch Type: Analysis

CAK = Chuck Kieda

CLL = Cheryl Loheyde

CNF = Caitlin Ferguson

PGJ = Paul Johnson

VVP = Vincent Piccolino



# Certification Summary

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

TestAmerica Job ID: 180-43409-1

## Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-15 *
California	State Program	9	2891	03-31-16
Connecticut	State Program	1	PH-0688	09-30-16
Florida	NELAP	4	E871008	06-30-15 *
Illinois	NELAP	5	002602	06-30-15 *
Kansas	NELAP	7	E-10350	07-31-15
Louisiana	NELAP	6	04041	06-30-15 *
New Hampshire	NELAP	1	203011	04-04-16
New Jersey	NELAP	2	PA005	06-30-15 *
New York	NELAP	2	11182	03-31-16
North Carolina (WW/SW)	State Program	4	434	12-31-15
Pennsylvania	NELAP	3	02-00416	04-30-16
South Carolina	State Program	4	89014	06-30-15 *
Texas	NELAP	6	T104704528	03-31-16
US Fish & Wildlife	Federal		LE94312A-1	11-30-15
USDA	Federal		P-Soil-01	05-23-16
Utah	NELAP	8	STLP	05-31-15 *
Virginia	NELAP	3	460189	09-14-15
West Virginia DEP	State Program	3	142	01-31-16
Wisconsin	State Program	5	998027800	08-31-15

\* Certification renewal pending - certification considered valid.

# Method Summary

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

TestAmerica Job ID: 180-43409-1

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<b>Method</b>	<b>Method Description</b>	<b>Protocol</b>	<b>Laboratory</b>
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PIT
6020A	Metals (ICP/MS)	SW846	TAL PIT
9014	Cyanide	SW846	TAL PIT
SM 2340C	Hardness, Total (mg/l as CaCO <sub>3</sub> )	SM	TAL PIT
SM 5310C	Organic Carbon, Dissolved (DOC)	SM	TAL PIT

**Protocol References:**

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

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

**Laboratory References:**

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

# Sample Summary

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

TestAmerica Job ID: 180-43409-1

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<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Matrix</b>	<b>Collected</b>	<b>Received</b>
180-43409-1	PW-DE01	Water	04/23/15 12:30	04/24/15 08:30
180-43409-2	PW-F05	Water	04/23/15 15:00	04/24/15 08:30

## GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Instrument ID: CH732 Analysis Batch Number: 132436Lab Sample ID: IC 180-132436/3 Client Sample ID: \_\_\_\_\_Date Analyzed: 02/03/15 05:53 Lab File ID: D0203003.D GC Column: Rxi-5SilMS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	1.55	Poor chromatography	piccolino v	02/03/15 08:47
N-Nitrosodimethylamine	2.14	Poor chromatography	piccolino v	02/03/15 08:47
Pyridine	2.24	Poor chromatography	piccolino v	02/03/15 08:47
Benzoic acid	7.15	Poor chromatography	piccolino v	02/03/15 08:47
Indeno[1,2,3-cd]pyrene	19.79	Poor chromatography	piccolino v	02/03/15 08:47
Dibenz(a,h)anthracene	19.85	Poor chromatography	piccolino v	02/03/15 08:47
Benzo[g,h,i]perylene	20.50	Poor chromatography	piccolino v	02/03/15 08:47

Lab Sample ID: IC 180-132436/4 Client Sample ID: \_\_\_\_\_Date Analyzed: 02/03/15 06:20 Lab File ID: D0203004.D GC Column: Rxi-5SilMS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Pyridine	2.22	Poor chromatography	piccolino v	02/03/15 08:48
Benzoic acid	7.16	Poor chromatography	piccolino v	02/03/15 08:48
Indeno[1,2,3-cd]pyrene	19.79	Poor chromatography	piccolino v	02/03/15 08:48
Dibenz(a,h)anthracene	19.84	Poor chromatography	piccolino v	02/03/15 08:48
Benzo[g,h,i]perylene	20.50	Poor chromatography	piccolino v	02/03/15 08:48

## GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Instrument ID: CH732 Analysis Batch Number: 132436Lab Sample ID: IC 180-132436/5 Client Sample ID: \_\_\_\_\_Date Analyzed: 02/03/15 06:46 Lab File ID: D0203005.D GC Column: Rxi-5SilMS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.16	Poor chromatography	piccolino v	02/03/15 08:50
Dibenz(a,h)anthracene	19.84	Poor chromatography	piccolino v	02/03/15 08:50

Lab Sample ID: ICIS 180-132436/6 Client Sample ID: \_\_\_\_\_Date Analyzed: 02/03/15 07:13 Lab File ID: D0203006.D GC Column: Rxi-5SilMS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dibenz(a,h)anthracene	19.82	Poor chromatography	piccolino v	02/03/15 08:51

Lab Sample ID: IC 180-132436/8 Client Sample ID: \_\_\_\_\_Date Analyzed: 02/03/15 08:07 Lab File ID: D0203008.D GC Column: Rxi-5SilMS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.82	Poor chromatography	piccolino v	02/03/15 08:58

Lab Sample ID: IC 180-132436/9 Client Sample ID: \_\_\_\_\_Date Analyzed: 02/03/15 08:33 Lab File ID: D0203009.D GC Column: Rxi-5SilMS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.81	Poor chromatography	piccolino v	02/03/15 08:59

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Instrument ID: CH732 Analysis Batch Number: 140564

Lab Sample ID: LCS 180-140150/2-A Client Sample ID: \_\_\_\_\_

Date Analyzed: 05/05/15 11:36 Lab File ID: D0505005.D GC Column: Rxi-5SilMS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.74	Poor chromatography	piccolino v	05/06/15 04:38

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
<b>10 PPM TOC/CC_00491</b>	05/07/15	05/06/15	DI Water, Lot DI WATER	200 mg/L	WTOC1000SP_00011	2 mL	Dissolved Organic Carbon - Duplicate	10 mg/L
.WTOC1000SP_00011	12/31/15		Ricca Chemical Co, Lot 2412908		(Purchased Reagent)		Dissolved Organic Carbon - Duplicate	1000 mg/L
<b>ICV 40 PPM_00624</b>	05/07/15	05/06/15	DI Water, Lot DIWATER	100 mg/L	WTOC1000SP_00011	4 mL	Dissolved Organic Carbon - Duplicate	40 mg/L
.WTOC1000SP_00011	12/31/15		Ricca Chemical Co, Lot 2412908		(Purchased Reagent)		Dissolved Organic Carbon - Duplicate	1000 mg/L
<b>LCS 20 PPM_00620</b>	05/07/15	05/06/15	DI Water, Lot DIWATER	200 mg/L	WTOC1000P_00022	4 mL	Dissolved Organic Carbon - Duplicate	20 mg/L
.WTOC1000P_00022	02/26/17		Lab Chem, Lot E054-11		(Purchased Reagent)		Dissolved Organic Carbon - Duplicate	1000 mg/L
<b>MCCVIX_00075</b>	06/01/15	05/01/15	2% Nitric Acid, Lot 1241747	500 mL	MCALSPECAREV_00006	10 mL	Cadmium	0.1 ppm
							Chromium	0.1 ppm
							Copper	0.1 ppm
							Lead	0.1 ppm
							Nickel	0.1 ppm
							Zinc	0.1 ppm
.MCALSPECAREV_00006	06/01/16		Inorganic Ventures, Lot J2-MEB575123		(Purchased Reagent)		Cadmium	5 ppm
							Chromium	5 ppm
							Copper	5 ppm
							Lead	5 ppm
							Nickel	5 ppm
							Zinc	5 ppm
<b>MCRIX_00066</b>	05/29/15	04/29/15	HNO3, Lot 1191081	250 mL	MMSCRI-1B_00005	1 mL	Cadmium	0.001 ppm
							Chromium	0.002 ppm
							Copper	0.002 ppm
							Lead	0.001 ppm
							Nickel	0.001 ppm
							Zinc	0.005 ppm
.MMSCRI-1B_00005	04/01/16		Inorganic Ventures, Lot J2-MEB572092		(Purchased Reagent)		Cadmium	0.25 ppm
							Chromium	0.5 ppm
							Copper	0.5 ppm
							Lead	0.25 ppm
							Nickel	0.25 ppm
							Zinc	1.25 ppm
<b>MICSABX_00070</b>	06/01/15	05/01/15	2% Nitric Acid, Lot J38N82	100 mL	M6020ICS-0A_00005	10 mL	Al	100 ppm
							Ca	100 ppm
							Fe	100 ppm
							K	100 ppm
							Mg	100 ppm
							Mo	2 ppm
							Na	100 ppm
							Ti	2 ppm
					M6020ICS-0B_00006	1 mL	Ag	0.02 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration					
					Reagent ID	Volume Added							
							As	0.02 ppm					
							Cadmium	0.02 ppm					
							Chromium	0.02 ppm					
							Co	0.02 ppm					
							Copper	0.02 ppm					
							Mn	0.0225 ppm					
							Nickel	0.02 ppm					
					Zinc	0.025 ppm							
					MMSICSAB-1_00008					0.2 mL		Ba	0.02 ppm
												Be	0.02 ppm
												Lead	0.02 ppm
												Sr	0.025 ppm
												Tl	0.02 ppm
												V	0.02 ppm
MMSICSAB-2_00007					0.2 mL		B	0.05 ppm					
							Sb	0.02 ppm					
							Se	0.05 ppm					
							Sn	0.1 ppm					
.M6020ICS-0A_00005	09/01/15		Inorganic Ventures, Lot G2-MEB476152MCA			(Purchased Reagent)	Al	1000 ppm					
							Ca	1000 ppm					
							Fe	1000 ppm					
							K	1000 ppm					
							Mg	1000 ppm					
							Mo	20 ppm					
							Na	1000 ppm					
							Ti	20 ppm					
.M6020ICS-0B_00006	09/01/15		Inorganic Ventures, Lot G2-MEB463151			(Purchased Reagent)	Ag	2 ppm					
							As	2 ppm					
							Cadmium	2 ppm					
							Chromium	2 ppm					
							Co	2 ppm					
							Copper	2 ppm					
							Mn	2.25 ppm					
							Nickel	2 ppm					
Zinc	2.5 ppm												
.MMSICSAB-1_00008	06/01/16		Inorganic Ventures, Lot J2-MEB575125			(Purchased Reagent)	Ba	10 ppm					
							Be	10 ppm					
							Lead	10 ppm					
							Sr	12.5 ppm					
							Tl	10 ppm					
							V	10 ppm					
.MMSICSAB-2_00007	06/01/16		Inorganic Ventures, Lot J2-MEB575126			(Purchased Reagent)	B	25 ppm					
							Sb	10 ppm					
							Se	25 ppm					
							Sn	50 ppm					
MICSAX_00065	05/14/15	04/14/15	DI Water, Lot J38N82	100 mL	M6020ICS-0A_00005	10 mL	Al	100 ppm					
							Ca	100 ppm					



REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fe	100 ppm
							K	100 ppm
							Mg	100 ppm
							Mo	2 ppm
							Na	100 ppm
							Ti	2 ppm
.M6020ICS-0A_00005	09/01/15		Inorganic Ventures, Lot G2-MEB476152MCA		(Purchased Reagent)		Al	1000 ppm
							Ca	1000 ppm
							Fe	1000 ppm
							K	1000 ppm
							Mg	1000 ppm
							Mo	20 ppm
							Na	1000 ppm
							Ti	20 ppm
MICVX_00031	05/09/15	04/09/15	2% Nitric Acid, Lot 25106	250 mg/L	MICPMSICV_00018	10 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
							Zinc	0.08 mg/L
.MICPMSICV_00018	11/30/15		SPEX CertiPrep, Lot 7-230WL		(Purchased Reagent)		Cadmium	2 ppm
							Chromium	2 ppm
							Copper	2 ppm
							Lead	2 ppm
							Nickel	2 ppm
							Zinc	2 ppm
MSTD2X_00046	06/01/15	05/01/15	DI Water, Lot 1241717	250 mL	MCALSPECAREV_00006	10 mg/L	Cadmium	0.2 ppm
							Chromium	0.2 ppm
							Copper	0.2 ppm
							Lead	0.2 ppm
							Nickel	0.2 ppm
							Zinc	0.2 ppm
.MCALSPECAREV_00006	06/01/16		Inorganic Ventures, Lot J2-MEB575123		(Purchased Reagent)		Cadmium	5 ppm
							Chromium	5 ppm
							Copper	5 ppm
							Lead	5 ppm
							Nickel	5 ppm
							Zinc	5 ppm
MTAPITTICPMS_00020	07/01/15		INORGANIC VENTURES, Lot H2-MEB532047		(Purchased Reagent)		Ag	5 ug/mL
							Al	200 ug/mL
							As	4 ug/mL
							B	100 ug/mL
							Ba	200 ug/mL
							Be	5 ug/mL
							Cadmium	5 ug/mL
							Chromium	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Co	50 ug/mL
							Copper	25 ug/mL
							Fe	100 ug/mL
							Lead	2 ug/mL
							Mn	50 ug/mL
							Nickel	50 ug/mL
							Se	1 ug/mL
							Sr	100 ug/mL
							Tl	5 ug/mL
							V	50 ug/mL
							Zinc	50 ug/mL
<b>MTAPITMSA_00023</b>	12/01/15		INORGANIC VENTURES, Lot H2-MEB532044		(Purchased Reagent)		Ca	5000 ug/mL
							K	5000 ug/mL
							Mg	5000 ug/mL
							Na	5000 ug/mL
<b>MTAPITMSC_00029</b>	12/01/15		Inorganic Ventures, Lot H2-MEB532046		(Purchased Reagent)		Mo	100 ug/mL
							Sb	50 ug/mL
							Si	1000 ug/mL
							SiO2	2140 ug/mL
							Sn	200 ug/mL
							Ti	100 ug/mL
<b>OPLVISPKMIX1i_00038</b>	10/16/15	04/16/15	Methanol, Lot 0000082533	100 mL	SVLVstd1_00030	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	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-Dichlorophenol	200 ug/mL
							2,6-Dinitrotoluene	200 ug/mL
							2-Chloronaphthalene	200 ug/mL
							2-Chlorophenol	200 ug/mL
							2-Methylnaphthalene	200 ug/mL
							2-Methylphenol	200 ug/mL
							2-Nitroaniline	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							N-Nitrosodi-n-propylamine	200 ug/mL
							N-Nitrosodimethylamine	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration		
					Reagent ID	Volume Added				
							N-Nitrosodiphenylamine	400 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		
							SVLVstd10_00001	10 mL	Benzoic acid	200 ug/mL
									Indene	200 ug/mL
							SVLVstd11_00001	10 mL	Atrazine	200 ug/mL
		Benzaldehyde	200 ug/mL							
		Caprolactam	200 ug/mL							
SVLVstd9_00001	10 mL	3,3'-Dichlorobenzidine	200 ug/mL							
		Benizidine	200 ug/mL							
.SVLVstd1_00030	05/31/16	Restek, Lot A0107399	(Purchased Reagent)			1,1'-Biphenyl	1000 ug/mL			
						1,2,4,5-Tetrachlorobenzene	1000 ug/mL			
						1,2,4-Trichlorobenzene	1000 ug/mL			
						1,2-Dichlorobenzene	1000 ug/mL			
						1,2-Diphenylhydrazine	1000 ug/mL			
						1,3-Dichlorobenzene	1000 ug/mL			
						1,3-Dinitrobenzene	1000 ug/mL			
						1,4-Dichlorobenzene	1000 ug/mL			
						1,4-Dioxane	1000 ug/mL			
						1-Methylnaphthalene	1000 ug/mL			
						2,2'-oxybis[1-chloropropane]	1000 ug/mL			
						2,3,4,6-Tetrachlorophenol	1000 ug/mL			
						2,4,5-Trichlorophenol	1000 ug/mL			
						2,4,6-Trichlorophenol	1000 ug/mL			
						2,4-Dichlorophenol	1000 ug/mL			
						2,4-Dimethylphenol	1000 ug/mL			
						2,4-Dinitrophenol	2000 ug/mL			
						2,4-Dinitrotoluene	1000 ug/mL			
						2,6-Dichlorophenol	1000 ug/mL			
						2,6-Dinitrotoluene	1000 ug/mL			
						2-Chloronaphthalene	1000 ug/mL			
						2-Chlorophenol	1000 ug/mL			
						2-Methylnaphthalene	1000 ug/mL			
						2-Methylphenol	1000 ug/mL			
						2-Nitroaniline	1000 ug/mL			
						2-Nitrophenol	1000 ug/mL			
						3 & 4 Methylphenol	1000 ug/mL			
						3-Nitroaniline	1000 ug/mL			
						4,6-Dinitro-2-methylphenol	2000 ug/mL			
						4-Bromophenyl phenyl ether	1000 ug/mL			
						4-Chloro-3-methylphenol	1000 ug/mL			

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
							Total Cresols	2000 ug/mL
.SVLVstd10_00001	06/30/16		Restek, Lot A0107943		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
.SVLVstd11_00001	06/30/16		Restek, Lot A0108035		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
.SVLVstd9_00001	07/31/16		Restek, Lot A0108709		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benidine	2000 ug/mL
<b>OPQL8270SURI_00029</b>	11/08/15	04/08/15	Methanol, Lot b#0000049909	500 mL	SVLVSURRSPK_00011	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_00011	05/31/19		Restek, Lot A0103615		(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
<b>SVTAPSTD0.4i_00007</b>	02/21/15	07/21/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00004	5 uL	Benzo[e]pyrene	0.2 ug/mL
							2-Naphthylamine	0.2 ug/mL
							2,3,5,6-Tetrachlorophenol	0.2 ug/mL
							2,6-Dichlorophenol	0.2 ug/mL
							7,12-Dimethylbenz(a)anthracene	0.2 ug/mL
							Methyl methanesulfonate	0.2 ug/mL
							1,1'-Biphenyl	0.2 ug/mL
							1,2,4,5-Tetrachlorobenzene	0.2 ug/mL
							1,2,4-Trichlorobenzene	0.2 ug/mL
							1,2-Dichlorobenzene	0.2 ug/mL
							1,2-Diphenylhydrazine	0.2 ug/mL
							1,3-Dichlorobenzene	0.2 ug/mL
							1,3-Dinitrobenzene	0.2 ug/mL
							1,4-Dichlorobenzene	0.2 ug/mL
							1,4-Dioxane	0.2 ug/mL
							1-Methylnaphthalene	0.2 ug/mL
							2,2'-oxybis[1-chloropropane]	0.2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,3,4,6-Tetrachlorophenol	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
							Fluoranthene	0.2 ug/mL
							Fluorene	0.2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorobenzene	0.2 ug/mL
							Hexachlorobutadiene	0.2 ug/mL
							Hexachlorocyclopentadiene	0.2 ug/mL
							Hexachloroethane	0.2 ug/mL
							Hexadecane	0.2 ug/mL
							Indeno[1,2,3-cd]pyrene	0.2 ug/mL
							Isophorone	0.2 ug/mL
							n-Decane	0.2 ug/mL
							N-Nitrosodi-n-propylamine	0.2 ug/mL
							N-Nitrosodimethylamine	0.2 ug/mL
							n-Octadecane	0.2 ug/mL
							Naphthalene	0.2 ug/mL
							Nitrobenzene	0.2 ug/mL
							Pentachlorophenol	0.4 ug/mL
							Phenanthrene	0.2 ug/mL
							Phenol	0.2 ug/mL
							Pyrene	0.2 ug/mL
							Pyridine	0.2 ug/mL
							3,3'-Dichlorobenzidine	0.2 ug/mL
							Atrazine	0.2 ug/mL
							Benzidine	0.2 ug/mL
							Caprolactam	0.2 ug/mL
							N-Nitrosodiphenylamine	0.2 ug/mL
							Benzaldehyde	0.2 ug/mL
							Benzoic acid	0.2 ug/mL
							Indene	0.2 ug/mL
							2,4,6-Tribromophenol (Surr)	0.2 ug/mL
							2-Fluorobiphenyl	0.2 ug/mL
							2-Fluorophenol (Surr)	0.2 ug/mL
							Nitrobenzene-d5 (Surr)	0.2 ug/mL
							Phenol-d5 (Surr)	0.2 ug/mL
							Terphenyl-d14 (Surr)	0.2 ug/mL
.SVTAPITINTRNi_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	N-Nitrosopyrrolidine	0.2 ug/mL
							1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00007	02/28/18		Restek, Lot A093676			(Purchased Reagent)	1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre 00001	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2NAPAMINEs 00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL



REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVstd1_00026	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

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	40 ug/mL
							Bis (2-chloroethyl) ether	40 ug/mL
							Bis (2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz (a,h) anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
							SVLVstd2_00012	400 uL
		Atrazine	40 ug/mL					
		Benzidine	40 ug/mL					
		Caprolactam	40 ug/mL					
SVLVstd5(7)_00001	400 uL	N-Nitrosodiphenylamine	40 ug/mL					
SVLVstd8_00003	400 uL	Benzaldehyde	40 ug/mL					
		Benzoic acid	40 ug/mL					
		Indene	40 ug/mL					
SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL					
		2-Fluorobiphenyl	40 ug/mL					
		2-Fluorophenol (Surr)	40 ug/mL					
		Nitrobenzene-d5 (Surr)	40 ug/mL					
		Phenol-d5 (Surr)	40 ug/mL					
		Terphenyl-d14 (Surr)	40 ug/mL					
SVNNITROPYROS_00015	800 uL	N-Nitrosopyrrolidine	40 ug/mL					
..sv benzoepyre_00001	10/03/18	Absolute, Lot 100313	(Purchased Reagent)	Benzo[e]pyrene	1000 ug/mL			

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

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			(Purchased Reagent)	2-Naphthylamine	1000 ug/mL
..SVLVlist12_00002	04/30/15		Restek, Lot A0102912			(Purchased Reagent)	2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
..SVLVstdl_00026	08/31/15		Restek, Lot A0101615			(Purchased Reagent)	1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis (2-chloroethoxy)methane	1000 ug/mL
							Bis (2-chloroethyl) ether	1000 ug/mL
							Bis (2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz (a,h) anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd2_00012	07/31/15		Restek, Lot A0100824		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzydine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd5(7) 00001	02/28/17		Restek, Lot A0101573		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd8_00003	05/31/15		Restek, Lot A0103145		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SVNNITROPYROS_00015	06/05/17		absolute, Lot 060514			(Purchased Reagent)	N-Nitrosopyrrolidine	1000 ug/mL
<b>SVTAPSTD10i_00088</b>	02/06/15	01/31/15	MeCl2, Lot 1417620	1 mL	SVTAPITINTRNi_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00004	125 uL	Benzo[e]pyrene	5 ug/mL
							2-Naphthylamine	5 ug/mL
							2,3,5,6-Tetrachlorophenol	5 ug/mL
							2,6-Dichlorophenol	5 ug/mL
							7,12-Dimethylbenz(a)anthracene	5 ug/mL
							Methyl methanesulfonate	5 ug/mL
							1,1'-Biphenyl	5 ug/mL
							1,2,4,5-Tetrachlorobenzene	5 ug/mL
							1,2,4-Trichlorobenzene	5 ug/mL
							1,2-Dichlorobenzene	5 ug/mL
							1,2-Diphenylhydrazine	5 ug/mL
							1,3-Dichlorobenzene	5 ug/mL
							1,3-Dinitrobenzene	5 ug/mL
							1,4-Dichlorobenzene	5 ug/mL
							1,4-Dioxane	5 ug/mL
							1-Methylnaphthalene	5 ug/mL
							2,2'-oxybis[1-chloropropane]	5 ug/mL
							2,3,4,6-Tetrachlorophenol	5 ug/mL
							2,4,5-Trichlorophenol	5 ug/mL
							2,4,6-Trichlorophenol	5 ug/mL
							2,4-Dichlorophenol	5 ug/mL
							2,4-Dimethylphenol	5 ug/mL
							2,4-Dinitrophenol	10 ug/mL
							2,4-Dinitrotoluene	5 ug/mL
							2,6-Dinitrotoluene	5 ug/mL
							2-Chloronaphthalene	5 ug/mL
							2-Chlorophenol	5 ug/mL
							2-Methylnaphthalene	5 ug/mL
							2-Methylphenol	5 ug/mL
							2-Nitroaniline	5 ug/mL
							2-Nitrophenol	5 ug/mL
							3-Nitroaniline	5 ug/mL
							4,6-Dinitro-2-methylphenol	10 ug/mL
							4-Bromophenyl phenyl ether	5 ug/mL
							4-Chloro-3-methylphenol	5 ug/mL
							4-Chloroaniline	5 ug/mL
							4-Chlorophenyl phenyl ether	5 ug/mL
							4-Methylphenol	5 ug/mL
							4-Nitroaniline	5 ug/mL
							4-Nitrophenol	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzaldehyde	5 ug/mL
							Benzoic acid	5 ug/mL
							Indene	5 ug/mL
							2,4,6-Tribromophenol (Surr)	5 ug/mL
							2-Fluorobiphenyl	5 ug/mL
							2-Fluorophenol (Surr)	5 ug/mL
							Nitrobenzene-d5 (Surr)	5 ug/mL
							Phenol-d5 (Surr)	5 ug/mL
							Terphenyl-d14 (Surr)	5 ug/mL
							N-Nitrosopyrrolidine	5 ug/mL
.SVTAPITINTRNi_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00007	02/28/18		Restek, Lot A093676			(Purchased Reagent)	1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre 00001	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVstd1_00026	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

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



REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd2_00012	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd5(7)_00001	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd8_00003	400 uL	Benzaldehyde	40 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					SVNNITROPYROs_00015	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre 00001	10/03/18		Absolute, Lot 100313		(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2NAPAMINES 00002	06/30/17		Ultra Scientific, Lot Ck-1617		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVlist12_00002	04/30/15		Restek, Lot A0102912		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
..SVLVstd1_00026	08/31/15		Restek, Lot A0101615		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd2_00012	07/31/15		Restek, Lot A0100824		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd5(7)_00001	02/28/17		Restek, Lot A0101573		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd8_00003	05/31/15		Restek, Lot A0103145		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..SVNNITROPYROS_00015	06/05/17		absolute, Lot 060514		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
<b>SVTAPSTD10i_00102</b>	05/08/15	05/01/15	MeCl2, Lot 1417620	1 mL	SVTAPITSTCKi_00008	125 uL	Acenaphthene	5 ug/mL
							Acenaphthylene	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
							Bis(2-ethylhexyl) phthalate	5 ug/mL
							Chrysene	5 ug/mL
							Dibenz(a,h)anthracene	5 ug/mL
							Fluoranthene	5 ug/mL
							Fluorene	5 ug/mL
							Indeno[1,2,3-cd]pyrene	5 ug/mL
							Naphthalene	5 ug/mL
							Phenanthrene	5 ug/mL
							Pyrene	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.SVTAPITSTCKi_00008	05/31/15	05/01/15	MeCl2, Lot 1417620	20 mL	SVLVstd1_00026	800 uL	Phenol-d5 (Surr)	5 ug/mL
							Terphenyl-d14 (Surr)	5 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-ethylhexyl) phthalate	40 ug/mL
							Chrysene	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Fluoranthene	40 ug/mL
					Fluorene	40 ug/mL		
					Indeno[1,2,3-cd]pyrene	40 ug/mL		
					Naphthalene	40 ug/mL		
					Phenanthrene	40 ug/mL		
					Pyrene	40 ug/mL		
					..SVLVstd1_00026	08/31/15		Restek, Lot A0101615
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							
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(Purchased Reagent)		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-ethylhexyl) phthalate	1000 ug/mL
							Chrysene	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
Naphthalene	1000 ug/mL							
Phenanthrene	1000 ug/mL							
Pyrene	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							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
SVTAPSTD2.0i_00005	02/21/15	07/21/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
					SVTAPITSTCKi_00004	25 uL	Phenanthrene-d10	4 ug/mL
							Benzo[e]pyrene	1 ug/mL
							2-Naphthylamine	1 ug/mL
							2,3,5,6-Tetrachlorophenol	1 ug/mL
							2,6-Dichlorophenol	1 ug/mL
							7,12-Dimethylbenz(a)anthracene	1 ug/mL
							Methyl methanesulfonate	1 ug/mL
							1,1'-Biphenyl	1 ug/mL
							1,2,4,5-Tetrachlorobenzene	1 ug/mL
							1,2,4-Trichlorobenzene	1 ug/mL
							1,2-Dichlorobenzene	1 ug/mL
							1,2-Diphenylhydrazine	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
							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							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Hexadecane	1 ug/mL
							Indeno[1,2,3-cd]pyrene	1 ug/mL
							Isophorone	1 ug/mL
							n-Decane	1 ug/mL
							N-Nitrosodi-n-propylamine	1 ug/mL
							N-Nitrosodimethylamine	1 ug/mL
							n-Octadecane	1 ug/mL
							Naphthalene	1 ug/mL
							Nitrobenzene	1 ug/mL
							Pentachlorophenol	2 ug/mL
							Phenanthrene	1 ug/mL
							Phenol	1 ug/mL
							Pyrene	1 ug/mL
							Pyridine	1 ug/mL
							3,3'-Dichlorobenzidine	1 ug/mL
							Atrazine	1 ug/mL
							Benzidine	1 ug/mL
							Caprolactam	1 ug/mL
							N-Nitrosodiphenylamine	1 ug/mL
							Benzaldehyde	1 ug/mL
							Benzoic acid	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Indene	1 ug/mL
							2,4,6-Tribromophenol (Surr)	1 ug/mL
							2-Fluorobiphenyl	1 ug/mL
							2-Fluorophenol (Surr)	1 ug/mL
							Nitrobenzene-d5 (Surr)	1 ug/mL
							Phenol-d5 (Surr)	1 ug/mL
							Terphenyl-d14 (Surr)	1 ug/mL
							N-Nitrosopyrrolidine	1 ug/mL
.SVTAPITINTRNi_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00007	02/28/18		Restek, Lot A093676			(Purchased Reagent)	1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre 00001	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVstd1_00026	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	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.: 180-43409-1

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.: 180-43409-1

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_00012	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd5(7)_00001	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd8_00003	400 uL	Benzaldehyde	40 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					SVNNITROPYROs_00015	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00001	10/03/18		Absolute, Lot 100313		(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2NAPAMINEs_00002	06/30/17		Ultra Scientific, Lot Ck-1617		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVlist12_00002	04/30/15		Restek, Lot A0102912		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
..SVLVstd1_00026	08/31/15		Restek, Lot A0101615		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	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.: 180-43409-1

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.: 180-43409-1

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_00012	07/31/15		Restek, Lot A0100824		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd5(7)_00001	02/28/17		Restek, Lot A0101573		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd8_00003	05/31/15		Restek, Lot A0103145		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..SVNNITROPYROS_00015	06/05/17		absolute, Lot 060514		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
<b>SVTAPSTD20i_00005</b>	02/21/15	07/21/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00004	250 uL	Benzo[e]pyrene	10 ug/mL
							2-Naphthylamine	10 ug/mL
							2,3,5,6-Tetrachlorophenol	10 ug/mL
							2,6-Dichlorophenol	10 ug/mL
							7,12-Dimethylbenz(a)anthracene	10 ug/mL
							Methyl methanesulfonate	10 ug/mL
							1,1'-Biphenyl	10 ug/mL
							1,2,4,5-Tetrachlorobenzene	10 ug/mL
							1,2,4-Trichlorobenzene	10 ug/mL
							1,2-Dichlorobenzene	10 ug/mL
							1,2-Diphenylhydrazine	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,3,4,6-Tetrachlorophenol	10 ug/mL
							2,4,5-Trichlorophenol	10 ug/mL
							2,4,6-Trichlorophenol	10 ug/mL
							2,4-Dichlorophenol	10 ug/mL
							2,4-Dimethylphenol	10 ug/mL
							2,4-Dinitrophenol	20 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							2,6-Dinitrotoluene	10 ug/mL
							2-Chloronaphthalene	10 ug/mL
							2-Chlorophenol	10 ug/mL
							2-Methylnaphthalene	10 ug/mL
							2-Methylphenol	10 ug/mL
							2-Nitroaniline	10 ug/mL
							2-Nitrophenol	10 ug/mL
							3-Nitroaniline	10 ug/mL
							4,6-Dinitro-2-methylphenol	20 ug/mL
							4-Bromophenyl phenyl ether	10 ug/mL
							4-Chloro-3-methylphenol	10 ug/mL
							4-Chloroaniline	10 ug/mL
							4-Chlorophenyl phenyl ether	10 ug/mL
							4-Methylphenol	10 ug/mL
							4-Nitroaniline	10 ug/mL
							4-Nitrophenol	20 ug/mL
							Acenaphthene	10 ug/mL
							Acenaphthylene	10 ug/mL
							Acetophenone	10 ug/mL
							Aniline	10 ug/mL
							Anthracene	10 ug/mL
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorobenzene	10 ug/mL
							Hexachlorobutadiene	10 ug/mL
							Hexachlorocyclopentadiene	10 ug/mL
							Hexachloroethane	10 ug/mL
							Hexadecane	10 ug/mL
							Indeno[1,2,3-cd]pyrene	10 ug/mL
							Isophorone	10 ug/mL
							n-Decane	10 ug/mL
							N-Nitrosodi-n-propylamine	10 ug/mL
							N-Nitrosodimethylamine	10 ug/mL
							n-Octadecane	10 ug/mL
							Naphthalene	10 ug/mL
							Nitrobenzene	10 ug/mL
							Pentachlorophenol	20 ug/mL
							Phenanthrene	10 ug/mL
							Phenol	10 ug/mL
							Pyrene	10 ug/mL
							Pyridine	10 ug/mL
							3,3'-Dichlorobenzidine	10 ug/mL
							Atrazine	10 ug/mL
							Benzidine	10 ug/mL
							Caprolactam	10 ug/mL
							N-Nitrosodiphenylamine	10 ug/mL
							Benzaldehyde	10 ug/mL
							Benzoic acid	10 ug/mL
							Indene	10 ug/mL
							2,4,6-Tribromophenol (Surr)	10 ug/mL
							2-Fluorobiphenyl	10 ug/mL
							2-Fluorophenol (Surr)	10 ug/mL
							Nitrobenzene-d5 (Surr)	10 ug/mL
							Phenol-d5 (Surr)	10 ug/mL
							Terphenyl-d14 (Surr)	10 ug/mL
							N-Nitrosopyrrolidine	10 ug/mL
.SVTAPITINTRNi_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00007	02/28/18		Restek, Lot A093676			(Purchased Reagent)	1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre 00001	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2NAPAMINEs 00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVstd1_00026	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

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	40 ug/mL
							Bis (2-chloroethyl) ether	40 ug/mL
							Bis (2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz (a,h) anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
							SVLVstd2_00012	400 uL
		Atrazine	40 ug/mL					
		Benzidine	40 ug/mL					
		Caprolactam	40 ug/mL					
SVLVstd5(7)_00001	400 uL	N-Nitrosodiphenylamine	40 ug/mL					
SVLVstd8_00003	400 uL	Benzaldehyde	40 ug/mL					
		Benzoic acid	40 ug/mL					
		Indene	40 ug/mL					
SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL					
		2-Fluorobiphenyl	40 ug/mL					
		2-Fluorophenol (Surr)	40 ug/mL					
		Nitrobenzene-d5 (Surr)	40 ug/mL					
		Phenol-d5 (Surr)	40 ug/mL					
		Terphenyl-d14 (Surr)	40 ug/mL					
SVNNITROPYROS_00015	800 uL	N-Nitrosopyrrolidine	40 ug/mL					
..sv benzoepyre_00001	10/03/18	Absolute, Lot 100313	(Purchased Reagent)	Benzo[e]pyrene	1000 ug/mL			

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

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			(Purchased Reagent)	2-Naphthylamine	1000 ug/mL
..SVLVlist12_00002	04/30/15		Restek, Lot A0102912			(Purchased Reagent)	2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
..SVLVstdl_00026	08/31/15		Restek, Lot A0101615			(Purchased Reagent)	1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL



REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis (2-chloroethoxy)methane	1000 ug/mL
							Bis (2-chloroethyl) ether	1000 ug/mL
							Bis (2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz (a,h) anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd2_00012	07/31/15		Restek, Lot A0100824		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzydine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd5(7) 00001	02/28/17		Restek, Lot A0101573		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd8_00003	05/31/15		Restek, Lot A0103145		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SVNNITROPYROS_00015	06/05/17		absolute, Lot 060514			(Purchased Reagent)	N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD4.0i_00006	02/21/15	07/21/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00004	50 uL	Benzo[e]pyrene	2 ug/mL
							2-Naphthylamine	2 ug/mL
							2,3,5,6-Tetrachlorophenol	2 ug/mL
							2,6-Dichlorophenol	2 ug/mL
							7,12-Dimethylbenz(a)anthracene	2 ug/mL
							Methyl methanesulfonate	2 ug/mL
							1,1'-Biphenyl	2 ug/mL
							1,2,4,5-Tetrachlorobenzene	2 ug/mL
							1,2,4-Trichlorobenzene	2 ug/mL
							1,2-Dichlorobenzene	2 ug/mL
							1,2-Diphenylhydrazine	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
							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							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Hexachloroethane	2 ug/mL
							Hexadecane	2 ug/mL
							Indeno[1,2,3-cd]pyrene	2 ug/mL
							Isophorone	2 ug/mL
							n-Decane	2 ug/mL
							N-Nitrosodi-n-propylamine	2 ug/mL
							N-Nitrosodimethylamine	2 ug/mL
							n-Octadecane	2 ug/mL
							Naphthalene	2 ug/mL
							Nitrobenzene	2 ug/mL
							Pentachlorophenol	4 ug/mL
							Phenanthrene	2 ug/mL
							Phenol	2 ug/mL
							Pyrene	2 ug/mL
							Pyridine	2 ug/mL
							3,3'-Dichlorobenzidine	2 ug/mL
							Atrazine	2 ug/mL
							Benzidine	2 ug/mL
							Caprolactam	2 ug/mL
							N-Nitrosodiphenylamine	2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzaldehyde	2 ug/mL
							Benzoic acid	2 ug/mL
							Indene	2 ug/mL
							2,4,6-Tribromophenol (Surr)	2 ug/mL
							2-Fluorobiphenyl	2 ug/mL
							2-Fluorophenol (Surr)	2 ug/mL
							Nitrobenzene-d5 (Surr)	2 ug/mL
							Phenol-d5 (Surr)	2 ug/mL
							Terphenyl-d14 (Surr)	2 ug/mL
							N-Nitrosopyrrolidine	2 ug/mL
.SVTAPITINTRNi_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00007	02/28/18		Restek, Lot A093676			(Purchased Reagent)	1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre 00001	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVstd1_00026	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd2_00012	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd5(7)_00001	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd8_00003	400 uL	Benzaldehyde	40 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					SVNNITROPYROs_00015	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre 00001	10/03/18		Absolute, Lot 100313		(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2NAPAMINES 00002	06/30/17		Ultra Scientific, Lot Ck-1617		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVlist12_00002	04/30/15		Restek, Lot A0102912		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
..SVLVstd1_00026	08/31/15		Restek, Lot A0101615		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd2_00012	07/31/15		Restek, Lot A0100824		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd5(7)_00001	02/28/17		Restek, Lot A0101573		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd8_00003	05/31/15		Restek, Lot A0103145		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..SVNNITROPYROS_00015	06/05/17		absolute, Lot 060514		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
<b>SVTAPSTD40i_00005</b>	02/21/15	07/21/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00004	500 uL	Benzo[e]pyrene	20 ug/mL
							2-Naphthylamine	20 ug/mL
							2,3,5,6-Tetrachlorophenol	20 ug/mL
							2,6-Dichlorophenol	20 ug/mL
							7,12-Dimethylbenz(a)anthracene	20 ug/mL
							Methyl methanesulfonate	20 ug/mL
							1,1'-Biphenyl	20 ug/mL
							1,2,4,5-Tetrachlorobenzene	20 ug/mL
							1,2,4-Trichlorobenzene	20 ug/mL
							1,2-Dichlorobenzene	20 ug/mL
							1,2-Diphenylhydrazine	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



REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							N-Nitrosodiphenylamine	20 ug/mL
							Benzaldehyde	20 ug/mL
							Benzoic acid	20 ug/mL
							Indene	20 ug/mL
							2,4,6-Tribromophenol (Surr)	20 ug/mL
							2-Fluorobiphenyl	20 ug/mL
							2-Fluorophenol (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20 ug/mL
							Phenol-d5 (Surr)	20 ug/mL
							Terphenyl-d14 (Surr)	20 ug/mL
							N-Nitrosopyrrolidine	20 ug/mL
.SVTAPITINTRNi_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00007	02/28/18		Restek, Lot A093676		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre_00001	800 uL	Benzo[e]pyrene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
				2,6-Dichlorophenol			40 ug/mL	
				7,12-Dimethylbenz(a)anthracene			40 ug/mL	
				Methyl methanesulfonate			40 ug/mL	
					SVLVstd1_00026	800 uL	1,1'-Biphenyl	40 ug/mL
				1,2,4,5-Tetrachlorobenzene			40 ug/mL	
				1,2,4-Trichlorobenzene			40 ug/mL	
				1,2-Dichlorobenzene			40 ug/mL	
				1,2-Diphenylhydrazine			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.: 180-43409-1

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_00012	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd5(7)_00001	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd8_00003	400 uL	Benzaldehyde	40 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..sv benzoepyre_00001	10/03/18		Absolute, Lot 100313		SVNNITROPYROS 00015	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..SV2NAPAMINES 00002	06/30/17		Ultra Scientific, Lot CK-1617		(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SVLVlist12_00002	04/30/15		Restek, Lot A0102912		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVstdl_00026	08/31/15		Restek, Lot A0101615		(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
							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	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.: 180-43409-1

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_00012	07/31/15		Restek, Lot A0100824			(Purchased Reagent)	3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd5(7)_00001	02/28/17		Restek, Lot A0101573			(Purchased Reagent)	N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd8_00003	05/31/15		Restek, Lot A0103145			(Purchased Reagent)	Benzaldehyde	2000 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638			(Purchased Reagent)	2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SVNNITROPYROS_00015	06/05/17		absolute, Lot 060514			(Purchased Reagent)	Phenol-d5 (Surr) Terphenyl-d14 (Surr) N-Nitrosopyrrolidine	5000 ug/mL 5000 ug/mL 1000 ug/mL
SVTAPSTD60i_00005	02/21/15	07/21/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00004	750 uL	Benzo[e]pyrene	30 ug/mL
							2-Naphthylamine	30 ug/mL
							2,3,5,6-Tetrachlorophenol	30 ug/mL
							2,6-Dichlorophenol	30 ug/mL
							7,12-Dimethylbenz(a)anthracene	30 ug/mL
							Methyl methanesulfonate	30 ug/mL
							1,1'-Biphenyl	30 ug/mL
							1,2,4,5-Tetrachlorobenzene	30 ug/mL
							1,2,4-Trichlorobenzene	30 ug/mL
							1,2-Dichlorobenzene	30 ug/mL
							1,2-Diphenylhydrazine	30 ug/mL
							1,3-Dichlorobenzene	30 ug/mL
							1,3-Dinitrobenzene	30 ug/mL
							1,4-Dichlorobenzene	30 ug/mL
							1,4-Dioxane	30 ug/mL
							1-Methylnaphthalene	30 ug/mL
							2,2'-oxybis[1-chloropropane]	30 ug/mL
							2,3,4,6-Tetrachlorophenol	30 ug/mL
							2,4,5-Trichlorophenol	30 ug/mL
							2,4,6-Trichlorophenol	30 ug/mL
							2,4-Dichlorophenol	30 ug/mL
							2,4-Dimethylphenol	30 ug/mL
							2,4-Dinitrophenol	60 ug/mL
							2,4-Dinitrotoluene	30 ug/mL
							2,6-Dinitrotoluene	30 ug/mL
							2-Chloronaphthalene	30 ug/mL
							2-Chlorophenol	30 ug/mL
2-Methylnaphthalene	30 ug/mL							
2-Methylphenol	30 ug/mL							
2-Nitroaniline	30 ug/mL							
2-Nitrophenol	30 ug/mL							
3-Nitroaniline	30 ug/mL							
4,6-Dinitro-2-methylphenol	60 ug/mL							
4-Bromophenyl phenyl ether	30 ug/mL							
4-Chloro-3-methylphenol	30 ug/mL							
4-Chloroaniline	30 ug/mL							
4-Chlorophenyl phenyl ether	30 ug/mL							
4-Methylphenol	30 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

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



REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Caprolactam	30 ug/mL
							N-Nitrosodiphenylamine	30 ug/mL
							Benzaldehyde	30 ug/mL
							Benzoic acid	30 ug/mL
							Indene	30 ug/mL
							2,4,6-Tribromophenol (Surr)	30 ug/mL
							2-Fluorobiphenyl	30 ug/mL
							2-Fluorophenol (Surr)	30 ug/mL
							Nitrobenzene-d5 (Surr)	30 ug/mL
							Phenol-d5 (Surr)	30 ug/mL
							Terphenyl-d14 (Surr)	30 ug/mL
							N-Nitrosopyrrolidine	30 ug/mL
.SVTAPITINTRNi_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00007	02/28/18		Restek, Lot A093676			(Purchased Reagent)	1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre 00001	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVstd1_00026	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd2_00012	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd5(7)_00001	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd8_00003	400 uL	Benzaldehyde	40 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					SVNNITROPYROS_00015	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyrene 00001	10/03/18		Absolute, Lot 100313				Benzo[e]pyrene	1000 ug/mL
..SV2NAPAMINES 00002	06/30/17		Ultra Scientific, Lot Ck-1617			(Purchased Reagent)	2-Naphthylamine	1000 ug/mL
..SVLVlist12_00002	04/30/15		Restek, Lot A0102912			(Purchased Reagent)	2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
..SVLVstd1_00026	08/31/15		Restek, Lot A0101615			(Purchased Reagent)	1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd2_00012	07/31/15		Restek, Lot A0100824		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd5(7)_00001	02/28/17		Restek, Lot A0101573		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd8_00003	05/31/15		Restek, Lot A0103145		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..SVNNITROPYROS_00015	06/05/17		absolute, Lot 060514		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
<b>SVTAPSTD80i_00005</b>	02/21/15	07/21/14	MeCl2, Lot 1053215	1 mL	SVTAPITINRNI_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00004	1000 uL	Benzo[e]pyrene	40 ug/mL
							2-Naphthylamine	40 ug/mL
							2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
							1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
							3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
							2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
							N-Nitrosopyrrolidine	40 ug/mL
.SVTAPITINTRNi_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00007	02/28/18		Restek, Lot A093676		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre_00001	800 uL	Phenanthrene-d10	2000 ug/mL
					SV2NAPAMINEs_00002	800 uL	Benzo[e]pyrene	40 ug/mL
					SVLVlist12_00002	800 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
							SVLVstd1_00026	800 uL
					1,2,4,5-Tetrachlorobenzene	40 ug/mL		
					1,2,4-Trichlorobenzene	40 ug/mL		
					1,2-Dichlorobenzene	40 ug/mL		
					1,2-Diphenylhydrazine	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							



REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis (2-chloroethoxy)methane	40 ug/mL
							Bis (2-chloroethyl) ether	40 ug/mL
							Bis (2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz (a,h) anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd2_00012	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd5(7)_00001	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd8_00003	400 uL	Benzaldehyde	40 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					SVNNITROPYROS 00015	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..sv benzoepyre_00001	10/03/18		Absolute, Lot 100313		(Purchased Reagent)		Benzo[e]pyrene	1000 ug/mL
..SV2NAPAMINEs_00002	06/30/17		Ultra Scientific, Lot CK-1617		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVlist12_00002	04/30/15		Restek, Lot A0102912		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
..SVLVstdl_00026	08/31/15		Restek, Lot A0101615		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis (2-chloroethoxy)methane	1000 ug/mL
							Bis (2-chloroethyl) ether	1000 ug/mL
							Bis (2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz (a,h) anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd2_00012	07/31/15		Restek, Lot A0100824		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzydine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd5(7)_00001	02/28/17		Restek, Lot A0101573		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd8_00003	05/31/15		Restek, Lot A0103145		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SVNNITROPYROS_00015	06/05/17		absolute, Lot 060514			(Purchased Reagent)	2-Fluorophenol (Surr) Nitrobenzene-d5 (Surr) Phenol-d5 (Surr) Terphenyl-d14 (Surr) N-Nitrosopyrrolidine	5000 ug/mL 5000 ug/mL 5000 ug/mL 5000 ug/mL 1000 ug/mL
<b>WCNO.1L3_00045</b>	05/06/15	05/06/15	Sodium Hydroxide, Lot 2410822	100 mL	WCN10Pi_00486	1 mL	Cyanide, Total	0.1 mg/L
.WCN10Pi_00486	05/10/15	05/04/15	Sodium Hydroxide, Lot 2410822	100 mL	WCN1000P_00024	1 mL	Cyanide, Total	10 mg/L
..WCN1000P_00024	05/20/15		LabChem Inc., Lot D322-27			(Purchased Reagent)	Cyanide, Total	1000 mg/L
<b>WCNO.2ICV_00330</b>	05/06/15	05/06/15	Sodium Hydroxide, Lot 2410822	100 mL	WCN10Si_00488	2 mL	Cyanide, Total	0.2 mg/L
.WCN10Si_00488	05/10/15	05/04/15	Sodium Hydroxide, Lot 2410822	100 mL	WCN1000S_00017	1 mL	Cyanide, Total	10 mg/L
..WCN1000S_00017	08/31/15		Ricca Chemical Co., Lot 4502438			(Purchased Reagent)	Cyanide, Total	1000 mg/L
<b>WCNO.5L1_00495</b>	05/06/15	05/06/15	Sodium Hydroxide, Lot 2410822	100 mL	WCN10Pi_00486	5 mL	Cyanide, Total	0.5 mg/L
.WCN10Pi_00486	05/10/15	05/04/15	Sodium Hydroxide, Lot 2410822	100 mL	WCN1000P_00024	1 mL	Cyanide, Total	10 mg/L
..WCN1000P_00024	05/20/15		LabChem Inc., Lot D322-27			(Purchased Reagent)	Cyanide, Total	1000 mg/L
<b>WCN10Pi_00486</b>	05/10/15	05/04/15	Sodium Hydroxide, Lot 2410822	100 mL	WCN1000P_00024	1 mL	Cyanide, Total	10 mg/L
.WCN1000P_00024	05/20/15		LabChem Inc., Lot D322-27			(Purchased Reagent)	Cyanide, Total	1000 mg/L
<b>WCNLCS_00018</b>	05/10/15	05/04/15	Sodium Hydroxide, Lot 2410822	100 mL	WCNWSTOCK_00001	1 mL	Cyanide, Total	10 mg/L
.WCNWSTOCK_00001	11/30/15		ERA, Lot 200213			(Purchased Reagent)	Cyanide, Total	1000 mg/L
<b>WHdCaCO3P_00006</b>	05/08/16		LabChem Inc., Lot D126-06			(Purchased Reagent)	Hardness as calcium carbonate	1000 mg/L

Reagent

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**M6020ICS-0A\_00005**

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**      **Stock Solution**

Catalog No.:                      6020ICS-0A

Lot Number:                        **G2-MEB476152MCA**

Matrix:                                1.4% HNO<sub>3</sub>(v/v)

10,000 µg/mL ea:

Chloride,

2,000 µg/mL ea:

C,

1,000 µg/mL ea:

Al,                      Ca,                      Fe,                      K,                      Mg,                      Na,                      P,                      S,

20 µg/mL ea:

Mo,                      Ti

### 3.0 CERTIFIED VALUES AND UNCERTAINTIES

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

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

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

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

( $\bar{x}$ ) = 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#
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
C	Gravimetric		See Sec. 4.2
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Chloride	Acidimetric	84L	84L
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mo	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	010728
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
S	Acidimetric	84k	84k
Ti	ICP Assay	3162a	060808

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

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

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

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

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

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

M - Checked by ICP-MS

O - Checked by ICP-OES

i - Spectral Interference

n - Not Checked For

s - Solution Standard Element

## 6.0 INTENDED USE

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

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

## 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

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

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

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

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

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

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



**10.0 QUALITY STANDARD DOCUMENTATION**

- 10.1 ISO 9001 Quality Management System Registration  
- SAI Global File Number 010105
- 10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration"  
- Chemical Testing - Accredited A2LA Certificate Number 883.01
- 10.3 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"  
- Reference Materials Production - Accredited A2LA Certificate Number 883.02
- 10.4 10CFR50 Appendix B - Nuclear Regulatory Commission  
- Domestic Licensing of Production and Utilization Facilities
- 10.5 10CFR21 - Nuclear Regulatory Commission  
- Reporting Defects and Non-Compliance

**11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY**

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

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

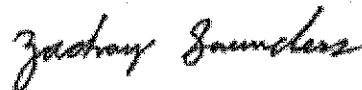
**11.3 Chemical Stability** - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

**Certification Date:** July 12, 2013

**Expiration Date:** **EXPIRES**  
01<sup>st</sup> 2015

**12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS**

**Certificate Prepared By:** Zach Saunders  
Product Documentation Technician



**Certificate Approved By:** Allyson Guilliams  
Quality Control Supervisor



**Certifying Officer:** Paul Gaines  
PhD., Senior Technical Director



Reagent

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**M6020ICS-0B\_00006**

**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      Stock Solution**

Catalog No.:                      6020ICS-0B

Lot Number:                        **G2-MEB463151**

Matrix:                                3% HNO<sub>3</sub>(v/v)

2 µg/mL ea:

Ag,              As,              Cd,              Co,              Cr<sub>3</sub>,              Cu,              Mn,              Ni,              Zn

**3.0 CERTIFIED VALUES AND UNCERTAINTIES**

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

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

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

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

( $\bar{x}$ ) = 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#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	00630
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Ni	ICP Assay	3136	000612
Ni	EDTA	928	928
Zn	ICP Assay	3168a	080123
Zn	EDTA	928	928

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

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

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

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

#### 6.0 INTENDED USE

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

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

#### 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

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

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

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

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

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

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

**10.0 QUALITY STANDARD DOCUMENTATION**

- 10.1 ISO 9001 Quality Management System Registration  
- SAI Global File Number 010105
- 10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration"  
- Chemical Testing - Accredited A2LA Certificate Number 883.01
- 10.3 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"  
- Reference Materials Production - Accredited A2LA Certificate Number 883.02
- 10.4 10CFR50 Appendix B - Nuclear Regulatory Commission  
- Domestic Licensing of Production and Utilization Facilities
- 10.5 10CFR21 - Nuclear Regulatory Commission  
- Reporting Defects and Non-Compliance

**11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY**

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

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

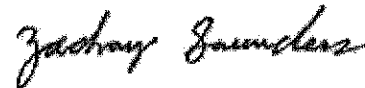
11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

**Certification Date:** March 25, 2013

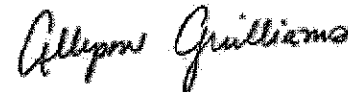
**Expiration Date:** EXPIRES  
01<sup>st</sup> 2015

**12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS**

**Certificate Prepared By:** Zach Saunders  
Product Documentation Technician



**Certificate Approved By:** Allyson Guilliams  
Quality Control Supervisor



**Certifying Officer:** Paul Gaines  
PhD., Senior Technical Director



Reagent

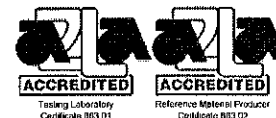
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**MCALSPECAREV\_00006**

**1.0 ACCREDITATION / REGISTRATION**

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories".

Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).


**2.0 PRODUCT DESCRIPTION**

Product Code: Multi Analyte Custom Grade Solution

Catalog Number: TAPITT-CAL-SPECA-REV

Lot Number: J2-MEB575123

Matrix: 3% (v/v) HNO<sub>3</sub>

Value / Analyte(s): 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,  
 Cr<sub>3</sub>, Cu, Ni,  
 Pb, Se, Sr,  
 Tl, V, Zn

**3.0 CERTIFIED VALUES AND UNCERTAINTIES**

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	25.01 ± 0.13 µg/mL	Arsenic, As	5.000 ± 0.032 µg/mL
Barium, Ba	4.997 ± 0.028 µg/mL	Beryllium, Be	5.003 ± 0.032 µg/mL
Cadmium, Cd	4.998 ± 0.032 µg/mL	Calcium, Ca	2 500 ± 11 µg/mL
Chromium+3, Cr <sub>3</sub>	4.999 ± 0.028 µg/mL	Cobalt, Co	4.999 ± 0.025 µg/mL
Copper, Cu	4.998 ± 0.032 µg/mL	Iron, Fe	1 250 ± 6 µg/mL
Lead, Pb	4.999 ± 0.025 µg/mL	Magnesium, Mg	2 500 ± 12 µg/mL
Manganese, Mn	24.99 ± 0.12 µg/mL	Nickel, Ni	4.998 ± 0.028 µg/mL
Potassium, K	2 500 ± 11 µg/mL	Selenium, Se	4.998 ± 0.028 µg/mL
Silver, Ag	4.998 ± 0.036 µg/mL	Sodium, Na	2 500 ± 11 µg/mL
Strontium, Sr	5.002 ± 0.032 µg/mL	Thallium, Tl	4.999 ± 0.040 µg/mL
Vanadium, V	5.002 ± 0.032 µg/mL	Zinc, Zn	5.001 ± 0.028 µg/mL

Certified Density: 1.048 g/mL (measured at 20 ± 1 °C)

**Assay Information:**

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
Al	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	060502
As	EDTA		See Sec. 4.2
As	ICP Assay	3103a	100818
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
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	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
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	ICP Assay	3158	993012
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
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

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

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**



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

#### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

#### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

#### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

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

N/A

### 6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

### 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

#### 7.1 Storage and Handling Recommendations

- Keep cap 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 removed aliquots to container.

**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 Safety Data Sheet for information regarding this CRM/RM.

### 9.0 HOMOGENEITY

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

### 10.0 QUALITY STANDARD DOCUMENTATION

#### 10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

#### 10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

#### 10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

#### 10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

### 11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 27, 2015

11.2 Expiration Date

**EXPIRES**  
1 #2016

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

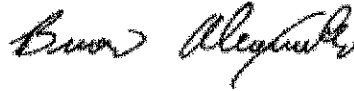
Certificate Prepared By:

Donna Senn  
Product Documentation Technician



Certificate Approved By:

Brian Alexander  
PhD., Technical Process Director



Certifying Officer:

Paul Gaines  
PhD., Senior Technical Director



Reagent

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**MICPMSICV\_00018**



Reference Materials Producer  
Cert #2495.01

# SPEXertificate®

## Certificate of Reference Material



Chemical Testing  
Cert #2495.02

**Catalog Number:** ZCAL-60-250 **Lot No.** 7-230WL  
**Description:** Custom Claritas Standard  
**Matrix:** 5% HNO<sub>3</sub> / Tr. Tart. Acid / Tr. HF

This CLARITAS PPT® Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for inorganic spectroscopic instrumentation such as ICP-OES, DCP, AA, ICP-MS, and XRF. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

The CRM is prepared from high purity single element concentrates of individual elements using Class A laboratory ware to give precise concentrations.

### Instrumental Analysis by ICP Spectrometer:

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

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

SPEX CertiPrep Reference Multi: Lot# ALL 8

### Trace Metallic Impurities in the Actual Solution via ICP-MS Analysis:

Element	µg/L	Element	µg/L	Element	µg/L	Element	µg/L	Element	µg/L	Element	µg/L
Au	<0.4	Ga	<2	Ir	<0.1	Pd	<1	Sc	30	Tm	5
Bi	<1	Gd	4	La	5	Pr	5	Sm	<4	U	0.08
Ce	6	Ge	<8	Li	<4	Pt	<0.1	Ta	7	W	10
Cs	<0.08	Hf	0.7	Lu	4	Rb	30	Tb	5	Y	5
Dy	4	Hg	<0.6	Nb	5	Re	4	Te	<4	Yb	4
Er	<0.4	Ho	5	Nd	<3	Rh	<0.2	Th	4	Zr	7
Eu	<0.5	In	<0.2	P	<300	Ru	<2				

Balances are calibrated regularly with weight sets traceable to NIST#s 32856, 32867 and others. This CRM is guaranteed stable and accurate to ±0.5% of the labeled value. This includes uncertainty components due to preparation, measurement, homogeneity, short-term and long-term stability, as well as transpiration loss. This guarantee is valid for a period of one year from the date of certification only when the material is unopened and stored under ambient laboratory conditions.

Date of Certification: NOV 2014

Certifying Officer: [Signature]

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# Report of Certification

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 quality system consistent with the following guides:

- ISO 9001: Quality management systems – Requirements – certified by UL-DQS
- ISO 17025: General requirements for the competence of testing and calibration laboratories – accredited by A2LA
- ISO Guide 34: General requirements for the competence of reference material producers – accredited by A2LA
- ISO Guide 31: Reference Materials – Contents of certificates and labels
- ISO Guide 35: Reference Materials – General & Statistical Principals for Certification
- Guide To The Expression Of Uncertainty In Measurement 1997
- EURACHEM/CITAC Guide: Quantifying Uncertainty in Analytical Measurement – Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference materials producers
- ISO/REMCO N280

## Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For further assistance, please contact the Sales Support Department at [crmsales@spexcsp.com](mailto:crmsales@spexcsp.com).

## Instructions for Use:

Primary usage of this CRM is in neat form or diluted serially with matrix of a purity at or greater than the purity of the original matrix solution. If dilution is required the diluent must be compatible with all certified analytes and contain stabilizers appropriate for the period of intended use. The CRM can also be used as a spike or with a spike, again with appropriate compatibility considerations. All solutions should be thoroughly mixed, by shaking, prior to use and never pipetted directly from the bottle. All surfaces that come in contact with the solution must be thoroughly cleaned and leached prior to use. Dilutions should be performed only with Class A volumetric glassware.

## Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, analytical instrumentation and personnel have been qualified prior to use. The highest purity acids applicable, 18 megohm, double deionized water, acid-leached triple-rinsed bottles (where appropriate), and Class A/calibrated volumetrics have been used in all preparations.

## Homogeneity:

The homogeneity of the CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4600-HOMOGEN-1A. Since the product is highly homogeneous, any sample size taken for analysis would be within the uncertainty budget. This is consistent with the intended use of the CRM.

## Statistical Estimator and Confidence Limits:

The certified value 'X' listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$  where X = certified value, U = expanded uncertainty, x = property value
- $U = k u_c$  where k = 2 is the coverage factor at the 95% confidence level
- $u_c$  is obtained by combining the individual element standard uncertainty components  $u_i$ , and  $u_c = \sqrt{\sum u_i^2}$

## Certification Traveler Report:

All certified values reported were derived from the Traveler Report (SPEX CertiPrep's traceability documentation) identified by the lot number of this CRM. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further assistance, please contact the Sales Support Department at [crmsales@spexcsp.com](mailto:crmsales@spexcsp.com).

## Legal Notice:

SPEX CertiPrep reference materials are not for any cosmetic, drug or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep, Inc. of any kind whatsoever, whether based on breach of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep, Inc. be liable for any loss of profits or any incidental, special, or consequential damages.

**SPEX CertiPrep** 

Your Science is Our Passion.®

203 Norcross Ave, Metuchen, NJ 08840

[www.spexcertiprep.com](http://www.spexcertiprep.com) • E-mail: [crmsales@spexcsp.com](mailto:crmsales@spexcsp.com)

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Phone: 1-800-LAB-SPEX • Fax: 732-603-9647



Reagent

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**MMSCRI-1B\_00005**

**1.0 ACCREDITATION / REGISTRATION**

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).


**2.0 PRODUCT DESCRIPTION**

Product Code:	Multi Analyte Custom Grade Solution			
Catalog Number:	TAPITT-MSCRI-1B-REV1			
Lot Number:	J2-MEB572092			
Matrix:	3% (v/v) HNO <sub>3</sub>			
Value / Analyte(s):	125 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:			
	Cr <sub>3</sub> ,	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**

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	7.49 ± 0.05 µg/mL	Arsenic, As	0.2501 ± 0.0021 µg/mL
Barium, Ba	2.500 ± 0.019 µg/mL	Beryllium, Be	0.2500 ± 0.0021 µg/mL
Cadmium, Cd	0.2501 ± 0.0019 µg/mL	Calcium, Ca	125.0 ± 0.6 µg/mL
Chromium+3, Cr3	0.5000 ± 0.0041 µg/mL	Cobalt, Co	0.1250 ± 0.0011 µg/mL
Copper, Cu	0.5003 ± 0.0035 µg/mL	Iron, Fe	12.50 ± 0.07 µg/mL
Lead, Pb	0.2501 ± 0.0017 µg/mL	Magnesium, Mg	125.0 ± 0.6 µg/mL
Manganese, Mn	1.250 ± 0.010 µg/mL	Nickel, Ni	0.2500 ± 0.0020 µg/mL
Potassium, K	125.0 ± 0.6 µg/mL	Selenium, Se	1.250 ± 0.010 µg/mL
Silver, Ag	0.2500 ± 0.0023 µg/mL	Sodium, Na	125.0 ± 0.6 µg/mL
Strontium, Sr	1.250 ± 0.008 µg/mL	Thallium, Tl	0.2501 ± 0.0021 µg/mL
Vanadium, V	0.2499 ± 0.0018 µg/mL	Zinc, Zn	1.250 ± 0.010 µg/mL

Certified Density: 1.019 g/mL (measured at 20 ± 1 °C)

**Assay Information:**



ANALYTE	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	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	Calculated		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

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

#### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

#### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

#### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

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

N/A

### 6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

### 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

#### 7.1 Storage and Handling Recommendations

- Keep cap 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 removed aliquots to container.

**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 Safety Data Sheet for information regarding this CRM/RM.

### 9.0 HOMOGENEITY

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

### 10.0 QUALITY STANDARD DOCUMENTATION

#### 10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

#### 10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

#### 10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

#### 10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

### 11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

**11.1 Certification Issue Date**

March 20, 2015

**11.2 Expiration Date**

EXPIRES

01<sup>st</sup> 2016

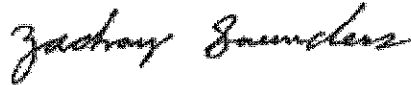
**11.3 Period of Validity**

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

**12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS**

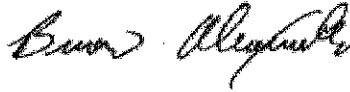
**Certificate Prepared By:**

Zach Saunders  
Product Documentation Technician



**Certificate Approved By:**

Brian Alexander  
PhD., Technical Process Director



**Certifying Officer:**

Paul Gaines  
PhD., Senior Technical Director



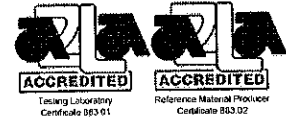
Reagent

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**MMSICSAB-1\_00008**

## 1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).



## 2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution  
Catalog Number: TAPITT-MSICSAB-1  
Lot Number: J2-MEB575125  
Matrix: 3% (v/v) HNO<sub>3</sub>  
Value / Analyte(s): 10 µg/mL ea:  
Ba, Be, Pb,  
Sr, Tl, V

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Barium, Ba	10.00 ± 0.06 µg/mL	Beryllium, Be	10.00 ± 0.06 µg/mL
Lead, Pb	10.00 ± 0.05 µg/mL	Strontium, Sr	10.00 ± 0.06 µg/mL
Thallium, Tl	10.00 ± 0.08 µg/mL	Vanadium, V	10.00 ± 0.06 µg/mL

Certified Density: 1.013 g/mL (measured at 20 ± 1 °C)

### Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	ICP Assay	3105a	090514
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Tl	ICP Assay	3158	993012
V	ICP Assay	3165	992706
V	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.  
[  $\sum (s_i)^2$  ]<sup>1/2</sup> = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

#### **4.0 TRACEABILITY TO NIST**

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

##### **4.1 Thermometer Calibration**

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

##### **4.2 Balance Calibration**

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

##### **4.3 Glassware Calibration**

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

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

N/A

#### **6.0 INTENDED USE**

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

#### **7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL**

##### **7.1 Storage and Handling Recommendations**

- Keep cap 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 removed aliquots to container.

#### **8.0 HAZARDOUS INFORMATION**

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

#### **9.0 HOMOGENEITY**

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

#### **10.0 QUALITY STANDARD DOCUMENTATION**

##### **10.1 10CFR50 Appendix B - Nuclear Regulatory Commission**

- Domestic Licensing of Production and Utilization Facilities

##### **10.2 10CFR21 - Nuclear Regulatory Commission**

- Reporting defects and Non-Compliance

##### **10.3 ISO 9001 Quality Management System Registration**

- SAI Global File Number 010105

##### **10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"**

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

##### **10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"**

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

#### **11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY**

11.1 Certification Issue Date

April 27, 2015

11.2 Expiration Date

**EXPIRES**  
1 #2016

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

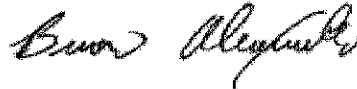
Certificate Prepared By:

Donna Senn  
Product Documentation Technician



Certificate Approved By:

Brian Alexander  
PhD., Technical Process Director



Certifying Officer:

Paul Gaines  
PhD., Senior Technical Director



Reagent

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**MMSICSAB-2\_00007**



## 1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).



## 2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution  
 Catalog Number: TAPITT-MSICSAB-2  
 Lot Number: J2-MEB575126  
 Matrix: 3% (v/v) HNO<sub>3</sub>  
 tr. HF  
 Value / Analyte(s): 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

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	10.00 ± 0.07 µg/mL	Boron, B	25.01 ± 0.17 µg/mL
Selenium, Se	25.00 ± 0.17 µg/mL	Silicon, Si	250.0 ± 1.9 µg/mL
Tin, Sn	50.01 ± 0.23 µg/mL		

Certified Density: 1.016 g/mL (measured at 20 ± 1 °C)

### Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	070514
Sb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Si	Calculated		See Sec. 4.2
Si	ICP Assay	3150	071204
Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330

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

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

##### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

##### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

##### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

#### 5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ( $\mu\text{g/mL}$ )

N/A

#### 6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

#### 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

##### 7.1 Storage and Handling Recommendations

- Keep cap 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 removed aliquots to container.

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

#### 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

#### 9.0 HOMOGENEITY

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

#### 10.0 QUALITY STANDARD DOCUMENTATION

##### 10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

##### 10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

##### 10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

##### 10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 27, 2015

11.2 Expiration Date

EXPIRES  
1 #2016

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

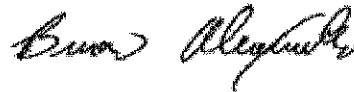
Certificate Prepared By:

Donna Senn  
Product Documentation Technician



Certificate Approved By:

Brian Alexander  
PhD., Technical Process Director



Certifying Officer:

Paul Gaines  
PhD., Senior Technical Director



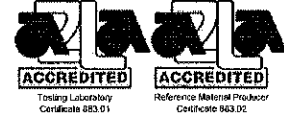
Reagent

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**MTAPITTTICPMS\_00020**

**1.0 ACCREDITATION / REGISTRATION**

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105)).


**2.0 PRODUCT DESCRIPTION**

Product Code: Multi Analyte Custom Grade Solution

Catalog Number: TAPITT-MS-ICPMS

Lot Number: H2-MEB532047

Matrix: 0.7% (v/v) HNO<sub>3</sub>

Value / Analyte(s):

- 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: Cr<sub>3</sub>,
- 5 µg/mL ea: Ag, Be, Cd, Tl,
- 4 µg/mL ea: As,
- 2 µg/mL ea: Pb,
- 1 µg/mL ea: Se

*Rec'd  
6/17/19  
EJR*

**3.0 CERTIFIED VALUES AND UNCERTAINTIES**

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Aluminum, Al	200.0 ± 1.0 µg/mL	Arsenic, As	4.002 ± 0.028 µg/mL	Barium, Ba	200.0 ± 1.0 µg/mL
Beryllium, Be	5.000 ± 0.029 µg/mL	Boron, B	100.0 ± 0.7 µg/mL	Cadmium, Cd	5.000 ± 0.024 µg/mL
Chromium+3, Cr <sub>3</sub>	20.00 ± 0.10 µg/mL	Cobalt, Co	50.02 ± 0.25 µg/mL	Copper, Cu	25.00 ± 0.17 µg/mL
Iron, Fe	100.0 ± 0.5 µg/mL	Lead, Pb	2.000 ± 0.010 µg/mL	Manganese, Mn	49.99 ± 0.22 µg/mL
Nickel, Ni	50.02 ± 0.24 µg/mL	Selenium, Se	1.001 ± 0.006 µg/mL	Silver, Ag	5.002 ± 0.032 µg/mL
Strontium, Sr	100.0 ± 0.6 µg/mL	Thallium, Tl	5.002 ± 0.033 µg/mL	Vanadium, V	50.00 ± 0.24 µg/mL
Zinc, Zn	50.02 ± 0.28 µg/mL				

Certified Density: 1.003 g/mL (measured at 20 ± 1 °C)

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	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	120619
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	3168	993012
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
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

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

##### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

##### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

##### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

#### 5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ( $\mu\text{g/mL}$ )

N/A

#### 6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

## 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

### 7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at  $20 \pm 4^\circ\text{C}$ . Do not pipette from the container. Do not return removed aliquots to container.

**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 Safety Data Sheet for information regarding this CRM/RM.

## 9.0 HOMOGENEITY

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

## 10.0 QUALITY STANDARD DOCUMENTATION

### 10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

### 10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

### 10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

### 10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

## 11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

June 06, 2014

### 11.2 Expiration Date

**EXPIRES**  
01/2015

### 11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

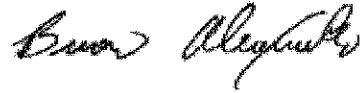
Certificate Prepared By:

Donna Senn  
Product Documentation Technician



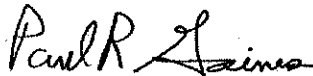
Certificate Approved By:

Brian Alexander  
PhD., Technical Process Director



Certifying Officer:

Paul Gaines  
PhD., Senior Technical Director





Reagent

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**MTAPIT'TMSA\_00023**

1407255  
 1407256  
 1407257

**1.0 ACCREDITATION / REGISTRATION**

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105)).


**2.0 PRODUCT DESCRIPTION**

Product Code: Multi Analyte Custom Grade Solution  
 Catalog Number: TAPITT-MS-A  
 Lot Number: H2-MEB532044  
 Matrix: 3% (v/v) HNO<sub>3</sub>  
 Value / Analyte(s): 5 000 µg/mL ea:  
 Ca, K, Mg,  
 Na

REC. 11/13/14 SLB

**3.0 CERTIFIED VALUES AND UNCERTAINTIES**

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Calcium	5 000 ± 22 µg/mL	Magnesium	5 000 ± 23 µg/mL
Potassium	5 000 ± 22 µg/mL	Sodium	5 000 ± 22 µg/mL

Certified Density: 1.071 g/mL (measured at 20 ± 1 °C)

**Assay Information:**

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	120715

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

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

( $\bar{x}$ ) = 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**

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

- 4.1 Thermometer Calibration**
- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.
- 4.2 Balance Calibration**
- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.
- 4.3 Glassware Calibration**
- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.
- 5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ( $\mu\text{g/mL}$ )**
- N/A
- 6.0 INTENDED USE**
- For the calibration of analytical instruments and validation of analytical methods as appropriate.
- 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL**
- 7.1 Storage and Handling Recommendations**
- Keep tightly sealed when not in use. Store and use at  $20 \pm 4^\circ\text{C}$ . Do not pipette from the container. Do not return removed aliquots to container.
- 8.0 HAZARDOUS INFORMATION**
- Please refer to the Safety Data Sheet for information regarding this CRM/RM.
- 9.0 HOMOGENEITY**
- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.
- 10.0 QUALITY STANDARD DOCUMENTATION**
- 10.1 10CFR50 Appendix B - Nuclear Regulatory Commission**
- Domestic Licensing of Production and Utilization Facilities
- 10.2 10CFR21 - Nuclear Regulatory Commission**
- Reporting defects and Non-Compliance
- 10.3 ISO 9001 Quality Management System Registration**
- SAI Global File Number 010105
- 10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"**
- Chemical Testing - Accredited / A2LA Certificate Number 883.01
- 10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"**
- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 05, 2014

11.2 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.3. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

11.3 Expiration Date **EXPIRES**

01<sup>st</sup> 2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

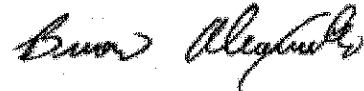
Certificate Prepared By:

Donna Senn  
Product Documentation Technician



Certificate Approved By:

Brian Alexander  
PhD., Technical Process Director



Certifying Officer:

Paul Gaines  
PhD., Senior Technical Director



Reagent

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**MTAPITTMSC\_00029**



300 Technology Drive  
Christiansburg, VA 24073 - USA  
inorganicventures.com

# CERTIFICATE OF ANALYSIS

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

1407263  
1407261  
1407262

## 1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).



## 2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution  
Catalog Number: TAPITT-MS-C  
Lot Number: H2-MEB532046  
Matrix: 3% (v/v) HNO3  
tr. HF  
Value / Analyte(s): 1 000 µg/mL ea:  
Si,  
200 µg/mL ea:  
Sn,  
100 µg/mL ea:  
Mo, Ti,  
50 µg/mL ea:  
Sb

*rec'd 11/13/14 SLB*

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony	49.98 ± 0.38 µg/mL	Molybdenum	100.0 ± 0.5 µg/mL
Silicon	1 000 ± 7 µg/mL	Tin	200.0 ± 1.4 µg/mL
Titanium	100.0 ± 0.7 µg/mL		

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

### Assay Information:

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

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

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

( $\bar{x}$ ) = 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

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

##### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

##### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

##### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

#### 5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ( $\mu\text{g/mL}$ )

- N/A

#### 6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

#### 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

##### 7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at  $20 \pm 4^\circ\text{C}$ . Do not pipette from the container. Do not return removed aliquots to container.

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

#### 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

#### 9.0 HOMOGENEITY

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

#### 10.0 QUALITY STANDARD DOCUMENTATION

##### 10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

##### 10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

##### 10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

##### 10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 05, 2014

11.2 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.3. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

11.3 Expiration Date

EXPIRES

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





Reagent

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**sv benzoepyre\_00001**



**Certified Reference Material CRM**

*51 Benzofluorene primary*  
 100313

ISO 9001 QS Registered  
 ISO 17025-34-35-43 Accredited  
 Scopes: http://AbsoluteStandards.com

**CERTIFIED WEIGHT REPORT**

**Part Number:** Z1016  
**Lot Number:** 100313  
**Description:** Benzofluorene  
**Expiration Date:** 100318  
**Recommended Storage:** Refrigerate (4 °C)  
**Nominal Concentration (µg/mL):** 1000

**Lot #** 44325  
**Solvent(s):** Methylene chloride

Formulated By:	Paul Barron	100313	DATE
Reviewed By:	<i>Pedro L. Rentas</i>	100313	DATE

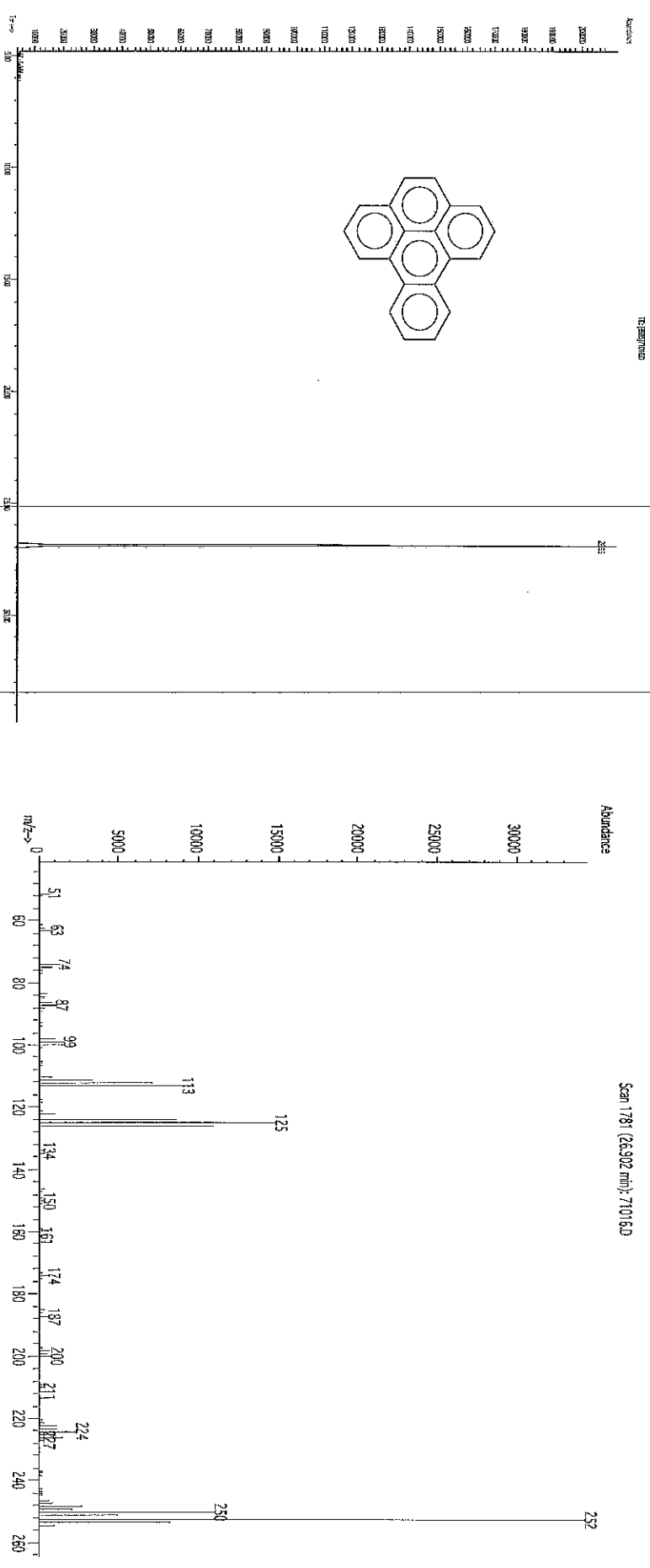
Weight(s) shown below were combined and diluted to:

100.0 0.003 SE-05 Balance Uncertainty  
 1000 0.003 Fisk Uncertainty

**MSDS Information**

Compound	Lot	Nominal Conc (µg/mL)	Purity (%)	Uncertainty (%)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty	(Solvent Safety Info. On Attached pg.)	CAS#	OSHA PEL (TWA)	LD50
1. Benzofluorene	1016	012011	1000	99	0.2	0.10100	0.10125	1002.5	0.0042	00192-97-2	N/A	N/A

**Method GCMSD-3.M:** Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B = 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.



Reagent

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**SV2NAPAMINEs\_00002**

# Certificate of Analysis

## 2-Naphthylamine Solution

**Product Number:** EPA-1135

**Page:** 1 of 1

**Lot Number:** CK-1617

**Lot Issue Date:** 20-May-2013

**Expiration Date:** 30-Jun-2017

This certified Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
2-naphthylamine	000091-59-8	RM06488	1001 ± 5 µg/mL

**Matrix:** methanol (methyl alcohol)

**Storage:** Store at Room Temperature (15-30°C)

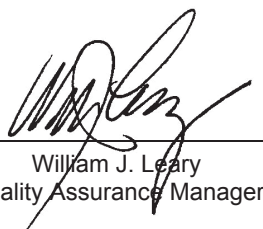
ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



ISO 17025:2005  
Accredited  
A2LA  
Cert. No. 0851-01

ISO 9001:2008  
Registered  
TUV USA, Inc.  
Cert. No. 09-1009

250 Smith Street, North Kingstown, RI 02852 USA  
401-294-9400 Fax: 295-2330  
www.ultrasci.com



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William J. Leary  
Quality Assurance Manager

Reagent

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**SVLVIntstd\_00007**



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

www.restek.com

*SV/VintStd/A A093676*



### Certificate of Analysis

**FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.**

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

**Catalog No. :** 567684 **Lot No.:** A093676  
**Description :** 8270 Internal Standard  
8270 Internal Standard 2,000µg/mL, Methylene Chloride, 5mL/ampul  
**Container Size :** 5 mL **Pkg Amt:** > 5 mL  
**Expiration Date :** February 2018 **Storage:** 10°C or colder  
**Handling:** Sonication required. Mix is photosensitive.

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)			
1	1,4-Dichlorobenzene-d4	2,000.0 µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 3855-82-1		+/-	92.7158	µg/mL	Unstressed
	Purity 99%		+/-	101.3766	µg/mL	Stressed
2	Naphthalene-d8	2,000.0 µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 1146-65-2		+/-	92.7158	µg/mL	Unstressed
	Purity 99%		+/-	101.3766	µg/mL	Stressed
3	Acenaphthene-d10	2,000.0 µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 15067-26-2		+/-	92.7163	µg/mL	Unstressed
	Purity 97%		+/-	101.3771	µg/mL	Stressed
4	Phenanthrene-d10	2,000.0 µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 1517-22-2		+/-	92.7158	µg/mL	Unstressed
	Purity 99%		+/-	101.3766	µg/mL	Stressed
5	Chrysene-d12	2,000.0 µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 1719-03-5		+/-	92.7150	µg/mL	Unstressed
	Purity 98%		+/-	101.3758	µg/mL	Stressed
6	Perylene-d12	2,000.0 µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 1520-96-3		+/-	92.7158	µg/mL	Unstressed
	Purity 99%		+/-	101.3766	µg/mL	Stressed

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

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

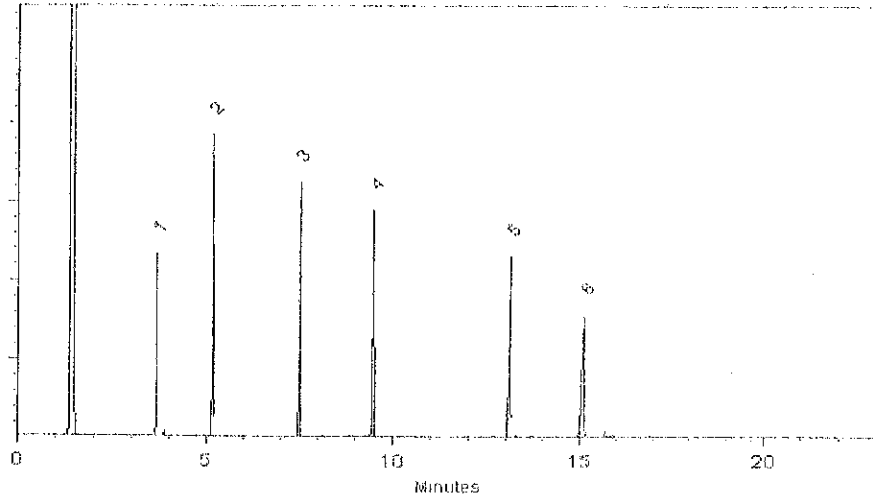
Carrier Gas:  
Hydrogen-constant pressure 10 psi.

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: 1128342315

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

Reagent

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**SVLVlist12\_00002**





# 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. : 567679 Lot No.: A0102912

Description : 8270 List 2 / Std #2

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

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : April 30, 2015 Storage: 10°C or colder

Handling: Sonication required. Mix is photosensitive.

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Methyl methanesulfonate	1,004.0 µg/mL (Lot MKBJ8702V)	+/-	5.9635	µg/mL	Gravimetric
	CAS # 66-27-3		+/-	31.2232	µg/mL	Unstressed
	Purity 99%		+/-	32.8038	µg/mL	Stressed
2	Ethyl methanesulfonate	1,007.0 µg/mL (Lot FIN01-LVQL)	+/-	5.9813	µg/mL	Gravimetric
	CAS # 62-50-0		+/-	31.3165	µg/mL	Unstressed
	Purity 99%		+/-	32.9019	µg/mL	Stressed
3	Pentachloroethane	1,000.0 µg/mL (Lot 7GHYB)	+/-	5.9397	µg/mL	Gravimetric
	CAS # 76-01-7		+/-	31.0988	µg/mL	Unstressed
	Purity 99%		+/-	32.6732	µg/mL	Stressed
4	2,6-Dichlorophenol	1,000.0 µg/mL (Lot 03518LN)	+/-	5.9397	µg/mL	Gravimetric
	CAS # 87-65-0		+/-	31.0988	µg/mL	Unstressed
	Purity 99%		+/-	32.6732	µg/mL	Stressed
5	Hexachloropropene	1,000.0 µg/mL (Lot 44391/3)	+/-	5.9397	µg/mL	Gravimetric
	CAS # 1888-71-7		+/-	31.0988	µg/mL	Unstressed
	Purity 99%		+/-	32.6732	µg/mL	Stressed
6	Isosafrole (cis & trans)	999.6 µg/mL (Lot MKBK3786V) 83% trans; 17% cis	+/-	5.9373	µg/mL	Gravimetric
	CAS # 120-58-1		+/-	31.0863	µg/mL	Unstressed
	Purity 98%		+/-	32.6601	µg/mL	Stressed
7	1-Chloronaphthalene	1,001.0 µg/mL (Lot MYWUK)	+/-	5.9456	µg/mL	Gravimetric
	CAS # 90-13-1		+/-	31.1299	µg/mL	Unstressed
	Purity 99%		+/-	32.7058	µg/mL	Stressed
8	1,4-Naphthoquinone	999.0 µg/mL (Lot 3232134094)	+/-	5.9338	µg/mL	Gravimetric
	CAS # 130-15-4		+/-	31.0677	µg/mL	Unstressed
	Purity 99%		+/-	32.6405	µg/mL	Stressed

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

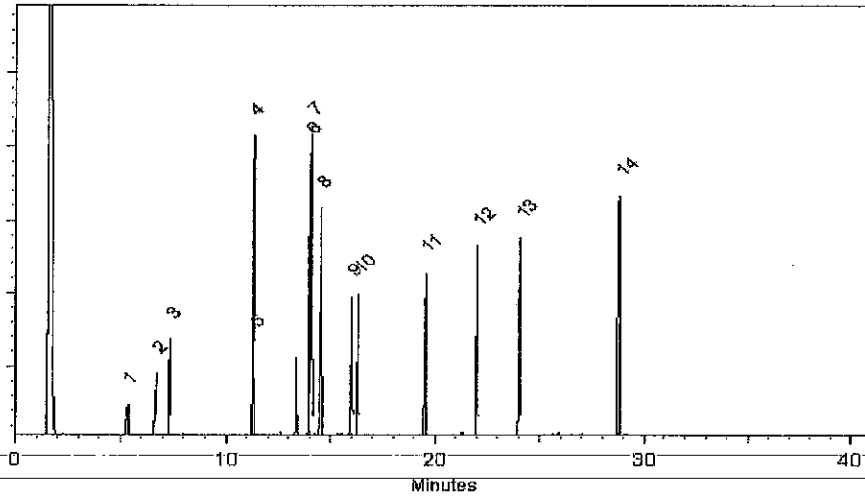
**Carrier Gas:**  
hydrogen-constant pressure 10 psi.

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

**Inj. Temp:**  
250°C

**Det. Temp:**  
330°C

**Det. Type:**  
FID



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

*F. Joseph Tallon*  
F. Joseph Tallon - Mix Technician

Date Mixed: 23-Apr-2014      Balance: 1128360905

*Jennifer L. Pollino*  
Jennifer L. Pollino - QC Analyst

Date Passed: 29-Apr-2014

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

Reagent

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**SVLVstd1\_00026**



# 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 **Lot No.:** A0101615  
**Description :** 8270 List 1 / Std #1 MegaMix  
 8270 List 1 / Std #1 MegaMix 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul  
**Container Size :** 5 mL **Pkg Amt:** > 5 mL  
**Expiration Date :** August 31, 2015 **Storage:** 10°C or colder  
**Handling:** Sonication required. Mix is photosensitive.

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	1,4-Dioxane	1,006.4 µg/mL	+/-	5.8510	µg/mL	Gravimetric
	CAS # 123-91-1 (Lot SHBD4119V)		+/-	11.0182	µg/mL	Unstressed
	Purity 99%		+/-	18.6887	µg/mL	Stressed
2	Pyridine	1,001.7 µg/mL	+/-	5.8237	µg/mL	Gravimetric
	CAS # 110-86-1 (Lot 02718MW)		+/-	10.9668	µg/mL	Unstressed
	Purity 99%		+/-	18.6014	µg/mL	Stressed
3	N-Nitrosodimethylamine	1,001.4 µg/mL	+/-	5.8222	µg/mL	Gravimetric
	CAS # 62-75-9 (Lot 2179300)		+/-	10.9640	µg/mL	Unstressed
	Purity 99%		+/-	18.5968	µg/mL	Stressed
4	Aniline	1,009.3 µg/mL	+/-	5.8682	µg/mL	Gravimetric
	CAS # 62-53-3 (Lot 68396APV)		+/-	11.0505	µg/mL	Unstressed
	Purity 99%		+/-	18.7435	µg/mL	Stressed
5	Phenol	1,009.5 µg/mL	+/-	5.8690	µg/mL	Gravimetric
	CAS # 108-95-2 (Lot SHBC6998V)		+/-	11.0522	µg/mL	Unstressed
	Purity 99%		+/-	18.7463	µg/mL	Stressed
6	Bis(2-chloroethyl)ether	1,005.2 µg/mL	+/-	5.8440	µg/mL	Gravimetric
	CAS # 111-44-4 (Lot 45296HKV)		+/-	11.0051	µg/mL	Unstressed
	Purity 99%		+/-	18.6664	µg/mL	Stressed
7	2-Chlorophenol	1,006.4 µg/mL	+/-	5.8510	µg/mL	Gravimetric
	CAS # 95-57-8 (Lot MKBD3900V)		+/-	11.0182	µg/mL	Unstressed
	Purity 99%		+/-	18.6887	µg/mL	Stressed
8	1,3-Dichlorobenzene	1,009.2 µg/mL	+/-	5.8673	µg/mL	Gravimetric
	CAS # 541-73-1 (Lot BCBC1891V)		+/-	11.0489	µg/mL	Unstressed
	Purity 99%		+/-	18.7407	µg/mL	Stressed

25	Bis(2-chloroethoxy)methane CAS # 111-91-1 Purity 99%	(Lot 2238100)	1,006.3 µg/mL	+/-	5.8507 11.0177 18.6878	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	2,4-Dichlorophenol CAS # 120-83-2 Purity 99%	(Lot BCBH1617V)	1,009.7 µg/mL	+/-	5.8705 11.0549 18.7509	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot 26896BM)	1,000.7 µg/mL	+/-	5.8179 10.9558 18.5829	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBH4351V)	1,001.0 µg/mL	+/-	5.8196 10.9591 18.5884	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	4-Chloroaniline CAS # 106-47-8 Purity 98%	(Lot 12528PH)	999.5 µg/mL	+/-	5.8112 10.9432 18.5615	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	Hexachlorobutadiene CAS # 87-68-3 Purity 98%	(Lot K22W009)	1,001.9 µg/mL	+/-	5.8249 10.9690 18.6052	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	2-Methylnaphthalene CAS # 91-57-6 Purity 96%	(Lot 19399MJV)	1,006.1 µg/mL	+/-	5.8497 11.0158 18.6846	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	4-Chloro-3-methylphenol CAS # 59-50-7 Purity 99%	(Lot STBC0769V)	1,004.2 µg/mL	+/-	5.8382 10.9941 18.6479	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	1-Methylnaphthalene CAS # 90-12-0 Purity 99%	(Lot 5250.00-10)	1,000.6 µg/mL	+/-	5.8173 10.9547 18.5810	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	1,2,4,5-Tetrachlorobenzene CAS # 95-94-3 Purity 99%	(Lot 06024AIV)	1,002.1 µg/mL	+/-	5.8263 10.9717 18.6098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Hexachlorocyclopentadiene CAS # 77-47-4 Purity 99%	(Lot 2220500)	1,009.5 µg/mL	+/-	5.8690 11.0522 18.7463	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	2,4,6-Trichlorophenol CAS # 88-06-2 Purity 99%	(Lot MKBH7393V)	1,003.6 µg/mL	+/-	5.8350 10.9881 18.6376	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	2,4,5-Trichlorophenol CAS # 95-95-4 Purity 99%	(Lot FHM01)	1,008.9 µg/mL	+/-	5.8658 11.0461 18.7361	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	2-Chloronaphthalene CAS # 91-58-7 Purity 99%	(Lot FIJ01)	1,004.8 µg/mL	+/-	5.8417 11.0007 18.6590	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Biphenyl CAS # 92-52-4 Purity 99%	(Lot 1277976)	1,005.6 µg/mL	+/-	5.8464 11.0095 18.6739	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
40	2-Nitroaniline CAS # 88-74-4 Purity 99%	(Lot MKBF9132V)	1,007.1 µg/mL	+/-	5.8551 11.0259 18.7017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

57	Azobenzene CAS # 103-33-3 Purity 99%	(Lot 130305JLM)	1,006.5 µg/mL	+/-	5.8516 11.0193 18.6906	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	4-Bromophenyl phenyl ether CAS # 101-55-3 Purity 99%	(Lot STBB9729V)	1,003.7 µg/mL	+/-	5.8353 10.9887 18.6386	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	Hexachlorobenzene CAS # 118-74-1 Purity 99%	(Lot LB93343V)	1,008.0 µg/mL	+/-	5.8606 11.0363 18.7193	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	Pentachlorophenol CAS # 87-86-5 Purity 99%	(Lot 130826JLM)	2,006.3 µg/mL	+/-	11.6648 21.9664 37.2586	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	Phenanthrene CAS # 85-01-8 Purity 99%	(Lot MKBJ4205V)	1,004.4 µg/mL	+/-	5.8394 10.9963 18.6516	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	Anthracene CAS # 120-12-7 Purity 99%	(Lot MKBK5208V)	1,007.3 µg/mL	+/-	5.8565 11.0286 18.7064	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	n-Hexadecane (C16) CAS # 544-76-3 Purity 99%	(Lot SHBC3991V)	1,001.9 µg/mL	+/-	5.8248 10.9690 18.6051	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	Carbazole CAS # 86-74-8 Purity 98%	(Lot S42950-417)	1,001.8 µg/mL	+/-	5.8246 10.9685 18.6043	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	Di-n-butylphthalate CAS # 84-74-2 Purity 99%	(Lot MKBG1851V)	1,002.5 µg/mL	+/-	5.8286 10.9761 18.6172	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	Fluoranthene CAS # 206-44-0 Purity 98%	(Lot 00828AJ)	1,009.4 µg/mL	+/-	5.8685 11.0511 18.7444	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	Pyrene CAS # 129-00-0 Purity 98%	(Lot BCBJ0984V)	1,004.0 µg/mL	+/-	5.8371 10.9921 18.6443	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	Benzyl butyl phthalate CAS # 85-68-7 Purity 99%	(Lot 03027HV)	1,005.4 µg/mL	+/-	5.8452 11.0073 18.6701	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	Benz(a)anthracene CAS # 56-55-3 Purity 99%	(Lot ER031412-01)	1,006.4 µg/mL	+/-	5.8513 11.0188 18.6896	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Chrysene CAS # 218-01-9 Purity 99%	(Lot PR121912-01)	1,003.2 µg/mL	+/-	5.8327 10.9837 18.6302	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Bis(2-ethylhexyl)phthalate CAS # 117-81-7 Purity 99%	(Lot MKBH9511V)	1,000.9 µg/mL	+/-	5.8190 10.9580 18.5866	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
72	Di-n-octyl phthalate CAS # 117-84-0 Purity 99%	(Lot 1674300)	1,002.3 µg/mL	+/-	5.8272 10.9733 18.6126	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

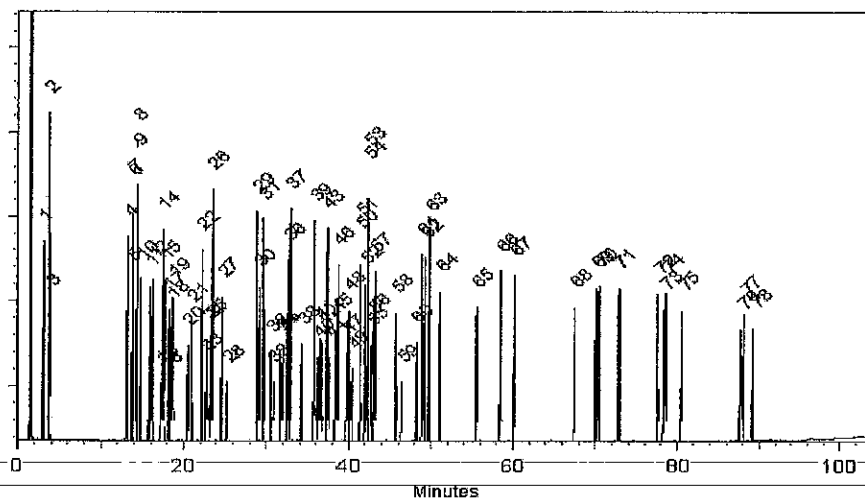
**Carrier Gas:**  
hydrogen-constant pressure 10 psi

**Temp. Program:**  
95°C (hold 3 min.) to 330°C  
@ 3°C/min. (hold 3 min.)

**Inj. Temp:**  
250°C

**Det. Temp:**  
300°C

**Det. Type:**  
FID



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

*Rebecca Sawyer*

Date Mixed: 26-Feb-2014      Balance: 1128360905

*Jodi E. Breon*  
Jodi E. Breon - QA Analyst

Date Passed: 04-Mar-2014

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

Reagent

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**SVLVstd1\_00030**



SVW 8070 New ASTM #1 Mega Mix 0010399



CERTIFIED REFERENCE MATERIAL

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 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.*

1446137  
 CT#  
 1449141  
 1449142  
 1449140  
 1449136  
 1449138

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

## CERTIFIED VALUES

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

8	<del>n-Dodecane</del> CAS # 118-5 Purity %	(Lot SHBF1587V)	1,000.5 µg/mL	+/- 5.8170 +/- 10.9542 +/- 18.5801	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,4-Dichlorobenzene CAS # 106-46-7 Purity %	(Lot MKBL3891V)	1,005.3 µg/mL	+/- 5.8449 +/- 11.0067 +/- 18.6692	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	1,3-Dichlorobenzene CAS # 106-73-1 Purity %	(Lot BCBC1891V)	1,002.0 µg/mL	+/- 5.8257 +/- 10.9706 +/- 18.6079	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	1,2-Dichlorobenzene CAS # 95-1 Purity %	(Lot 68996CMV)	1,006.5 µg/mL	+/- 5.8519 +/- 11.0199 +/- 18.6915	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Benzylalcohol CAS # 100-1-6 Purity %	(Lot SHBC1850V)	1,000.4 µg/mL	+/- 5.8164 +/- 10.9531 +/- 18.5782	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	2,2'-oxybis(1-chloropropane) CAS # 1080-1 Purity 99%	(Lot 2-EAW-18-3)	1,000.0 µg/mL	+/- 5.8141 +/- 10.9487 +/- 18.5708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	2-Methylphenol (o-cresol) CAS # 95-47 Purity 99%	(Lot SHBC1479V)	1,003.6 µg/mL	+/- 5.8350 +/- 10.9881 +/- 18.6376	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Hexachloroethane CAS # 67-73 Purity 99%	(Lot 4H3SF)	1,005.9 µg/mL	+/- 5.8484 +/- 11.0133 +/- 18.6804	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Acetophenone CAS # 98-86 Purity 99%	(Lot MKBR7156V)	1,002.7 µg/mL	+/- 5.8298 +/- 10.9783 +/- 18.6209	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	N-Nitroso-di-n-propylamine CAS # 621-647 Purity 99%	(Lot OPAGF)	1,003.9 µg/mL	+/- 5.8368 +/- 10.9914 +/- 18.6432	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	4-Methylphenol (p-cresol) CAS # 106-443 Purity 99%	(Lot 49396APV)	500.4 µg/mL	+/- 2.9161 +/- 5.4823 +/- 9.2949	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	3-Methylphenol (m-cresol) CAS # 108-394 Purity 99%	(Lot SHBD0627V)	500.2 µg/mL	+/- 2.9149 +/- 5.4801 +/- 9.2912	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Nitrobenzene CAS # 98-95-3 Purity 99%	(Lot 65096APV)	1,001.1 µg/mL	+/- 5.8205 +/- 10.9607 +/- 18.5912	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	Isophorone CAS # 78-59-1 Purity 97%	(Lot 06705DE)	999.3 µg/mL	+/- 5.8100 +/- 10.9410 +/- 18.5577	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	2-Nitrophenol CAS # 88-75-5 Purity 99%	(Lot BCBI17602V)	1,000.0 µg/mL	+/- 5.8141 +/- 10.9487 +/- 18.5708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	2,4-Dimethylphenol CAS # 105-67-9 Purity 99%	(Lot 10165155)	1,003.2 µg/mL	+/- 5.8327 +/- 10.9837 +/- 18.6302	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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

56	Azobenzene CAS # 103-33-3 Purity 99%	(Lot MKBS2559V)	1,002.3 µg/mL	+/- 5.8275 +/- 10.9739 +/- 18.6135	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	Diphenylamine CAS # 122-39-4 Purity 99%	(Lot 07525MF) <i>86-30-6 nitroso diphenylamine</i>	1,713.4 µg/mL	+/- 9.9619 +/- 18.7595 +/- 31.8192	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	4-Nitroaniline CAS # 100-01-6 Purity 99%	(Lot BCBG4702V)	1,002.8 µg/mL	+/- 5.8304 +/- 10.9794 +/- 18.6228	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol) CAS # 534-52-1 Purity 99%	(Lot LC06195V)	2,002.0 µg/mL	+/- 11.6398 +/- 21.9193 +/- 37.1787	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	4-Bromophenyl phenyl ether CAS # 101-55-3 Purity 99%	(Lot STBB9729V)	1,000.5 µg/mL	+/- 5.8170 +/- 10.9542 +/- 18.5801	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	Hexachlorobenzene CAS # 118-74-1 Purity 98%	(Lot LC04221V)	1,002.1 µg/mL	+/- 5.8260 +/- 10.9711 +/- 18.6089	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	Pentachlorophenol CAS # 87-86-5 Purity 99%	(Lot 140626JLM)	2,000.3 µg/mL	+/- 11.6299 +/- 21.9007 +/- 37.1471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	Phenanthrene CAS # 85-01-8 Purity 98%	(Lot MKBL6906V)	999.0 µg/mL	+/- 5.8083 +/- 10.9379 +/- 18.5524	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	n-Octadecane (C18) CAS # 593-45-3 Purity 99%	(Lot OGCDK)	1,006.5 µg/mL	+/- 5.8519 +/- 11.0199 +/- 18.6915	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	Anthracene CAS # 120-12-7 Purity 99%	(Lot MKBK5208V)	1,000.0 µg/mL	+/- 5.8141 +/- 10.9487 +/- 18.5708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	Carbazole CAS # 86-74-8 Purity 98%	(Lot S42950-417)	1,000.1 µg/mL	+/- 5.8146 +/- 10.9497 +/- 18.5725	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	Di-n-butylphthalate CAS # 84-74-2 Purity 99%	(Lot MKBL8501V)	1,000.0 µg/mL	+/- 5.8141 +/- 10.9487 +/- 18.5708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	Fluoranthene CAS # 206-44-0 Purity 98%	(Lot MKBQ6360V)	999.7 µg/mL	+/- 5.8123 +/- 10.9454 +/- 18.5652	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	Pyrene CAS # 129-00-0 Purity 98%	(Lot BCBJ0984V)	999.1 µg/mL	+/- 5.8089 +/- 10.9390 +/- 18.5543	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Benzyl butyl phthalate CAS # 85-68-7 Purity 99%	(Lot 03027HV)	1,001.2 µg/mL	+/- 5.8211 +/- 10.9618 +/- 18.5931	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Benz(a)anthracene CAS # 56-55-3 Purity 99%	(Lot ER031412-01)	1,001.4 µg/mL	+/- 5.8222 +/- 10.9640 +/- 18.5968	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

*86-30-6*

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

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

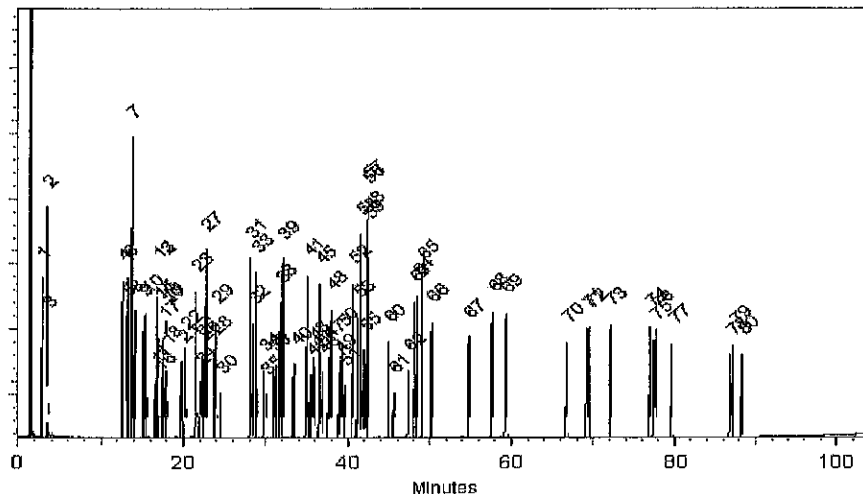
**Carrier Gas:**  
hydrogen-constant pressure 10 psi

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

**Inj. Temp:**  
250°C

**Det. Temp:**  
300°C

**Det. Type:**  
FID



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

*F. Joseph Tallon*  
F. Joseph Tallon - Mix Technician

Date Mixed: 24-Nov-2014 Balance: 1128360905

*Jodi E. Breon*  
Jodi E. Breon - QA Analyst

Date Passed: 05-Dec-2014

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

Reagent

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**SVLVstd10\_00001**





# CERTIFIED REFERENCE MATERIAL

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 SDS PRIOR TO USE.

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

**Catalog No. :** 569731 **Lot No.:** A0107943

**Description :** 8270 List 1 / Std #10  
8270 List 1 / Std #10 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

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

**Expiration Date :** June 30, 2016 **Storage:** 10°C or colder

### CERTIFIED VALUES

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

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

Reagent

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**SVLVstd11\_00001**



# CERTIFIED REFERENCE MATERIAL

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 SDS PRIOR TO USE.

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**Catalog No. :** 569732 **Lot No.:** A0108035

**Description :** 8270 List 1 / Std #11  
8270 List 1 / Std #11 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

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

**Expiration Date :** June 30, 2016 **Storage:** 10°C or colder

**Handling:** This product is photosensitive.

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Benzaldehyde	2,000.6 µg/mL (Lot SHBD3510V)	+/-	11.6317	µg/mL	Gravimetric
	CAS # 100-52-7		+/-	64.1305	µg/mL	Unstressed
	Purity 99%		+/-	74.5493	µg/mL	Stressed
2	epsilon-Caprolactam	2,001.2 µg/mL (Lot H16X016)	+/-	11.6351	µg/mL	Gravimetric
	CAS # 105-60-2		+/-	64.1498	µg/mL	Unstressed
	Purity 99%		+/-	74.5716	µg/mL	Stressed
3	Atrazine	2,004.3 µg/mL (Lot TZ8ED)	+/-	11.6532	µg/mL	Gravimetric
	CAS # 1912-24-9		+/-	64.2490	µg/mL	Unstressed
	Purity 98%		+/-	74.6870	µg/mL	Stressed

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

Reagent

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**SVLVstd2\_00012**



# CERTIFIED REFERENCE MATERIAL

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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. :** 567673 **Lot No.:** A0100824

**Description :** 8270 List 1 / Std #2 Amines

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

**Container Size :** 10 mL **Pkg Amt:** > 5 mL

**Expiration Date :** July 31, 2015 **Storage:** 10°C or colder

**Handling:** Contains carcinogen

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	epsilon-Caprolactam	2,004.8 µg/mL (Lot 10000218)	+/-	11.7653	µg/mL Gravimetric
	CAS # 105-60-2		+/-	22.0081	µg/mL Unstressed
	Purity 99%		+/-	37.2650	µg/mL Stressed
2	Atrazine	2,000.4 µg/mL (Lot TZ8ED)	+/-	11.7393	µg/mL Gravimetric
	CAS # 1912-24-9		+/-	21.9596	µg/mL Unstressed
	Purity 98%		+/-	37.1828	µg/mL Stressed
3	Benzidine	2,010.4 µg/mL (Lot 140107JLM)	+/-	11.7982	µg/mL Gravimetric
	CAS # 92-87-5		+/-	22.0696	µg/mL Unstressed
	Purity 99%		+/-	37.3691	µg/mL Stressed
4	3,3'-Dichlorobenzidine	2,000.0 µg/mL (Lot 140109JLM)	+/-	11.7371	µg/mL Gravimetric
	CAS # 91-94-1		+/-	21.9554	µg/mL Unstressed
	Purity 99%		+/-	37.1758	µg/mL Stressed

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

Reagent

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**SVLVstd5 (7) \_00001**



# CERTIFIED REFERENCE MATERIAL

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

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## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568725 Lot No.: A0101573

Description : 8270 List 1/ Std #7 Diphenylamine

8270 List 1/ Std #7 Diphenylamine 1,710 µg/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL Pkg Amt: > 5 mL

Expiration Date : February 28, 2017 Storage: 10°C or colder

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)				
1	Diphenylamine CAS # 122-39-4 Purity 99% (Lot 07525MF)	1,706.8 µg/mL	+/-	10.0165	µg/mL	Gravimetric	
			+/-	18.7368	µg/mL	Unstressed	
			+/-	31.7258	µg/mL	Stressed	

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

#### Specific Reference Material Notes:

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

#### Tech Tips:

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

Reagent

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**SVLVstd8\_00003**





# CERTIFIED REFERENCE MATERIAL

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

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## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568724 Lot No.: A0103145

Description : 8270 List 1/ Std #8

8270 List 1/ Std #8 2,000 µg/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL Pkg Amt: > 5 mL

Expiration Date : May 31, 2015 Storage: 10°C or colder

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Benzaldehyde	2,000.0 µg/mL (Lot SHBC6366V)	+/-	11.7371	µg/mL	Gravimetric
	CAS # 100-52-7		+/-	64.1312	µg/mL	Unstressed
	Purity 99%		+/-	74.5440	µg/mL	Stressed
2	Indene	2,012.0 µg/mL (Lot MKBH4027V)	+/-	11.8075	µg/mL	Gravimetric
	CAS # 95-13-6		+/-	64.5160	µg/mL	Unstressed
	Purity 99%		+/-	74.9913	µg/mL	Stressed
3	Benzoic acid	2,003.0 µg/mL (Lot MKBG9391V)	+/-	11.7547	µg/mL	Gravimetric
	CAS # 65-85-0		+/-	64.2274	µg/mL	Unstressed
	Purity 99%		+/-	74.6558	µg/mL	Stressed

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

Reagent

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**SVLVstd9\_00001**



# CERTIFIED REFERENCE MATERIAL

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Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
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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. :** 569730 **Lot No.:** A0108709

**Description :** 8270 List 1 / Std #9  
8270 List 1 / Std #9 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

**Container Size :** 10 mL **Pkg Amt:** > 5 mL

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

**Handling:** Contains carcinogen/reproductive toxin.

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Benzidine	2,006.6 µg/mL (Lot 141208JLM)	+/-	11.6665	µg/mL	Gravimetric
	CAS # 92-87-5		+/-	21.9697	µg/mL	Unstressed
	Purity 99%		+/-	37.2641	µg/mL	Stressed
2	3,3'-Dichlorobenzidine	2,001.0 µg/mL (Lot 141205JLM)	+/-	11.6340	µg/mL	Gravimetric
	CAS # 91-94-1		+/-	21.9083	µg/mL	Unstressed
	Purity 99%		+/-	37.1601	µg/mL	Stressed

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

Reagent

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**SVLVSURRSPK\_00003**



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 Fax: (814)353-1309

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708036  
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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.*

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:**

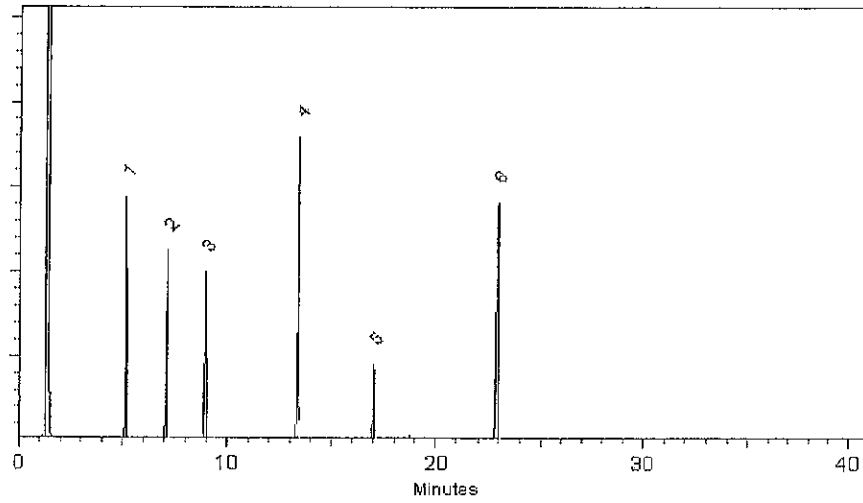
250°C

**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

Reagent

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**SVLVSURRSPK\_00011**

SV 8270 SURROGATE



CERTIFIED REFERENCE MATERIAL

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

OT # 1310492  
 91  
 90  
 89  
 88

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Fluorophenol CAS # 367-12-4 Purity 99% (Lot STBC5591V)	5,003.5 µg/mL	+/- 29.0892 µg/mL +/- 124.6713 µg/mL +/- 156.7818 µg/mL	Gravimetric Unstressed Stressed	
2	Phenol-d5 CAS # 4165-62-2 Purity 99% (Lot M387P4)	5,002.9 µg/mL	+/- 29.0860 µg/mL +/- 124.6575 µg/mL +/- 156.7644 µg/mL	Gravimetric Unstressed Stressed	
3	Nitrobenzene-d5 CAS # 4165-60-0 Purity 99% (Lot PR-20474)	5,001.4 µg/mL	+/- 29.0773 µg/mL +/- 124.6201 µg/mL +/- 156.7174 µg/mL	Gravimetric Unstressed Stressed	
4	2-Fluorobiphenyl CAS # 321-60-8 Purity 99% (Lot B11Y047)	5,004.4 µg/mL	+/- 29.0947 µg/mL +/- 124.6949 µg/mL +/- 156.8114 µg/mL	Gravimetric Unstressed Stressed	
5	2,4,6-Tribromophenol CAS # 118-79-6 Purity 99% (Lot 29699MJV)	5,003.9 µg/mL	+/- 29.0914 µg/mL +/- 124.6805 µg/mL +/- 156.7934 µg/mL	Gravimetric Unstressed Stressed	
6	p-Terphenyl-d14 CAS # 1718-51-0 Purity 99% (Lot PR-20577)	5,007.1 µg/mL	+/- 29.1100 µg/mL +/- 124.7604 µg/mL +/- 156.8938 µg/mL	Gravimetric Unstressed Stressed	

78501  
 4247-4671-32

1243184



Reagent

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**SVNNITROPYROs\_00015**



**CERTIFIED WEIGHT REPORT**

**Part Number:** 70451  
**Lot Number:** 060514  
**Description:** N-Nitrosopyrrolidine  
**Expiration Date:** 060517  
**Recommended Storage:** Freezer (0 °C)  
**Nominal Concentration (µg/mL):** 1000

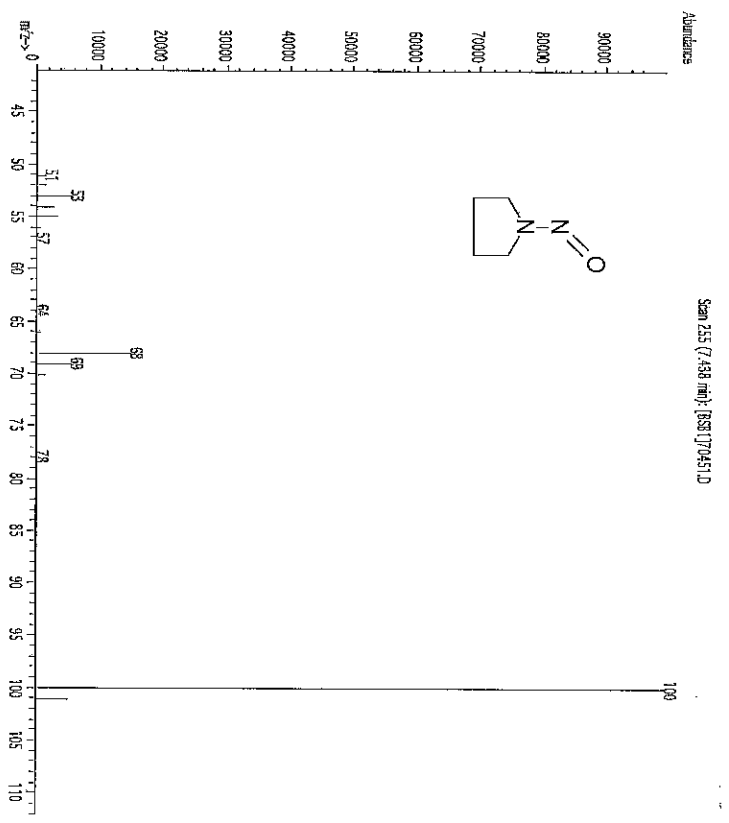
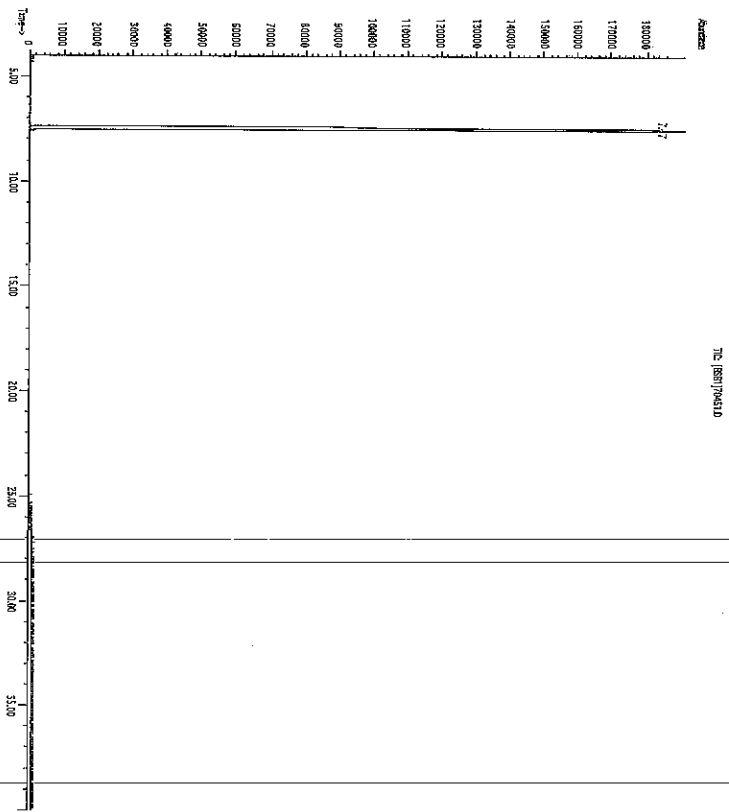
**Solvent(s):** Methylene chloride  
**Lot #:** 62418

SE-05 Balance Uncertainty  
0.001 Flask Uncertainty

Formulated By:	Paul Barron	060514	DATE
Reviewed By:	Pedro L. Rentas	060514	DATE

Compound	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty (%)	Target Weight (g)	Actual Weight (g)	Actual Conc (µg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50	
1. N-Nitrosopyrrolidine	451	04025BM	1000	99	0.2	0.02524	0.02530	1002.2	0.00565	00990-55-2	N/A	or-rat 900mg/kg

**Method GC8MSD-3.M:** Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B = 200°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.



Reagent

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**WCN1000P\_00024**



1515323  
 ID: WCN1000P\_00024  
 Exp: 05/20/15 Ppd: PGJ Qpn: 12/19/14  
 Cyanide 1000 ppm Primary



1515324  
 ID: WAvCN1000P\_00017  
 Exp: 05/20/15 Ppd: PGJ Qpn: 12/19/14  
 Available Cyanide 1000 pp



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)

Mfg. Date: 11/20/2014

Catalog Number: LC13545

Exp. Date: 05/20/2015

Lot Number: D322-27

**ANALYTICAL SECTION**

Test	Specification	Test Result
Appearance	clear, colorless solution	Pass Test
Concentration ppm CN	1000ppm +/- 10ppm	1010ppm
Concentration mg CN/mL	1.000mg/mL +/- 0.010 mg CN/mL	1.010 mg CN/mL
Traceable to NIST	Potassium Chloride	999b

Submitted by: Greg Albright, Chemist Supervisor

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

03/26/2015 2:29 PM

Reagent

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**WCN1000S\_00017**



RICC

1508131  
ID: WCN1000S\_00017  
Exp:08/31/16 Ppd:PGJ Cpn:03/19/15  
Cyanide 1000 ppm Secondar

ICAL

1508132  
ID: WAvCN1000S\_00018  
Exp:08/31/15 Ppd:PGJ Cpn:03/19/15  
Available Cyanide 1000 Se



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

http://www.riccachemical.com

1-888-GO-RICCA

customerservice@riccachemical.com

# Certificate of Analysis

## Cyanide Standard, 1000 ppm CN

Manufacture Date: FEB 13, 2015

Lot Number: 4502438

Product Number: 2543

Expiration Date: AUG 2015

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.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Cyanide	151-50-8	ACS
Sodium Hydroxide	1310-73-2	Reagent

Test	Specification	Result
Appearance	Colorless liquid	Passed
Cyanide (CN)	995-1005 ppm	1000 ppm

Specification	Reference
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.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
2543-4	120 mL amber poly	6 months
2543-32	1 L amber poly	6 months
2543-16	500 mL amber poly	6 months

Recommended Storage: 2°C - 8°C (36°F - 46°F)

*Katie Schnur*

Katie Schnur  
Quality Control Manager

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference  
Materials -- Contents of Certificates and Labels."

Reagent

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**WCNWSTOCK\_00001**





A Waters Company

Distributed by  
SPEX CertiPrep  
1-800-LAB-SPEX  
www.spexcsp.com

1466021  
ID: WCNWSTOCK\_00001  
Exp: 11/00/15 Prip: Opn: 01/06/15  
Total Cyanide Water LCS 1

*Found  
10-21-14  
PSC*

# Certificate of Analysis

<b>PRODUCT:</b>	1000 mg/L Complex Cyanide
<b>CATALOG NUMBER:</b>	049 – 125 mL; 998 – 500 mL
<b>LOT NUMBER:</b>	200213
<b>ISSUE DATE:</b>	March 29, 2013
<b>REVISION DATE:</b>	May 8, 2014
<b>STARTING MATERIAL:</b>	Potassium Ferrocyanide 3-Hydrate (K <sub>4</sub> Fe(CN) <sub>6</sub> ·3H <sub>2</sub> O)
<b>CERTIFIED CONCENTRATION<sup>1</sup>:</b>	1000 mg/L
<b>UNCERTAINTY<sup>2</sup>:</b>	1.0%
<b>MATRIX:</b>	18 megohm deionized water and 0.5% (v/v) NaOH
<b>DENSITY:</b>	1.0083 ± 0.0008 g/mL at 20.5°C and 767 mm Hg
<b>TRACEABILITY<sup>3</sup>:</b>	NA
<b>NIST/SRM:</b>	NA
<b>VERIFICATION METHOD:</b>	Spectrophotometry
<b>STORAGE:</b>	Store at 20-25°C

1. The **Certified Concentration** is the actual made-to concentration confirmed by ERA analytical verification.
2. The stated **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation of the product and includes uncertainty related to the starting material used and the volumetric and gravimetric measurements made. The method of calculating uncertainty is taken from the ISO Guide to the Expression of Uncertainty in Measurement (current version). The uncertainty applies to the product as supplied and does not take into account any required or optional dilutions and/or preparations the laboratory may perform while using this product.
3. Traceability Recovery = ((% Recovery certified standard)/(% Recovery NIST SRM))\*100.

The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

This standard **expires 11/2015**. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

This product is intended to be used as either a calibration standard or a quality control check of the entire analytical process for the analytes/matrix included in the standard.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or email to [info@eraqc.com](mailto:info@eraqc.com)

Certifying Officer: Tom Widera

ISO/IEC GUIDE 34:2009



REFERENCE MATERIAL PRODUCER  
CERTIFICATE NO. 1539.02

ISO/IEC 17025:2005



CHEMICAL TESTING LABORATORY  
CERTIFICATE NO. 1539.02

Reagent

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**WTOC1000SP\_00011**



1457491  
 ID: WTOC1000SP\_00011  
 Exp: 12/31/15 Ppdt: CLL  
 1000 ppm TOC standard

## Certificate of Analysis

### Organic Carbon Standard, 1000 ppm C

Lot Number: 2412908

Product Number: 1847

Manufacture Date: DEC 24, 2014

Expiration Date: DEC 2015

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Phosphoric Acid	7664-38-2	ACS
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Acid Phthalate	877-24-7	ACS Acidimetric

Test	Specification	Result
Appearance	Colorless liquid	Passed
Carbon (C)	995-1005 ppm	1000 ppm

Specification	Reference
Organic Carbon Stock Solution	APHA (5310 B)
Potassium Hydrogen Phthalate, Stock Solution	EPA (SW-846) (9060)
Potassium Hydrogen Phthalate, Stock Solution, 1000 mg Carbon/liter	EPA (415.1)
Organic Carbon Solution, Standard (1 mL = 1 mg C)	ASTM (D 2579)

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.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1847-2.5	10 L Cubitainer®	12 months
1847-4	120 mL amber glass	12 months
1847-82	1 L amber glass	12 months
1847-5	20 L Cubitainer®	12 months
1847-8	250 mL amber glass	12 months
1847-1	4 L amber glass	12 months
1847-16	500 mL amber glass	12 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

LaNelle Ohlhausen  
 Quality Assurance

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

# Method 8270D Low Level

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

FORM II  
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1

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 #
PW-DE01	180-43409-1	41	48	42	47	49	41
PW-F05	180-43409-2	36	45	39	45	56	35
	MB 180-140150/1-A	63	73	63	66	62	77
	LCS 180-140150/2-A	62	69	63	64	65	62

	<u>QC LIMITS</u>
2FP = 2-Fluorophenol (Surr)	20-105
PHL = Phenol-d5 (Surr)	25-105
NBZ = Nitrobenzene-d5 (Surr)	27-114
FBP = 2-Fluorobiphenyl	28-109
TBP = 2,4,6-Tribromophenol (Surr)	30-118
TPH = Terphenyl-d14 (Surr)	20-118

# Column to be used to flag recovery values

FORM III  
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: D0505005.D

Lab ID: LCS 180-140150/2-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Anthracene	20.0	14.4	72	49-100	
Benzo[a]anthracene	20.0	14.1	71	50-100	
Benzo[b]fluoranthene	20.0	15.2	76	43-100	
Benzo[k]fluoranthene	20.0	15.7	78	47-100	
Benzo[g,h,i]perylene	20.0	15.3	76	48-100	
Benzo[a]pyrene	20.0	15.5	77	47-100	
Chrysene	20.0	13.7	68	49-100	
Dibenz(a,h)anthracene	20.0	15.6	78	48-100	
Fluoranthene	20.0	13.7	69	48-100	
Fluorene	20.0	14.2	71	48-100	
Indeno[1,2,3-cd]pyrene	20.0	15.7	79	47-100	
Phenanthrene	20.0	14.4	72	48-100	
Pyrene	20.0	14.7	74	44-100	
Acenaphthene	20.0	13.2	66	47-100	
Acenaphthylene	20.0	13.7	69	47-100	
Naphthalene	20.0	12.8	64	44-100	
Bis(2-ethylhexyl) phthalate	20.0	14.7	73	35-118	

# 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.: 180-43409-1  
SDG No.: \_\_\_\_\_  
Lab File ID: D0505004.D Lab Sample ID: MB 180-140150/1-A  
Matrix: Water Date Extracted: 04/30/2015 10:29  
Instrument ID: CH732 Date Analyzed: 05/05/2015 11:09  
Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-140150/2-A	D0505005.D	05/05/2015 11:36
PW-DE01	180-43409-1	D0508014.D	05/08/2015 13:12
PW-F05	180-43409-2	D0508015.D	05/08/2015 13:38

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1  
 SDG No.: \_\_\_\_\_  
 Lab File ID: D0203002.D DFTPP Injection Date: 02/03/2015  
 Instrument ID: CH732 DFTPP Injection Time: 05:37  
 Analysis Batch No.: 132436

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0 % of mass 198	49.1
68	Less than 2.0 % of mass 69	0.6 (1.4)1
69	Mass 69 relative abundance	41.6
70	Less than 2.0 % of mass 69	0.1 (0.3)1
127	40.0 - 60.0 % of mass 198	52.2
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	7.0
275	10.0 - 30.0 % of mass 198	22.0
365	Greater than 1.0 % of mass 198	2.8
441	Present but less than mass 443	9.0 (81.1)3
442	Greater than 40.0 % of mass 198	58.4
443	17.0 - 23.0 % of mass 442	11.1 (19.0)2

1-Value is % mass 69                      2-Value is % mass 442                      3-Value is % mass 443

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 180-132436/3	D0203003.D	02/03/2015	05:53
	IC 180-132436/4	D0203004.D	02/03/2015	06:20
	IC 180-132436/5	D0203005.D	02/03/2015	06:46
	ICIS 180-132436/6	D0203006.D	02/03/2015	07:13
	IC 180-132436/7	D0203007.D	02/03/2015	07:40
	IC 180-132436/8	D0203008.D	02/03/2015	08:07
	IC 180-132436/9	D0203009.D	02/03/2015	08:33
	IC 180-132436/10	D0203010.D	02/03/2015	09:00



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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1  
 SDG No.: \_\_\_\_\_  
 Lab File ID: D0505002.D DFTPP Injection Date: 05/05/2015  
 Instrument ID: CH732 DFTPP Injection Time: 10:27  
 Analysis Batch No.: 140564

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0 % of mass 198	53.8
68	Less than 2.0 % of mass 69	0.6 (1.3)1
69	Mass 69 relative abundance	44.1
70	Less than 2.0 % of mass 69	0.3 (0.6)1
127	40.0 - 60.0 % of mass 198	54.0
197	Less than 1.0 % of mass 198	0.0
198	Base Peak, 100 % relative abundance	100.0
199	5.0- 9.0 % of mass 198	6.9
275	10.0 - 30.0 % of mass 198	19.4
365	Greater than 1.0 % of mass 198	2.3
441	Present but less than mass 443	6.9 (73.1)3
442	Greater than 40.0 % of mass 198	48.1
443	17.0 - 23.0 % of mass 442	9.5 (19.7)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 180-140564/3	D0505003.D	05/05/2015	10:42
	MB 180-140150/1-A	D0505004.D	05/05/2015	11:09
	LCS 180-140150/2-A	D0505005.D	05/05/2015	11:36

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1  
 SDG No.: \_\_\_\_\_  
 Lab File ID: D0508002.D DFTPP Injection Date: 05/08/2015  
 Instrument ID: CH732 DFTPP Injection Time: 08:15  
 Analysis Batch No.: 140958

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0 % of mass 198	50.5
68	Less than 2.0 % of mass 69	0.4 (0.8)1
69	Mass 69 relative abundance	42.9
70	Less than 2.0 % of mass 69	0.0 (0.1)1
127	40.0 - 60.0 % of mass 198	53.7
197	Less than 1.0 % of mass 198	0.3
198	Base Peak, 100 % relative abundance	100.0
199	5.0- 9.0 % of mass 198	6.6
275	10.0 - 30.0 % of mass 198	18.6
365	Greater than 1.0 % of mass 198	2.2
441	Present but less than mass 443	7.6 (81.9)3
442	Greater than 40.0 % of mass 198	50.1
443	17.0 - 23.0 % of mass 442	9.3 (18.5)2

1-Value is % mass 69                      2-Value is % mass 442                      3-Value is % mass 443

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-140958/3	D0508003.D	05/08/2015	08:31
PW-DE01	180-43409-1	D0508014.D	05/08/2015	13:12
PW-F05	180-43409-2	D0508015.D	05/08/2015	13:38

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 180-140564/3 Date Analyzed: 05/05/2015 10:42  
 Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32 (mm)  
 Lab File ID (Standard): D0505003.D Heated Purge: (Y/N) N  
 Calibration ID: 21642

	DCB		NPT		ANT	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	221698	6.21	1000997	7.49	586151	9.21
UPPER LIMIT	443396	6.71	2001994	7.99	1172302	9.71
LOWER LIMIT	110849	5.71	500499	6.99	293076	8.71
LAB SAMPLE ID	CLIENT SAMPLE ID					
MB 180-140150/1-A	217724	6.20	1004626	7.49	581330	9.20
LCS 180-140150/2-A	174109	6.20	788643	7.49	462643	9.20

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.: 180-43409-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 180-140564/3 Date Analyzed: 05/05/2015 10:42  
 Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32 (mm)  
 Lab File ID (Standard): D0505003.D Heated Purge: (Y/N) N  
 Calibration ID: 21642

	PHN		CRY		PRY	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	948110	10.66	834462	14.45	603716	17.35
UPPER LIMIT	1896220	11.16	1668924	14.95	1207432	17.85
LOWER LIMIT	474055	10.16	417231	13.95	301858	16.85
LAB SAMPLE ID	CLIENT SAMPLE ID					
MB 180-140150/1-A	922509	10.65	685158	14.43	509260	17.34
LCS 180-140150/2-A	752043	10.66	685658	14.44	470408	17.35

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.: 180-43409-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 180-140958/3 Date Analyzed: 05/08/2015 08:31  
 Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32 (mm)  
 Lab File ID (Standard): D0508003.D Heated Purge: (Y/N) N  
 Calibration ID: 21642

	DCB		NPT		ANT			
	AREA #	RT #	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	175471	6.22	896196	7.50	566149	9.20		
UPPER LIMIT	350942	6.72	1792392	8.00	1132298	9.70		
LOWER LIMIT	87736	5.72	448098	7.00	283075	8.70		
LAB SAMPLE ID	CLIENT SAMPLE ID							
180-43409-1	PW-DE01		159507	6.20	854175	7.48	574942	9.19
180-43409-2	PW-F05		141961	6.20	750660	7.48	502365	9.20

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.: 180-43409-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 180-140958/3 Date Analyzed: 05/08/2015 08:31  
 Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32 (mm)  
 Lab File ID (Standard): D0508003.D Heated Purge: (Y/N) N  
 Calibration ID: 21642

	PHN		CRY		PRY		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	930308	10.65	756308	14.40	600011	17.29	
UPPER LIMIT	1860616	11.15	1512616	14.90	1200022	17.79	
LOWER LIMIT	465154	10.15	378154	13.90	300006	16.79	
LAB SAMPLE ID	CLIENT SAMPLE ID						
180-43409-1	PW-DE01	980940	10.65	798213	14.40	669140	17.29
180-43409-2	PW-F05	838748	10.65	752368	14.41	632076	17.30

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.: 180-43409-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: PW-DE01 Lab Sample ID: 180-43409-1  
 Matrix: Water Lab File ID: D0508014.D  
 Analysis Method: 8270D LL Date Collected: 04/23/2015 12:30  
 Extract. Method: 3520C Date Extracted: 04/30/2015 10:29  
 Sample wt/vol: 270 (mL) Date Analyzed: 05/08/2015 13:12  
 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.: 140958 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-12-7	Anthracene	ND		0.19	0.018
56-55-3	Benzo[a]anthracene	ND		0.19	0.034
205-99-2	Benzo[b]fluoranthene	ND		0.19	0.045
207-08-9	Benzo[k]fluoranthene	ND		0.19	0.028
191-24-2	Benzo[g,h,i]perylene	ND		0.19	0.027
50-32-8	Benzo[a]pyrene	ND		0.19	0.026
218-01-9	Chrysene	ND		0.19	0.029
53-70-3	Dibenz(a,h)anthracene	ND		0.19	0.025
206-44-0	Fluoranthene	ND		0.19	0.020
86-73-7	Fluorene	ND		0.19	0.022
193-39-5	Indeno[1,2,3-cd]pyrene	ND		0.19	0.040
85-01-8	Phenanthrene	ND		0.19	0.038
129-00-0	Pyrene	ND		0.19	0.021
83-32-9	Acenaphthene	ND		0.19	0.027
208-96-8	Acenaphthylene	ND		0.19	0.020
91-20-3	Naphthalene	0.15	J	0.19	0.021
117-81-7	Bis(2-ethylhexyl) phthalate	ND		1.9	0.41

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	42		27-114
321-60-8	2-Fluorobiphenyl	47		28-109
1718-51-0	Terphenyl-d14 (Surr)	41		20-118
367-12-4	2-Fluorophenol (Surr)	41		20-105
118-79-6	2,4,6-Tribromophenol (Surr)	49		30-118
4165-62-2	Phenol-d5 (Surr)	48		25-105

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150508-6828.b\D0508014.D  
 Lims ID: 180-43409-A-1-A Lab Sample ID: 180-43409-1  
 Client ID: PW-DE01  
 Sample Type: Client  
 Inject. Date: 08-May-2015 13:12:30 ALS Bottle#: 13 Worklist Smp#: 14  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0006828-014  
 Misc. Info.: 180-43409-A-1-A  
 Operator ID: 003200 Instrument ID: CH732  
 Method: \\PITCHROM\ChromData\CH732\20150508-6828.b\BNA\_CH732.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 11-May-2015 04:41:55 Calib Date: 18-Mar-2015 11:54:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\PITCHROM\ChromData\CH732\20150318-6063.b\D0318011.D  
 Column 1 : Rxi-5SiIMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK011

First Level Reviewer: piccolinov Date: 11-May-2015 04:33:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.196	6.217	-0.021	97	159507	8.00	
* 2 Naphthalene-d8	136	7.484	7.500	-0.016	100	854175	8.00	
* 3 Acenaphthene-d10	164	9.193	9.204	-0.011	92	574942	8.00	
* 4 Phenanthrene-d10	188	10.646	10.651	-0.005	97	980940	8.00	
* 5 Chrysene-d12	240	14.402	14.402	0.000	96	798213	8.00	
* 6 Perylene-d12	264	17.292	17.287	0.006	95	669140	8.00	
\$ 7 2-Fluorophenol	112	4.738	4.775	-0.037	92	336258	16.3	
\$ 8 Phenol-d5	99	5.812	5.838	-0.026	95	533699	19.2	
\$ 9 Nitrobenzene-d5	82	6.757	6.778	-0.021	92	608915	17.0	
\$ 10 2-Fluorobiphenyl	172	8.525	8.536	-0.011	100	1763170	18.7	
\$ 11 2,4,6-Tribromophenol	330	9.952	9.962	-0.010	87	210637	19.5	
\$ 12 Terphenyl-d14	244	12.575	12.575	0.000	99	1430599	16.5	
58 Naphthalene	128	7.505	7.521	-0.016	96	37670	0.3260	
85 Acenaphthylene	152		9.070				ND	
88 Acenaphthene	153		9.236				ND	
103 Fluorene	166		9.733				ND	
121 Phenanthrene	178		10.673				ND	
122 Anthracene	178		10.726				ND	
131 Fluoranthene	202		12.078				ND	
133 Pyrene	202		12.404				ND	
145 Bis(2-ethylhexyl) phthalat	149	14.354	14.348	0.006	97	41356	0.5104	
146 Benzo[a]anthracene	228		14.380				ND	
147 Chrysene	228		14.450				ND	
152 Benzo[b]fluoranthene	252		16.512				ND	
153 Benzo[k]fluoranthene	252		16.565				ND	
154 Benzo[a]pyrene	252		17.174				ND	
157 Indeno[1,2,3-cd]pyrene	276		19.653				ND	
158 Dibenz(a,h)anthracene	278		19.685				ND	
159 Benzo[g,h,i]perylene	276		20.332				ND	



Reagents:

SVTAPITINTRNi\_00007

Amount Added: 1.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150508-6828.b\D0508014.D

Injection Date: 08-May-2015 13:12:30

Instrument ID: CH732

Operator ID: 003200

Lims ID: 180-43409-A-1-A

Lab Sample ID: 180-43409-1

Worklist Smp#: 14

Client ID: PW-DE01

Injection Vol: 2.0 ul

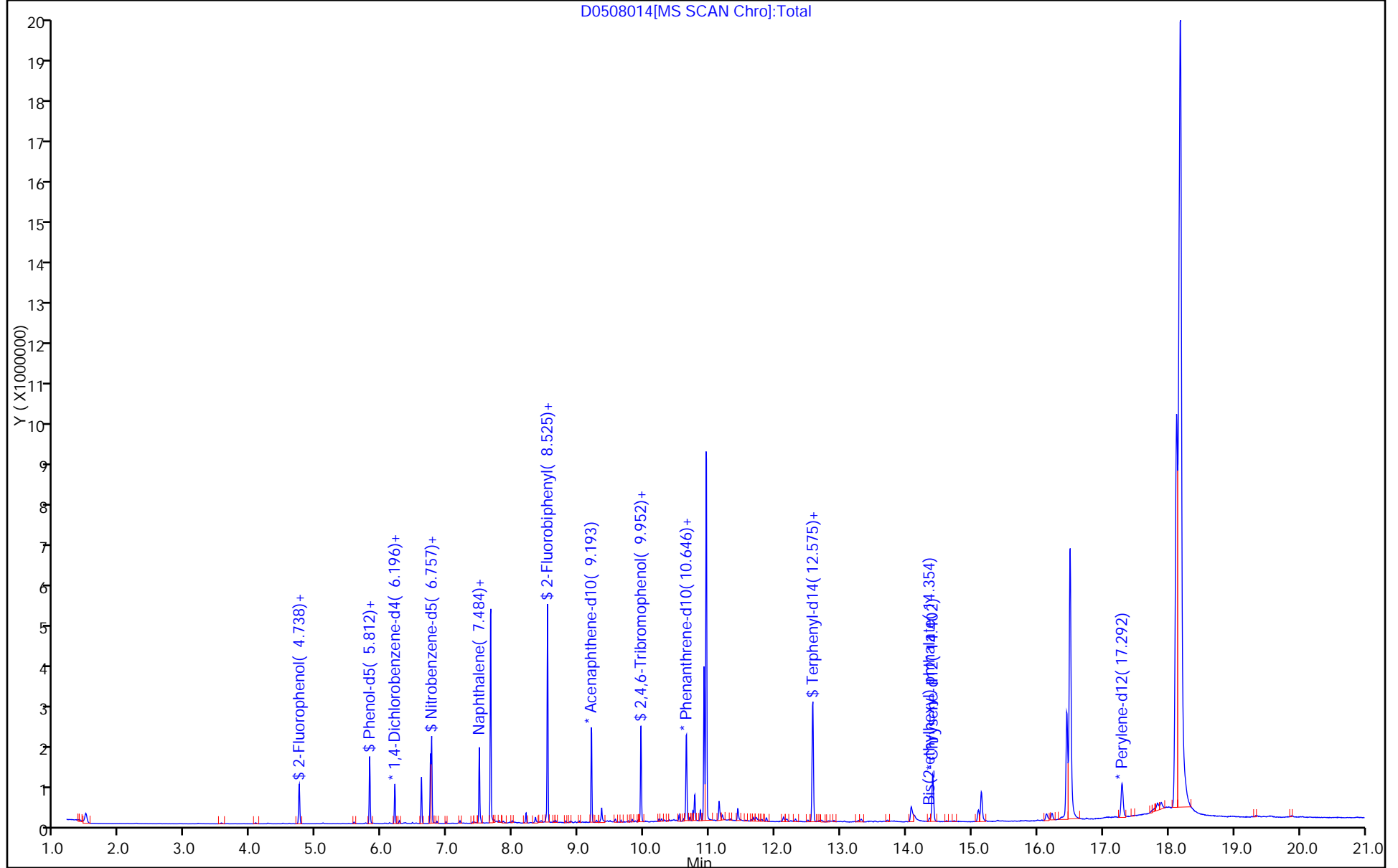
Dil. Factor: 1.0000

ALS Bottle#: 13

Method: BNA\_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150508-6828.b\D0508014.D

Injection Date: 08-May-2015 13:12:30

Instrument ID: CH732

Lims ID: 180-43409-A-1-A

Lab Sample ID: 180-43409-1

Client ID: PW-DE01

Operator ID: 003200

ALS Bottle#: 13

Worklist Smp#: 14

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

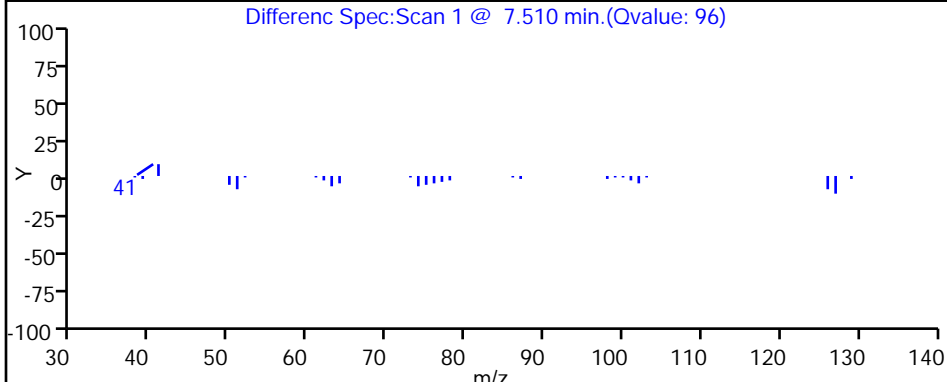
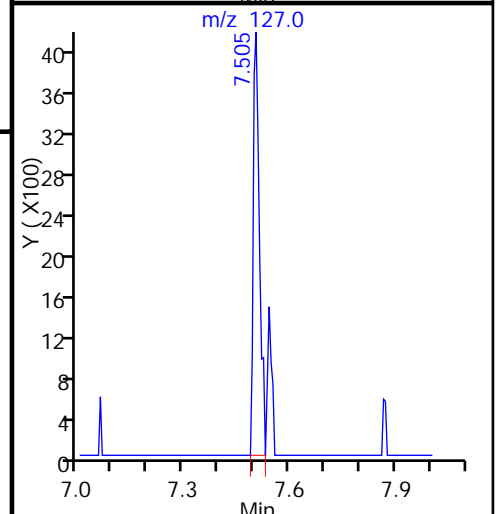
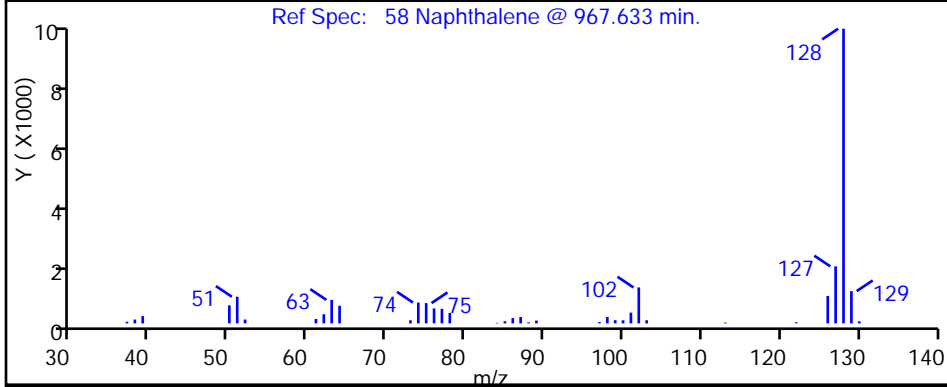
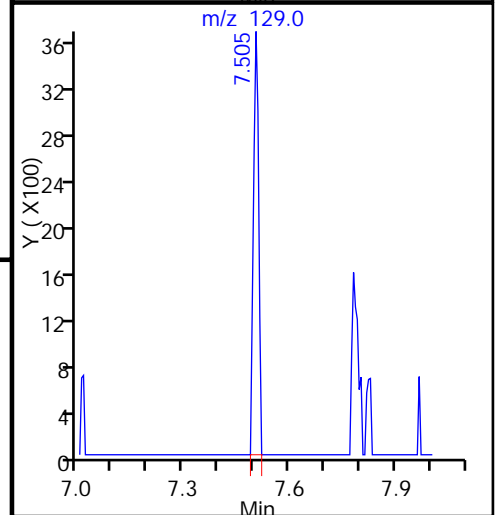
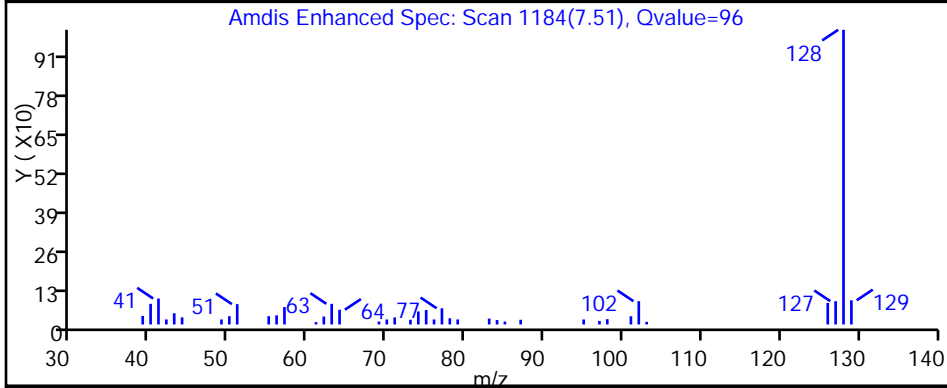
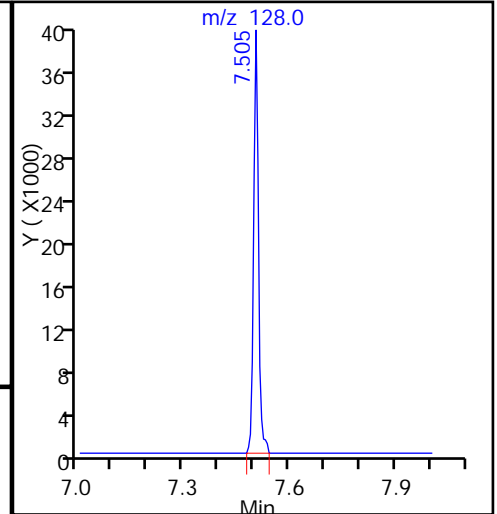
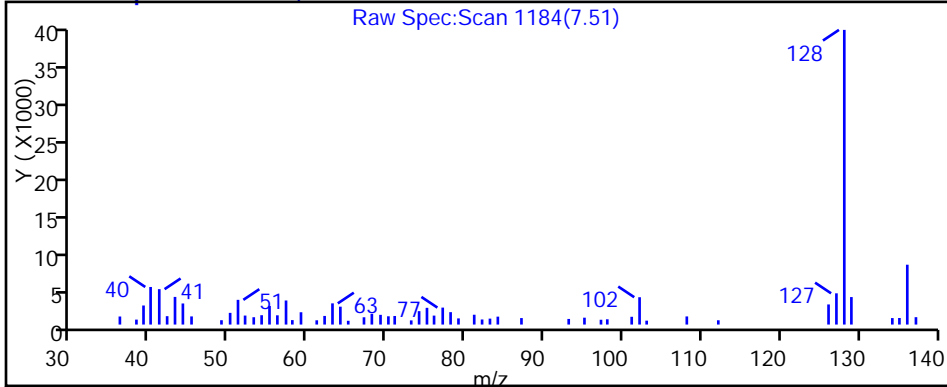
Method: BNA\_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

### 58 Naphthalene, CAS: 91-20-3



FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: PW-F05 Lab Sample ID: 180-43409-2  
 Matrix: Water Lab File ID: D0508015.D  
 Analysis Method: 8270D LL Date Collected: 04/23/2015 15:00  
 Extract. Method: 3520C Date Extracted: 04/30/2015 10:29  
 Sample wt/vol: 260 (mL) Date Analyzed: 05/08/2015 13:38  
 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.: 140958 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-12-7	Anthracene	ND		0.19	0.018
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
191-24-2	Benzo[g,h,i]perylene	ND		0.19	0.028
50-32-8	Benzo[a]pyrene	ND		0.19	0.027
218-01-9	Chrysene	ND		0.19	0.030
53-70-3	Dibenz(a,h)anthracene	ND		0.19	0.026
206-44-0	Fluoranthene	ND		0.19	0.020
86-73-7	Fluorene	ND		0.19	0.023
193-39-5	Indeno[1,2,3-cd]pyrene	ND		0.19	0.042
85-01-8	Phenanthrene	ND		0.19	0.040
129-00-0	Pyrene	ND		0.19	0.022
83-32-9	Acenaphthene	ND		0.19	0.028
208-96-8	Acenaphthylene	ND		0.19	0.021
91-20-3	Naphthalene	ND		0.19	0.022
117-81-7	Bis(2-ethylhexyl) phthalate	1.1	J	1.9	0.42

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	39		27-114
321-60-8	2-Fluorobiphenyl	45		28-109
1718-51-0	Terphenyl-d14 (Surr)	35		20-118
367-12-4	2-Fluorophenol (Surr)	36		20-105
118-79-6	2,4,6-Tribromophenol (Surr)	56		30-118
4165-62-2	Phenol-d5 (Surr)	45		25-105

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150508-6828.b\D0508015.D  
 Lims ID: 180-43409-A-2-A Lab Sample ID: 180-43409-2  
 Client ID: PW-F05  
 Sample Type: Client  
 Inject. Date: 08-May-2015 13:38:30 ALS Bottle#: 14 Worklist Smp#: 15  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0006828-015  
 Misc. Info.: 180-43409-A-2-A  
 Operator ID: 003200 Instrument ID: CH732  
 Method: \\PITCHROM\ChromData\CH732\20150508-6828.b\BNA\_CH732.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 11-May-2015 04:41:55 Calib Date: 18-Mar-2015 11:54:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\PITCHROM\ChromData\CH732\20150318-6063.b\D0318011.D  
 Column 1 : Rxi-5SiIMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK011

First Level Reviewer: piccolinov

Date: 11-May-2015 04:34:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.196	6.217	-0.021	97	141961	8.00	
* 2 Naphthalene-d8	136	7.484	7.500	-0.016	100	750660	8.00	
* 3 Acenaphthene-d10	164	9.198	9.204	-0.006	91	502365	8.00	
* 4 Phenanthrene-d10	188	10.646	10.651	-0.005	97	838748	8.00	
* 5 Chrysene-d12	240	14.412	14.402	0.010	96	752368	8.00	
* 6 Perylene-d12	264	17.303	17.287	0.017	95	632076	8.00	
\$ 7 2-Fluorophenol	112	4.738	4.775	-0.037	92	263694	14.3	
\$ 8 Phenol-d5	99	5.811	5.838	-0.027	95	443013	17.9	
\$ 9 Nitrobenzene-d5	82	6.757	6.778	-0.021	92	497284	15.8	
\$ 10 2-Fluorobiphenyl	172	8.525	8.536	-0.011	99	1497225	18.2	
\$ 11 2,4,6-Tribromophenol	330	9.957	9.962	-0.005	90	205755	22.3	
\$ 12 Terphenyl-d14	244	12.580	12.575	0.005	99	1160531	14.2	
58 Naphthalene	128		7.521				ND	
85 Acenaphthylene	152		9.070				ND	
88 Acenaphthene	153		9.236				ND	
103 Fluorene	166		9.733				ND	
121 Phenanthrene	178		10.673				ND	
122 Anthracene	178		10.726				ND	
131 Fluoranthene	202		12.078				ND	
133 Pyrene	202		12.404				ND	
145 Bis(2-ethylhexyl) phthalat	149	14.364	14.348	0.016	97	175298	2.30	
146 Benzo[a]anthracene	228		14.380				ND	
147 Chrysene	228		14.450				ND	
152 Benzo[b]fluoranthene	252		16.512				ND	
153 Benzo[k]fluoranthene	252		16.565				ND	
154 Benzo[a]pyrene	252		17.174				ND	
157 Indeno[1,2,3-cd]pyrene	276		19.653				ND	
158 Dibenz(a,h)anthracene	278		19.685				ND	
159 Benzo[g,h,i]perylene	276		20.332				ND	

Reagents:

SVTAPITINTRNi\_00007

Amount Added: 1.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150508-6828.b\D0508015.D

Injection Date: 08-May-2015 13:38:30

Instrument ID: CH732

Operator ID: 003200

Lims ID: 180-43409-A-2-A

Lab Sample ID: 180-43409-2

Worklist Smp#: 15

Client ID: PW-F05

Injection Vol: 2.0 ul

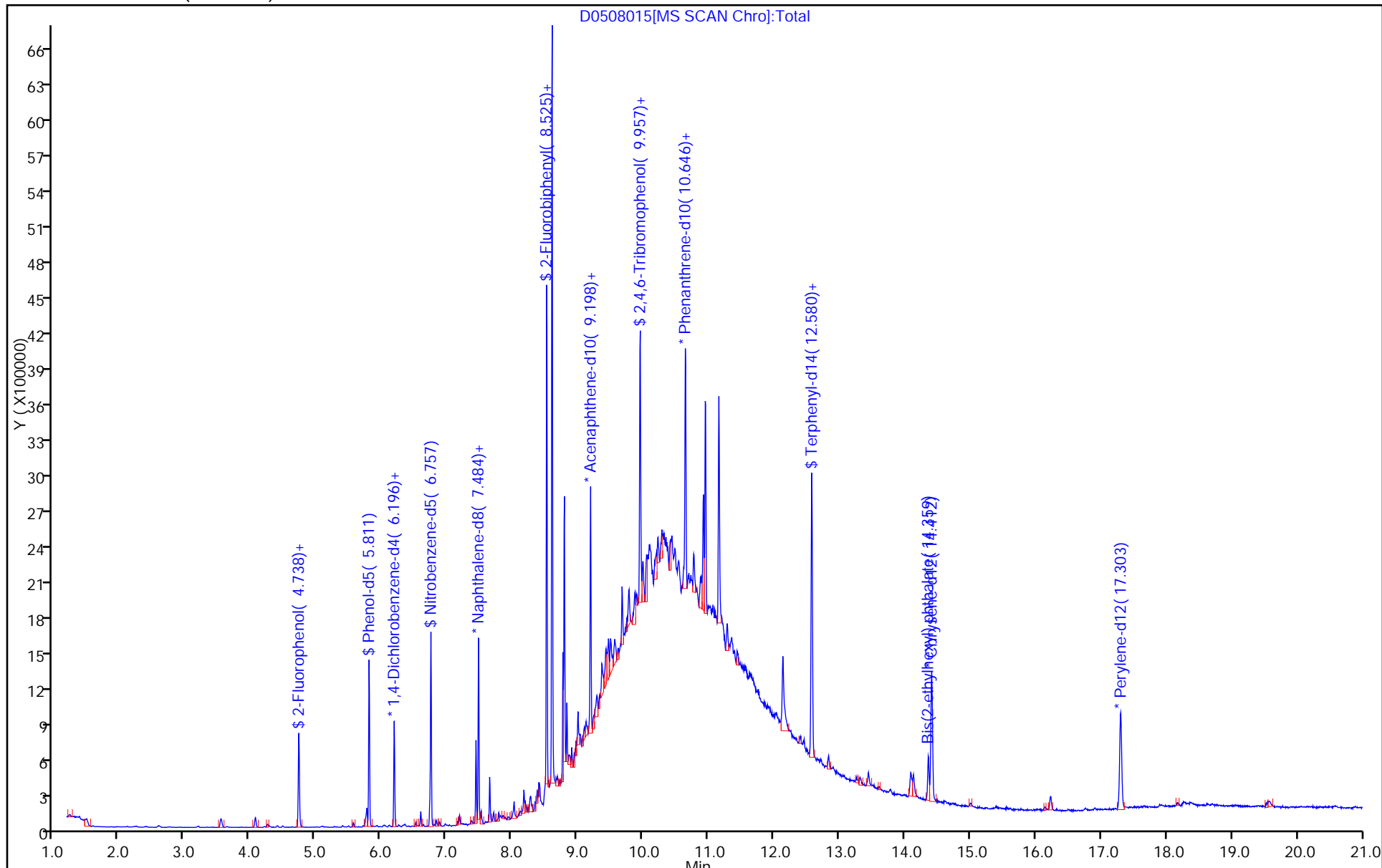
Dil. Factor: 1.0000

ALS Bottle#: 14

Method: BNA\_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150508-6828.b\D0508015.D

Injection Date: 08-May-2015 13:38:30

Instrument ID: CH732

Lims ID: 180-43409-A-2-A

Lab Sample ID: 180-43409-2

Client ID: PW-F05

Operator ID: 003200

ALS Bottle#: 14

Worklist Smp#: 15

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

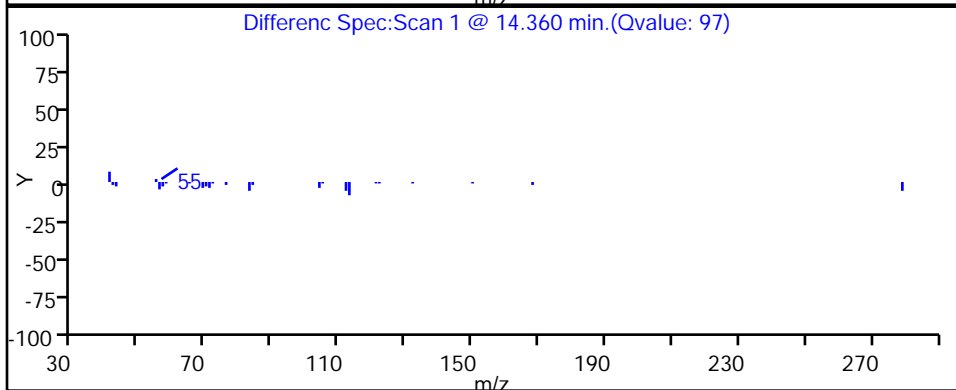
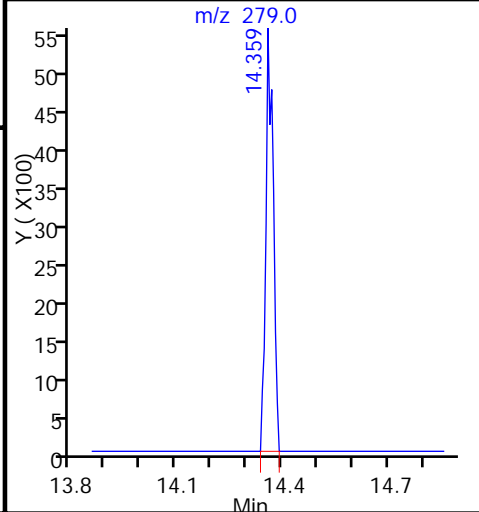
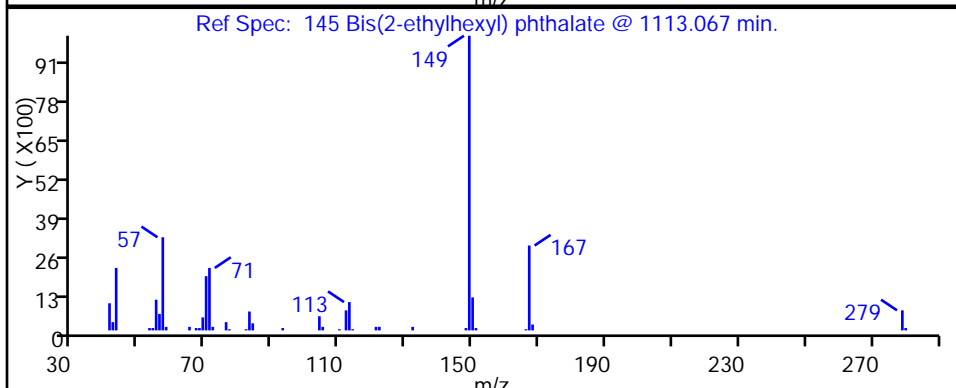
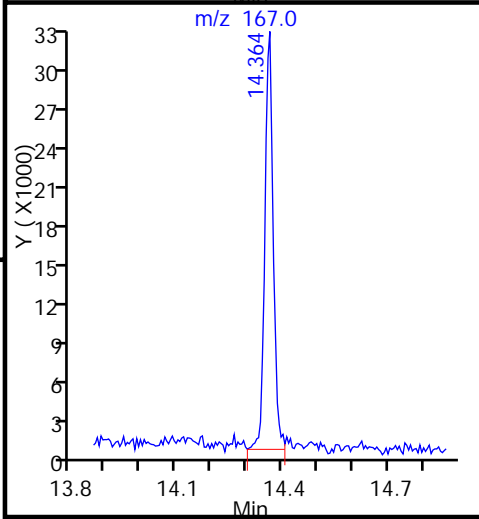
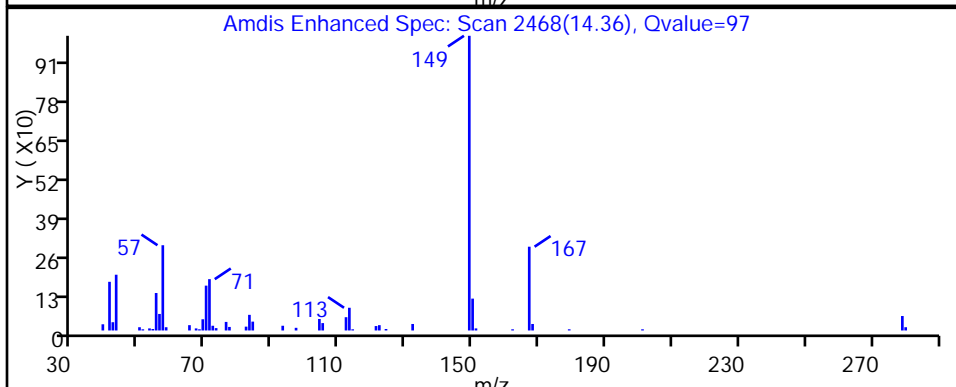
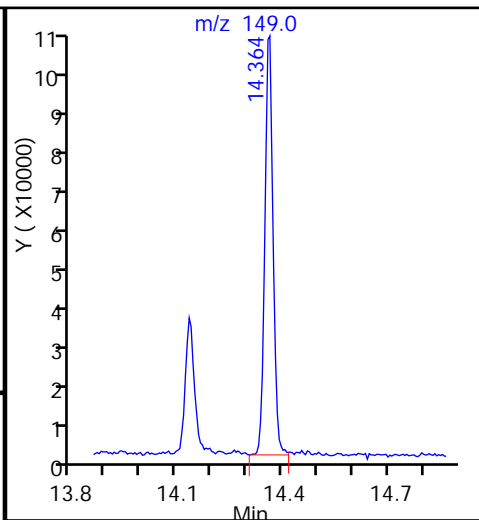
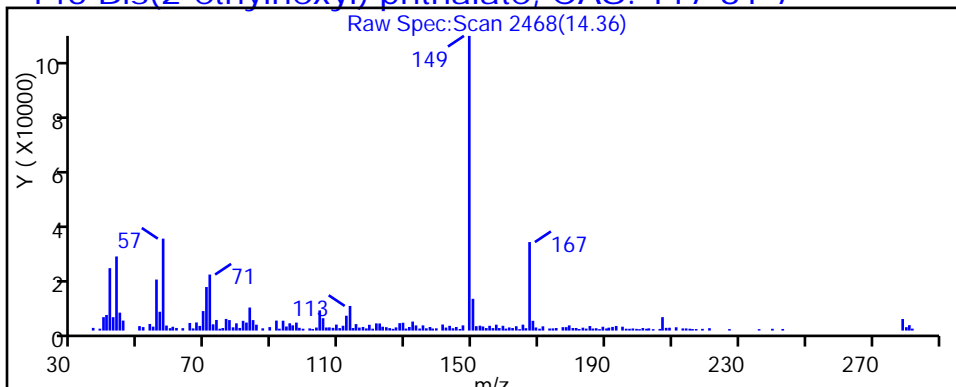
Method: BNA\_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

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





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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1 Analy Batch No.: 132436

SDG No.: \_\_\_\_\_

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/03/2015 05:53 Calibration End Date: 02/03/2015 09:00 Calibration ID: 21642

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-132436/3	D0203003.D
Level 2	IC 180-132436/4	D0203004.D
Level 3	IC 180-132436/5	D0203005.D
Level 4	ICIS 180-132436/6	D0203006.D
Level 5	IC 180-132436/7	D0203007.D
Level 6	IC 180-132436/8	D0203008.D
Level 7	IC 180-132436/9	D0203009.D
Level 8	IC 180-132436/10	D0203010.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	0.2894 0.3232	0.3261 0.3192	0.3327 0.3142	0.3264	0.3179	Ave		0.3186		0.0100	4.1		20.0				
N-Nitrosodimethylamine	0.3996 0.4396	0.4307 0.4384	0.4292 0.4385	0.4393	0.4287	Ave		0.4305		0.0100	3.1		20.0				
Pyridine	0.6306 0.7824	0.7337 0.7815	0.7719 0.7636	0.7738	0.7696	Ave		0.7509		0.0100	6.8		20.0				
Methyl methanesulfonate	0.5847 0.5946	0.6333 0.5934	0.6501 0.5766	0.6218	0.5934	Ave		0.6060		0.0100	4.3		20.0				
Benzaldehyde	0.6297 0.7987	0.6041 0.7206	0.6312 0.6357	0.6301	0.7534	Ave		0.6754		0.0100	11.0		20.0				
Phenol	1.6566 1.5518	1.6696 1.5021	1.6880 1.4680	1.5906	1.5654	Ave		1.5865		0.8000	5.1		20.0				
Aniline	1.7678 1.7687	1.7915 1.7175	1.8542 1.6350	1.7762	1.7351	Ave		1.7557		0.0100	3.6		20.0				
Bis(2-chloroethyl)ether	1.2240 1.0827	1.1553 1.0665	1.1821 1.0456	1.1180	1.0850	Ave		1.1199		0.7000	5.5		20.0				
2-Chlorophenol	1.3213 1.3691	1.3583 1.3347	1.4311 1.3215	1.3713	1.3354	Ave		1.3553		0.8000	2.7		20.0				
n-Decane	1.7844 1.5383	1.6952 1.4335	1.7046 1.3670	1.6121	1.5819	Ave		1.5896			8.9		20.0				
1,3-Dichlorobenzene	1.5278 1.5967	1.6341 1.5442	1.6362 1.5131	1.6179	1.5562	Ave		1.5783		0.0100	3.1		20.0				
1,4-Dichlorobenzene	1.6487 1.6065	1.6240 1.6015	1.7358 1.5476	1.6058	1.5859	Ave		1.6195		0.0100	3.4		20.0				
Benzyl alcohol	0.8053 0.8464	0.8659 0.8422	0.9413 0.8086	0.8759	0.8311	Ave		0.8521		0.0100	5.1		20.0				
1,2-Dichlorobenzene	1.6482 1.5539	1.6131 1.5183	1.6459 1.4935	1.5758	1.5449	Ave		1.5742		0.0100	3.6		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.: 180-43409-1

Analy Batch No.: 132436

SDG No.: \_\_\_\_\_

Instrument ID: CH732

GC Column: Rxi-5SilMS ID: 0.32 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 02/03/2015 05:53

Calibration End Date: 02/03/2015 09:00

Calibration ID: 21642

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	1.2615 1.1778	1.2521 1.1518	1.3156 1.0897	1.2215	1.1588	Ave		1.2036			0.7000	6.0	20.0				
Indene	2.3133 2.1398	2.2209 2.1085	2.3406 1.9870	2.2347	2.1387	Ave		2.1854			0.0100	5.3	20.0				
2,2'-oxybis[1-chloropropane]	2.5131 2.2628	2.5045 2.2085	2.6347 2.0194	2.4316	2.3000	Ave		2.3593			0.0100	8.4	20.0				
N-Nitrosopyrrolidine	0.5262 0.5893	0.6009 0.5880	0.6401 0.5653	0.5954	0.5859	Ave		0.5864			0.0100	5.5	20.0				
Acetophenone	2.0369 1.7219	1.9688 1.6379	2.0045 1.5364	1.8680	1.7454	Ave		1.8150			0.0100	10.0	20.0				
N-Nitrosodi-n-propylamine	0.9492 0.7944	0.9543 0.7526	0.9805 0.7006	0.8774	0.8314	Ave		0.8551			0.5000	12.0	20.0				
Methylphenol, 3 & 4	1.2641 1.1848	1.3320 1.1393	1.3945 1.0530	1.2967	1.2224	Ave		1.2358			0.6000	8.9	20.0				
Hexachloroethane	0.7385 0.6865	0.7117 0.6822	0.7467 0.6648	0.7026	0.6776	Ave		0.7013			0.3000	4.2	20.0				
Nitrobenzene	0.3271 0.3336	0.3446 0.3293	0.3443 0.3120	0.3390	0.3372	Ave		0.3334			0.2000	3.2	20.0				
Isophorone	0.5945 0.5873	0.5897 0.5783	0.6005 0.5621	0.6022	0.5816	Ave		0.5870			0.4000	2.2	20.0				
2-Nitrophenol	0.1657 0.1902	0.1840 0.1903	0.1844 0.1819	0.1896	0.1897	Ave		0.1845			0.1000	4.5	20.0				
2,4-Dimethylphenol	0.3280 0.3348	0.3513 0.3350	0.3524 0.3006	0.3537	0.3374	Ave		0.3367			0.2000	5.2	20.0				
Benzoic acid	++++ 0.1987	0.1125 0.2033	0.1360 0.2048	0.1402	0.1689	Lin1	-0.274	0.2037			0.0100			0.9960		0.9900	
Bis(2-chloroethoxy)methane	0.3834 0.3557	0.3759 0.3474	0.3766 0.3299	0.3693	0.3508	Ave		0.3611			0.3000	5.0	20.0				
2,4-Dichlorophenol	0.2934 0.2950	0.2935 0.2893	0.2980 0.2824	0.3042	0.2969	Ave		0.2941			0.2000	2.2	20.0				
1,2,4-Trichlorobenzene	0.3394 0.3347	0.3522 0.3268	0.3505 0.3188	0.3506	0.3259	Ave		0.3374			0.0100	3.8	20.0				
Naphthalene	1.0933 1.0643	1.1149 1.0677	1.1083 1.0388	1.0934	1.0774	Ave		1.0823			0.7000	2.3	20.0				
4-Chloroaniline	0.4263 0.4369	0.4351 0.4265	0.4505 0.4043	0.4433	0.4460	Ave		0.4336			0.0100	3.4	20.0				
2,6-Dichlorophenol	0.2615 0.2923	0.3132 0.2825	0.3169 0.2731	0.3025	0.2976	Ave		0.2924			0.0100	6.6	20.0				
Hexachlorobutadiene	0.2188 0.1970	0.2056 0.1955	0.2032 0.1917	0.2049	0.1985	Ave		0.2019			0.0100	4.2	20.0				

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

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

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

Analy Batch No.: 132436

SDG No.: \_\_\_\_\_

Instrument ID: CH732

GC Column: Rxi-5SilMS ID: 0.32 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 02/03/2015 05:53

Calibration End Date: 02/03/2015 09:00

Calibration ID: 21642

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	0.0936 0.0987	0.1004 0.1006	0.1010 0.0967	0.0971	0.1001	Ave		0.0985			0.0100	2.6		20.0			
4-Chloro-3-methylphenol	0.3259 0.3032	0.3118 0.3010	0.3190 0.2893	0.3127	0.3048	Ave		0.3085			0.2000	3.7		20.0			
2-Methylnaphthalene	0.7854 0.7616	0.7970 0.7409	0.7819 0.7178	0.7854	0.7530	Ave		0.7654			0.4000	3.5		20.0			
1-Methylnaphthalene	0.7588 0.7095	0.7356 0.6944	0.7462 0.6677	0.7283	0.7014	Ave		0.7177			0.0100	4.2		20.0			
Hexachlorocyclopentadiene	0.2878 0.3872	0.3363 0.3718	0.3406 0.3157	0.3633	0.3814	Ave		0.3480			0.0500	9.9		20.0			
1,2,4,5-Tetrachlorobenzene	0.5271 0.5157	0.5490 0.4843	0.5616 0.4793	0.5356	0.5187	Ave		0.5214			0.0100	5.5		20.0			
2,4,6-Trichlorophenol	0.3384 0.3625	0.3491 0.3512	0.3640 0.3551	0.3670	0.3587	Ave		0.3558			0.2000	2.6		20.0			
2,4,5-Trichlorophenol	0.3632 0.3897	0.3616 0.3754	0.3889 0.3774	0.3794	0.3834	Ave		0.3774			0.2000	2.8		20.0			
1,1'-Biphenyl	1.4675 1.5500	1.5477 1.4658	1.5307 1.4591	1.5290	1.4933	Ave		1.5054			0.0100	2.5		20.0			
2-Chloronaphthalene	1.2012 1.2780	1.2764 1.1651	1.2437 1.1616	1.2325	1.1984	Ave		1.2196			0.8000	3.7		20.0			
2-Nitroaniline	0.3160 0.3609	0.3422 0.3402	0.3641 0.3482	0.3507	0.3502	Ave		0.3466			0.0100	4.3		20.0			
Dimethyl phthalate	1.2918 1.2997	1.2696 1.2239	1.3080 1.2415	1.2660	1.2604	Ave		1.2701			0.0100	2.3		20.0			
1,3-Dinitrobenzene	0.1398 0.2093	0.1828 0.2040	0.1949 0.1996	0.1986	0.2017	Ave		0.1913			0.0100	12.0		20.0			
2,6-Dinitrotoluene	0.2531 0.2910	0.2768 0.2735	0.2901 0.2792	0.2856	0.2829	Ave		0.2790			0.2000	4.4		20.0			
Acenaphthylene	1.9319 1.9727	1.8890 1.9400	1.9822 1.9233	1.9235	1.9095	Ave		1.9340			0.9000	1.6		20.0			
3-Nitroaniline	0.3033 0.3545	0.3298 0.3468	0.3443 0.3405	0.3513	0.3466	Ave		0.3396			0.0100	4.8		20.0			
2,4-Dinitrophenol	0.0832 0.1969	0.1126 0.1883	0.1416 0.1859	0.1702	0.1865	Lin1	-0.142	0.1889			0.0100				0.9980		0.9900
Acenaphthene	1.2341 1.1644	1.2375 1.0882	1.2536 1.0424	1.2271	1.1994	Ave		1.1808			0.9000	6.5		20.0			
4-Nitrophenol	0.1449 0.2049	0.1773 0.1990	0.1858 0.1985	0.1926	0.2002	Ave		0.1879			0.0100	10.0		20.0			
2,4-Dinitrotoluene	0.3258 0.3820	0.3710 0.3605	0.3746 0.3591	0.3785	0.3817	Ave		0.3667			0.2000	5.1		20.0			

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

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

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

Analy Batch No.: 132436

SDG No.: \_\_\_\_\_

Instrument ID: CH732

GC Column: Rxi-5SilMS ID: 0.32 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 02/03/2015 05:53

Calibration End Date: 02/03/2015 09:00

Calibration ID: 21642

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	1.7039 1.6974	1.7236 1.6717	1.7324 1.6535	1.6806	1.6861	Ave		1.6936		0.8000	1.6		20.0				
2,3,5,6-Tetrachlorophenol	0.2784 0.3522	0.3231 0.3411	0.3288 0.3332	0.3290	0.3409	Ave		0.3283		0.0100	6.7		20.0				
2,3,4,6-Tetrachlorophenol	0.2692 0.3331	0.3234 0.3255	0.3364 0.3231	0.3274	0.3351	Ave		0.3217		0.0100	6.8		20.0				
2-Naphthylamine	1.1143 1.2587	1.2501 1.2075	1.2670 1.1115	1.2281	1.2187	Ave		1.2070		0.0100	5.1		20.0				
Diethyl phthalate	1.3162 1.2963	1.3893 1.2225	1.3466 1.1760	1.3204	1.3148	Ave		1.2978		0.0100	5.2		20.0				
Hexadecane	0.6523 0.5660	0.6318 0.5102	0.6572 0.4522	0.6386	0.6137	Ave		0.5903			13.0		20.0				
4-Chlorophenyl phenyl ether	0.6117 0.6273	0.6466 0.6042	0.6486 0.5941	0.6234	0.6183	Ave		0.6218		0.4000	3.1		20.0				
4-Nitroaniline	0.2857 0.3410	0.3374 0.3366	0.3445 0.3302	0.3513	0.3549	Ave		0.3352		0.0100	6.4		20.0				
Fluorene	1.3053 1.3254	1.3617 1.2560	1.3725 1.2546	1.3428	1.3245	Ave		1.3179		0.9000	3.3		20.0				
4,6-Dinitro-2-methylphenol	++++ 0.1432	0.0985 0.1462	0.1142 0.1453	0.1268	0.1361	Ave		0.1300		0.0100	14.0		20.0				
N-Nitrosodiphenylamine	0.5815 0.5842	0.5335 0.5775	0.5631 0.5899	0.5591	0.5578	Ave		0.5683		0.0100	3.3		20.0				
1,2-Diphenylhydrazine (as Azobenzene)	0.7667 0.8428	0.8041 0.8121	0.8471 0.8091	0.8166	0.8146	Ave		0.8141		0.0100	3.0		20.0				
4-Bromophenyl phenyl ether	0.2046 0.2116	0.1971 0.2114	0.2124 0.2103	0.2105	0.2134	Ave		0.2089		0.1000	2.6		20.0				
Hexachlorobenzene	0.1992 0.2131	0.2049 0.2119	0.2145 0.2089	0.2091	0.2086	Ave		0.2088		0.1000	2.3		20.0				
Atrazine	0.1508 0.1701	0.1598 0.1692	0.1695 0.1557	0.1710	0.1740	Ave		0.1650		0.0100	5.1		20.0				
Pentachlorophenol	0.1520 0.1572	0.1371 0.1550	0.1337 0.1472	0.1463	0.1491	Ave		0.1472		0.0500	5.6		20.0				
n-Octadecane	2.9279 2.7791	2.9973 2.6531	3.2672 2.3073	3.0215	2.8258	Ave		2.8474			10.0		20.0				
Phenanthrene	1.2333 1.2156	1.1493 1.2158	1.2014 1.2428	1.1714	1.1853	Ave		1.2019		0.7000	2.6		20.0				
Anthracene	1.1639 1.2594	1.1596 1.2828	1.2305 1.2914	1.2094	1.2361	Ave		1.2292		0.7000	4.0		20.0				
Carbazole	0.9973 1.0904	1.0318 1.1270	1.0917 1.1210	1.0590	1.0898	Ave		1.0760		0.0100	4.1		20.0				

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

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

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

Analy Batch No.: 132436

SDG No.: \_\_\_\_\_

Instrument ID: CH732

GC Column: Rxi-5SilMS ID: 0.32 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 02/03/2015 05:53

Calibration End Date: 02/03/2015 09:00

Calibration ID: 21642

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	1.2435 1.4028	1.2478 1.4108	1.2963 1.4534	1.3362	1.3749	Ave		1.3457			0.0100	5.8	20.0				
Fluoranthene	1.2269 1.2465	1.1395 1.2579	1.1842 1.2493	1.1722	1.2253	Ave		1.2127			0.6000	3.5	20.0				
Benzidine	++++ 0.6087	0.3381 0.5884	0.3417 ++++	0.4319	0.5499	Lin1	-0.796	0.6014			0.0100			0.9950		0.9900	
Pyrene	1.2316 1.3821	1.3123 1.3377	1.3222 1.3790	1.3011	1.2959	Ave		1.3202			0.6000	3.7	20.0				
Butyl benzyl phthalate	0.5641 0.6167	0.5570 0.6045	0.5764 0.6090	0.5730	0.5894	Ave		0.5863			0.0100	3.8	20.0				
3,3'-Dichlorobenzidine	0.3540 0.4211	0.3483 0.4265	0.3548 0.4206	0.3825	0.3790	Ave		0.3859			0.0100	8.5	20.0				
Bis(2-ethylhexyl) phthalate	0.7021 0.8761	0.7843 0.8596	0.7648 0.8725	0.8242	0.8129	Ave		0.8121			0.0100	7.4	20.0				
Benzo[a]anthracene	1.1208 1.1714	1.1533 1.1649	1.1486 1.1975	1.1557	1.1481	Ave		1.1575			0.8000	1.9	20.0				
Chrysene	1.0300 1.1228	1.0963 1.1040	1.0801 1.1217	1.0966	1.0755	Ave		1.0909			0.7000	2.7	20.0				
Di-n-octyl phthalate	1.2730 1.7268	1.3219 1.7538	1.4451 1.7590	1.5535	1.6017	Ave		1.5544			0.0100	12.0	20.0				
7,12-Dimethylbenz(a)anthracene	0.4916 0.5923	0.5158 0.5834	0.5403 0.5803	0.5553	0.5564	Ave		0.5519			0.0100	6.3	20.0				
Benzo[b]fluoranthene	1.1665 1.3564	1.2427 1.3265	1.3292 1.3265	1.2863	1.3392	Ave		1.2967			0.7000	4.9	20.0				
Benzo[k]fluoranthene	1.1740 1.3060	1.2282 1.3366	1.2104 1.3323	1.2992	1.2796	Ave		1.2708			0.7000	4.7	20.0				
Benzo[e]pyrene	1.0767 1.2070	1.1193 1.2216	1.1574 1.2121	1.1816	1.1791	Ave		1.1694			0.0100	4.3	20.0				
Benzo[a]pyrene	1.0264 1.2368	1.1216 1.2146	1.1478 1.2456	1.1816	1.1717	Ave		1.1682			0.7000	6.1	20.0				
Indeno[1,2,3-cd]pyrene	1.0328 1.3270	1.1037 1.3836	1.1196 1.4315	1.2105	1.2218	Ave		1.2288			0.5000	12.0	20.0				
Dibenz(a,h)anthracene	0.8585 1.1035	0.9322 1.1407	0.9486 1.1741	1.0061	1.0090	Ave		1.0216			0.4000	11.0	20.0				
Benzo[g,h,i]perylene	0.9029 1.1236	0.9484 1.1747	0.9727 1.2283	1.0095	1.0273	Ave		1.0484			0.5000	11.0	20.0				
2-Fluorophenol (Surr)	0.9661 1.0450	1.0460 1.0420	1.0861 1.0374	1.0544	1.0213	Ave		1.0373				3.3	20.0				
Phenol-d5 (Surr)	1.2867 1.4119	1.3965 1.3682	1.5097 1.3500	1.4614	1.3893	Ave		1.3967				4.9	20.0				

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1 Analy Batch No.: 132436

SDG No.: \_\_\_\_\_

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/03/2015 05:53 Calibration End Date: 02/03/2015 09:00 Calibration ID: 21642

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
Nitrobenzene-d5 (Surr)	0.3197 0.3403	0.3409 0.3398	0.3393 0.3237	0.3449	0.3373	Ave		0.3358			2.7		20.0				
2-Fluorobiphenyl	1.2937 1.3368	1.3465 1.2809	1.3527 1.2654	1.3156	1.3177	Ave		1.3136			2.4		20.0				
2,4,6-Tribromophenol (Surr)	0.0707 0.0958	0.0803 0.0956	0.0889 0.0947	0.0887	0.0888	Ave		0.0879		0.0100	9.8		20.0				
Terphenyl-d14 (Surr)	0.8113 0.8873	0.8676 0.8789	0.8868 0.8883	0.8805	0.8663	Ave		0.8709			2.9		20.0				

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

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1 Analy Batch No.: 132436

SDG No.: \_\_\_\_\_

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/03/2015 05:53 Calibration End Date: 02/03/2015 09:00 Calibration ID: 21642

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-132436/3	D0203003.D
Level 2	IC 180-132436/4	D0203004.D
Level 3	IC 180-132436/5	D0203005.D
Level 4	ICIS 180-132436/6	D0203006.D
Level 5	IC 180-132436/7	D0203007.D
Level 6	IC 180-132436/8	D0203008.D
Level 7	IC 180-132436/9	D0203009.D
Level 8	IC 180-132436/10	D0203010.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	1934 209470	11737 302556	23830 408930	55464	109242	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosodimethylamine	DCB	Ave	2670 284868	15503 415506	30743 570621	74663	147321	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pyridine	DCB	Ave	4214 507054	26410 740621	55290 993662	131501	264484	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Methyl methanesulfonate	DCB	Ave	3907 385315	22793 562394	46560 750302	105679	203934	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzaldehyde	DCB	Ave	4208 517593	21743 682953	45208 827212	107077	258918	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenol	DCB	Ave	11070 1005636	60095 1423572	120902 1910430	270314	537943	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Aniline	DCB	Ave	11813 1146158	64483 1627756	132805 2127696	301857	596247	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-chloroethyl)ether	DCB	Ave	8179 701627	41584 1010724	84668 1360669	190003	372868	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Chlorophenol	DCB	Ave	8829 887214	48891 1264905	102500 1719757	233051	458905	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
n-Decane	DCB	Ave	11924 996855	61014 1358551	122092 1778933	273969	543602	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	10209 1034697	58818 1463480	117189 1969048	274959	534786	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	11017 1041084	58452 1517829	124324 2013954	272903	544982	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzyl alcohol	DCB	Ave	5381 548480	31167 798172	67422 1052255	148867	285603	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	11014 1006967	58062 1438910	117889 1943533	267807	530899	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Methylphenol	DCB	Ave	8430 763283	45068 1091611	94232 1418095	207591	398202	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.: 180-43409-1

Analy Batch No.: 132436

SDG No.: \_\_\_\_\_

Instrument ID: CH732

GC Column: Rxi-5SilMS ID: 0.32 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 02/03/2015 05:53

Calibration End Date: 02/03/2015 09:00

Calibration ID: 21642

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Indene	DCB	Ave	15458 1386687	79937 1998319	167642 2585818	379789	734967	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,2'-oxybis[1-chloropropane]	DCB	Ave	16793 1466380	90145 2093118	188707 2627938	413246	790384	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosopyrrolidine	DCB	Ave	3516 381909	21630 557274	45845 735704	101195	201336	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acetophenone	DCB	Ave	13611 1115856	70865 1552275	143572 1999395	317474	599792	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosodi-n-propylamine	DCB	Ave	6343 514816	34348 713290	70224 911733	149121	285723	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Methylphenol, 3 & 4	DCB	Ave	8447 767791	47943 1079768	99882 1370355	220366	420058	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachloroethane	DCB	Ave	4935 444909	25617 646511	53481 865068	119409	232849	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Nitrobenzene	NPT	Ave	9966 927641	55637 1350399	114851 1755924	251361	498871	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Isophorone	NPT	Ave	18114 1633037	95220 2371427	200303 3163519	446570	860436	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Nitrophenol	NPT	Ave	5049 529004	29702 780171	61516 1023420	140596	280608	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dimethylphenol	NPT	Ave	9995 931124	56716 1373726	117563 1691801	262290	499190	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzoic acid	NPT	Lin1	+++++ 552644	18161 833727	45351 1152352	103970	249876	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-chloroethoxy)methane	NPT	Ave	11681 989031	60701 1424492	125607 1856791	273809	519031	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dichlorophenol	NPT	Ave	8940 820358	47384 1186303	99409 1589300	225553	439198	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2,4-Trichlorobenzene	NPT	Ave	10340 930596	56870 1339792	116908 1794324	259967	482199	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Naphthalene	NPT	Ave	33313 2959547	180017 4378054	369682 5845912	810769	1593857	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chloroaniline	NPT	Ave	12989 1214856	70259 1748750	150282 2275054	328724	659764	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,6-Dichlorophenol	NPT	Ave	7969 812683	50566 1158271	105695 1537038	224288	440269	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorobutadiene	NPT	Ave	6668 547750	33197 801613	67792 1078670	151937	293629	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Caprolactam	NPT	Ave	2851 274556	16212 412304	33697 544085	72011	148052	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chloro-3-methylphenol	NPT	Ave	9929 843095	50346 1234208	106402 1628392	231893	450969	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.: 180-43409-1

Analy Batch No.: 132436

SDG No.: \_\_\_\_\_

Instrument ID: CH732

GC Column: Rxi-5SilMS ID: 0.32 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 02/03/2015 05:53

Calibration End Date: 02/03/2015 09:00

Calibration ID: 21642

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	23929 2117761	128685 3038002	260830 4039867	582381	1113976	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1-Methylnaphthalene	NPT	Ave	23121 1972940	118777 2847445	248893 3757680	540054	1037675	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorocyclopentadiene	ANT	Ave	5682 644566	34246 941368	71542 1063917	170705	347500	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2,4,5-Tetrachlorobenzene	ANT	Ave	10408 858550	55917 1226308	117976 1614990	251697	472692	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,6-Trichlorophenol	ANT	Ave	6681 603497	35559 889199	76466 1196597	172469	326888	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,5-Trichlorophenol	ANT	Ave	7171 648683	36826 950450	81693 1271911	178301	349406	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,1'-Biphenyl	ANT	Ave	28976 2580419	157628 3711661	321551 4916975	718467	1360765	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Chloronaphthalene	ANT	Ave	23718 2127629	129992 2950139	261278 3914388	579154	1091984	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Nitroaniline	ANT	Ave	6240 600873	34853 861359	76492 1173309	164804	319101	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dimethyl phthalate	ANT	Ave	25507 2163658	129303 3099106	274773 4183619	594888	1148510	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,3-Dinitrobenzene	ANT	Ave	2761 348418	18618 516502	40950 672638	93300	183786	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,6-Dinitrotoluene	ANT	Ave	4998 484496	28186 692489	60939 940800	134217	257767	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acenaphthylene	ANT	Ave	38147 3284115	192381 4912276	416410 6481156	903822	1740013	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
3-Nitroaniline	ANT	Ave	5989 590172	33591 878098	72336 1147441	165063	315804	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dinitrophenol	ANT	Lin1	3286 655440	22936 953848	59478 1253184	159961	339911	0.800 80.0	4.00 120	8.00 160	20.0	40.0
Acenaphthene	ANT	Ave	24369 1938543	126036 2755493	263354 3512775	576591	1092870	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Nitrophenol	ANT	Ave	5723 682381	36110 1007845	78078 1337557	181010	364939	0.800 80.0	4.00 120	8.00 160	20.0	40.0
2,4-Dinitrotoluene	ANT	Ave	6434 635934	37788 912905	78701 1210224	177872	347851	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dibenzofuran	ANT	Ave	33645 2825768	175543 4232923	363941 5571795	789696	1536391	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,3,5,6-Tetrachlorophenol	ANT	Ave	5498 586262	32909 863773	69064 1122675	154617	310668	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,3,4,6-Tetrachlorophenol	ANT	Ave	5315 554584	32937 824302	70676 1088782	153842	305329	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.: 180-43409-1

Analy Batch No.: 132436

SDG No.: \_\_\_\_\_

Instrument ID: CH732

GC Column: Rxi-5SilMS ID: 0.32 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 02/03/2015 05:53

Calibration End Date: 02/03/2015 09:00

Calibration ID: 21642

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	22002 2095491	127319 3057555	266173 3745510	577092	1110540	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Diethyl phthalate	ANT	Ave	25990 2158069	141494 3095548	282894 3962742	620434	1198085	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexadecane	NPT	Ave	19875 1573793	102020 2091830	219225 2544862	473542	907979	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chlorophenyl phenyl ether	ANT	Ave	12078 1044305	65852 1529802	136257 2002066	292933	563422	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Nitroaniline	ANT	Ave	5641 567688	34362 852366	72364 1112682	165071	323357	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Fluorene	ANT	Ave	25774 2206480	138685 3180401	288323 4227850	630958	1206930	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4,6-Dinitro-2-methylphenol	PHN	Ave	++++ 811928	36409 1229972	84343 1636050	207551	426277	++++ 80.0	4.00 120	8.00 160	20.0	40.0
N-Nitrosodiphenylamine	PHN	Ave	19976 1656272	98631 2429181	207962 3320829	457506	873779	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2-Diphenylhydrazine (as Azobenzene)	PHN	Ave	26337 2389339	148666 3415954	312827 4555078	668173	1276008	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Bromophenyl phenyl ether	PHN	Ave	7027 599814	36435 889331	78447 1183915	172260	334279	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorobenzene	PHN	Ave	6843 604183	37887 891428	79204 1175832	171081	326768	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Atrazine	PHN	Ave	5181 482114	29538 711536	62578 876625	139931	272565	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pentachlorophenol	PHN	Ave	10440 891131	50690 1304271	98731 1657954	239474	467256	0.800 80.0	4.00 120	8.00 160	20.0	40.0
n-Octadecane	DCB	Ave	19565 1800945	107882 2514404	234012 3002594	513509	971090	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenanthrene	PHN	Ave	42368 3446256	212492 5114269	443670 6996513	958538	1856746	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Anthracene	PHN	Ave	39984 3570591	214399 5395998	454435 7270383	989626	1936292	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Carbazole	PHN	Ave	34259 3091224	190765 4740553	403180 6310858	866503	1707133	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Di-n-butyl phthalate	PHN	Ave	42717 3976938	230689 5934589	478707 8182573	1093325	2153696	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Fluoranthene	PHN	Ave	42149 3533786	210680 5291453	437332 7033592	959196	1919281	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzidine	CRY	Lin1	++++ 1638838	56969 2399353	115541 ++++	327820	826654	++++ 40.0	2.00 60.0	4.00 ++++	10.0	20.0
Pyrene	CRY	Ave	40844 3720835	221103 5454551	447116 7357760	987653	1948062	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.: 180-43409-1

Analy Batch No.: 132436

SDG No.: \_\_\_\_\_

Instrument ID: CH732

GC Column: Rxi-5SilMS ID: 0.32 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 02/03/2015 05:53

Calibration End Date: 02/03/2015 09:00

Calibration ID: 21642

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Butyl benzyl phthalate	CRY	Ave	18708 1660263	93839 2464856	194904 3249211	434962	886116	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
3,3'-Dichlorobenzidine	CRY	Ave	11741 1133566	58677 1739062	119990 2244278	290343	569808	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-ethylhexyl) phthalate	CRY	Ave	23285 2358686	132135 3504948	258611 4655604	625648	1221960	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[a]anthracene	CRY	Ave	37171 3153612	194307 4749712	388390 6389372	877303	1725874	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Chrysene	CRY	Ave	34157 3022852	184718 4501660	365240 5985101	832413	1616774	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Di-n-octyl phthalate	PRY	Ave	37171 3924029	194307 5987889	388390 8321767	967260	1974782	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
7,12-Dimethylbenz(a)anthracene	PRY	Ave	13505 1345948	72293 1992000	142947 2745346	345745	686009	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[b]fluoranthene	PRY	Ave	32046 3082246	174164 4528904	351632 6275756	800926	1651159	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[k]fluoranthene	PRY	Ave	32254 2967704	172135 4563372	320222 6303252	808910	1577594	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[e]pyrene	PRY	Ave	29579 2742921	156862 4171014	306198 5734616	735708	1453734	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[a]pyrene	PRY	Ave	28197 2810546	157185 4146954	303646 5893073	735703	1444557	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Indeno[1,2,3-cd]pyrene	PRY	Ave	28373 3015474	154678 4723890	296192 6772582	753684	1506352	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dibenz(a,h)anthracene	PRY	Ave	23584 2507561	130639 3894722	250943 5554542	626416	1244003	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[g,h,i]perylene	PRY	Ave	24806 2553190	132922 4010862	257341 5811207	628584	1266587	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Fluorophenol (Surr)	DCB	Ave	6456 677215	37650 987546	77789 1350034	179189	350979	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenol-d5 (Surr)	DCB	Ave	8598 914976	50263 1296709	108130 1756748	248370	477417	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Nitrobenzene-d5 (Surr)	NPT	Ave	9741 946397	55043 1393487	113169 1821929	255780	498999	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Fluorobiphenyl	ANT	Ave	25545 2225410	137132 3243372	284174 4264201	618183	1200667	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,6-Tribromophenol (Surr)	PHN	Ave	2430 271556	14848 402216	32838 533212	72581	139101	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Terphenyl-d14 (Surr)	CRY	Ave	26904 2388667	146177 3583724	299886 4739579	668366	1302313	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.: 180-43409-1 Analy Batch No.: 132436

SDG No.: \_\_\_\_\_

Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/03/2015 05:53 Calibration End Date: 02/03/2015 09:00 Calibration ID: 21642

Curve Type Legend:

Ave = Average ISTD Lin1 = Linear 1/conc ISTD
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TestAmerica Laboratories  
Initial Calibration %Drift Report

Method: \\PITCHROM\ChromData\CH732\20150203-5518.b\BNA\_CH732.m

Instrument: CH732

Lims Location: 180

Lock State: Unlocked

Cpnd Order: Compound Type

Integrator: RTE

Last Modified: 04-Feb-2015 06:46:57

No.Compounds:209

## Initial Calibration Batches

Ical Batch: \\PITCHROM\ChromData\CH732\20150203-5518.b

Inj Date : 03-Feb-2015 05:53:30, Sublist: chrom-BNA\_CH732\*sub4

Limit Group: BNA 8270C ICAL

Detector 1: MS SCAN

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
* 1 1,4-Dichlorobenzene-d4	133646	143973	143248	135960	137459	129608	126365	130134
* 2 Naphthalene-d8	609382	645863	667133	593216	591759	556151	546713	562776
* 3 Acenaphthene-d10	394913	407379	420149	375917	364487	332955	337620	336979
* 4 Phenanthrene-d10	687055	739534	738596	654603	626567	567011	560871	562981
* 5 Chrysene-d12	663270	673939	676299	607262	601321	538430	543659	533575
* 6 Perylene-d12	549453	560589	529106	498112	493170	454484	455236	473099
\$ 7 2-Fluorophenol	-6.9	0.8	4.7	1.6	-1.5	0.7	0.5	0.0
\$ 8 Phenol-d5	-7.9	0.0	8.1	4.6	-0.5	1.1	-2.0	-3.3
\$ 9 Nitrobenzene-d5	-4.8	1.5	1.0	2.7	0.5	1.4	1.2	-3.6
\$ 10 2-Fluorobiphenyl	-1.5	2.5	3.0	0.1	0.3	1.8	-2.5	-3.7
\$ 11 2,4,6-Tribromophenol	-19.6	-8.7	1.1	0.9	1.0	8.9	8.7	7.7
\$ 12 Terphenyl-d14	-6.8	-0.4	1.8	1.1	-0.5	1.9	0.9	2.0
13 1,4-Dioxane	-9.2	2.3	4.4	2.4	-0.2	1.4	0.2	-1.4
14 N-Nitrosodimethylamine	-7.2	0.1	-0.3	2.0	-0.4	2.1	1.8	1.9
15 Pyridine	-16.0	-2.3	2.8	3.0	2.5	4.2	4.1	1.7
21 Methyl methanesulfonat	-3.5	4.5	7.3	2.6	-2.1	-1.9	-2.1	-4.9
25 Benzaldehyde	-6.8	-10.6	-6.6	-6.7	11.5	18.3	6.7	-5.9
26 Phenol	4.4	5.2	6.4	0.3	-1.3	-2.2	-5.3	-7.5
27 Aniline	0.7	2.0	5.6	1.2	-1.2	0.7	-2.2	-6.9
29 Bis(2-chloroethyl)ethe	9.3	3.2	5.6	-0.2	-3.1	-3.3	-4.8	-6.6
30 2-Chlorophenol	-2.5	0.2	5.6	1.2	-1.5	1.0	-1.5	-2.5
31 n-Decane	12.3	6.6	7.2	1.4	-0.5	-3.2	-9.8	-14.0
32 1,3-Dichlorobenzene	-3.2	3.5	3.7	2.5	-1.4	1.2	-2.2	-4.1
33 1,4-Dichlorobenzene	1.8	0.3	7.2	-0.8	-2.1	-0.8	-1.1	-4.4
34 Benzyl alcohol	-5.5	1.6	10.5	2.8	-2.5	-0.7	-1.2	-5.1
35 1,2-Dichlorobenzene	4.7	2.5	4.6	0.1	-1.9	-1.3	-3.6	-5.1
36 2-Methylphenol	4.8	4.0	9.3	1.5	-3.7	-2.1	-4.3	-9.5
37 Indene	5.8	1.6	7.1	2.3	-2.1	-2.1	-3.5	-9.1
38 2,2'-oxybis[1-chloropr	6.5	6.2	11.7	3.1	-2.5	-4.1	-6.4	-14.4
39 N-Nitrosopyrrolidine	-10.3	2.5	9.2	1.5	-0.1	0.5	0.3	-3.6
41 N-Nitrosodi-n-propylam	11.0	11.6	14.7	2.6	-2.8	-7.1	-12.0	-18.1
40 Acetophenone	12.2	8.5	10.4	2.9	-3.8	-5.1	-9.8	-15.3
42 4-Methylphenol	2.3	7.8	12.8	4.9	-1.1	-4.1	-7.8	-14.8
45 Hexachloroethane	5.3	1.5	6.5	0.2	-3.4	-2.1	-2.7	-5.2
46 Nitrobenzene	-1.9	3.4	3.3	1.7	1.1	0.1	-1.2	-6.4
48 Isophorone	1.3	0.5	2.3	2.6	-0.9	0.0	-1.5	-4.2
49 2-Nitrophenol	-10.2	-0.3	0.0	2.8	2.8	3.1	3.1	-1.4
50 2,4-Dimethylphenol	-2.6	4.3	4.7	5.1	0.2	-0.5	-0.5	-10.7
52 Benzoic acid	Disabled	22.5	0.4	-17.7	-10.4	0.9	2.1	2.2
53 Bis(2-chloroethoxy)met	6.2	4.1	4.3	2.3	-2.8	-1.5	-3.8	-8.6
54 2,4-Dichlorophenol	-0.2	-0.2	1.3	3.4	0.9	0.3	-1.6	-4.0
56 1,2,4-Trichlorobenzene	0.6	4.4	3.9	3.9	-3.4	-0.8	-3.1	-5.5
58 Naphthalene	1.0	3.0	2.4	1.0	-0.5	-1.7	-1.3	-4.0

Method: \\PITCHROM\ChromData\CH732\20150203-5518.b\BNA\_CH732.m

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
59 4-Chloroaniline	-1.7	0.4	3.9	2.2	2.9	0.8	-1.6	-6.8
60 2,6-Dichlorophenol	-10.6	7.1	8.4	3.4	1.8	-0.1	-3.4	-6.6
62 Hexachlorobutadiene	8.4	1.8	0.7	1.5	-1.7	-2.4	-3.2	-5.1
64 Caprolactam	-5.0	1.9	2.5	-1.4	1.6	0.2	2.1	-1.9
67 4-Chloro-3-methylpheno	5.6	1.1	3.4	1.4	-1.2	-1.7	-2.4	-6.2
69 2-Methylnaphthalene	2.6	4.1	2.2	2.6	-1.6	-0.5	-3.2	-6.2
71 1-Methylnaphthalene	5.7	2.5	4.0	1.5	-2.3	-1.1	-3.2	-7.0
72 Hexachlorocyclopentadi	-17.3	-3.4	-2.1	4.4	9.6	11.3	6.8	-9.3
73 1,2,4,5-Tetrachloroben	1.1	5.3	7.7	2.7	-0.5	-1.1	-7.1	-8.1
74 2,4,6-Trichlorophenol	-4.9	-1.9	2.3	3.2	0.8	1.9	-1.3	-0.2
75 2,4,5-Trichlorophenol	-3.8	-4.2	3.0	0.5	1.6	3.3	-0.5	0.0
76 1,1'-Biphenyl	-2.5	2.8	1.7	1.6	-0.8	3.0	-2.6	-3.1
77 2-Chloronaphthalene	-1.5	4.7	2.0	1.1	-1.7	4.8	-4.5	-4.8
79 2-Nitroaniline	-8.8	-1.3	5.1	1.2	1.0	4.1	-1.8	0.5
82 Dimethyl phthalate	1.7	0.0	3.0	-0.3	-0.8	2.3	-3.6	-2.3
83 1,3-Dinitrobenzene	-26.9	-4.5	1.9	3.8	5.4	9.4	6.6	4.3
84 2,6-Dinitrotoluene	-9.3	-0.8	4.0	2.4	1.4	4.3	-2.0	0.1
85 Acenaphthylene	-0.1	-2.3	2.5	-0.5	-1.3	2.0	0.3	-0.6
86 3-Nitroaniline	-10.7	-2.9	1.4	3.4	2.0	4.4	2.1	0.3
87 2,4-Dinitrophenol	* 38.3	-21.5	-15.6	-6.1	0.6	5.2	0.3	-1.1
88 Acenaphthene	4.5	4.8	6.2	3.9	1.6	-1.4	-7.8	-11.7
89 4-Nitrophenol	-22.9	-5.7	-1.1	2.5	6.6	9.1	5.9	5.6
91 2,4-Dinitrotoluene	-11.1	1.2	2.2	3.2	4.1	4.2	-1.7	-2.1
93 Dibenzofuran	0.6	1.8	2.3	-0.8	-0.4	0.2	-1.3	-2.4
95 2,3,5,6-Tetrachlorophe	-15.2	-1.6	0.1	0.2	3.8	7.3	3.9	1.5
96 2,3,4,6-Tetrachlorophe	-16.3	0.5	4.6	1.8	4.2	3.6	1.2	0.4
97 2-Naphthylamine	-7.7	3.6	5.0	1.8	1.0	4.3	0.0	-7.9
98 Diethyl phthalate	1.4	7.1	3.8	1.7	1.3	-0.1	-5.8	-9.4
99 Hexadecane	10.5	7.0	11.3	8.2	4.0	-4.1	-13.6	-23.4
100 4-Chlorophenyl phenyl	-1.6	4.0	4.3	0.3	-0.6	0.9	-2.8	-4.4
101 4-Nitroaniline	-14.8	0.7	2.8	4.8	5.9	1.7	0.4	-1.5
103 Fluorene	-1.0	3.3	4.1	1.9	0.5	0.6	-4.7	-4.8
104 4,6-Dinitro-2-methylph	Disabled	-24.3	-12.2	-2.5	4.6	10.1	12.4	11.7
105 N-Nitrosodiphenylamine	2.3	-6.1	-0.9	-1.6	-1.8	2.8	1.6	3.8
90 1,2-Diphenylhydrazine	-5.8	-1.2	4.0	0.3	0.1	3.5	-0.3	-0.6
110 4-Bromophenyl phenyl e	-2.1	-5.7	1.7	0.8	2.2	1.3	1.2	0.7
112 Hexachlorobenzene	-4.6	-1.8	2.7	0.1	-0.1	2.1	1.5	0.0
113 Atrazine	-8.6	-3.2	2.7	3.6	5.5	3.1	2.5	-5.6
116 Pentachlorophenol	3.2	-6.9	-9.2	-0.6	1.3	6.8	5.3	0.0
115 n-Octadecane	2.8	5.3	14.7	6.1	-0.8	-2.4	-6.8	-19.0
121 Phenanthrene	2.6	-4.4	0.0	-2.5	-1.4	1.1	1.2	3.4
122 Anthracene	-5.3	-5.7	0.1	-1.6	0.6	2.5	4.4	5.1
124 Carbazole	-7.3	-4.1	1.5	-1.6	1.3	1.3	4.7	4.2
126 Di-n-butyl phthalate	-7.6	-7.3	-3.7	-0.7	2.2	4.2	4.8	8.0
131 Fluoranthene	1.2	-6.0	-2.4	-3.3	1.0	2.8	3.7	3.0
132 Benzidine	Disabled	22.4	-10.1	-15.0	-1.9	4.5	0.0	Disabled
133 Pyrene	-6.7	-0.6	0.2	-1.4	-1.8	4.7	1.3	4.4
138 Butyl benzyl phthalate	-3.8	-5.0	-1.7	-2.3	0.5	5.2	3.1	3.9
144 3,3'-Dichlorobenzidine	-8.2	-9.7	-8.0	-0.9	-1.8	9.1	10.5	9.0
145 Bis(2-ethylhexyl) phth	-13.5	-3.4	-5.8	1.5	0.1	7.9	5.9	7.4
146 Benzo[a]anthracene	-3.2	-0.4	-0.8	-0.2	-0.8	1.2	0.6	3.5
147 Chrysene	-5.6	0.5	-1.0	0.5	-1.4	2.9	1.2	2.8
150 Di-n-octyl phthalate	-18.1	-15.0	-7.0	-0.1	3.0	11.1	12.8	13.2
151 7,12-Dimethylbenz(a)an	-10.9	-6.5	-2.1	0.6	0.8	7.3	5.7	5.1
152 Benzo[b]fluoranthene	-10.0	-4.2	2.5	-0.8	3.3	4.6	2.3	2.3
153 Benzo[k]fluoranthene	-7.6	-3.3	-4.7	2.2	0.7	2.8	5.2	4.8
219 Benzo[e]pyrene	-7.9	-4.3	-1.0	1.0	0.8	3.2	4.5	3.7
154 Benzo[a]pyrene	-12.1	-4.0	-1.8	1.1	0.3	5.9	4.0	6.6
157 Indeno[1,2,3-cd]pyrene	-16.0	-10.2	-8.9	-1.5	-0.6	8.0	12.6	16.5
158 Dibenzo(a,h)anthracene	-16.0	-8.8	-7.1	-1.5	-1.2	8.0	11.7	14.9

Method: \\PITCHROM\ChromData\CH732\20150203-5518.b\BNA\_CH732.m

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
159 Benzo[g,h,i]perylene	-13.9	-9.5	-7.2	-3.7	-2.0	7.2	12.0	17.2

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203003.D  
 Lims ID: IC  
 Client ID:  
 Sample Type: IC Calib Level: 1  
 Inject. Date: 03-Feb-2015 05:53:30 ALS Bottle#: 2 Worklist Smp#: 3  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0005518-003  
 Misc. Info.: IC  
 Operator ID: 003200 Instrument ID: CH732  
 Sublist: chrom-BNA\_CH732\*sub4  
 Method: \\PITCHROM\ChromData\CH732\20150203-5518.b\BNA\_CH732.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 04-Feb-2015 06:40:52 Calib Date: 03-Feb-2015 09:00:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203010.D  
 Column 1 : Rxi-5SiIMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK011

First Level Reviewer: piccolinov

Date: 04-Feb-2015 06:38:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.185	6.185	0.000	97	133646	8.00	8.00	
* 2 Naphthalene-d8	136	7.484	7.484	0.000	100	609382	8.00	8.00	
* 3 Acenaphthene-d10	164	9.209	9.209	0.000	92	394913	8.00	8.00	
* 4 Phenanthrene-d10	188	10.668	10.668	0.000	97	687055	8.00	8.00	
* 5 Chrysene-d12	240	14.471	14.471	0.000	97	663270	8.00	8.00	
* 6 Perylene-d12	264	17.388	17.388	0.000	96	549453	8.00	8.00	
\$ 7 2-Fluorophenol	112	4.716	4.716	0.000	90	6456	0.4000	0.3726	
\$ 8 Phenol-d5	99	5.801	5.801	0.000	90	8598	0.4000	0.3685	
\$ 9 Nitrobenzene-d5	82	6.752	6.752	0.000	96	9741	0.4000	0.3809	
\$ 10 2-Fluorobiphenyl	172	8.531	8.531	0.000	99	25545	0.4000	0.3939	
\$ 11 2,4,6-Tribromophenol	330	9.973	9.973	0.000	83	2430	0.4000	0.3217	
\$ 12 Terphenyl-d14	244	12.628	12.628	0.000	98	26904	0.4000	0.3726	
13 1,4-Dioxane	88	1.548	1.548	0.000	1	1934	0.4000	0.3633	M
14 N-Nitrosodimethylamine	74	2.141	2.141	0.000	71	2670	0.4000	0.3713	M
15 Pyridine	79	2.243	2.243	0.000	93	4214	0.4000	0.3359	M
21 Methyl methanesulfonate	80	4.471	4.471	0.000	86	3907	0.4000	0.3859	
25 Benzaldehyde	77	5.710	5.710	0.000	89	4208	0.4000	0.3729	
26 Phenol	94	5.812	5.812	0.000	97	11070	0.4000	0.4177	
27 Aniline	93	5.833	5.833	0.000	97	11813	0.4000	0.4027	
29 Bis(2-chloroethyl)ether	93	5.902	5.902	0.000	90	8179	0.4000	0.4372	
30 2-Chlorophenol	128	5.961	5.961	0.000	97	8829	0.4000	0.3899	
31 n-Decane	43	6.036	6.036	0.000	92	11924	0.4000	0.4490	
32 1,3-Dichlorobenzene	146	6.127	6.127	0.000	95	10209	0.4000	0.3872	
33 1,4-Dichlorobenzene	146	6.207	6.207	0.000	91	11017	0.4000	0.4072	
34 Benzyl alcohol	108	6.324	6.324	0.000	88	5381	0.4000	0.3780	
35 1,2-Dichlorobenzene	146	6.367	6.367	0.000	94	11014	0.4000	0.4188	
36 2-Methylphenol	108	6.442	6.442	0.000	95	8430	0.4000	0.4193	
37 Indene	116	6.458	6.458	0.000	87	15458	0.4000	0.4234	
38 2,2'-oxybis[1-chloropropan	45	6.474	6.474	0.000	91	16793	0.4000	0.4261	
39 N-Nitrosopyrrolidine	100	6.559	6.559	0.000	75	3516	0.4000	0.3589	



Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
40 Acetophenone	105	6.597	6.597	0.000	79	13611	0.4000	0.4489	
41 N-Nitrosodi-n-propylamine	70	6.597	6.597	0.000	74	6343	0.4000	0.4440	
42 4-Methylphenol	108	6.591	6.591	0.000	60	8447	0.4000	0.4091	
45 Hexachloroethane	117	6.720	6.720	0.000	93	4935	0.4000	0.4212	
46 Nitrobenzene	77	6.768	6.768	0.000	95	9966	0.4000	0.3924	
48 Isophorone	82	7.008	7.008	0.000	98	18114	0.4000	0.4051	
49 2-Nitrophenol	139	7.094	7.094	0.000	94	5049	0.4000	0.3593	
50 2,4-Dimethylphenol	107	7.131	7.131	0.000	95	9995	0.4000	0.3897	
52 Benzoic acid	122	7.152	7.152	0.000	83	2959	0.4000	1.54	M
53 Bis(2-chloroethoxy)methane	93	7.222	7.222	0.000	97	11681	0.4000	0.4246	
54 2,4-Dichlorophenol	162	7.334	7.334	0.000	92	8940	0.4000	0.3991	
56 1,2,4-Trichlorobenzene	180	7.425	7.425	0.000	94	10340	0.4000	0.4024	
58 Naphthalene	128	7.505	7.505	0.000	95	33313	0.4000	0.4041	
59 4-Chloroaniline	127	7.542	7.542	0.000	96	12989	0.4000	0.3933	
60 2,6-Dichlorophenol	162	7.558	7.558	0.000	92	7969	0.4000	0.3577	
62 Hexachlorobutadiene	225	7.628	7.628	0.000	95	6668	0.4000	0.4336	
64 Caprolactam	113	7.842	7.842	0.000	75	2851	0.4000	0.3799	
67 4-Chloro-3-methylphenol	107	8.007	8.007	0.000	95	9929	0.4000	0.4226	
69 2-Methylnaphthalene	142	8.183	8.183	0.000	91	23929	0.4000	0.4104	
71 1-Methylnaphthalene	142	8.285	8.285	0.000	94	23121	0.4000	0.4229	
72 Hexachlorocyclopentadiene	237	8.344	8.344	0.000	90	5682	0.4000	0.3308	
73 1,2,4,5-Tetrachlorobenzene	216	8.349	8.349	0.000	93	10408	0.4000	0.4044	
74 2,4,6-Trichlorophenol	196	8.451	8.451	0.000	91	6681	0.4000	0.3804	
75 2,4,5-Trichlorophenol	196	8.488	8.488	0.000	92	7171	0.4000	0.3849	
76 1,1'-Biphenyl	154	8.632	8.632	0.000	96	28976	0.4000	0.3899	
77 2-Chloronaphthalene	162	8.664	8.664	0.000	98	23718	0.4000	0.3940	
79 2-Nitroaniline	65	8.744	8.744	0.000	81	6240	0.4000	0.3647	
82 Dimethyl phthalate	163	8.905	8.905	0.000	98	25507	0.4000	0.4068	
83 1,3-Dinitrobenzene	168	8.942	8.942	0.000	82	2761	0.4000	0.2923	
84 2,6-Dinitrotoluene	165	8.969	8.969	0.000	86	4998	0.4000	0.3629	
85 Acenaphthylene	152	9.070	9.070	0.000	97	38147	0.4000	0.3996	
86 3-Nitroaniline	138	9.134	9.134	0.000	70	5989	0.4000	0.3572	
87 2,4-Dinitrophenol	184	9.241	9.241	0.000	60	3286	0.8000	1.11	
88 Acenaphthene	153	9.241	9.241	0.000	90	24369	0.4000	0.4181	
89 4-Nitrophenol	109	9.273	9.273	0.000	94	5723	0.8000	0.6170	
91 2,4-Dinitrotoluene	165	9.364	9.364	0.000	91	6434	0.4000	0.3555	
93 Dibenzofuran	168	9.401	9.401	0.000	96	33645	0.4000	0.4024	
95 2,3,5,6-Tetrachlorophenol	232	9.476	9.476	0.000	90	5498	0.4000	0.3392	
96 2,3,4,6-Tetrachlorophenol	232	9.514	9.514	0.000	74	5315	0.4000	0.3347	
97 2-Naphthylamine	143	9.546	9.546	0.000	96	22002	0.4000	0.3693	
98 Diethyl phthalate	149	9.583	9.583	0.000	97	25990	0.4000	0.4057	
99 Hexadecane	57	9.594	9.594	0.000	92	19875	0.4000	0.4420	
100 4-Chlorophenyl phenyl ethe	204	9.717	9.717	0.000	96	12078	0.4000	0.3935	
101 4-Nitroaniline	138	9.727	9.727	0.000	78	5641	0.4000	0.3409	
103 Fluorene	166	9.738	9.738	0.000	93	25774	0.4000	0.3962	
104 4,6-Dinitro-2-methylphenol	198	9.759	9.759	0.000	76	5271	0.8000	0.4720	
105 N-Nitrosodiphenylamine	169	9.829	9.829	0.000	62	19976	0.4000	0.4093	
90 1,2-Diphenylhydrazine	77	9.872	9.872	0.000	97	26337	0.4000	0.3767	
110 4-Bromophenyl phenyl ether	248	10.192	10.192	0.000	72	7027	0.4000	0.3917	
112 Hexachlorobenzene	284	10.283	10.283	0.000	89	6843	0.4000	0.3817	
113 Atrazine	200	10.315	10.315	0.000	84	5181	0.4000	0.3656	
116 Pentachlorophenol	266	10.465	10.465	0.000	86	10440	0.8000	0.8258	

Compound	Sig	RT (min.)	Adj RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.475	10.475	0.000	93	19565	0.4000	0.4113	
121 Phenanthrene	178	10.694	10.694	0.000	95	42368	0.4000	0.4105	
122 Anthracene	178	10.748	10.748	0.000	97	39984	0.4000	0.3788	
124 Carbazole	167	10.903	10.903	0.000	96	34259	0.4000	0.3707	
126 Di-n-butyl phthalate	149	11.239	11.239	0.000	100	42717	0.4000	0.3696	
57 Azobenzene	77		11.923				ND	ND	
131 Fluoranthene	202	12.121	12.121	0.000	98	42149	0.4000	0.4047	
132 Benzidine	184	12.260	12.260	0.000	98	10812	0.4000	1.54	
133 Pyrene	202	12.447	12.447	0.000	97	40844	0.4000	0.3731	
138 Butyl benzyl phthalate	149	13.387	13.387	0.000	97	18708	0.4000	0.3849	
144 3,3'-Dichlorobenzidine	252	14.375	14.375	0.000	74	11741	0.4000	0.3670	
145 Bis(2-ethylhexyl) phthalat	149	14.445	14.445	0.000	96	23285	0.4000	0.3458	
146 Benzo[a]anthracene	228	14.461	14.461	0.000	98	37171	0.4000	0.3873	
147 Chrysene	228	14.525	14.525	0.000	97	34157	0.4000	0.3777	
150 Di-n-octyl phthalate	149	15.764	15.764	0.000	66	34973	0.4000	0.3276	
151 7,12-Dimethylbenz(a)anthra	256	16.597	16.597	0.000	86	13505	0.4000	0.3563	
152 Benzo[b]fluoranthene	252	16.614	16.614	0.000	98	32046	0.4000	0.3598	
153 Benzo[k]fluoranthene	252	16.667	16.667	0.000	97	32254	0.4000	0.3695	
219 Benzo[e]pyrene	252	17.174	17.174	0.000	0	29579	0.4000	0.3683	
154 Benzo[a]pyrene	252	17.276	17.276	0.000	80	28197	0.4000	0.3514	
157 Indeno[1,2,3-cd]pyrene	276	19.792	19.792	0.000	91	28373	0.4000	0.3362	M
158 Dibenz(a,h)anthracene	278	19.851	19.851	0.000	76	23584	0.4000	0.3361	M
159 Benzo[g,h,i]perylene	276	20.497	20.497	0.000	94	24806	0.4000	0.3445	M
S 199 Total Cresols	108				0		0.8000	0.8284	
S 197 Methyl Phenols,Total	108				0		0.8000	0.8284	

**QC Flag Legend**

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

**Reagents:**

SVTAPSTD0.4i\_00007

Amount Added: 1.00

Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203003.D

Injection Date: 03-Feb-2015 05:53:30

Instrument ID: CH732

Operator ID: 003200

Lims ID: IC

Worklist Smp#: 3

Client ID:

Injection Vol: 2.0 ul

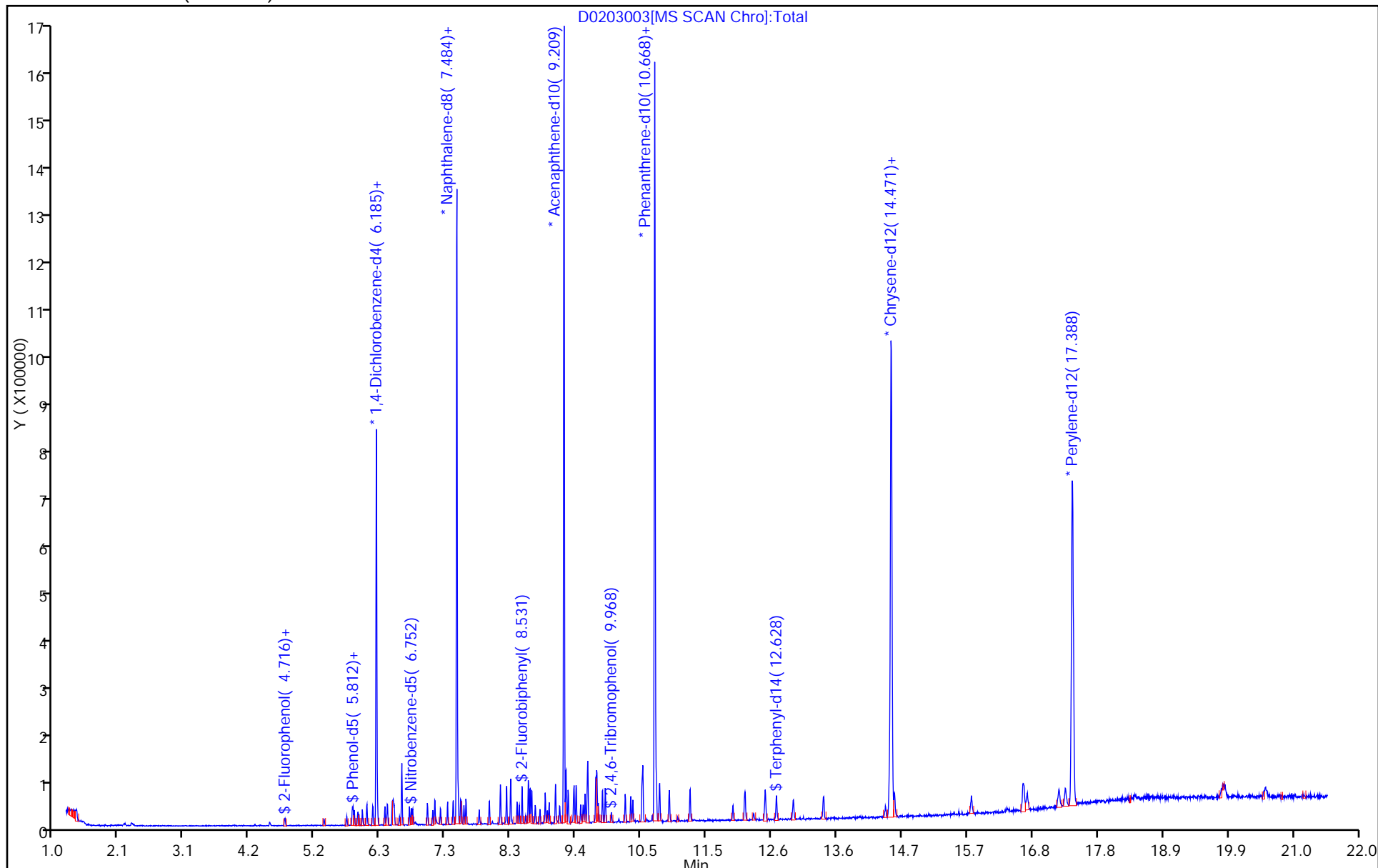
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: BNA\_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



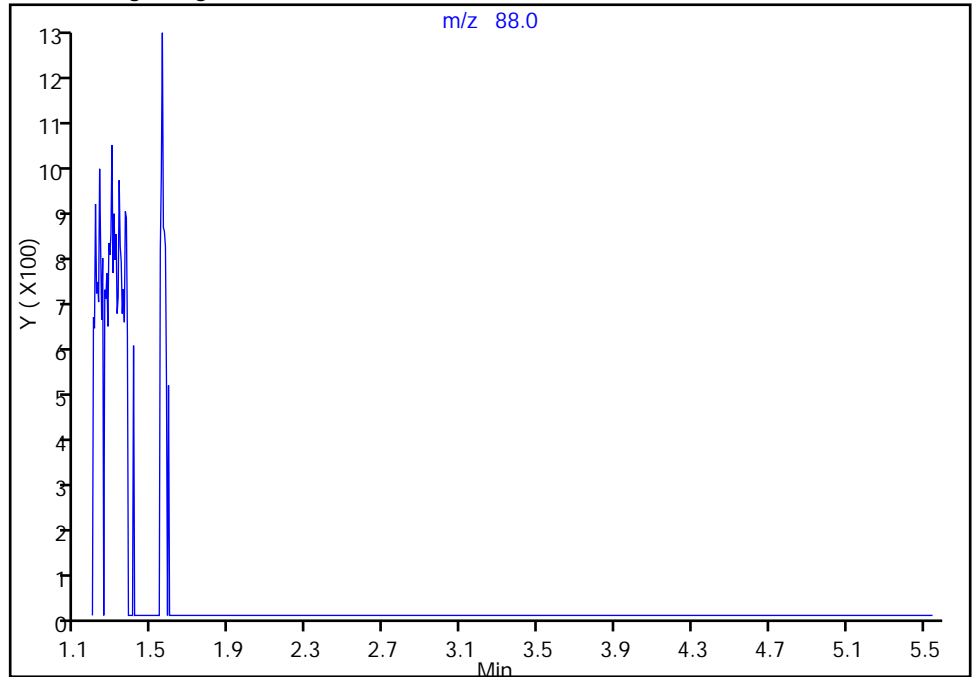
TestAmerica Pittsburgh

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Injection Date: 03-Feb-2015 05:53:30 Instrument ID: CH732  
Lims ID: IC  
Client ID:  
Operator ID: 003200 ALS Bottle#: 2 Worklist Smp#: 3  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH732 Limit Group: BNA 8270D ICAL  
Column: Rxi-5SiIMS (0.32 mm) Detector: MS SCAN

13 1,4-Dioxane, CAS: 123-91-1

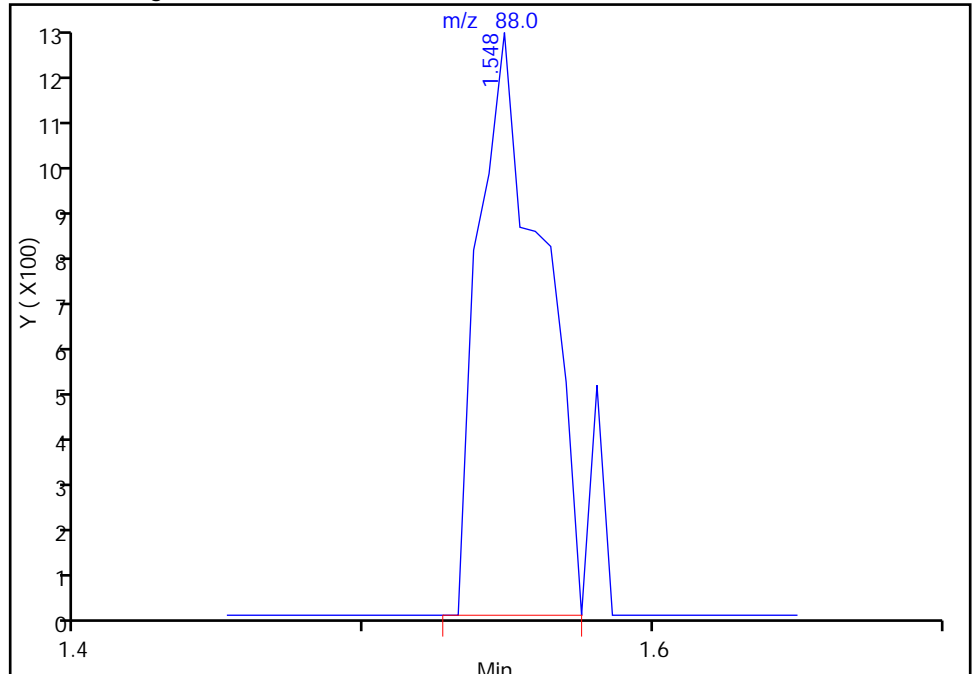
Not Detected  
Expected RT: 1.55

Processing Integration Results



RT: 1.55  
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Amount: 0.363312  
Amount Units: ng

Manual Integration Results



Reviewer: piccolinov, 03-Feb-2015 08:47:03  
Audit Action: Manually Integrated  
Audit Reason: Poor chromatography

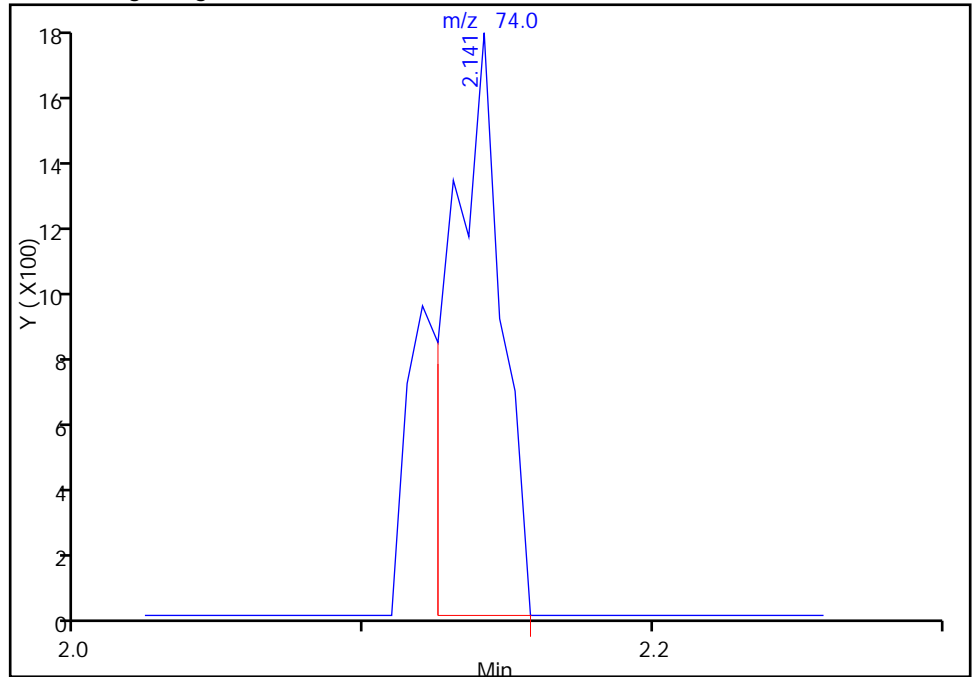
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203003.D  
Injection Date: 03-Feb-2015 05:53:30 Instrument ID: CH732  
Lims ID: IC  
Client ID:  
Operator ID: 003200 ALS Bottle#: 2 Worklist Smp#: 3  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH732 Limit Group: BNA 8270D ICAL  
Column: Rxi-5SiIMS (0.32 mm) Detector: MS SCAN

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

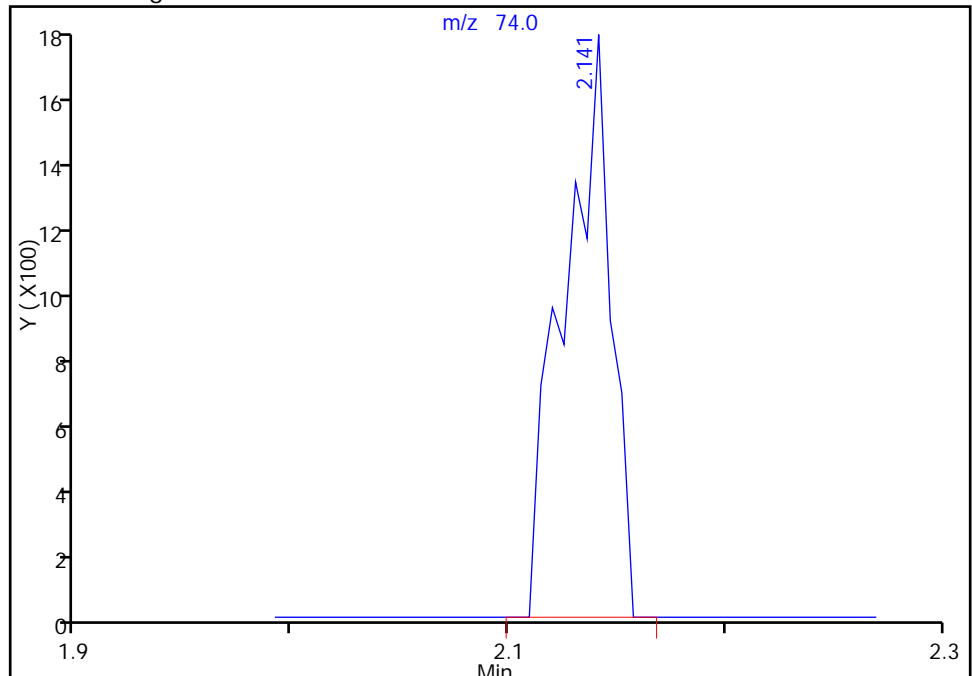
RT: 2.14  
Area: 2141  
Amount: 0.309072  
Amount Units: ng

Processing Integration Results



RT: 2.14  
Area: 2670  
Amount: 0.371252  
Amount Units: ng

Manual Integration Results



Reviewer: piccolinov, 03-Feb-2015 08:47:03  
Audit Action: Manually Integrated  
Audit Reason: Poor chromatography

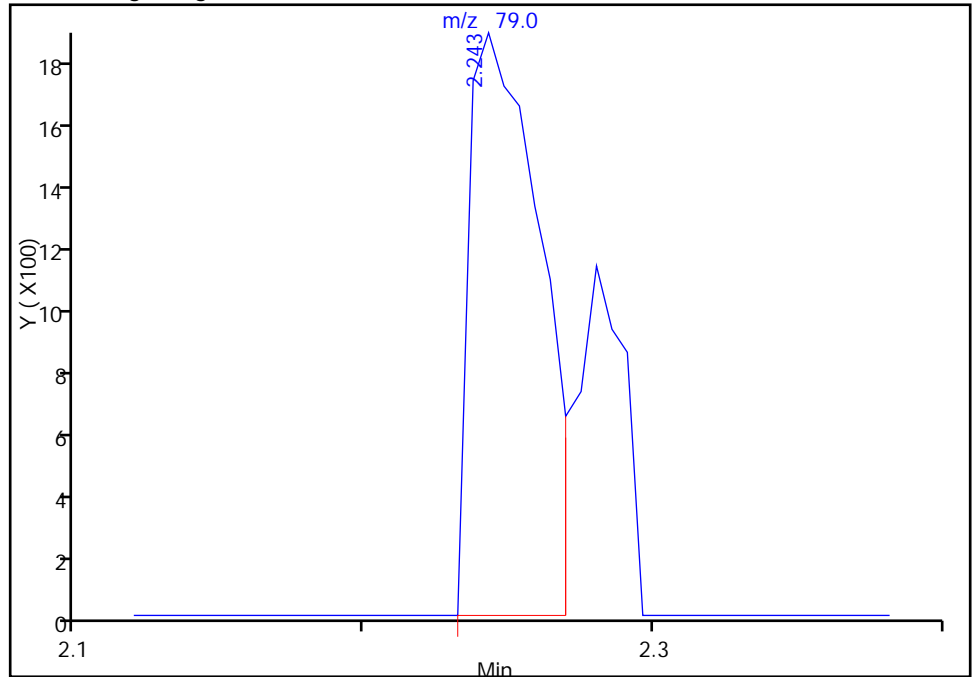
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203003.D  
Injection Date: 03-Feb-2015 05:53:30 Instrument ID: CH732  
Lims ID: IC  
Client ID:  
Operator ID: 003200 ALS Bottle#: 2 Worklist Smp#: 3  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH732 Limit Group: BNA 8270D ICAL  
Column: Rxi-5SilMS (0.32 mm) Detector: MS SCAN

15 Pyridine, CAS: 110-86-1

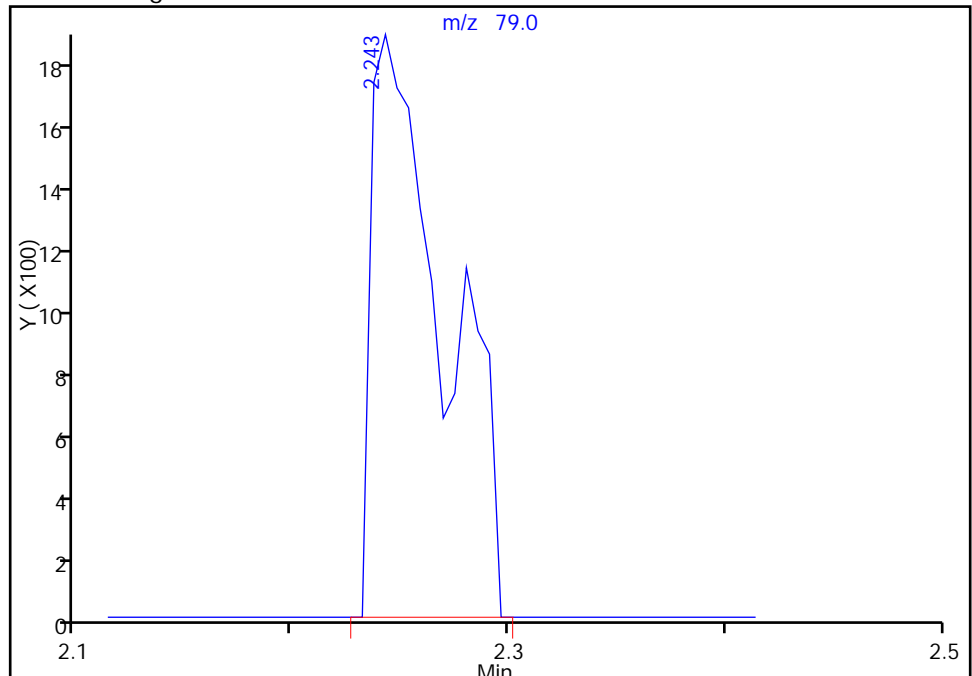
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Amount: 0.399812  
Amount Units: ng

Processing Integration Results



RT: 2.24  
Area: 4214  
Amount: 0.335929  
Amount Units: ng

Manual Integration Results



Reviewer: piccolinov, 03-Feb-2015 08:47:03  
Audit Action: Manually Integrated  
Audit Reason: Poor chromatography

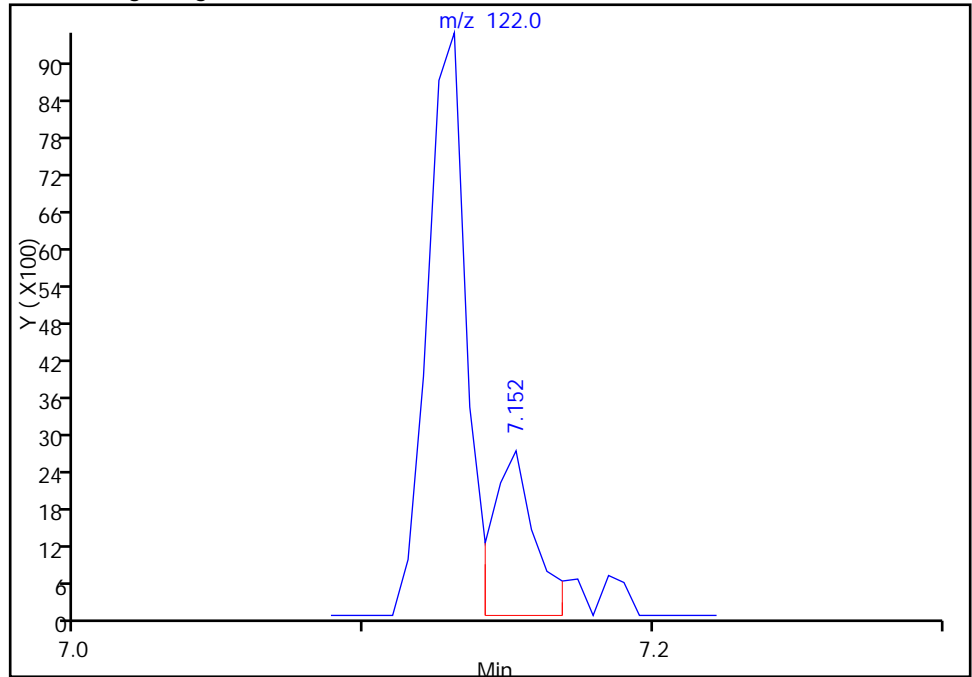
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203003.D  
 Injection Date: 03-Feb-2015 05:53:30 Instrument ID: CH732  
 Lims ID: IC  
 Client ID:  
 Operator ID: 003200 ALS Bottle#: 2 Worklist Smp#: 3  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Method: BNA\_CH732 Limit Group: BNA 8270D ICAL  
 Column: Rxi-5SiIMS (0.32 mm) Detector: MS SCAN

52 Benzoic acid, CAS: 65-85-0

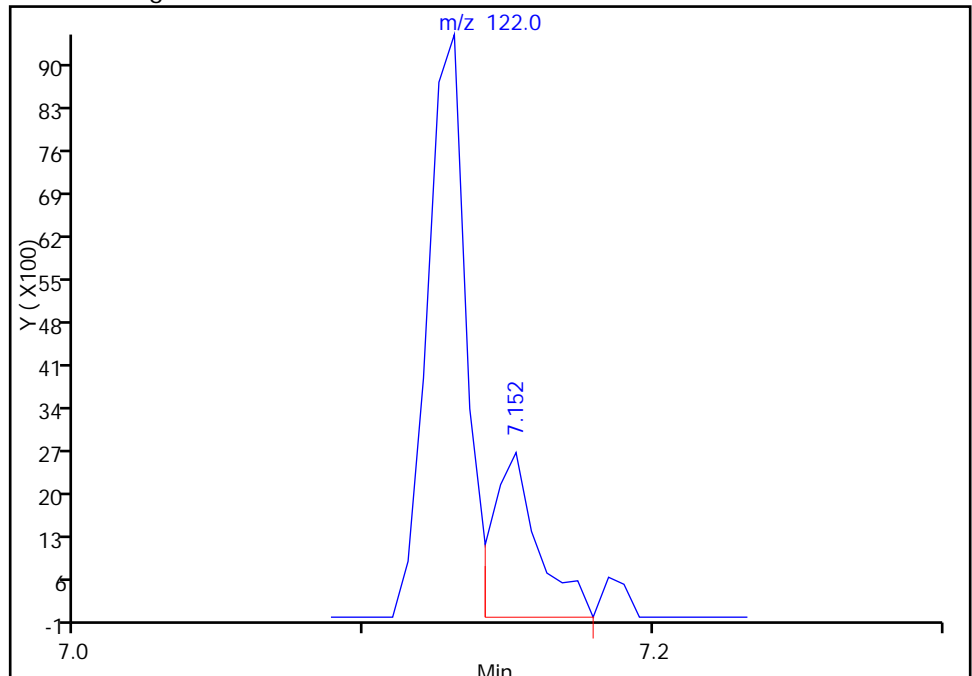
RT: 7.15  
 Area: 2769  
 Amount: 0.268892  
 Amount Units: ng

Processing Integration Results



RT: 7.15  
 Area: 2959  
 Amount: 1.535991  
 Amount Units: ng

Manual Integration Results



Reviewer: piccolinov, 03-Feb-2015 08:47:03  
 Audit Action: Manually Integrated  
 Audit Reason: Poor chromatography

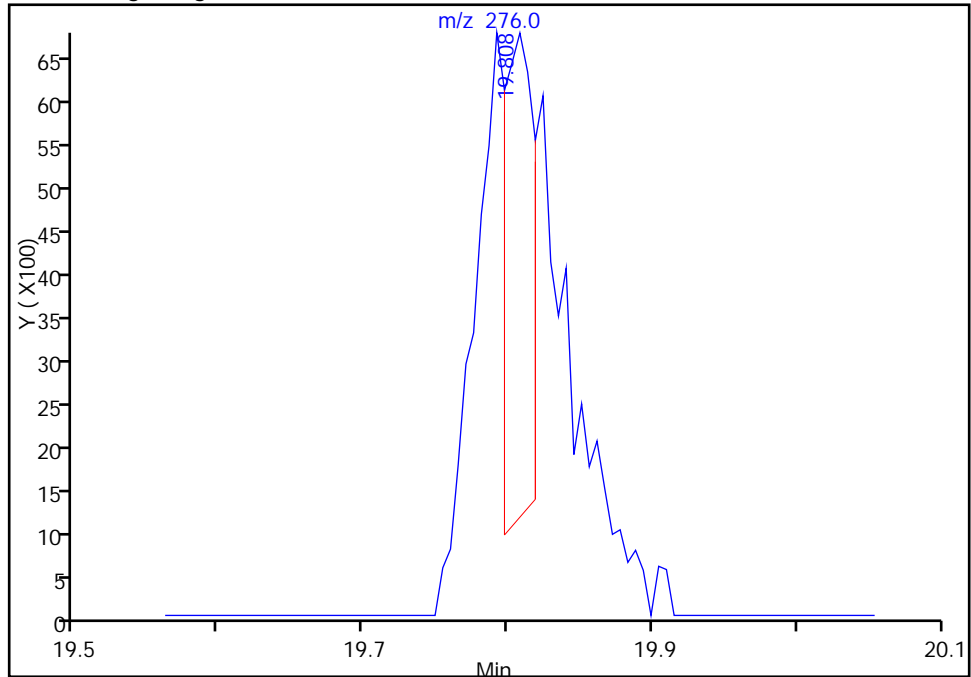
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203003.D  
Injection Date: 03-Feb-2015 05:53:30 Instrument ID: CH732  
Lims ID: IC  
Client ID:  
Operator ID: 003200 ALS Bottle#: 2 Worklist Smp#: 3  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH732 Limit Group: BNA 8270D ICAL  
Column: Rxi-5SiIMS (0.32 mm) Detector: MS SCAN

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

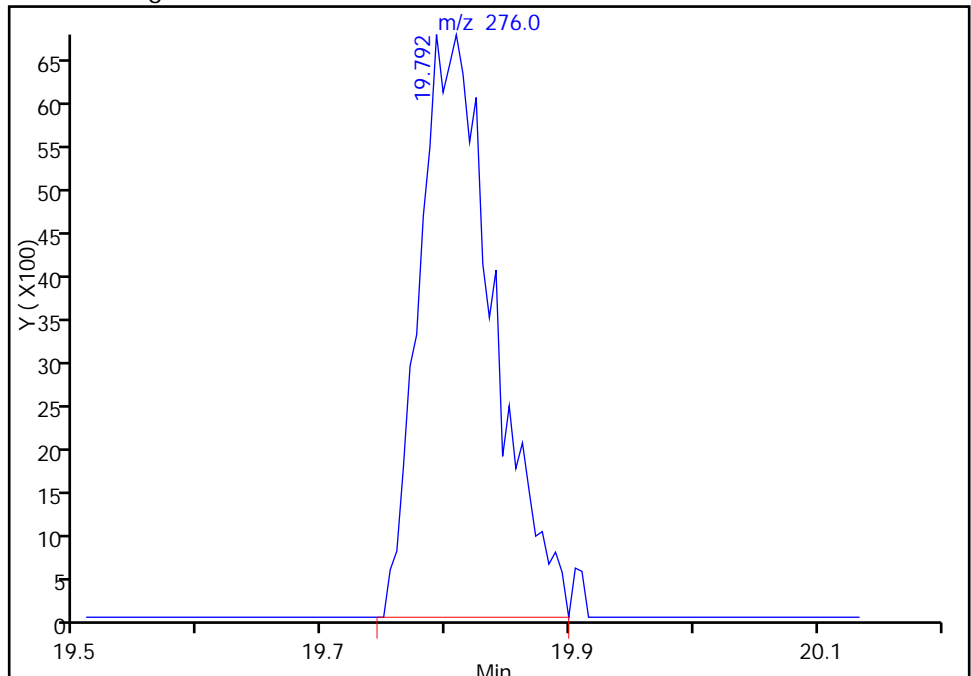
Processing Integration Results

RT: 19.81  
Area: 8168  
Amount: 0.144835  
Amount Units: ng



Manual Integration Results

RT: 19.79  
Area: 28373  
Amount: 0.336190  
Amount Units: ng



Reviewer: piccolinov, 03-Feb-2015 08:47:03  
Audit Action: Manually Integrated  
Audit Reason: Poor chromatography



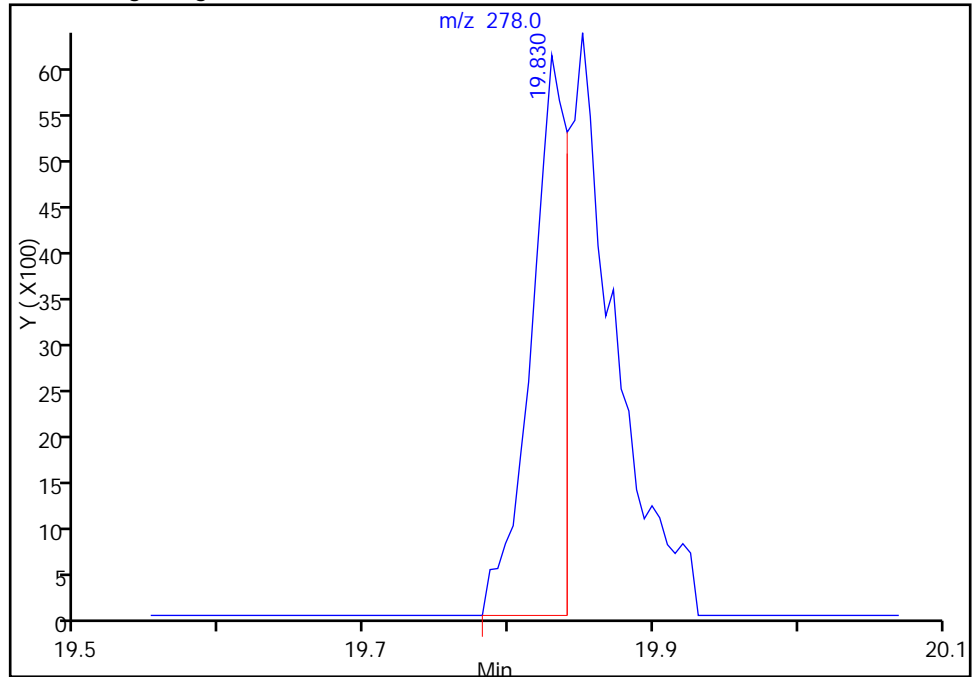
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203003.D  
Injection Date: 03-Feb-2015 05:53:30 Instrument ID: CH732  
Lims ID: IC  
Client ID:  
Operator ID: 003200 ALS Bottle#: 2 Worklist Smp#: 3  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH732 Limit Group: BNA 8270D ICAL  
Column: Rxi-5SilMS (0.32 mm) Detector: MS SCAN

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

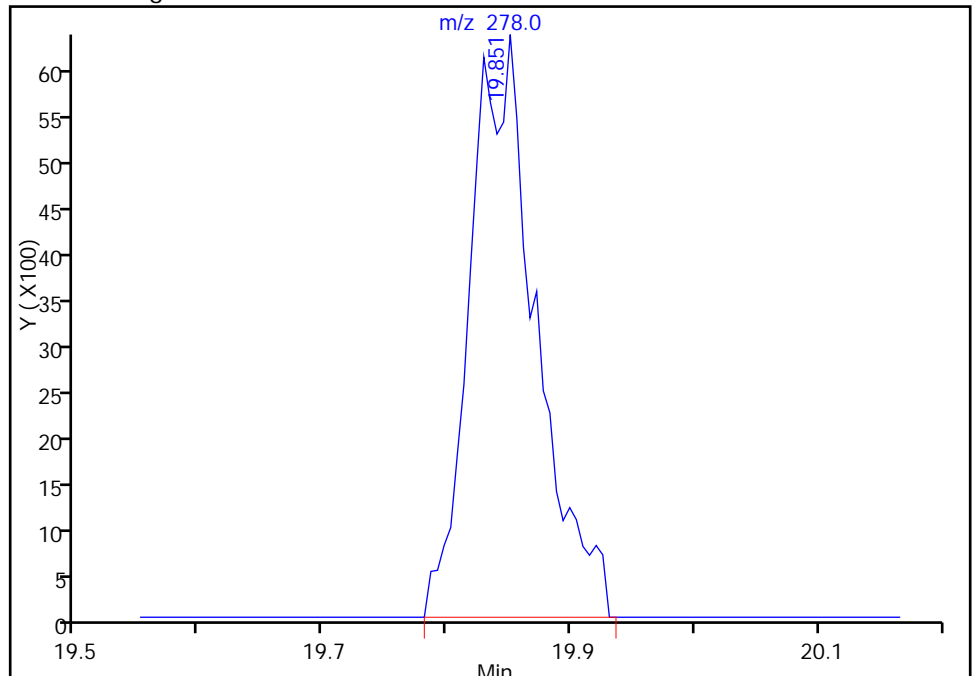
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Amount: 0.204719  
Amount Units: ng

Processing Integration Results



RT: 19.85  
Area: 23584  
Amount: 0.336134  
Amount Units: ng

Manual Integration Results



Reviewer: piccolinov, 03-Feb-2015 08:47:03  
Audit Action: Manually Integrated  
Audit Reason: Poor chromatography

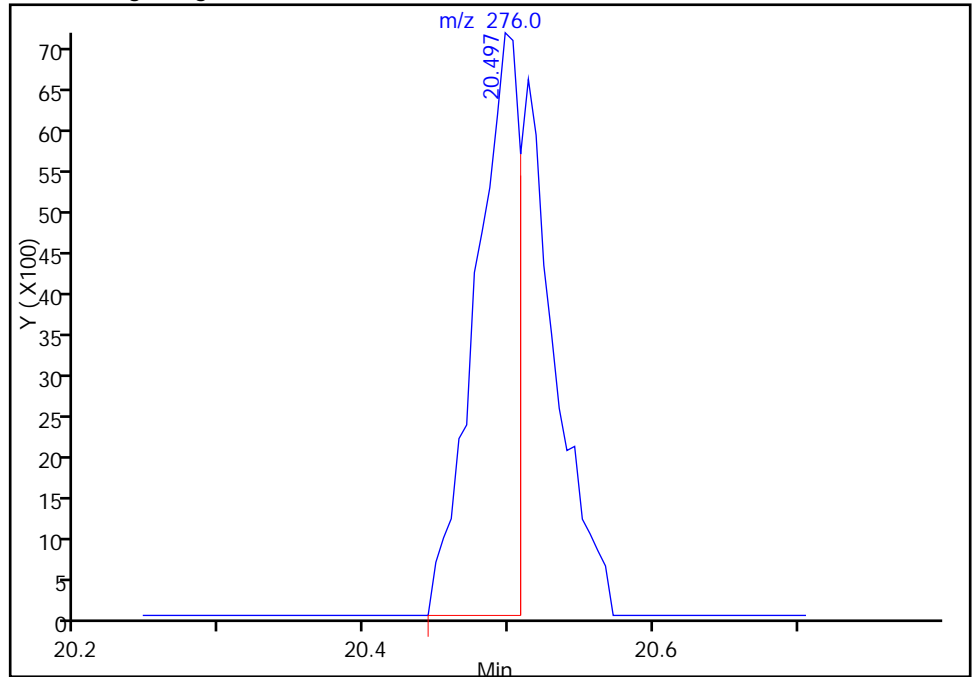
TestAmerica Pittsburgh

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Injection Date: 03-Feb-2015 05:53:30 Instrument ID: CH732  
Lims ID: IC  
Client ID:  
Operator ID: 003200 ALS Bottle#: 2 Worklist Smp#: 3  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH732 Limit Group: BNA 8270D ICAL  
Column: Rxi-5SiIMS (0.32 mm) Detector: MS SCAN

159 Benzo[g,h,i]perylene, CAS: 191-24-2

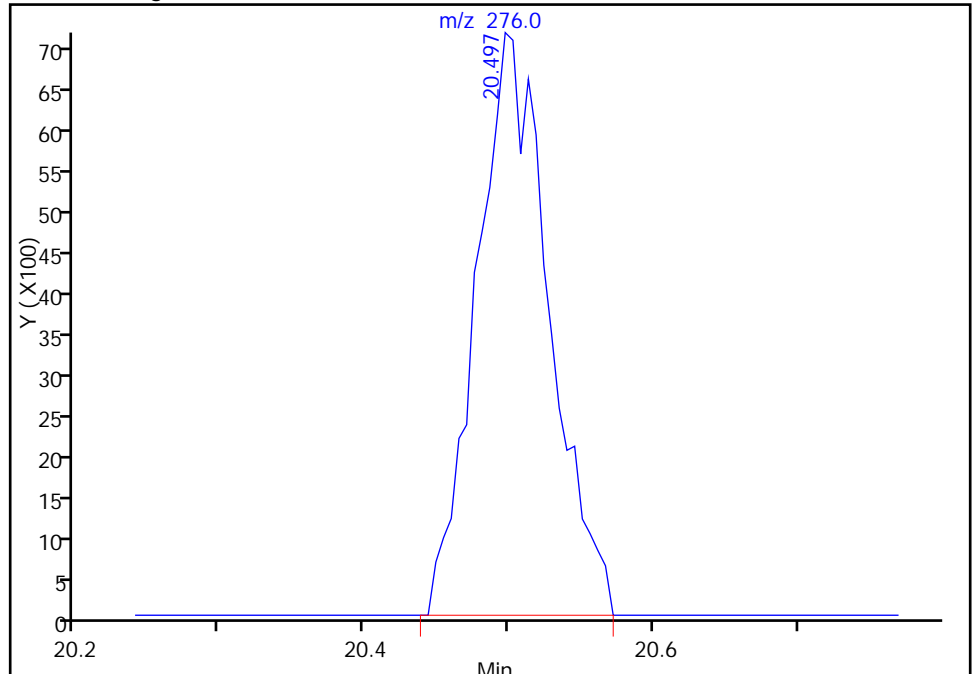
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Area: 15111  
Amount: 0.402477  
Amount Units: ng

Processing Integration Results



RT: 20.50  
Area: 24806  
Amount: 0.344484  
Amount Units: ng

Manual Integration Results



Reviewer: piccolinov, 03-Feb-2015 08:47:03  
Audit Action: Manually Integrated  
Audit Reason: Poor chromatography

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203004.D  
 Lims ID: IC  
 Client ID:  
 Sample Type: IC Calib Level: 2  
 Inject. Date: 03-Feb-2015 06:20:30 ALS Bottle#: 3 Worklist Smp#: 4  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0005518-004  
 Misc. Info.: IC  
 Operator ID: 003200 Instrument ID: CH732  
 Sublist: chrom-BNA\_CH732\*sub4  
 Method: \\PITCHROM\ChromData\CH732\20150203-5518.b\BNA\_CH732.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 04-Feb-2015 06:40:58 Calib Date: 03-Feb-2015 09:00:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203010.D  
 Column 1 : Rxi-5SiIMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK011

First Level Reviewer: piccolinov

Date: 03-Feb-2015 08:48:35

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	6.180	6.180	0.000	97	143973	8.00	8.00	
* 2 Naphthalene-d8	136	7.478	7.478	0.000	100	645863	8.00	8.00	
* 3 Acenaphthene-d10	164	9.204	9.204	0.000	92	407379	8.00	8.00	
* 4 Phenanthrene-d10	188	10.668	10.668	0.000	97	739534	8.00	8.00	
* 5 Chrysene-d12	240	14.477	14.477	0.000	97	673939	8.00	8.00	
* 6 Perylene-d12	264	17.388	17.388	0.000	96	560589	8.00	8.00	
\$ 7 2-Fluorophenol	112	4.706	4.706	0.000	92	37650	2.00	2.02	
\$ 8 Phenol-d5	99	5.796	5.796	0.000	95	50263	2.00	2.00	
\$ 9 Nitrobenzene-d5	82	6.746	6.746	0.000	94	55043	2.00	2.03	
\$ 10 2-Fluorobiphenyl	172	8.531	8.531	0.000	99	137132	2.00	2.05	
\$ 11 2,4,6-Tribromophenol	330	9.968	9.968	0.000	88	14848	2.00	1.83	
\$ 12 Terphenyl-d14	244	12.628	12.628	0.000	99	146177	2.00	1.99	
13 1,4-Dioxane	88	1.548	1.548	0.000	95	11737	2.00	2.05	
14 N-Nitrosodimethylamine	74	2.120	2.120	0.000	80	15503	2.00	2.00	
15 Pyridine	79	2.216	2.216	0.000	91	26410	2.00	1.95	M
21 Methyl methanesulfonate	80	4.455	4.455	0.000	89	22793	2.00	2.09	
25 Benzaldehyde	77	5.705	5.705	0.000	91	21743	2.00	1.79	
26 Phenol	94	5.806	5.806	0.000	95	60095	2.00	2.10	
27 Aniline	93	5.828	5.828	0.000	95	64483	2.00	2.04	
29 Bis(2-chloroethyl)ether	93	5.897	5.897	0.000	93	41584	2.00	2.06	
30 2-Chlorophenol	128	5.956	5.956	0.000	96	48891	2.00	2.00	
31 n-Decane	43	6.031	6.031	0.000	93	61014	2.00	2.13	
32 1,3-Dichlorobenzene	146	6.121	6.121	0.000	97	58818	2.00	2.07	
33 1,4-Dichlorobenzene	146	6.202	6.202	0.000	95	58452	2.00	2.01	
34 Benzyl alcohol	108	6.319	6.319	0.000	90	31167	2.00	2.03	
35 1,2-Dichlorobenzene	146	6.362	6.362	0.000	96	58062	2.00	2.05	
36 2-Methylphenol	108	6.437	6.437	0.000	96	45068	2.00	2.08	
37 Indene	116	6.453	6.453	0.000	89	79937	2.00	2.03	
38 2,2'-oxybis[1-chloropropan	45	6.469	6.469	0.000	91	90145	2.00	2.12	
39 N-Nitrosopyrrolidine	100	6.559	6.559	0.000	79	21630	2.00	2.05	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
40 Acetophenone	105	6.592	6.592	0.000	76	70865	2.00	2.17	
41 N-Nitrosodi-n-propylamine	70	6.592	6.592	0.000	77	34348	2.00	2.23	
42 4-Methylphenol	108	6.592	6.592	0.000	62	47943	2.00	2.16	
45 Hexachloroethane	117	6.714	6.714	0.000	95	25617	2.00	2.03	
46 Nitrobenzene	77	6.768	6.768	0.000	92	55637	2.00	2.07	
48 Isophorone	82	7.003	7.003	0.000	97	95220	2.00	2.01	
49 2-Nitrophenol	139	7.094	7.094	0.000	96	29702	2.00	1.99	
50 2,4-Dimethylphenol	107	7.126	7.126	0.000	96	56716	2.00	2.09	
52 Benzoic acid	122	7.158	7.158	0.000	91	18161	2.00	2.45	M
53 Bis(2-chloroethoxy)methane	93	7.217	7.217	0.000	95	60701	2.00	2.08	
54 2,4-Dichlorophenol	162	7.329	7.329	0.000	96	47384	2.00	2.00	
56 1,2,4-Trichlorobenzene	180	7.420	7.420	0.000	94	56870	2.00	2.09	
58 Naphthalene	128	7.500	7.500	0.000	98	180017	2.00	2.06	
59 4-Chloroaniline	127	7.542	7.542	0.000	96	70259	2.00	2.01	
60 2,6-Dichlorophenol	162	7.553	7.553	0.000	96	50566	2.00	2.14	
62 Hexachlorobutadiene	225	7.628	7.628	0.000	97	33197	2.00	2.04	
64 Caprolactam	113	7.842	7.842	0.000	74	16212	2.00	2.04	
67 4-Chloro-3-methylphenol	107	8.002	8.002	0.000	96	50346	2.00	2.02	
69 2-Methylnaphthalene	142	8.183	8.183	0.000	92	128685	2.00	2.08	
71 1-Methylnaphthalene	142	8.280	8.280	0.000	93	118777	2.00	2.05	
72 Hexachlorocyclopentadiene	237	8.344	8.344	0.000	97	34246	2.00	1.93	
73 1,2,4,5-Tetrachlorobenzene	216	8.349	8.349	0.000	98	55917	2.00	2.11	
74 2,4,6-Trichlorophenol	196	8.451	8.451	0.000	94	35559	2.00	1.96	
75 2,4,5-Trichlorophenol	196	8.483	8.483	0.000	92	36826	2.00	1.92	
76 1,1'-Biphenyl	154	8.632	8.632	0.000	94	157628	2.00	2.06	
77 2-Chloronaphthalene	162	8.659	8.659	0.000	97	129992	2.00	2.09	
79 2-Nitroaniline	65	8.744	8.744	0.000	85	34853	2.00	1.97	
82 Dimethyl phthalate	163	8.905	8.905	0.000	98	129303	2.00	2.00	
83 1,3-Dinitrobenzene	168	8.937	8.937	0.000	85	18618	2.00	1.91	
84 2,6-Dinitrotoluene	165	8.969	8.969	0.000	92	28186	2.00	1.98	
85 Acenaphthylene	152	9.070	9.070	0.000	98	192381	2.00	1.95	
86 3-Nitroaniline	138	9.134	9.134	0.000	93	33591	2.00	1.94	
87 2,4-Dinitrophenol	184	9.236	9.236	0.000	62	22936	4.00	3.14	
88 Acenaphthene	153	9.236	9.236	0.000	91	126036	2.00	2.10	
89 4-Nitrophenol	109	9.273	9.273	0.000	97	36110	4.00	3.77	
91 2,4-Dinitrotoluene	165	9.364	9.364	0.000	92	37788	2.00	2.02	
93 Dibenzofuran	168	9.402	9.402	0.000	96	175543	2.00	2.04	
95 2,3,5,6-Tetrachlorophenol	232	9.476	9.476	0.000	93	32909	2.00	1.97	
96 2,3,4,6-Tetrachlorophenol	232	9.519	9.519	0.000	74	32937	2.00	2.01	
97 2-Naphthylamine	143	9.546	9.546	0.000	97	127319	2.00	2.07	
98 Diethyl phthalate	149	9.583	9.583	0.000	98	141494	2.00	2.14	
99 Hexadecane	57	9.588	9.588	0.000	91	102020	2.00	2.14	
100 4-Chlorophenyl phenyl ether	204	9.717	9.717	0.000	94	65852	2.00	2.08	
101 4-Nitroaniline	138	9.727	9.727	0.000	89	34362	2.00	2.01	
103 Fluorene	166	9.738	9.738	0.000	94	138685	2.00	2.07	
104 4,6-Dinitro-2-methylphenol	198	9.759	9.759	0.000	81	36409	4.00	3.03	
105 N-Nitrosodiphenylamine	169	9.829	9.829	0.000	64	98631	2.00	1.88	
90 1,2-Diphenylhydrazine	77	9.872	9.872	0.000	99	148666	2.00	1.98	
110 4-Bromophenyl phenyl ether	248	10.192	10.192	0.000	71	36435	2.00	1.89	
112 Hexachlorobenzene	284	10.278	10.278	0.000	93	37887	2.00	1.96	
113 Atrazine	200	10.315	10.315	0.000	89	29538	2.00	1.94	
116 Pentachlorophenol	266	10.459	10.459	0.000	90	50690	4.00	3.73	

Compound	Sig	RT (min.)	Adj RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.475	10.475	0.000	91	107882	2.00	2.11	
121 Phenanthrene	178	10.694	10.694	0.000	97	212492	2.00	1.91	
122 Anthracene	178	10.748	10.748	0.000	97	214399	2.00	1.89	
124 Carbazole	167	10.903	10.903	0.000	93	190765	2.00	1.92	
126 Di-n-butyl phthalate	149	11.234	11.234	0.000	99	230689	2.00	1.85	
57 Azobenzene	77		11.923				ND	ND	
131 Fluoranthene	202	12.115	12.115	0.000	98	210680	2.00	1.88	
132 Benzidine	184	12.260	12.260	0.000	99	56969	2.00	2.45	
133 Pyrene	202	12.447	12.447	0.000	97	221103	2.00	1.99	
138 Butyl benzyl phthalate	149	13.381	13.381	0.000	98	93839	2.00	1.90	
144 3,3'-Dichlorobenzidine	252	14.380	14.380	0.000	75	58677	2.00	1.81	
145 Bis(2-ethylhexyl) phthalat	149	14.445	14.445	0.000	96	132135	2.00	1.93	
146 Benzo[a]anthracene	228	14.455	14.455	0.000	99	194307	2.00	1.99	
147 Chrysene	228	14.525	14.525	0.000	98	184718	2.00	2.01	
150 Di-n-octyl phthalate	149	15.759	15.759	0.000	99	185265	2.00	1.70	
151 7,12-Dimethylbenz(a)anthra	256	16.598	16.598	0.000	82	72293	2.00	1.87	
152 Benzo[b]fluoranthene	252	16.614	16.614	0.000	97	174164	2.00	1.92	
153 Benzo[k]fluoranthene	252	16.662	16.662	0.000	98	172135	2.00	1.93	
219 Benzo[e]pyrene	252	17.174	17.174	0.000	0	156862	2.00	1.91	
154 Benzo[a]pyrene	252	17.271	17.271	0.000	79	157185	2.00	1.92	
157 Indeno[1,2,3-cd]pyrene	276	19.792	19.792	0.000	93	154678	2.00	1.80	M
158 Dibenz(a,h)anthracene	278	19.840	19.840	0.000	93	130639	2.00	1.82	M
159 Benzo[g,h,i]perylene	276	20.497	20.497	0.000	96	132922	2.00	1.81	M
S 197 Methyl Phenols, Total	108				0		4.00	4.24	
S 199 Total Cresols	108				0		4.00	4.24	

**QC Flag Legend**

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

**Reagents:**

SVTAPSTD2.0i\_00005

Amount Added: 1.00

Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203004.D

Injection Date: 03-Feb-2015 06:20:30

Instrument ID: CH732

Operator ID: 003200

Lims ID: IC

Worklist Smp#: 4

Client ID:

Injection Vol: 2.0 ul

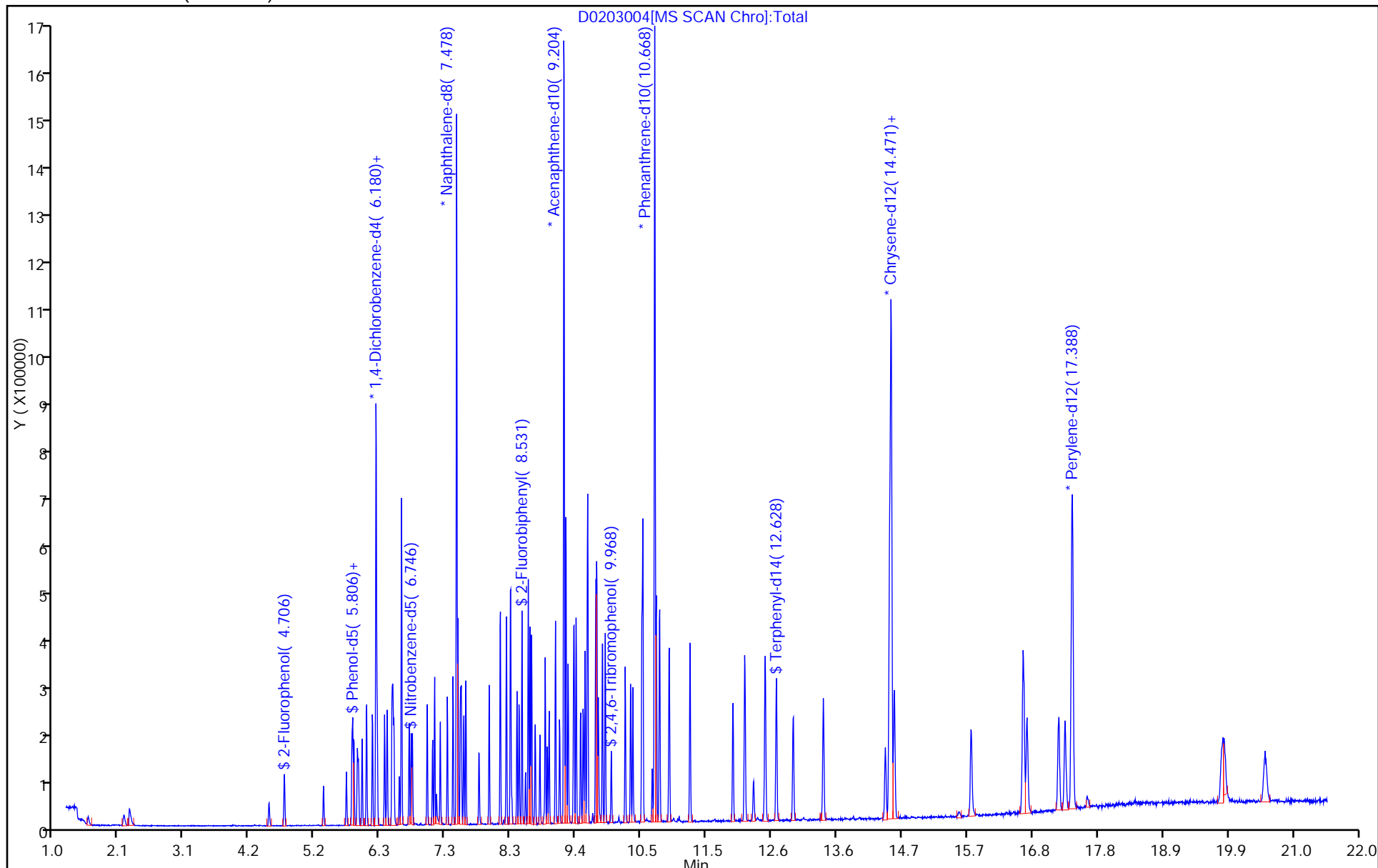
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: BNA\_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



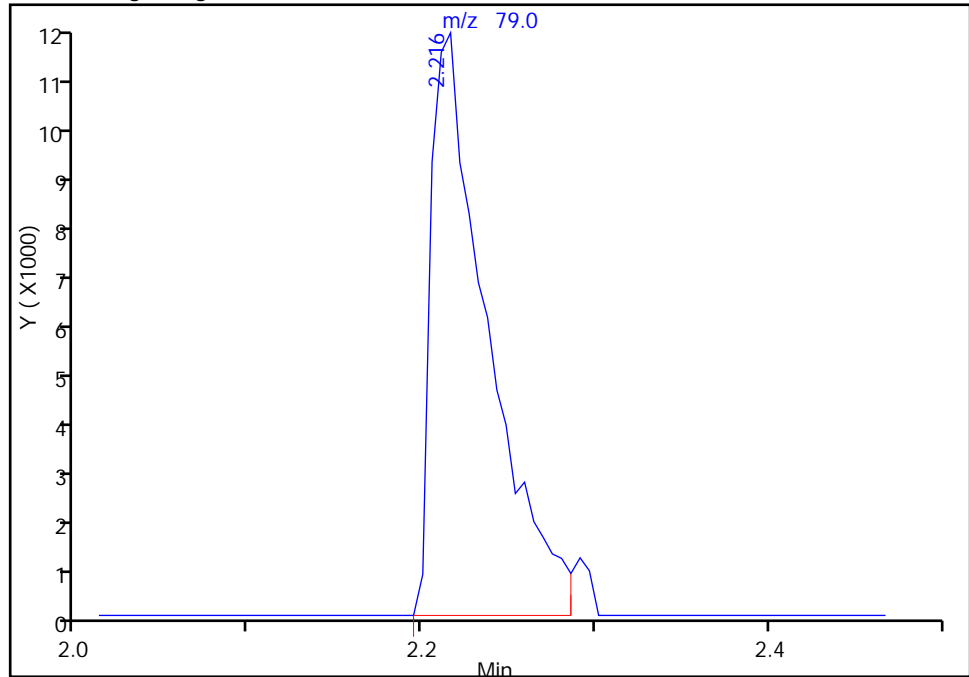
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203004.D  
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Lims ID: IC  
Client ID:  
Operator ID: 003200 ALS Bottle#: 3 Worklist Smp#: 4  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH732 Limit Group: BNA 8270D ICAL  
Column: Rxi-5SiIMS (0.32 mm) Detector: MS SCAN

15 Pyridine, CAS: 110-86-1

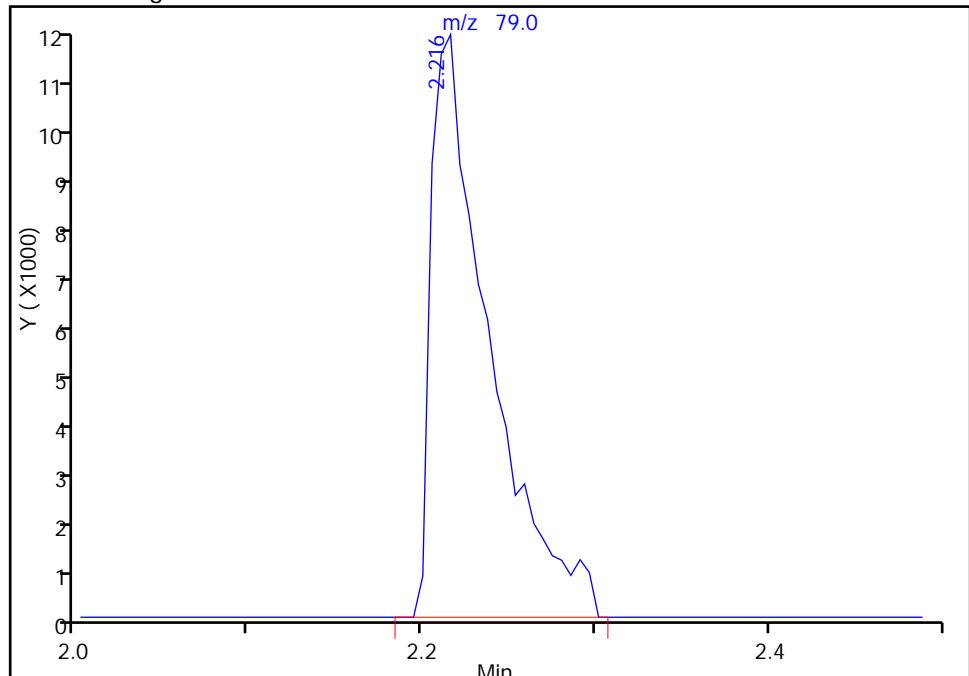
RT: 2.22  
Area: 25773  
Amount: 1.933329  
Amount Units: ng

Processing Integration Results



RT: 2.22  
Area: 26410  
Amount: 1.954321  
Amount Units: ng

Manual Integration Results



Reviewer: piccolinov, 03-Feb-2015 08:48:35  
Audit Action: Manually Integrated  
Audit Reason: Poor chromatography

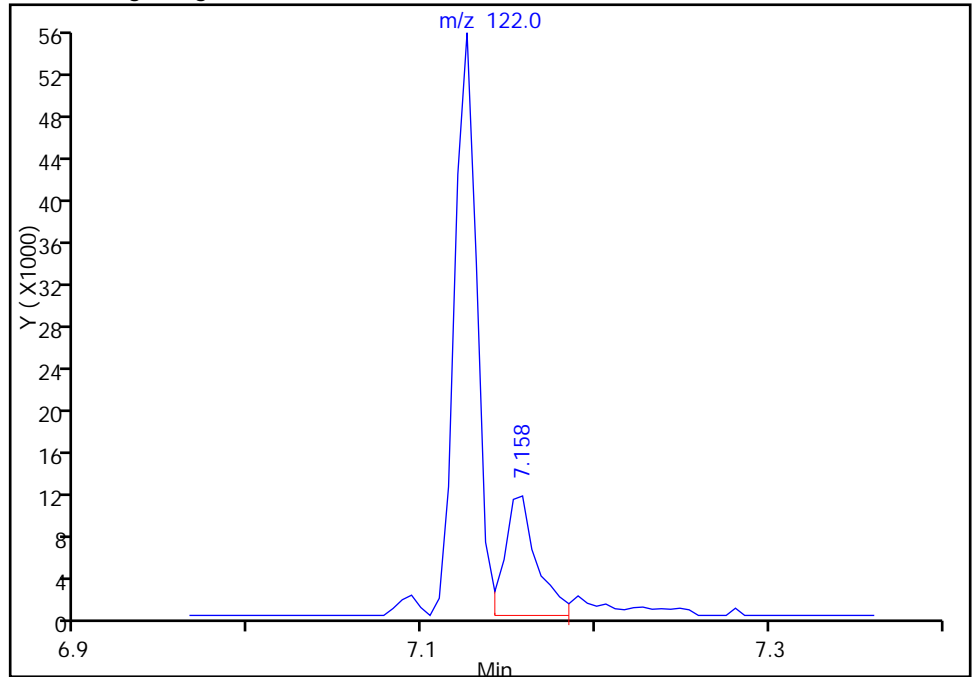
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203004.D  
Injection Date: 03-Feb-2015 06:20:30 Instrument ID: CH732  
Lims ID: IC  
Client ID:  
Operator ID: 003200 ALS Bottle#: 3 Worklist Smp#: 4  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH732 Limit Group: BNA 8270D ICAL  
Column: Rxi-5SiIMS (0.32 mm) Detector: MS SCAN

52 Benzoic acid, CAS: 65-85-0

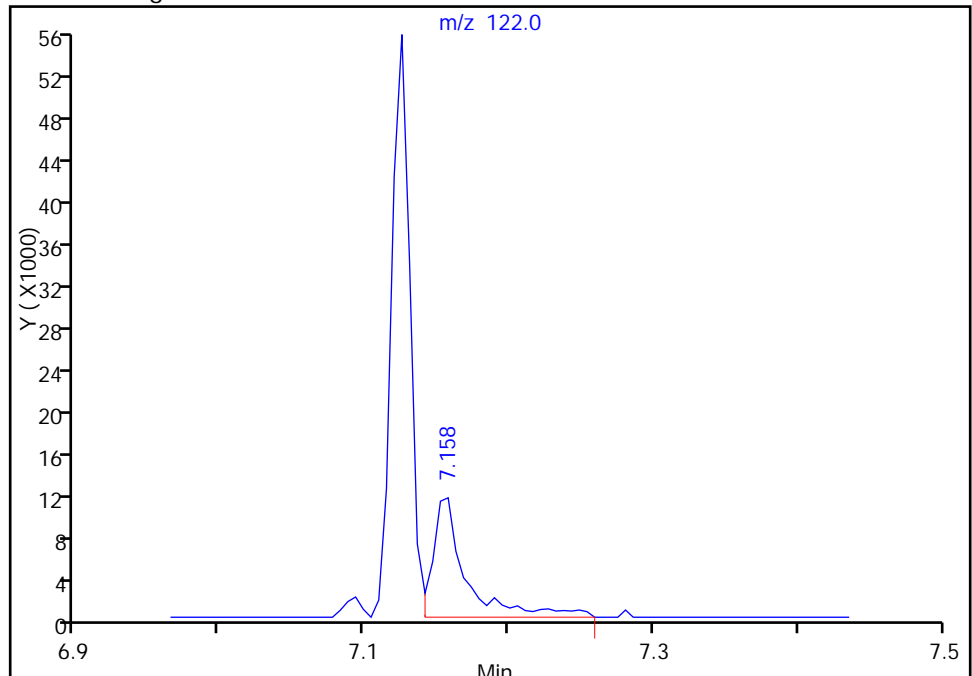
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Area: 14759  
Amount: 1.341947  
Amount Units: ng

Processing Integration Results



RT: 7.16  
Area: 18161  
Amount: 2.449653  
Amount Units: ng

Manual Integration Results



Reviewer: piccolinov, 03-Feb-2015 08:48:35  
Audit Action: Manually Integrated  
Audit Reason: Poor chromatography



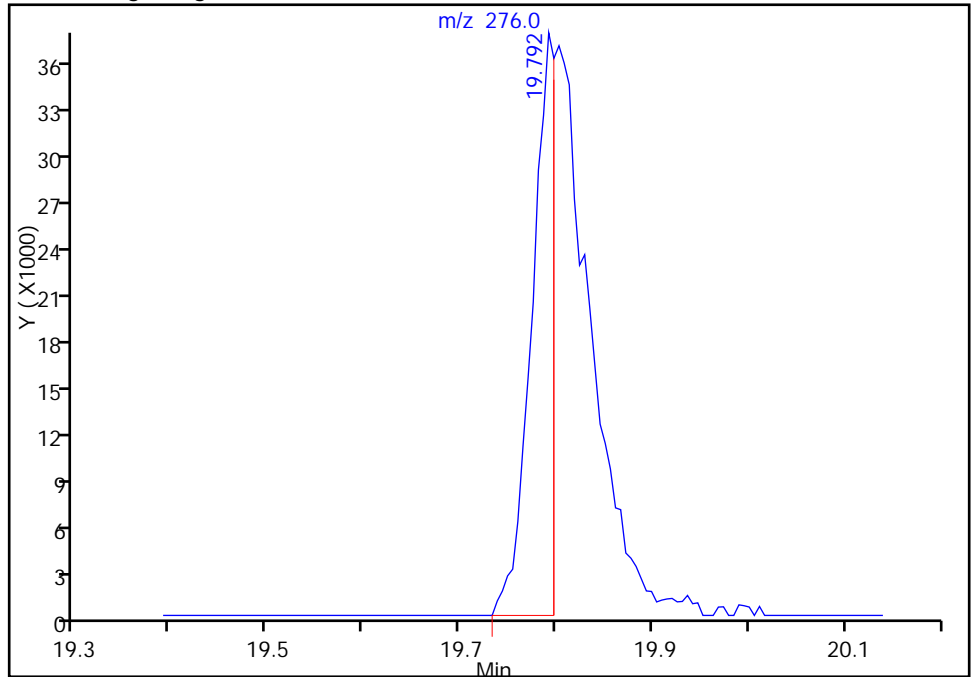
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203004.D  
 Injection Date: 03-Feb-2015 06:20:30 Instrument ID: CH732  
 Lims ID: IC  
 Client ID:  
 Operator ID: 003200 ALS Bottle#: 3 Worklist Smp#: 4  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Method: BNA\_CH732 Limit Group: BNA 8270D ICAL  
 Column: Rxi-5SiIMS (0.32 mm) Detector: MS SCAN

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

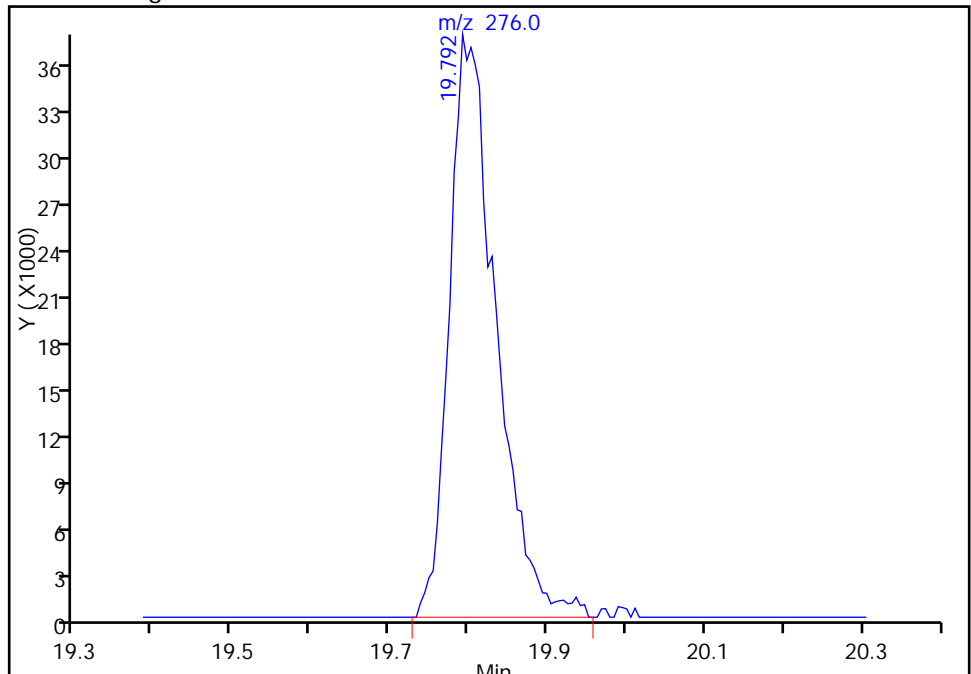
Processing Integration Results

RT: 19.79  
 Area: 62619  
 Amount: 0.946944  
 Amount Units: ng



Manual Integration Results

RT: 19.79  
 Area: 154678  
 Amount: 1.796361  
 Amount Units: ng



Reviewer: piccolinov, 03-Feb-2015 08:48:35  
 Audit Action: Manually Integrated  
 Audit Reason: Poor chromatography

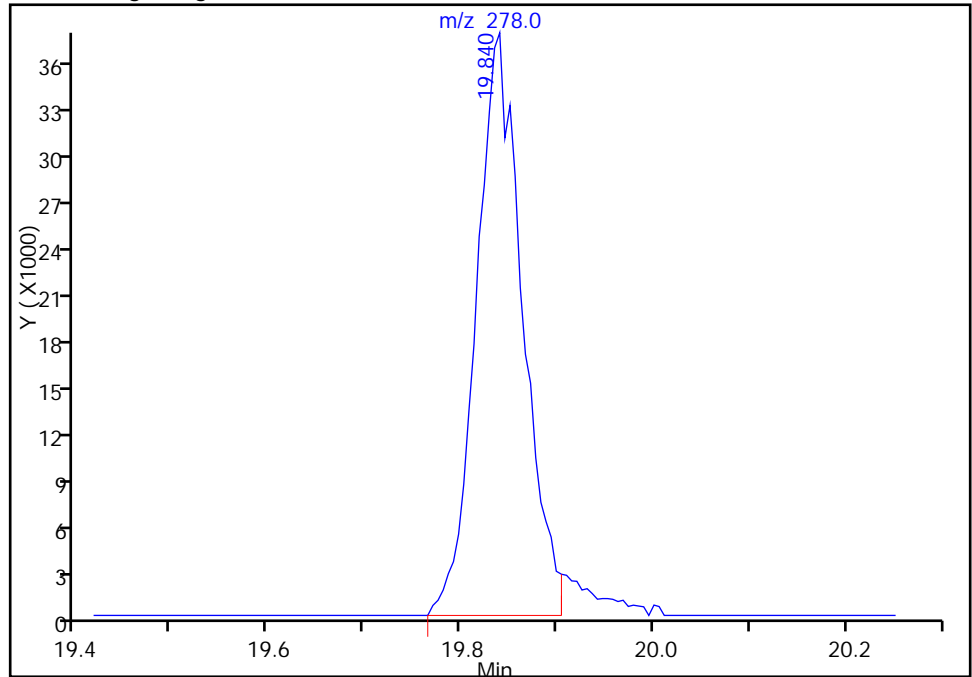
TestAmerica Pittsburgh

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 Lims ID: IC  
 Client ID:  
 Operator ID: 003200 ALS Bottle#: 3 Worklist Smp#: 4  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Method: BNA\_CH732 Limit Group: BNA 8270D ICAL  
 Column: Rxi-5SilMS (0.32 mm) Detector: MS SCAN

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

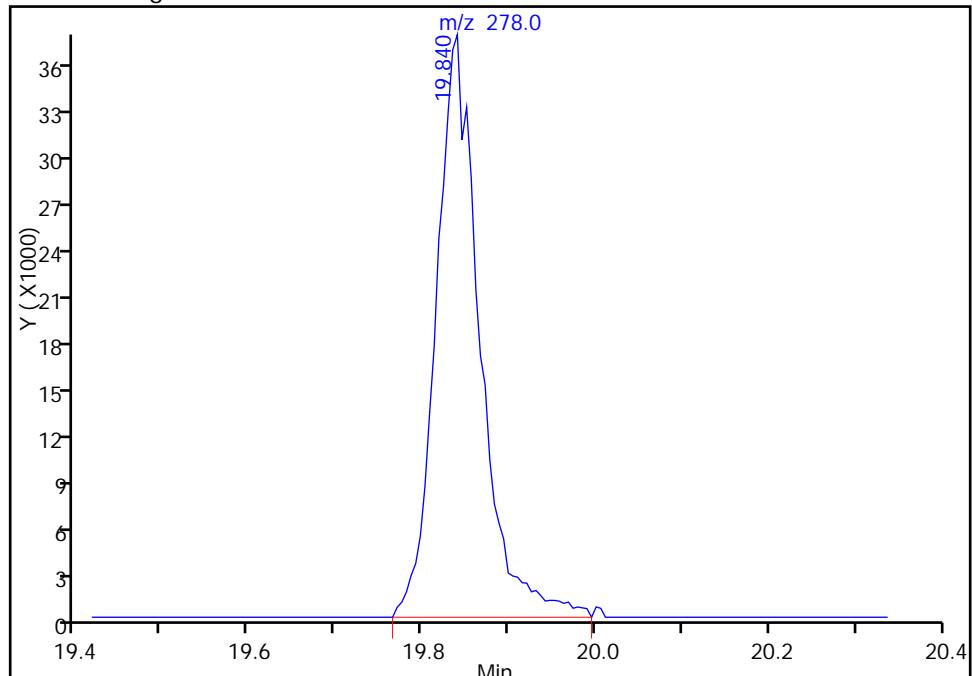
RT: 19.84  
 Area: 124199  
 Amount: 2.129613  
 Amount Units: ng

Processing Integration Results



RT: 19.84  
 Area: 130639  
 Amount: 1.824963  
 Amount Units: ng

Manual Integration Results



Reviewer: piccolinov, 03-Feb-2015 08:48:35  
 Audit Action: Manually Integrated  
 Audit Reason: Poor chromatography

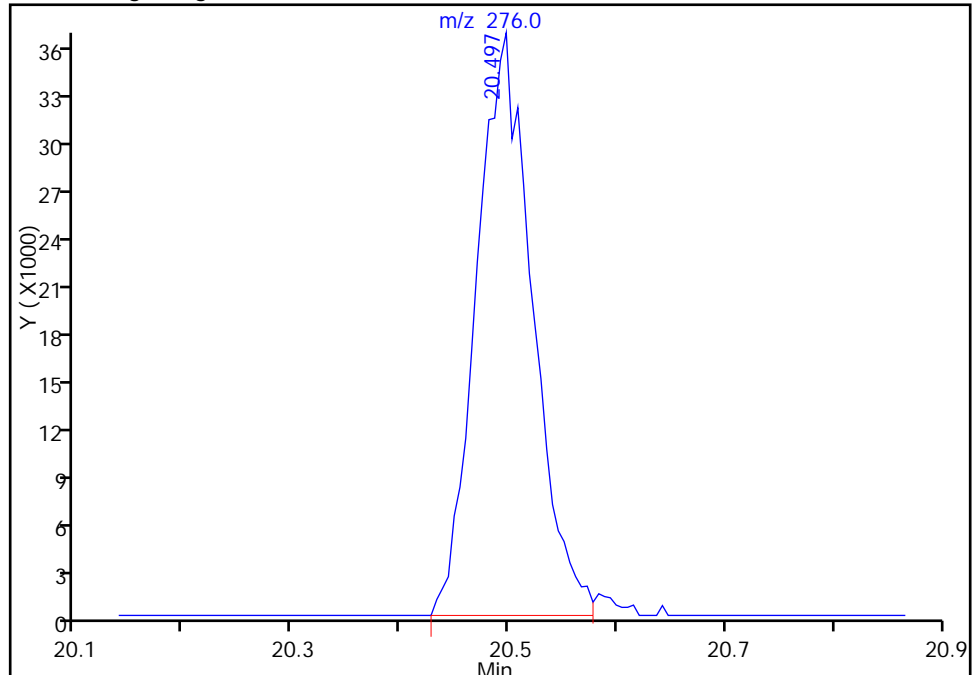
## TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203004.D  
Injection Date: 03-Feb-2015 06:20:30 Instrument ID: CH732  
Lims ID: IC  
Client ID:  
Operator ID: 003200 ALS Bottle#: 3 Worklist Smp#: 4  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH732 Limit Group: BNA 8270D ICAL  
Column: Rxi-5SiIMS (0.32 mm) Detector: MS SCAN

**159 Benzo[g,h,i]perylene, CAS: 191-24-2**

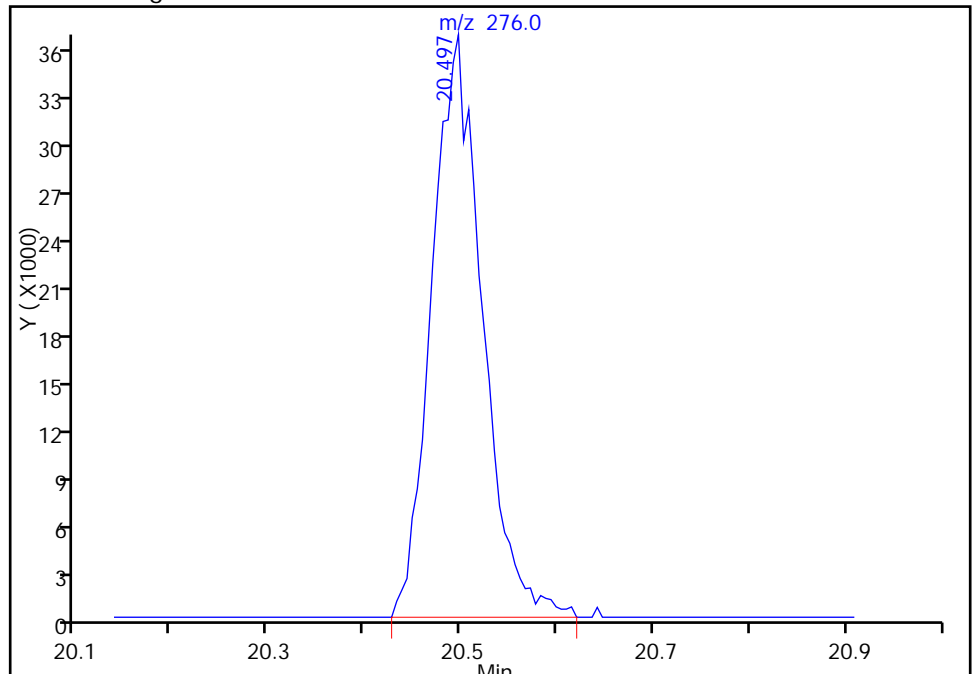
RT: 20.50  
Area: 131022  
Amount: 1.878868  
Amount Units: ng

## Processing Integration Results



RT: 20.50  
Area: 132922  
Amount: 1.809236  
Amount Units: ng

## Manual Integration Results



Reviewer: piccolinov, 03-Feb-2015 08:48:35  
Audit Action: Manually Integrated  
Audit Reason: Poor chromatography

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203005.D  
 Lims ID: IC  
 Client ID:  
 Sample Type: IC Calib Level: 3  
 Inject. Date: 03-Feb-2015 06:46:30 ALS Bottle#: 4 Worklist Smp#: 5  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0005518-005  
 Misc. Info.: IC  
 Operator ID: 003200 Instrument ID: CH732  
 Sublist: chrom-BNA\_CH732\*sub4  
 Method: \\PITCHROM\ChromData\CH732\20150203-5518.b\BNA\_CH732.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 04-Feb-2015 06:41:05 Calib Date: 03-Feb-2015 09:00:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last Ical File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203010.D  
 Column 1 : Rxi-5SiIMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK011

First Level Reviewer: piccolinov

Date: 03-Feb-2015 08:41:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.175	6.175	0.000	97	143248	8.00	8.00	
* 2 Naphthalene-d8	136	7.473	7.473	0.000	100	667133	8.00	8.00	
* 3 Acenaphthene-d10	164	9.204	9.204	0.000	91	420149	8.00	8.00	
* 4 Phenanthrene-d10	188	10.662	10.662	0.000	95	738596	8.00	8.00	
* 5 Chrysene-d12	240	14.466	14.466	0.000	96	676299	8.00	8.00	
* 6 Perylene-d12	264	17.383	17.383	0.000	96	529106	8.00	8.00	
\$ 7 2-Fluorophenol	112	4.695	4.695	0.000	86	77789	4.00	4.19	
\$ 8 Phenol-d5	99	5.790	5.790	0.000	93	108130	4.00	4.32	
\$ 9 Nitrobenzene-d5	82	6.741	6.741	0.000	90	113169	4.00	4.04	
\$ 10 2-Fluorobiphenyl	172	8.531	8.531	0.000	99	284174	4.00	4.12	
\$ 11 2,4,6-Tribromophenol	330	9.968	9.968	0.000	86	32838	4.00	4.04	
\$ 12 Terphenyl-d14	244	12.623	12.623	0.000	97	299886	4.00	4.07	
13 1,4-Dioxane	88	1.527	1.527	0.000	81	23830	4.00	4.18	
14 N-Nitrosodimethylamine	74	2.093	2.093	0.000	64	30743	4.00	3.99	
15 Pyridine	79	2.179	2.179	0.000	87	55290	4.00	4.11	
21 Methyl methanesulfonate	80	4.444	4.444	0.000	90	46560	4.00	4.29	
25 Benzaldehyde	77	5.699	5.699	0.000	85	45208	4.00	3.74	
26 Phenol	94	5.801	5.801	0.000	95	120902	4.00	4.26	
27 Aniline	93	5.822	5.822	0.000	59	132805	4.00	4.22	
29 Bis(2-chloroethyl)ether	93	5.892	5.892	0.000	87	84668	4.00	4.22	
30 2-Chlorophenol	128	5.950	5.950	0.000	96	102500	4.00	4.22	
31 n-Decane	43	6.025	6.025	0.000	94	122092	4.00	4.29	
32 1,3-Dichlorobenzene	146	6.116	6.116	0.000	96	117189	4.00	4.15	
33 1,4-Dichlorobenzene	146	6.196	6.196	0.000	84	124324	4.00	4.29	
34 Benzyl alcohol	108	6.314	6.314	0.000	87	67422	4.00	4.42	
35 1,2-Dichlorobenzene	146	6.356	6.356	0.000	91	117889	4.00	4.18	
36 2-Methylphenol	108	6.436	6.436	0.000	96	94232	4.00	4.37	
37 Indene	116	6.447	6.447	0.000	84	167642	4.00	4.28	
38 2,2'-oxybis[1-chloropropan	45	6.463	6.463	0.000	60	188707	4.00	4.47	
39 N-Nitrosopyrrolidine	100	6.554	6.554	0.000	76	45845	4.00	4.37	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 4-Methylphenol	108	6.591	6.591	0.000	69	99882	4.00	4.51	
40 Acetophenone	105	6.586	6.586	0.000	77	143572	4.00	4.42	
41 N-Nitrosodi-n-propylamine	70	6.586	6.586	0.000	72	70224	4.00	4.59	
45 Hexachloroethane	117	6.709	6.709	0.000	95	53481	4.00	4.26	
46 Nitrobenzene	77	6.762	6.762	0.000	93	114851	4.00	4.13	
48 Isophorone	82	7.003	7.003	0.000	95	200303	4.00	4.09	
49 2-Nitrophenol	139	7.088	7.088	0.000	95	61516	4.00	4.00	
50 2,4-Dimethylphenol	107	7.120	7.120	0.000	74	117563	4.00	4.19	
52 Benzoic acid	122	7.158	7.158	0.000	78	45351	4.00	4.02	M
53 Bis(2-chloroethoxy)methane	93	7.211	7.211	0.000	95	125607	4.00	4.17	
54 2,4-Dichlorophenol	162	7.329	7.329	0.000	94	99409	4.00	4.05	
56 1,2,4-Trichlorobenzene	180	7.419	7.419	0.000	94	116908	4.00	4.16	
58 Naphthalene	128	7.494	7.494	0.000	84	369682	4.00	4.10	
59 4-Chloroaniline	127	7.537	7.537	0.000	76	150282	4.00	4.16	
60 2,6-Dichlorophenol	162	7.553	7.553	0.000	92	105695	4.00	4.33	
62 Hexachlorobutadiene	225	7.622	7.622	0.000	74	67792	4.00	4.03	
64 Caprolactam	113	7.836	7.836	0.000	61	33697	4.00	4.10	
67 4-Chloro-3-methylphenol	107	8.002	8.002	0.000	91	106402	4.00	4.14	
69 2-Methylnaphthalene	142	8.178	8.178	0.000	88	260830	4.00	4.09	
71 1-Methylnaphthalene	142	8.280	8.280	0.000	82	248893	4.00	4.16	
72 Hexachlorocyclopentadiene	237	8.338	8.338	0.000	96	71542	4.00	3.91	
73 1,2,4,5-Tetrachlorobenzene	216	8.344	8.344	0.000	95	117976	4.00	4.31	
74 2,4,6-Trichlorophenol	196	8.445	8.445	0.000	94	76466	4.00	4.09	
75 2,4,5-Trichlorophenol	196	8.483	8.483	0.000	94	81693	4.00	4.12	
76 1,1'-Biphenyl	154	8.627	8.627	0.000	96	321551	4.00	4.07	
77 2-Chloronaphthalene	162	8.659	8.659	0.000	71	261278	4.00	4.08	
79 2-Nitroaniline	65	8.739	8.739	0.000	71	76492	4.00	4.20	
82 Dimethyl phthalate	163	8.905	8.905	0.000	98	274773	4.00	4.12	
83 1,3-Dinitrobenzene	168	8.937	8.937	0.000	80	40950	4.00	4.08	
84 2,6-Dinitrotoluene	165	8.963	8.963	0.000	67	60939	4.00	4.16	
85 Acenaphthylene	152	9.065	9.065	0.000	89	416410	4.00	4.10	
86 3-Nitroaniline	138	9.134	9.134	0.000	93	72336	4.00	4.06	
87 2,4-Dinitrophenol	184	9.236	9.236	0.000	45	59478	8.00	6.75	
88 Acenaphthene	153	9.236	9.236	0.000	86	263354	4.00	4.25	
89 4-Nitrophenol	109	9.268	9.268	0.000	80	78078	8.00	7.91	
91 2,4-Dinitrotoluene	165	9.359	9.359	0.000	87	78701	4.00	4.09	
93 Dibenzofuran	168	9.401	9.401	0.000	79	363941	4.00	4.09	
95 2,3,5,6-Tetrachlorophenol	232	9.471	9.471	0.000	91	69064	4.00	4.01	
96 2,3,4,6-Tetrachlorophenol	232	9.514	9.514	0.000	74	70676	4.00	4.18	
97 2-Naphthylamine	143	9.540	9.540	0.000	83	266173	4.00	4.20	
98 Diethyl phthalate	149	9.578	9.578	0.000	95	282894	4.00	4.15	
99 Hexadecane	57	9.588	9.588	0.000	91	219225	4.00	4.45	
100 4-Chlorophenyl phenyl ether	204	9.717	9.717	0.000	93	136257	4.00	4.17	
101 4-Nitroaniline	138	9.722	9.722	0.000	76	72364	4.00	4.11	
103 Fluorene	166	9.733	9.733	0.000	80	288323	4.00	4.17	
104 4,6-Dinitro-2-methylphenol	198	9.759	9.759	0.000	65	84343	8.00	7.03	
105 N-Nitrosodiphenylamine	169	9.823	9.823	0.000	61	207962	4.00	3.96	
90 1,2-Diphenylhydrazine	77	9.866	9.866	0.000	98	312827	4.00	4.16	
110 4-Bromophenyl phenyl ether	248	10.192	10.192	0.000	64	78447	4.00	4.07	
112 Hexachlorobenzene	284	10.278	10.278	0.000	89	79204	4.00	4.11	
113 Atrazine	200	10.315	10.315	0.000	72	62578	4.00	4.11	
116 Pentachlorophenol	266	10.459	10.459	0.000	90	98731	8.00	7.26	

Compound	Sig	RT (min.)	Adj RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.470	10.470	0.000	90	234012	4.00	4.59	
121 Phenanthrene	178	10.689	10.689	0.000	96	443670	4.00	4.00	
122 Anthracene	178	10.742	10.742	0.000	97	454435	4.00	4.00	
124 Carbazole	167	10.897	10.897	0.000	82	403180	4.00	4.06	
126 Di-n-butyl phthalate	149	11.234	11.234	0.000	99	478707	4.00	3.85	
57 Azobenzene	77		11.923				ND	ND	
131 Fluoranthene	202	12.115	12.115	0.000	97	437332	4.00	3.91	
132 Benzidine	184	12.260	12.260	0.000	94	115541	4.00	3.60	
133 Pyrene	202	12.441	12.441	0.000	97	447116	4.00	4.01	
138 Butyl benzyl phthalate	149	13.376	13.376	0.000	96	194904	4.00	3.93	
144 3,3'-Dichlorobenzidine	252	14.375	14.375	0.000	57	119990	4.00	3.68	
145 Bis(2-ethylhexyl) phthalat	149	14.439	14.439	0.000	94	258611	4.00	3.77	
146 Benzo[a]anthracene	228	14.450	14.450	0.000	98	388390	4.00	3.97	
147 Chrysene	228	14.519	14.519	0.000	91	365240	4.00	3.96	
150 Di-n-octyl phthalate	149	15.753	15.753	0.000	98	382318	4.00	3.72	
151 7,12-Dimethylbenz(a)anthra	256	16.587	16.587	0.000	70	142947	4.00	3.92	
152 Benzo[b]fluoranthene	252	16.603	16.603	0.000	95	351632	4.00	4.10	
153 Benzo[k]fluoranthene	252	16.656	16.656	0.000	99	320222	4.00	3.81	
219 Benzo[e]pyrene	252	17.164	17.164	0.000	0	306198	4.00	3.96	
154 Benzo[a]pyrene	252	17.265	17.265	0.000	72	303646	4.00	3.93	
157 Indeno[1,2,3-cd]pyrene	276	19.787	19.787	0.000	92	296192	4.00	3.64	
158 Dibenz(a,h)anthracene	278	19.840	19.840	0.000	56	250943	4.00	3.71	M
159 Benzo[g,h,i]perylene	276	20.487	20.487	0.000	85	257341	4.00	3.71	
S 199 Total Cresols	108				0		8.00	8.89	
S 197 Methyl Phenols,Total	108				0		8.00	8.89	

**QC Flag Legend**

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

**Reagents:**

SVTAPSTD4.0i\_00006

Amount Added: 1.00

Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203005.D

Injection Date: 03-Feb-2015 06:46:30

Instrument ID: CH732

Operator ID: 003200

Lims ID: IC

Worklist Smp#: 5

Client ID:

Injection Vol: 2.0 ul

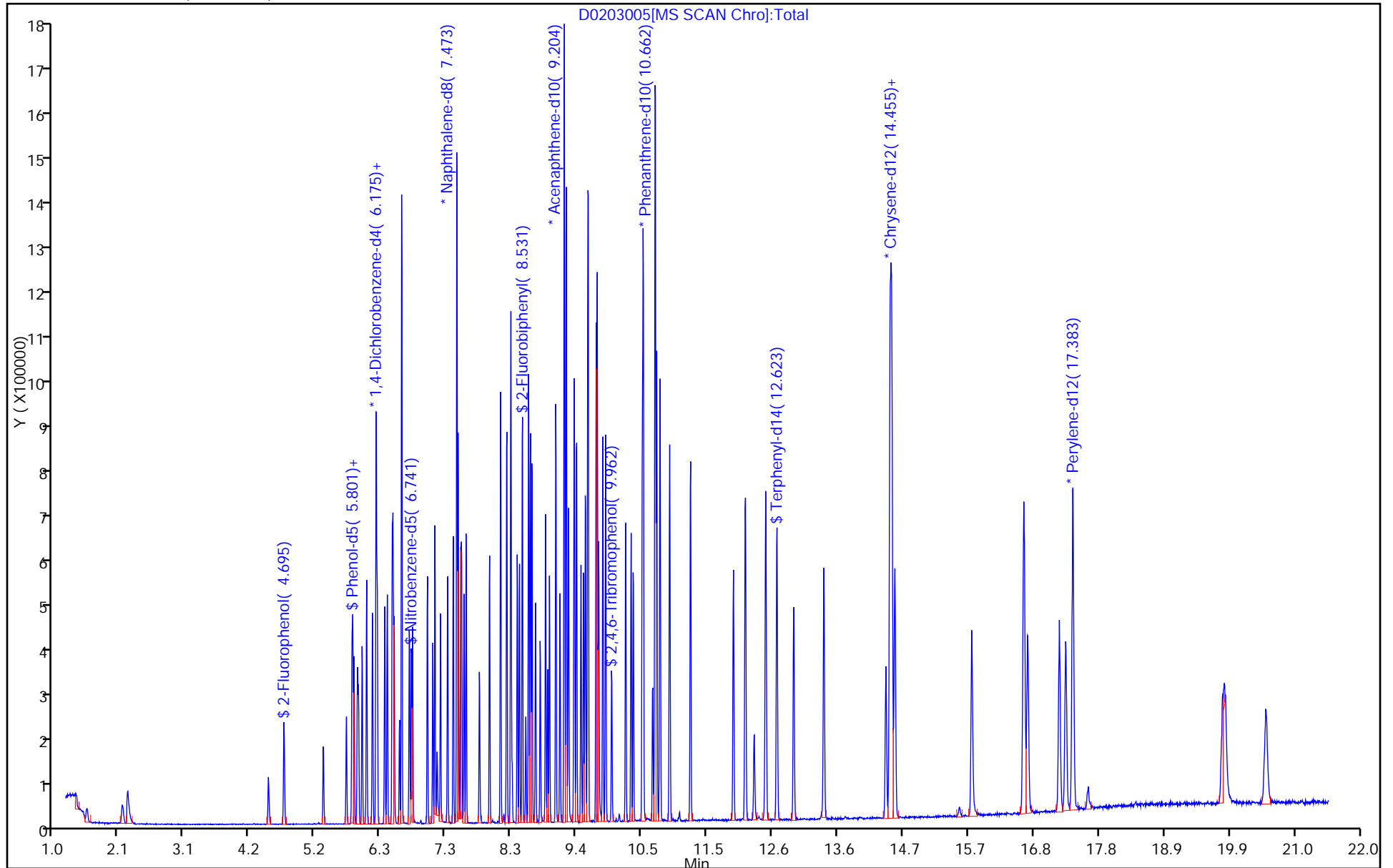
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: BNA\_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



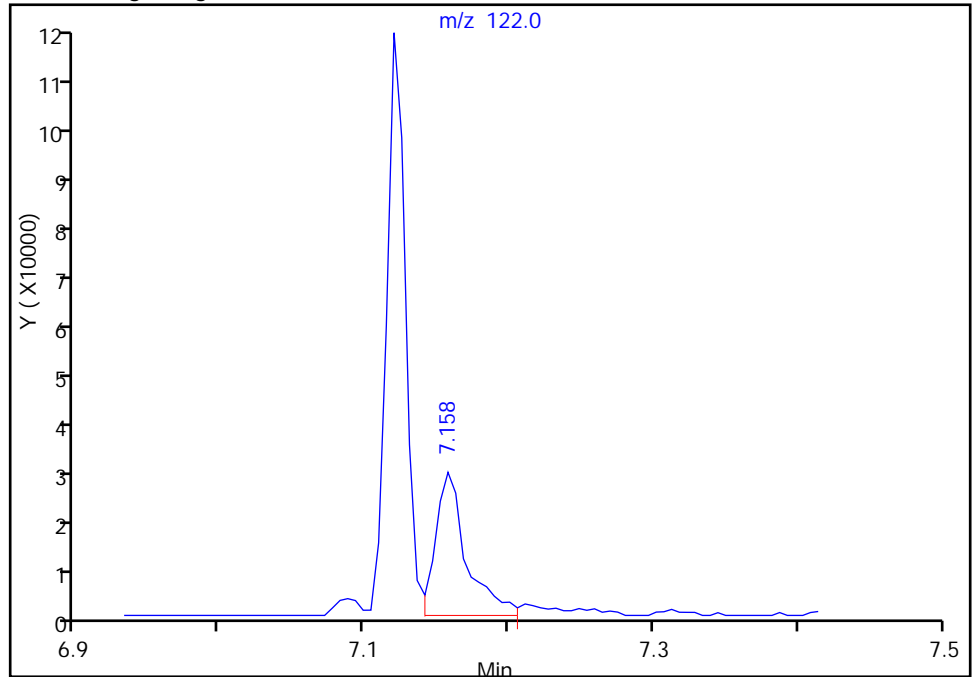
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203005.D  
Injection Date: 03-Feb-2015 06:46:30 Instrument ID: CH732  
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\_CH732 Limit Group: BNA 8270D ICAL  
Column: Rxi-5SilMS (0.32 mm) Detector: MS SCAN

52 Benzoic acid, CAS: 65-85-0

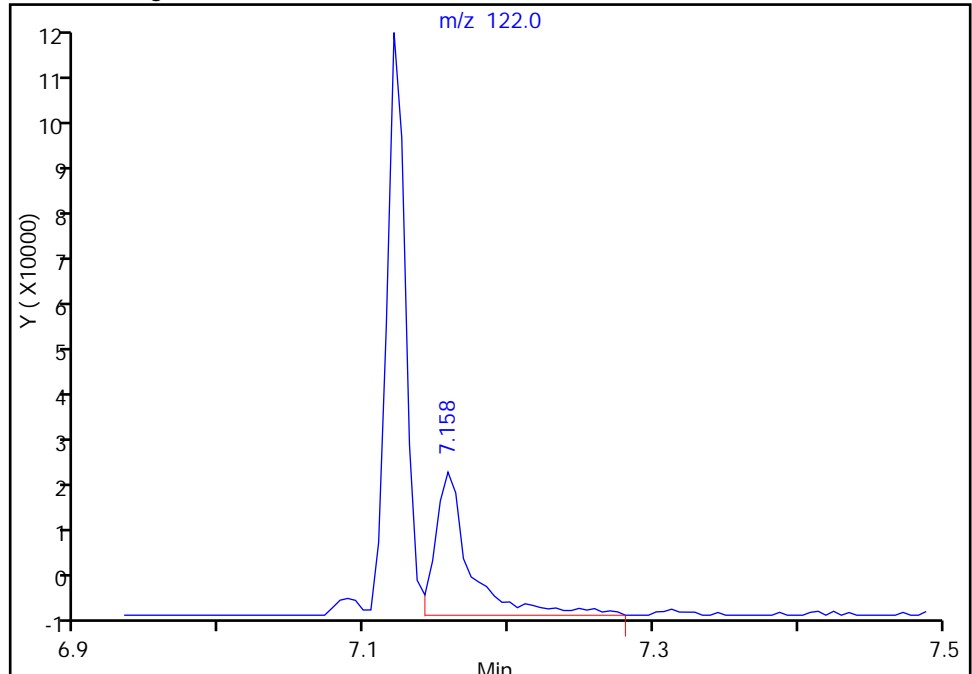
RT: 7.16  
Area: 40362  
Amount: 3.463586  
Amount Units: ng

Processing Integration Results



RT: 7.16  
Area: 45351  
Amount: 4.015151  
Amount Units: ng

Manual Integration Results



Reviewer: piccolinov, 03-Feb-2015 08:50:34  
Audit Action: Manually Integrated  
Audit Reason: Poor chromatography



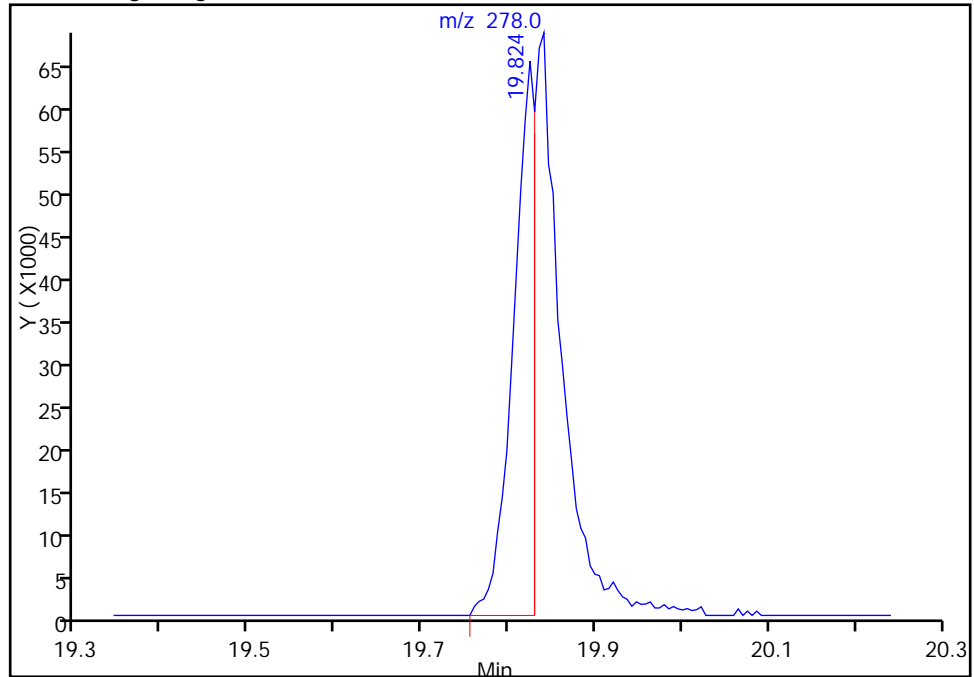
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203005.D  
 Injection Date: 03-Feb-2015 06:46:30 Instrument ID: CH732  
 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\_CH732 Limit Group: BNA 8270D ICAL  
 Column: Rxi-5SiIMS (0.32 mm) Detector: MS SCAN

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

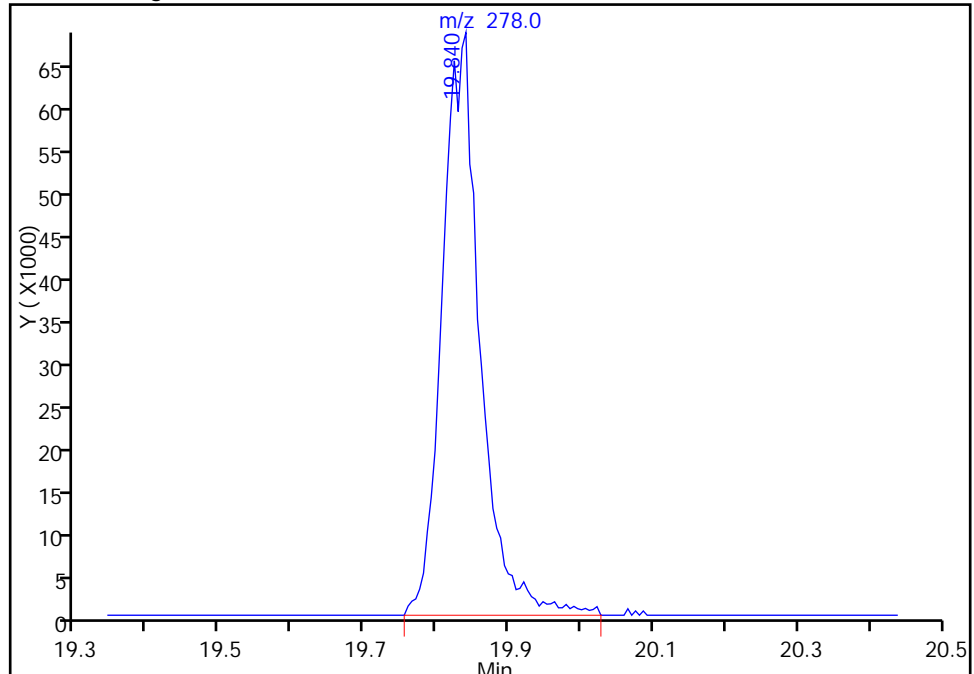
RT: 19.82  
 Area: 114832  
 Amount: 2.067137  
 Amount Units: ng

Processing Integration Results



RT: 19.84  
 Area: 250943  
 Amount: 3.714140  
 Amount Units: ng

Manual Integration Results



Reviewer: piccolinov, 03-Feb-2015 08:50:34  
 Audit Action: Manually Integrated  
 Audit Reason: Poor chromatography

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203006.D  
 Lims ID: ICIS  
 Client ID:  
 Sample Type: ICIS Calib Level: 4  
 Inject. Date: 03-Feb-2015 07:13:30 ALS Bottle#: 5 Worklist Smp#: 6  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0005518-006  
 Misc. Info.: ICIS  
 Operator ID: 003200 Instrument ID: CH732  
 Sublist: chrom-BNA\_CH732\*sub4  
 Method: \\PITCHROM\ChromData\CH732\20150203-5518.b\BNA\_CH732.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 04-Feb-2015 06:41:10 Calib Date: 03-Feb-2015 09:00:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last Ical File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203010.D  
 Column 1 : Rxi-5SiIMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK011

First Level Reviewer: piccolinov

Date: 03-Feb-2015 08:43:04

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	6.175	6.175	0.000	97	135960	8.00	8.00	
* 2 Naphthalene-d8	136	7.473	7.473	0.000	100	593216	8.00	8.00	
* 3 Acenaphthene-d10	164	9.204	9.204	0.000	91	375917	8.00	8.00	
* 4 Phenanthrene-d10	188	10.662	10.662	0.000	91	654603	8.00	8.00	
* 5 Chrysene-d12	240	14.471	14.471	0.000	97	607262	8.00	8.00	
* 6 Perylene-d12	264	17.377	17.377	0.000	96	498112	8.00	8.00	
\$ 7 2-Fluorophenol	112	4.695	4.695	0.000	88	179189	10.0	10.2	
\$ 8 Phenol-d5	99	5.785	5.785	0.000	95	248370	10.0	10.5	
\$ 9 Nitrobenzene-d5	82	6.741	6.741	0.000	90	255780	10.0	10.3	
\$ 10 2-Fluorobiphenyl	172	8.525	8.525	0.000	99	618183	10.0	10.0	
\$ 11 2,4,6-Tribromophenol	330	9.962	9.962	0.000	86	72581	10.0	10.1	
\$ 12 Terphenyl-d14	244	12.617	12.617	0.000	98	668366	10.0	10.1	
13 1,4-Dioxane	88	1.511	1.511	0.000	90	55464	10.0	10.2	
14 N-Nitrosodimethylamine	74	2.077	2.077	0.000	75	74663	10.0	10.2	
15 Pyridine	79	2.157	2.157	0.000	91	131501	10.0	10.3	
21 Methyl methanesulfonate	80	4.438	4.438	0.000	90	105679	10.0	10.3	
25 Benzaldehyde	77	5.694	5.694	0.000	85	107077	10.0	9.33	
26 Phenol	94	5.801	5.801	0.000	95	270314	10.0	10.0	
27 Aniline	93	5.817	5.817	0.000	93	301857	10.0	10.1	
29 Bis(2-chloroethyl)ether	93	5.892	5.892	0.000	88	190003	10.0	9.98	
30 2-Chlorophenol	128	5.950	5.950	0.000	96	233051	10.0	10.1	
31 n-Decane	43	6.020	6.020	0.000	93	273969	10.0	10.1	
32 1,3-Dichlorobenzene	146	6.116	6.116	0.000	97	274959	10.0	10.3	
33 1,4-Dichlorobenzene	146	6.191	6.191	0.000	93	272903	10.0	9.92	
34 Benzyl alcohol	108	6.314	6.314	0.000	89	148867	10.0	10.3	
35 1,2-Dichlorobenzene	146	6.356	6.356	0.000	95	267807	10.0	10.0	
36 2-Methylphenol	108	6.431	6.431	0.000	97	207591	10.0	10.1	
37 Indene	116	6.447	6.447	0.000	85	379789	10.0	10.2	
38 2,2'-oxybis[1-chloropropan	45	6.463	6.463	0.000	89	413246	10.0	10.3	
39 N-Nitrosopyrrolidine	100	6.549	6.549	0.000	75	101195	10.0	10.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
42 4-Methylphenol	108	6.586	6.586	0.000	65	220366	10.0	10.5	
40 Acetophenone	105	6.586	6.586	0.000	79	317474	10.0	10.3	
41 N-Nitrosodi-n-propylamine	70	6.586	6.586	0.000	70	149121	10.0	10.3	
45 Hexachloroethane	117	6.709	6.709	0.000	96	119409	10.0	10.0	
46 Nitrobenzene	77	6.762	6.762	0.000	89	251361	10.0	10.2	
48 Isophorone	82	6.997	6.997	0.000	96	446570	10.0	10.3	
49 2-Nitrophenol	139	7.088	7.088	0.000	95	140596	10.0	10.3	
50 2,4-Dimethylphenol	107	7.120	7.120	0.000	82	262290	10.0	10.5	
52 Benzoic acid	122	7.168	7.168	0.000	84	103970	10.0	8.23	
53 Bis(2-chloroethoxy)methane	93	7.211	7.211	0.000	96	273809	10.0	10.2	
54 2,4-Dichlorophenol	162	7.323	7.323	0.000	95	225553	10.0	10.3	
56 1,2,4-Trichlorobenzene	180	7.414	7.414	0.000	93	259967	10.0	10.4	
58 Naphthalene	128	7.494	7.494	0.000	97	810769	10.0	10.1	
59 4-Chloroaniline	127	7.537	7.537	0.000	77	328724	10.0	10.2	
60 2,6-Dichlorophenol	162	7.553	7.553	0.000	94	224288	10.0	10.3	
62 Hexachlorobutadiene	225	7.622	7.622	0.000	80	151937	10.0	10.1	
64 Caprolactam	113	7.841	7.841	0.000	61	72011	10.0	9.86	
67 4-Chloro-3-methylphenol	107	8.002	8.002	0.000	92	231893	10.0	10.1	
69 2-Methylnaphthalene	142	8.178	8.178	0.000	82	582381	10.0	10.3	
71 1-Methylnaphthalene	142	8.274	8.274	0.000	82	540054	10.0	10.1	
72 Hexachlorocyclopentadiene	237	8.338	8.338	0.000	90	170705	10.0	10.4	
73 1,2,4,5-Tetrachlorobenzene	216	8.344	8.344	0.000	97	251697	10.0	10.3	
74 2,4,6-Trichlorophenol	196	8.445	8.445	0.000	95	172469	10.0	10.3	
75 2,4,5-Trichlorophenol	196	8.482	8.482	0.000	93	178301	10.0	10.1	
76 1,1'-Biphenyl	154	8.627	8.627	0.000	95	718467	10.0	10.2	
77 2-Chloronaphthalene	162	8.659	8.659	0.000	65	579154	10.0	10.1	
79 2-Nitroaniline	65	8.739	8.739	0.000	84	164804	10.0	10.1	
82 Dimethyl phthalate	163	8.899	8.899	0.000	98	594888	10.0	9.97	
83 1,3-Dinitrobenzene	168	8.937	8.937	0.000	84	93300	10.0	10.4	
84 2,6-Dinitrotoluene	165	8.963	8.963	0.000	72	134217	10.0	10.2	
85 Acenaphthylene	152	9.065	9.065	0.000	90	903822	10.0	9.95	
86 3-Nitroaniline	138	9.134	9.134	0.000	95	165063	10.0	10.3	
87 2,4-Dinitrophenol	184	9.230	9.230	0.000	54	159961	20.0	18.8	
88 Acenaphthene	153	9.236	9.236	0.000	88	576591	10.0	10.4	
89 4-Nitrophenol	109	9.273	9.273	0.000	80	181010	20.0	20.5	
91 2,4-Dinitrotoluene	165	9.359	9.359	0.000	89	177872	10.0	10.3	
93 Dibenzofuran	168	9.401	9.401	0.000	80	789696	10.0	9.92	
95 2,3,5,6-Tetrachlorophenol	232	9.471	9.471	0.000	91	154617	10.0	10.0	
96 2,3,4,6-Tetrachlorophenol	232	9.514	9.514	0.000	75	153842	10.0	10.2	
97 2-Naphthylamine	143	9.540	9.540	0.000	88	577092	10.0	10.2	
98 Diethyl phthalate	149	9.578	9.578	0.000	95	620434	10.0	10.2	
99 Hexadecane	57	9.588	9.588	0.000	91	473542	10.0	10.8	
100 4-Chlorophenyl phenyl ether	204	9.711	9.711	0.000	95	292933	10.0	10.0	
101 4-Nitroaniline	138	9.722	9.722	0.000	77	165071	10.0	10.5	
103 Fluorene	166	9.733	9.733	0.000	80	630958	10.0	10.2	
104 4,6-Dinitro-2-methylphenol	198	9.754	9.754	0.000	55	207551	20.0	19.5	
105 N-Nitrosodiphenylamine	169	9.823	9.823	0.000	59	457506	10.0	9.84	
90 1,2-Diphenylhydrazine	77	9.866	9.866	0.000	99	668173	10.0	10.0	
110 4-Bromophenyl phenyl ether	248	10.192	10.192	0.000	62	172260	10.0	10.1	
112 Hexachlorobenzene	284	10.277	10.277	0.000	92	171081	10.0	10.0	
113 Atrazine	200	10.310	10.310	0.000	72	139931	10.0	10.4	
116 Pentachlorophenol	266	10.454	10.454	0.000	90	239474	20.0	19.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.470	10.470	0.000	89	513509	10.0	10.6	
121 Phenanthrene	178	10.689	10.689	0.000	97	958538	10.0	9.75	
122 Anthracene	178	10.742	10.742	0.000	97	989626	10.0	9.84	
124 Carbazole	167	10.897	10.897	0.000	82	866503	10.0	9.84	
126 Di-n-butyl phthalate	149	11.234	11.234	0.000	100	1093325	10.0	9.93	
57 Azobenzene	77		11.923				ND	ND	
131 Fluoranthene	202	12.110	12.110	0.000	98	959196	10.0	9.67	
132 Benzidine	184	12.254	12.254	0.000	97	327820	10.0	8.50	
133 Pyrene	202	12.441	12.441	0.000	97	987653	10.0	9.86	
138 Butyl benzyl phthalate	149	13.376	13.376	0.000	95	434962	10.0	9.77	
144 3,3'-Dichlorobenzidine	252	14.375	14.375	0.000	68	290343	10.0	9.91	
145 Bis(2-ethylhexyl) phthalat	149	14.434	14.434	0.000	96	625648	10.0	10.1	
146 Benzo[a]anthracene	228	14.450	14.450	0.000	98	877303	10.0	9.98	
147 Chrysene	228	14.519	14.519	0.000	93	832413	10.0	10.1	
150 Di-n-octyl phthalate	149	15.753	15.753	0.000	99	967260	10.0	10.0	
151 7,12-Dimethylbenz(a)anthra	256	16.581	16.581	0.000	74	345745	10.0	10.1	
152 Benzo[b]fluoranthene	252	16.597	16.597	0.000	95	800926	10.0	9.92	
153 Benzo[k]fluoranthene	252	16.656	16.656	0.000	98	808910	10.0	10.2	
219 Benzo[e]pyrene	252	17.158	17.158	0.000	0	735708	10.0	10.1	
154 Benzo[a]pyrene	252	17.265	17.265	0.000	75	735703	10.0	10.1	
157 Indeno[1,2,3-cd]pyrene	276	19.787	19.787	0.000	96	753684	10.0	9.85	
158 Dibenz(a,h)anthracene	278	19.824	19.824	0.000	1	626416	10.0	9.85	M
159 Benzo[g,h,i]perylene	276	20.481	20.481	0.000	87	628584	10.0	9.63	
S 197 Methyl Phenols, Total	108				0		20.0	20.6	
S 199 Total Cresols	108				0		20.0	20.6	

### QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

### Reagents:

SVTAPSTD10i\_00088

Amount Added: 1.00

Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203006.D

Injection Date: 03-Feb-2015 07:13:30

Instrument ID: CH732

Operator ID: 003200

Lims ID: ICIS

Worklist Smp#: 6

Client ID:

Injection Vol: 2.0 ul

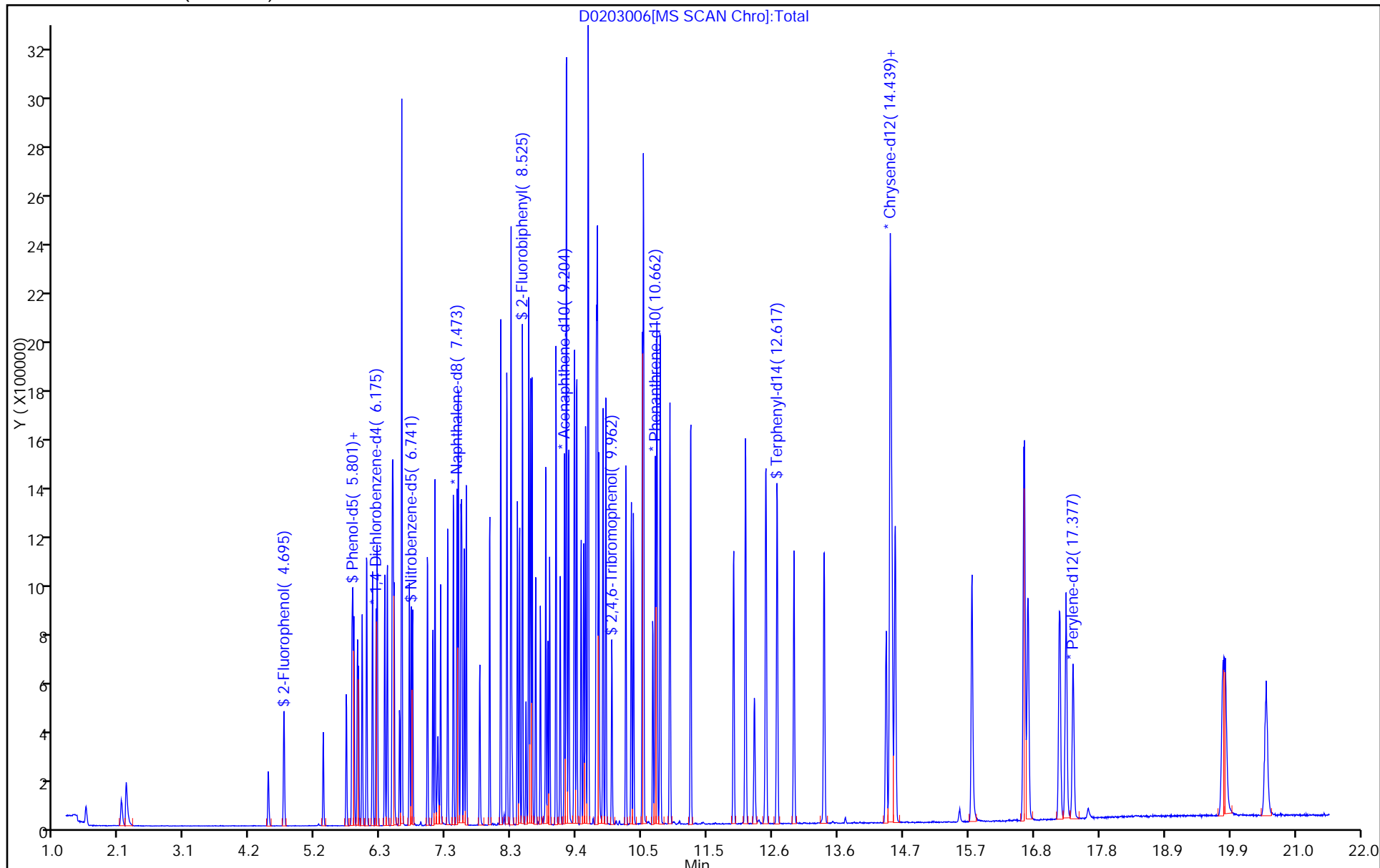
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: BNA\_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SILMS (0.32 mm)



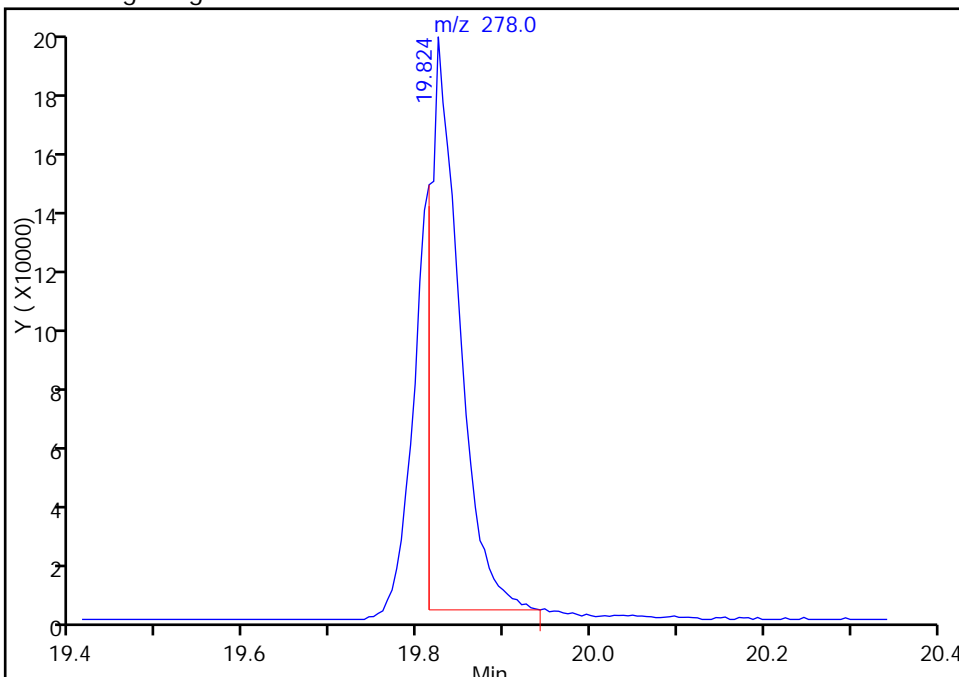
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203006.D  
Injection Date: 03-Feb-2015 07:13:30 Instrument ID: CH732  
Lims ID: ICIS  
Client ID:  
Operator ID: 003200 ALS Bottle#: 5 Worklist Smp#: 6  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH732 Limit Group: BNA 8270D ICAL  
Column: Rxi-5SiIMS (0.32 mm) Detector: MS SCAN

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

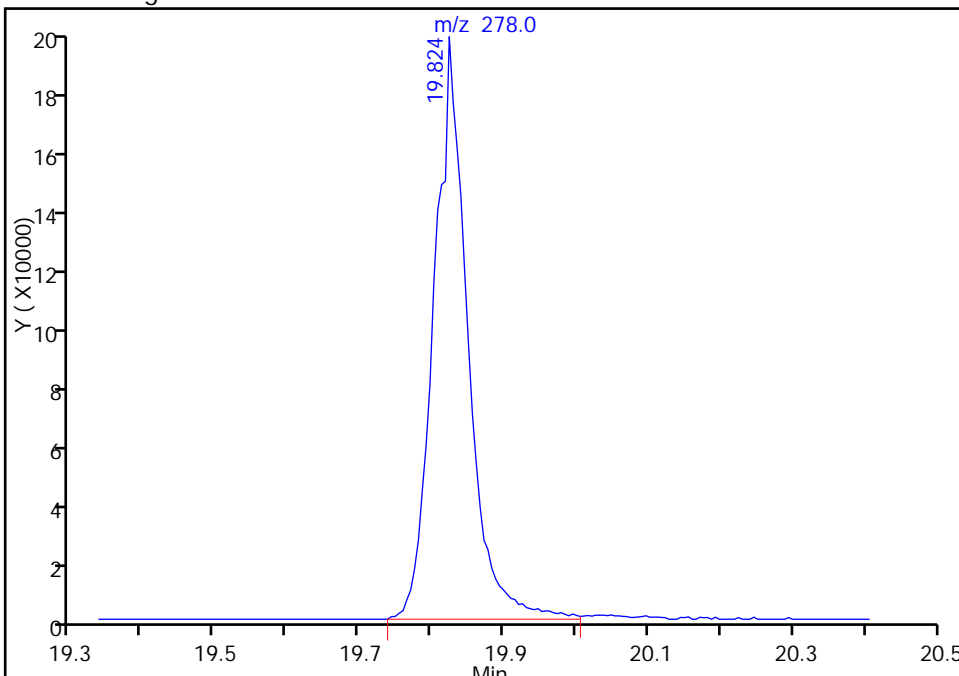
Processing Integration Results

RT: 19.82  
Area: 437358  
Amount: 7.588248  
Amount Units: ng



Manual Integration Results

RT: 19.82  
Area: 626416  
Amount: 9.848310  
Amount Units: ng



Reviewer: piccolinov, 03-Feb-2015 08:51:49  
Audit Action: Manually Integrated  
Audit Reason: Poor chromatography

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203007.D  
 Lims ID: IC  
 Client ID:  
 Sample Type: IC Calib Level: 5  
 Inject. Date: 03-Feb-2015 07:40:30 ALS Bottle#: 6 Worklist Smp#: 7  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0005518-007  
 Misc. Info.: IC  
 Operator ID: 003200 Instrument ID: CH732  
 Sublist: chrom-BNA\_CH732\*sub4  
 Method: \\PITCHROM\ChromData\CH732\20150203-5518.b\BNA\_CH732.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 04-Feb-2015 06:41:16 Calib Date: 03-Feb-2015 09:00:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203010.D  
 Column 1 : Rxi-5SiIMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK011

First Level Reviewer: piccolinov

Date: 03-Feb-2015 08:52:42

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	6.180	6.175	0.005	97	137459	8.00	8.00	
* 2 Naphthalene-d8	136	7.478	7.473	0.005	100	591759	8.00	8.00	
* 3 Acenaphthene-d10	164	9.209	9.204	0.005	90	364487	8.00	8.00	
* 4 Phenanthrene-d10	188	10.668	10.662	0.006	83	626567	8.00	8.00	
* 5 Chrysene-d12	240	14.477	14.471	0.006	96	601321	8.00	8.00	
* 6 Perylene-d12	264	17.388	17.377	0.011	97	493170	8.00	8.00	
\$ 7 2-Fluorophenol	112	4.706	4.695	0.011	90	350979	20.0	19.7	
\$ 8 Phenol-d5	99	5.795	5.785	0.010	94	477417	20.0	19.9	
\$ 9 Nitrobenzene-d5	82	6.746	6.741	0.005	93	498999	20.0	20.1	
\$ 10 2-Fluorobiphenyl	172	8.531	8.525	0.006	100	1200667	20.0	20.1	
\$ 11 2,4,6-Tribromophenol	330	9.968	9.962	0.006	86	139101	20.0	20.2	
\$ 12 Terphenyl-d14	244	12.623	12.617	0.006	98	1302313	20.0	19.9	
13 1,4-Dioxane	88	1.532	1.511	0.021	91	109242	20.0	20.0	
14 N-Nitrosodimethylamine	74	2.104	2.077	0.027	75	147321	20.0	19.9	
15 Pyridine	79	2.173	2.157	0.016	92	264484	20.0	20.5	
21 Methyl methanesulfonate	80	4.449	4.438	0.011	90	203934	20.0	19.6	
25 Benzaldehyde	77	5.705	5.694	0.011	85	258918	20.0	22.3	
26 Phenol	94	5.806	5.801	0.005	95	537943	20.0	19.7	
27 Aniline	93	5.828	5.817	0.011	74	596247	20.0	19.8	
29 Bis(2-chloroethyl)ether	93	5.897	5.892	0.005	89	372868	20.0	19.4	
30 2-Chlorophenol	128	5.956	5.950	0.006	96	458905	20.0	19.7	
31 n-Decane	43	6.031	6.020	0.011	94	543602	20.0	19.9	
32 1,3-Dichlorobenzene	146	6.127	6.116	0.011	98	534786	20.0	19.7	
33 1,4-Dichlorobenzene	146	6.201	6.191	0.010	93	544982	20.0	19.6	
34 Benzyl alcohol	108	6.319	6.314	0.005	88	285603	20.0	19.5	
35 1,2-Dichlorobenzene	146	6.362	6.356	0.006	92	530899	20.0	19.6	
36 2-Methylphenol	108	6.442	6.431	0.011	96	398202	20.0	19.3	
37 Indene	116	6.453	6.447	0.006	85	734967	20.0	19.6	
38 2,2'-oxybis[1-chloropropan	45	6.469	6.463	0.006	86	790384	20.0	19.5	
39 N-Nitrosopyrrolidine	100	6.559	6.549	0.010	77	201336	20.0	20.0	

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	6.591	6.586	0.005	65	285723	20.0	19.4	
40 Acetophenone	105	6.591	6.586	0.005	77	599792	20.0	19.2	
42 4-Methylphenol	108	6.597	6.586	0.011	69	420058	20.0	19.8	
45 Hexachloroethane	117	6.714	6.709	0.005	96	232849	20.0	19.3	
46 Nitrobenzene	77	6.768	6.762	0.006	92	498871	20.0	20.2	
48 Isophorone	82	7.008	6.997	0.011	95	860436	20.0	19.8	
49 2-Nitrophenol	139	7.094	7.088	0.006	96	280608	20.0	20.6	
50 2,4-Dimethylphenol	107	7.126	7.120	0.006	78	499190	20.0	20.0	
52 Benzoic acid	122	7.190	7.168	0.022	82	249876	20.0	17.9	
53 Bis(2-chloroethoxy)methane	93	7.217	7.211	0.006	90	519031	20.0	19.4	
54 2,4-Dichlorophenol	162	7.329	7.323	0.006	96	439198	20.0	20.2	
56 1,2,4-Trichlorobenzene	180	7.425	7.414	0.011	92	482199	20.0	19.3	
58 Naphthalene	128	7.500	7.494	0.006	97	1593857	20.0	19.9	
59 4-Chloroaniline	127	7.542	7.537	0.005	78	659764	20.0	20.6	
60 2,6-Dichlorophenol	162	7.558	7.553	0.005	96	440269	20.0	20.4	
62 Hexachlorobutadiene	225	7.628	7.622	0.006	76	293629	20.0	19.7	
64 Caprolactam	113	7.852	7.841	0.011	67	148052	20.0	20.3	
67 4-Chloro-3-methylphenol	107	8.007	8.002	0.005	92	450969	20.0	19.8	
69 2-Methylnaphthalene	142	8.183	8.178	0.005	86	1113976	20.0	19.7	
71 1-Methylnaphthalene	142	8.285	8.274	0.011	82	1037675	20.0	19.5	
72 Hexachlorocyclopentadiene	237	8.344	8.338	0.006	96	347500	20.0	21.9	
73 1,2,4,5-Tetrachlorobenzene	216	8.349	8.344	0.005	97	472692	20.0	19.9	
74 2,4,6-Trichlorophenol	196	8.451	8.445	0.006	95	326888	20.0	20.2	
75 2,4,5-Trichlorophenol	196	8.488	8.482	0.006	93	349406	20.0	20.3	
76 1,1'-Biphenyl	154	8.632	8.627	0.005	95	1360765	20.0	19.8	
77 2-Chloronaphthalene	162	8.664	8.659	0.005	65	1091984	20.0	19.7	
79 2-Nitroaniline	65	8.744	8.739	0.005	81	319101	20.0	20.2	
82 Dimethyl phthalate	163	8.910	8.899	0.011	99	1148510	20.0	19.8	
83 1,3-Dinitrobenzene	168	8.942	8.937	0.005	61	183786	20.0	21.1	
84 2,6-Dinitrotoluene	165	8.969	8.963	0.006	71	257767	20.0	20.3	
85 Acenaphthylene	152	9.070	9.065	0.005	91	1740013	20.0	19.7	
86 3-Nitroaniline	138	9.140	9.134	0.006	92	315804	20.0	20.4	
87 2,4-Dinitrophenol	184	9.236	9.230	0.006	59	339911	40.0	40.2	
88 Acenaphthene	153	9.241	9.236	0.005	87	1092870	20.0	20.3	
89 4-Nitrophenol	109	9.279	9.273	0.006	82	364939	40.0	42.6	
91 2,4-Dinitrotoluene	165	9.364	9.359	0.005	89	347851	20.0	20.8	
93 Dibenzofuran	168	9.407	9.401	0.006	80	1536391	20.0	19.9	
95 2,3,5,6-Tetrachlorophenol	232	9.476	9.471	0.005	92	310668	20.0	20.8	
96 2,3,4,6-Tetrachlorophenol	232	9.519	9.514	0.005	73	305329	20.0	20.8	
97 2-Naphthylamine	143	9.551	9.540	0.011	88	1110540	20.0	20.2	
98 Diethyl phthalate	149	9.583	9.578	0.005	97	1198085	20.0	20.3	
99 Hexadecane	57	9.594	9.588	0.006	91	907979	20.0	20.8	
100 4-Chlorophenyl phenyl ethe	204	9.717	9.711	0.006	97	563422	20.0	19.9	
101 4-Nitroaniline	138	9.733	9.722	0.011	65	323357	20.0	21.2	
103 Fluorene	166	9.738	9.733	0.005	80	1206930	20.0	20.1	
104 4,6-Dinitro-2-methylphenol	198	9.759	9.754	0.005	52	426277	40.0	41.9	
105 N-Nitrosodiphenylamine	169	9.829	9.823	0.006	63	873779	20.0	19.6	
90 1,2-Diphenylhydrazine	77	9.872	9.866	0.006	99	1276008	20.0	20.0	
110 4-Bromophenyl phenyl ether	248	10.192	10.192	0.000	67	334279	20.0	20.4	
112 Hexachlorobenzene	284	10.283	10.277	0.006	92	326768	20.0	20.0	
113 Atrazine	200	10.320	10.310	0.010	75	272565	20.0	21.1	
116 Pentachlorophenol	266	10.459	10.454	0.005	89	467256	40.0	40.5	



Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.475	10.470	0.005	90	971090	20.0	19.8	
121 Phenanthrene	178	10.694	10.689	0.005	96	1856746	20.0	19.7	
122 Anthracene	178	10.748	10.742	0.006	97	1936292	20.0	20.1	
124 Carbazole	167	10.903	10.897	0.006	82	1707133	20.0	20.3	
126 Di-n-butyl phthalate	149	11.234	11.234	0.000	99	2153696	20.0	20.4	
57 Azobenzene	77		11.923				ND	ND	
131 Fluoranthene	202	12.121	12.110	0.011	97	1919281	20.0	20.2	
132 Benzidine	184	12.265	12.254	0.011	99	826654	20.0	19.6	
133 Pyrene	202	12.447	12.441	0.006	97	1948062	20.0	19.6	
138 Butyl benzyl phthalate	149	13.381	13.376	0.005	97	886116	20.0	20.1	
144 3,3'-Dichlorobenzidine	252	14.380	14.375	0.005	71	569808	20.0	19.6	
145 Bis(2-ethylhexyl) phthalat	149	14.439	14.434	0.005	96	1221960	20.0	20.0	
146 Benzo[a]anthracene	228	14.455	14.450	0.005	97	1725874	20.0	19.8	
147 Chrysene	228	14.525	14.519	0.006	94	1616774	20.0	19.7	
150 Di-n-octyl phthalate	149	15.764	15.753	0.011	99	1974782	20.0	20.6	
151 7,12-Dimethylbenz(a)anthra	256	16.597	16.581	0.016	68	686009	20.0	20.2	
152 Benzo[b]fluoranthene	252	16.614	16.597	0.017	93	1651159	20.0	20.7	
153 Benzo[k]fluoranthene	252	16.662	16.656	0.006	95	1577594	20.0	20.1	
219 Benzo[e]pyrene	252	17.174	17.158	0.016	0	1453734	20.0	20.2	
154 Benzo[a]pyrene	252	17.276	17.265	0.011	75	1444557	20.0	20.1	
157 Indeno[1,2,3-cd]pyrene	276	19.808	19.787	0.021	96	1506352	20.0	19.9	
158 Dibenz(a,h)anthracene	278	19.840	19.824	0.016	66	1244003	20.0	19.8	
159 Benzo[g,h,i]perylene	276	20.497	20.481	0.016	88	1266587	20.0	19.6	
S 199 Total Cresols	108				0		40.0	39.0	
S 197 Methyl Phenols,Total	108				0		40.0	39.0	

**QC Flag Legend**

Processing Flags

ND - Not Detected or Marked ND

**Reagents:**

SVTAPSTD20i\_00005

Amount Added: 1.00

Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203007.D

Injection Date: 03-Feb-2015 07:40:30

Instrument ID: CH732

Operator ID: 003200

Lims ID: IC

Worklist Smp#: 7

Client ID:

Injection Vol: 2.0 ul

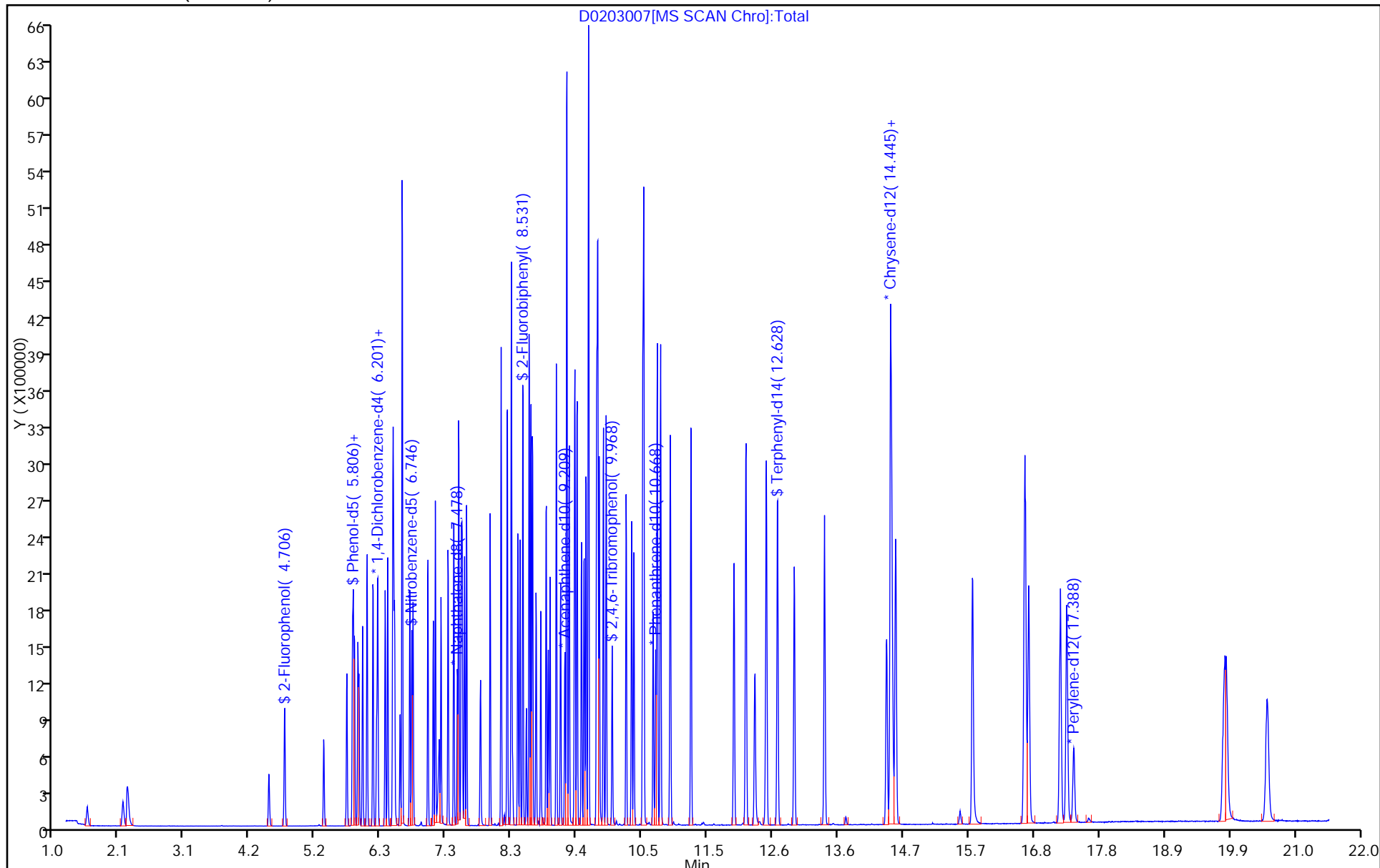
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: BNA\_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203008.D  
 Lims ID: IC  
 Client ID:  
 Sample Type: IC Calib Level: 6  
 Inject. Date: 03-Feb-2015 08:07:30 ALS Bottle#: 7 Worklist Smp#: 8  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0005518-008  
 Misc. Info.: IC  
 Operator ID: 003200 Instrument ID: CH732  
 Sublist: chrom-BNA\_CH732\*sub4  
 Method: \\PITCHROM\ChromData\CH732\20150203-5518.b\BNA\_CH732.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 04-Feb-2015 06:41:24 Calib Date: 03-Feb-2015 09:00:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICAL File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203010.D  
 Column 1 : Rxi-5SiIMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK011

First Level Reviewer: piccolinov

Date: 03-Feb-2015 08:58:16

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	6.175	6.175	0.000	97	129608	8.00	8.00	
* 2 Naphthalene-d8	136	7.478	7.473	0.005	100	556151	8.00	8.00	
* 3 Acenaphthene-d10	164	9.204	9.204	0.000	92	332955	8.00	8.00	
* 4 Phenanthrene-d10	188	10.668	10.662	0.006	73	567011	8.00	8.00	
* 5 Chrysene-d12	240	14.477	14.471	0.006	88	538430	8.00	8.00	
* 6 Perylene-d12	264	17.388	17.377	0.011	96	454484	8.00	8.00	
\$ 7 2-Fluorophenol	112	4.695	4.695	0.000	91	677215	40.0	40.3	
\$ 8 Phenol-d5	99	5.790	5.785	0.005	95	914976	40.0	40.4	
\$ 9 Nitrobenzene-d5	82	6.746	6.741	0.005	92	946397	40.0	40.5	
\$ 10 2-Fluorobiphenyl	172	8.531	8.525	0.006	98	2225410	40.0	40.7	
\$ 11 2,4,6-Tribromophenol	330	9.968	9.962	0.006	88	271556	40.0	43.6	
\$ 12 Terphenyl-d14	244	12.628	12.617	0.011	98	2388667	40.0	40.8	
13 1,4-Dioxane	88	1.506	1.511	-0.005	93	209470	40.0	40.6	
14 N-Nitrosodimethylamine	74	2.077	2.077	0.000	76	284868	40.0	40.8	
15 Pyridine	79	2.147	2.157	-0.010	93	507054	40.0	41.7	
21 Methyl methanesulfonate	80	4.439	4.438	0.001	91	385315	40.0	39.2	
25 Benzaldehyde	77	5.699	5.694	0.005	87	517593	40.0	47.3	
26 Phenol	94	5.806	5.801	0.005	94	1005636	40.0	39.1	
27 Aniline	93	5.822	5.817	0.005	64	1146158	40.0	40.3	
29 Bis(2-chloroethyl)ether	93	5.897	5.892	0.005	90	701627	40.0	38.7	
30 2-Chlorophenol	128	5.950	5.950	0.000	97	887214	40.0	40.4	
31 n-Decane	43	6.025	6.020	0.005	93	996855	40.0	38.7	
32 1,3-Dichlorobenzene	146	6.121	6.116	0.005	98	1034697	40.0	40.5	
33 1,4-Dichlorobenzene	146	6.196	6.191	0.005	94	1041084	40.0	39.7	
34 Benzyl alcohol	108	6.319	6.314	0.005	89	548480	40.0	39.7	
35 1,2-Dichlorobenzene	146	6.356	6.356	0.000	92	1006967	40.0	39.5	
36 2-Methylphenol	108	6.442	6.431	0.011	88	763283	40.0	39.1	
37 Indene	116	6.447	6.447	0.000	84	1386687	40.0	39.2	
38 2,2'-oxybis[1-chloropropan	45	6.469	6.463	0.006	90	1466380	40.0	38.4	
39 N-Nitrosopyrrolidine	100	6.559	6.549	0.010	78	381909	40.0	40.2	

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	6.592	6.586	0.006	63	514816	40.0	37.2	
40 Acetophenone	105	6.592	6.586	0.006	79	1115856	40.0	37.9	
42 4-Methylphenol	108	6.592	6.586	0.006	69	767791	40.0	38.3	
45 Hexachloroethane	117	6.709	6.709	0.000	97	444909	40.0	39.2	
46 Nitrobenzene	77	6.768	6.762	0.006	88	927641	40.0	40.0	
48 Isophorone	82	7.003	6.997	0.006	96	1633037	40.0	40.0	
49 2-Nitrophenol	139	7.088	7.088	0.000	96	529004	40.0	41.3	
50 2,4-Dimethylphenol	107	7.126	7.120	0.006	57	931124	40.0	39.8	
52 Benzoic acid	122	7.206	7.168	0.038	72	552644	40.0	40.4	
53 Bis(2-chloroethoxy)methane	93	7.217	7.211	0.006	96	989031	40.0	39.4	
54 2,4-Dichlorophenol	162	7.329	7.323	0.006	95	820358	40.0	40.1	
56 1,2,4-Trichlorobenzene	180	7.420	7.414	0.006	94	930596	40.0	39.7	
58 Naphthalene	128	7.500	7.494	0.006	97	2959547	40.0	39.3	
59 4-Chloroaniline	127	7.542	7.537	0.005	74	1214856	40.0	40.3	
60 2,6-Dichlorophenol	162	7.553	7.553	0.000	95	812683	40.0	40.0	
62 Hexachlorobutadiene	225	7.628	7.622	0.006	55	547750	40.0	39.0	
64 Caprolactam	113	7.858	7.841	0.017	71	274556	40.0	40.1	
67 4-Chloro-3-methylphenol	107	8.007	8.002	0.005	95	843095	40.0	39.3	
69 2-Methylnaphthalene	142	8.183	8.178	0.005	87	2117761	40.0	39.8	
71 1-Methylnaphthalene	142	8.280	8.274	0.006	83	1972940	40.0	39.5	
72 Hexachlorocyclopentadiene	237	8.344	8.338	0.006	95	644566	40.0	44.5	
73 1,2,4,5-Tetrachlorobenzene	216	8.349	8.344	0.005	98	858550	40.0	39.6	
74 2,4,6-Trichlorophenol	196	8.451	8.445	0.006	94	603497	40.0	40.8	
75 2,4,5-Trichlorophenol	196	8.488	8.482	0.006	93	648683	40.0	41.3	
76 1,1'-Biphenyl	154	8.632	8.627	0.005	94	2580419	40.0	41.2	
77 2-Chloronaphthalene	162	8.659	8.659	0.000	78	2127629	40.0	41.9	
79 2-Nitroaniline	65	8.744	8.739	0.005	84	600873	40.0	41.7	
82 Dimethyl phthalate	163	8.905	8.899	0.006	98	2163658	40.0	40.9	
83 1,3-Dinitrobenzene	168	8.942	8.937	0.005	62	348418	40.0	43.8	
84 2,6-Dinitrotoluene	165	8.969	8.963	0.006	67	484496	40.0	41.7	
85 Acenaphthylene	152	9.070	9.065	0.005	91	3284115	40.0	40.8	
86 3-Nitroaniline	138	9.140	9.134	0.006	94	590172	40.0	41.8	
87 2,4-Dinitrophenol	184	9.236	9.230	0.006	64	655440	80.0	84.1	
88 Acenaphthene	153	9.241	9.236	0.005	87	1938543	40.0	39.4	
89 4-Nitrophenol	109	9.279	9.273	0.006	81	682381	80.0	87.3	
91 2,4-Dinitrotoluene	165	9.364	9.359	0.005	89	635934	40.0	41.7	
93 Dibenzofuran	168	9.402	9.401	0.001	70	2825768	40.0	40.1	
95 2,3,5,6-Tetrachlorophenol	232	9.476	9.471	0.005	89	586262	40.0	42.9	
96 2,3,4,6-Tetrachlorophenol	232	9.519	9.514	0.005	73	554584	40.0	41.4	
97 2-Naphthylamine	143	9.546	9.540	0.006	92	2095491	40.0	41.7	
98 Diethyl phthalate	149	9.583	9.578	0.005	96	2158069	40.0	40.0	
99 Hexadecane	57	9.588	9.588	0.000	86	1573793	40.0	38.4	
100 4-Chlorophenyl phenyl ethe	204	9.717	9.711	0.006	95	1044305	40.0	40.4	
101 4-Nitroaniline	138	9.733	9.722	0.011	62	567688	40.0	40.7	
103 Fluorene	166	9.738	9.733	0.005	83	2206480	40.0	40.2	
104 4,6-Dinitro-2-methylphenol	198	9.765	9.754	0.011	57	811928	80.0	88.1	
105 N-Nitrosodiphenylamine	169	9.829	9.823	0.006	59	1656272	40.0	41.1	
90 1,2-Diphenylhydrazine	77	9.872	9.866	0.006	99	2389339	40.0	41.4	
110 4-Bromophenyl phenyl ether	248	10.192	10.192	0.000	65	599814	40.0	40.5	
112 Hexachlorobenzene	284	10.283	10.277	0.006	94	604183	40.0	40.8	
113 Atrazine	200	10.320	10.310	0.010	80	482114	40.0	41.2	
116 Pentachlorophenol	266	10.459	10.454	0.005	90	891131	80.0	85.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.475	10.470	0.005	91	1800945	40.0	39.0	
121 Phenanthrene	178	10.694	10.689	0.005	96	3446256	40.0	40.5	
122 Anthracene	178	10.748	10.742	0.006	96	3570591	40.0	41.0	
124 Carbazole	167	10.903	10.897	0.006	82	3091224	40.0	40.5	
126 Di-n-butyl phthalate	149	11.234	11.234	0.000	99	3976938	40.0	41.7	
57 Azobenzene	77		11.923				ND	ND	
131 Fluoranthene	202	12.121	12.110	0.011	97	3533786	40.0	41.1	
132 Benzidine	184	12.260	12.254	0.006	99	1638838	40.0	41.8	
133 Pyrene	202	12.447	12.441	0.006	98	3720835	40.0	41.9	
138 Butyl benzyl phthalate	149	13.381	13.376	0.005	97	1660263	40.0	42.1	
144 3,3'-Dichlorobenzidine	252	14.380	14.375	0.005	66	1133566	40.0	43.6	
145 Bis(2-ethylhexyl) phthalat	149	14.439	14.434	0.005	96	2358686	40.0	43.2	
146 Benzo[a]anthracene	228	14.455	14.450	0.005	98	3153612	40.0	40.5	
147 Chrysene	228	14.525	14.519	0.006	94	3022852	40.0	41.2	
150 Di-n-octyl phthalate	149	15.759	15.753	0.006	99	3924029	40.0	44.4	
151 7,12-Dimethylbenz(a)anthra	256	16.598	16.581	0.017	69	1345948	40.0	42.9	
152 Benzo[b]fluoranthene	252	16.614	16.597	0.017	96	3082246	40.0	41.8	
153 Benzo[k]fluoranthene	252	16.667	16.656	0.011	95	2967704	40.0	41.1	
219 Benzo[e]pyrene	252	17.180	17.158	0.022	0	2742921	40.0	41.3	
154 Benzo[a]pyrene	252	17.276	17.265	0.011	74	2810546	40.0	42.3	
157 Indeno[1,2,3-cd]pyrene	276	19.819	19.787	0.032	93	3015474	40.0	43.2	M
158 Dibenz(a,h)anthracene	278	19.840	19.824	0.016	77	2507561	40.0	43.2	
159 Benzo[g,h,i]perylene	276	20.508	20.481	0.027	91	2553190	40.0	42.9	
S 197 Methyl Phenols, Total	108				0		80.0	77.5	
S 199 Total Cresols	108				0		80.0	77.5	

**QC Flag Legend**

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

**Reagents:**

SVTAPSTD40i\_00005

Amount Added: 1.00

Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203008.D

Injection Date: 03-Feb-2015 08:07:30

Instrument ID: CH732

Operator ID: 003200

Lims ID: IC

Worklist Smp#: 8

Client ID:

Injection Vol: 2.0 ul

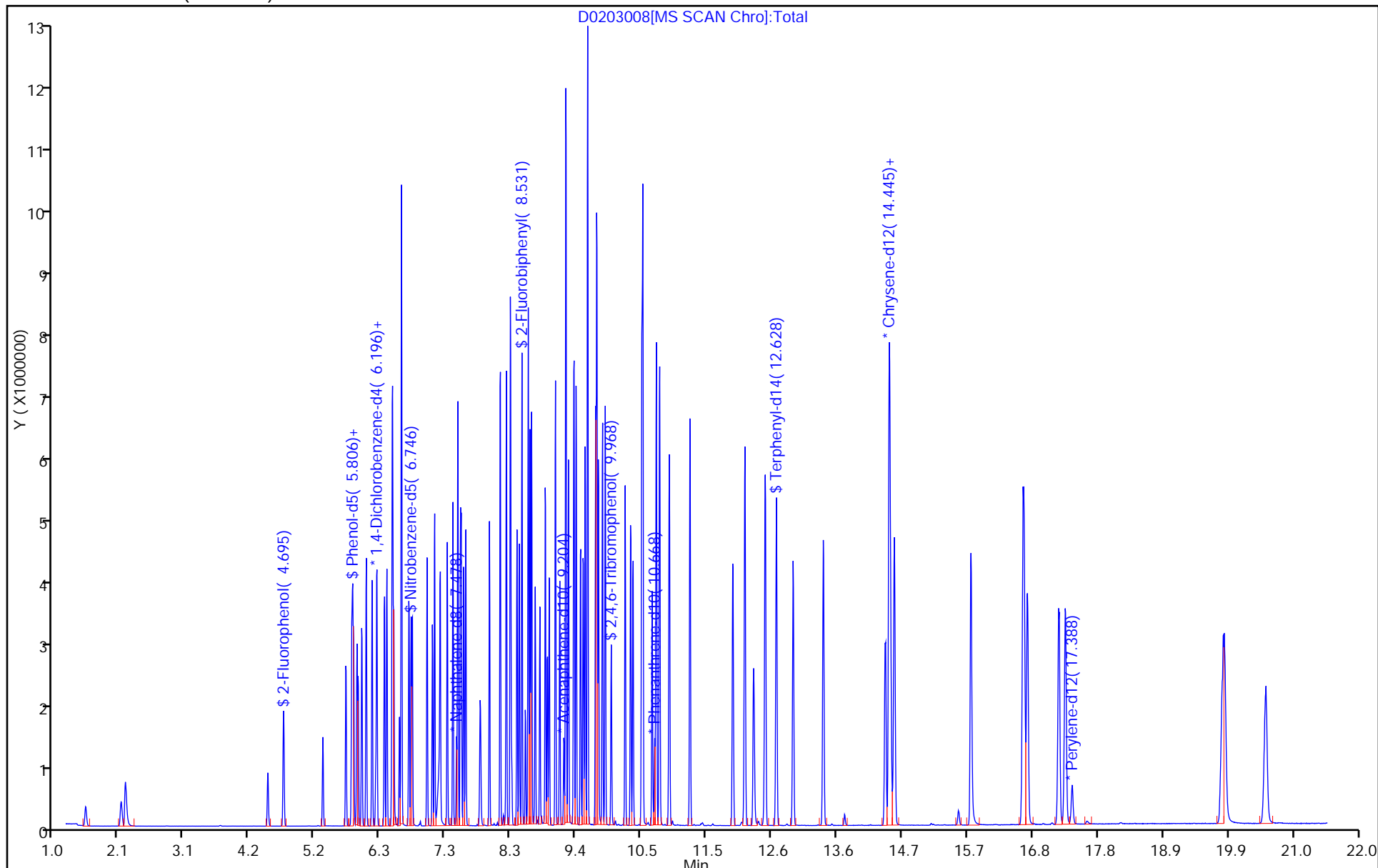
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: BNA\_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



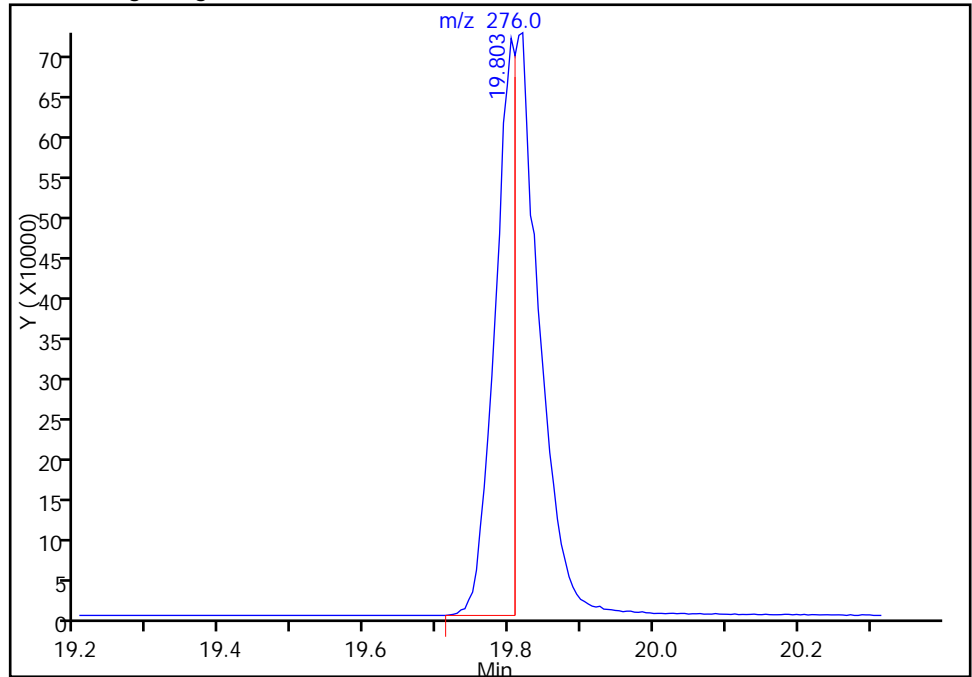
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203008.D  
Injection Date: 03-Feb-2015 08:07:30 Instrument ID: CH732  
Lims ID: IC  
Client ID:  
Operator ID: 003200 ALS Bottle#: 7 Worklist Smp#: 8  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH732 Limit Group: BNA 8270D ICAL  
Column: Rxi-5SiIMS (0.32 mm) Detector: MS SCAN

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

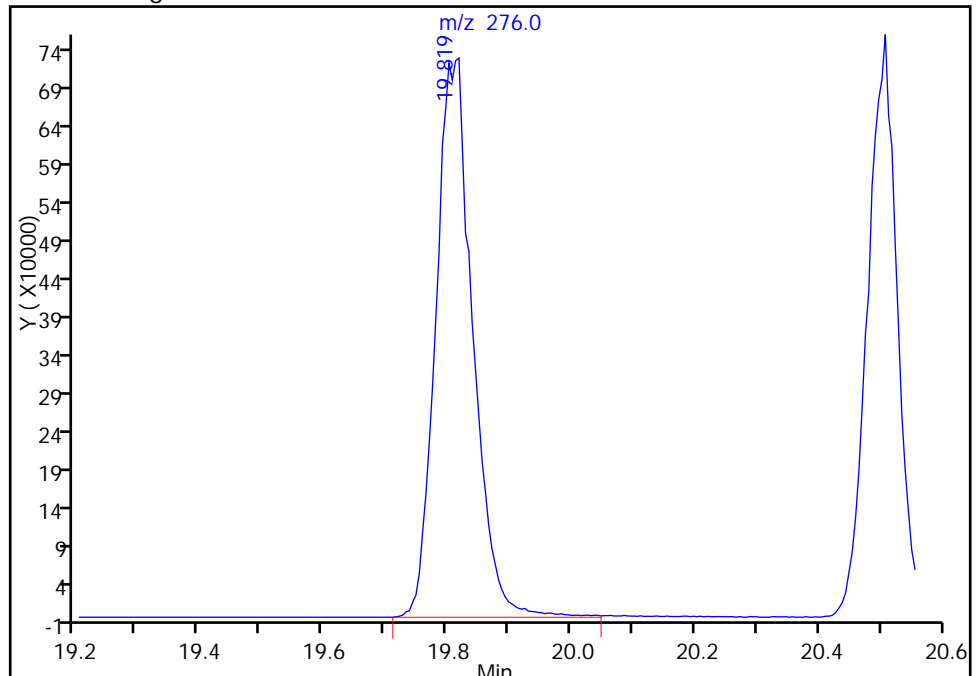
Processing Integration Results

RT: 19.80  
Area: 1433224  
Amount: 23.954611  
Amount Units: ng



Manual Integration Results

RT: 19.82  
Area: 3015474  
Amount: 43.196305  
Amount Units: ng



Reviewer: piccolinov, 03-Feb-2015 08:58:16  
Audit Action: Manually Integrated  
Audit Reason: Poor chromatography

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203009.D  
 Lims ID: IC  
 Client ID:  
 Sample Type: IC Calib Level: 7  
 Inject. Date: 03-Feb-2015 08:33:30 ALS Bottle#: 8 Worklist Smp#: 9  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0005518-009  
 Misc. Info.: IC  
 Operator ID: 003200 Instrument ID: CH732  
 Sublist: chrom-BNA\_CH732\*sub4  
 Method: \\PITCHROM\ChromData\CH732\20150203-5518.b\BNA\_CH732.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 04-Feb-2015 06:41:31 Calib Date: 03-Feb-2015 09:00:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last Ical File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203010.D  
 Column 1 : Rxi-5SiIMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK011

First Level Reviewer: piccolinov

Date: 03-Feb-2015 08:59:37

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	6.175	6.175	0.000	97	126365	8.00	8.00	
* 2 Naphthalene-d8	136	7.478	7.473	0.005	100	546713	8.00	8.00	
* 3 Acenaphthene-d10	164	9.209	9.204	0.005	91	337620	8.00	8.00	
* 4 Phenanthrene-d10	188	10.667	10.662	0.005	73	560871	8.00	8.00	
* 5 Chrysene-d12	240	14.482	14.471	0.011	66	543659	8.00	8.00	
* 6 Perylene-d12	264	17.393	17.377	0.016	95	455236	8.00	8.00	
\$ 7 2-Fluorophenol	112	4.689	4.695	-0.006	91	987546	60.0	60.3	
\$ 8 Phenol-d5	99	5.790	5.785	0.005	96	1296709	60.0	58.8	
\$ 9 Nitrobenzene-d5	82	6.746	6.741	0.005	90	1393487	60.0	60.7	
\$ 10 2-Fluorobiphenyl	172	8.531	8.525	0.006	93	3243372	60.0	58.5	
\$ 11 2,4,6-Tribromophenol	330	9.973	9.962	0.011	91	402216	60.0	65.2	
\$ 12 Terphenyl-d14	244	12.628	12.617	0.011	98	3583724	60.0	60.6	
13 1,4-Dioxane	88	1.500	1.511	-0.011	93	302556	60.0	60.1	
14 N-Nitrosodimethylamine	74	2.077	2.077	0.000	78	415506	60.0	61.1	
15 Pyridine	79	2.141	2.157	-0.016	90	740621	60.0	62.4	
21 Methyl methanesulfonate	80	4.438	4.438	0.000	90	562394	60.0	58.8	
25 Benzaldehyde	77	5.699	5.694	0.005	86	682953	60.0	64.0	
26 Phenol	94	5.806	5.801	0.005	94	1423572	60.0	56.8	
27 Aniline	93	5.822	5.817	0.005	74	1627756	60.0	58.7	
29 Bis(2-chloroethyl)ether	93	5.897	5.892	0.005	91	1010724	60.0	57.1	
30 2-Chlorophenol	128	5.956	5.950	0.006	96	1264905	60.0	59.1	
31 n-Decane	43	6.025	6.020	0.005	92	1358551	60.0	54.1	
32 1,3-Dichlorobenzene	146	6.116	6.116	0.000	97	1463480	60.0	58.7	
33 1,4-Dichlorobenzene	146	6.196	6.191	0.005	94	1517829	60.0	59.3	
34 Benzyl alcohol	108	6.319	6.314	0.005	88	798172	60.0	59.3	
35 1,2-Dichlorobenzene	146	6.356	6.356	0.000	90	1438910	60.0	57.9	
36 2-Methylphenol	108	6.442	6.431	0.011	86	1091611	60.0	57.4	
37 Indene	116	6.447	6.447	0.000	84	1998319	60.0	57.9	
38 2,2'-oxybis[1-chloropropan	45	6.468	6.463	0.005	91	2093118	60.0	56.2	
39 N-Nitrosopyrrolidine	100	6.565	6.549	0.016	78	557274	60.0	60.2	



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	6.591	6.586	0.005	45	713290	60.0	52.8	
40 Acetophenone	105	6.591	6.586	0.005	81	1552275	60.0	54.1	
42 4-Methylphenol	108	6.597	6.586	0.011	75	1079768	60.0	55.3	
45 Hexachloroethane	117	6.714	6.709	0.005	96	646511	60.0	58.4	
46 Nitrobenzene	77	6.768	6.762	0.006	92	1350399	60.0	59.3	
48 Isophorone	82	7.003	6.997	0.006	96	2371427	60.0	59.1	
49 2-Nitrophenol	139	7.093	7.088	0.005	95	780171	60.0	61.9	
50 2,4-Dimethylphenol	107	7.126	7.120	0.006	57	1373726	60.0	59.7	
52 Benzoic acid	122	7.227	7.168	0.059	84	833727	60.0	61.2	
53 Bis(2-chloroethoxy)methane	93	7.216	7.211	0.005	97	1424492	60.0	57.7	
54 2,4-Dichlorophenol	162	7.329	7.323	0.005	95	1186303	60.0	59.0	
56 1,2,4-Trichlorobenzene	180	7.419	7.414	0.005	91	1339792	60.0	58.1	
58 Naphthalene	128	7.499	7.494	0.005	97	4378054	60.0	59.2	
59 4-Chloroaniline	127	7.542	7.537	0.005	78	1748750	60.0	59.0	
60 2,6-Dichlorophenol	162	7.558	7.553	0.005	97	1158271	60.0	58.0	
62 Hexachlorobutadiene	225	7.628	7.622	0.006	54	801613	60.0	58.1	
64 Caprolactam	113	7.868	7.841	0.027	70	412304	60.0	61.2	
67 4-Chloro-3-methylphenol	107	8.012	8.002	0.010	96	1234208	60.0	58.5	
69 2-Methylnaphthalene	142	8.183	8.178	0.005	87	3038002	60.0	58.1	
71 1-Methylnaphthalene	142	8.279	8.274	0.005	90	2847445	60.0	58.1	
72 Hexachlorocyclopentadiene	237	8.344	8.338	0.006	96	941368	60.0	64.1	
73 1,2,4,5-Tetrachlorobenzene	216	8.349	8.344	0.005	97	1226308	60.0	55.7	
74 2,4,6-Trichlorophenol	196	8.456	8.445	0.011	93	889199	60.0	59.2	
75 2,4,5-Trichlorophenol	196	8.493	8.482	0.011	95	950450	60.0	59.7	
76 1,1'-Biphenyl	154	8.632	8.627	0.005	94	3711661	60.0	58.4	
77 2-Chloronaphthalene	162	8.664	8.659	0.005	65	2950139	60.0	57.3	
79 2-Nitroaniline	65	8.744	8.739	0.005	83	861359	60.0	58.9	
82 Dimethyl phthalate	163	8.910	8.899	0.011	98	3099106	60.0	57.8	
83 1,3-Dinitrobenzene	168	8.942	8.937	0.005	60	516502	60.0	64.0	
84 2,6-Dinitrotoluene	165	8.974	8.963	0.011	71	692489	60.0	58.8	
85 Acenaphthylene	152	9.070	9.065	0.005	91	4912276	60.0	60.2	
86 3-Nitroaniline	138	9.140	9.134	0.006	92	878098	60.0	61.3	
87 2,4-Dinitrophenol	184	9.241	9.230	0.011	64	953848	120.0	120.4	
88 Acenaphthene	153	9.241	9.236	0.005	86	2755493	60.0	55.3	
89 4-Nitrophenol	109	9.284	9.273	0.011	55	1007845	120.0	127.1	
91 2,4-Dinitrotoluene	165	9.364	9.359	0.005	87	912905	60.0	59.0	
93 Dibenzofuran	168	9.407	9.401	0.006	80	4232923	60.0	59.2	
95 2,3,5,6-Tetrachlorophenol	232	9.476	9.471	0.005	89	863773	60.0	62.3	
96 2,3,4,6-Tetrachlorophenol	232	9.519	9.514	0.005	75	824302	60.0	60.7	
97 2-Naphthylamine	143	9.551	9.540	0.011	88	3057555	60.0	60.0	
98 Diethyl phthalate	149	9.588	9.578	0.010	96	3095548	60.0	56.5	
99 Hexadecane	57	9.594	9.588	0.006	91	2091830	60.0	51.9	
100 4-Chlorophenyl phenyl ethe	204	9.716	9.711	0.005	97	1529802	60.0	58.3	
101 4-Nitroaniline	138	9.738	9.722	0.016	57	852366	60.0	60.3	
103 Fluorene	166	9.738	9.733	0.005	79	3180401	60.0	57.2	
104 4,6-Dinitro-2-methylphenol	198	9.765	9.754	0.011	63	1229972	120.0	134.9	
105 N-Nitrosodiphenylamine	169	9.829	9.823	0.006	60	2429181	60.0	61.0	
90 1,2-Diphenylhydrazine	77	9.877	9.866	0.011	99	3415954	60.0	59.8	
110 4-Bromophenyl phenyl ether	248	10.197	10.192	0.005	62	889331	60.0	60.7	
112 Hexachlorobenzene	284	10.283	10.277	0.006	93	891428	60.0	60.9	
113 Atrazine	200	10.320	10.310	0.010	73	711536	60.0	61.5	
116 Pentachlorophenol	266	10.464	10.454	0.010	91	1304271	120.0	126.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.480	10.470	0.010	91	2514404	60.0	55.9	
121 Phenanthrene	178	10.694	10.689	0.005	97	5114269	60.0	60.7	
122 Anthracene	178	10.748	10.742	0.006	96	5395998	60.0	62.6	
124 Carbazole	167	10.908	10.897	0.011	82	4740553	60.0	62.8	
126 Di-n-butyl phthalate	149	11.239	11.234	0.005	99	5934589	60.0	62.9	
57 Azobenzene	77		11.923				ND	ND	
131 Fluoranthene	202	12.121	12.110	0.010	97	5291453	60.0	62.2	
132 Benzidine	184	12.265	12.254	0.011	99	2399353	60.0	60.0	
133 Pyrene	202	12.452	12.441	0.011	98	5454551	60.0	60.8	
138 Butyl benzyl phthalate	149	13.387	13.376	0.011	97	2464856	60.0	61.9	
144 3,3'-Dichlorobenzidine	252	14.391	14.375	0.016	70	1739062	60.0	66.3	
145 Bis(2-ethylhexyl) phthalat	149	14.444	14.434	0.010	96	3504948	60.0	63.5	
146 Benzo[a]anthracene	228	14.460	14.450	0.010	95	4749712	60.0	60.4	
147 Chrysene	228	14.535	14.519	0.016	94	4501660	60.0	60.7	
150 Di-n-octyl phthalate	149	15.764	15.753	0.011	99	5987889	60.0	67.7	
151 7,12-Dimethylbenz(a)anthra	256	16.608	16.581	0.027	70	1992000	60.0	63.4	
152 Benzo[b]fluoranthene	252	16.629	16.597	0.032	94	4528904	60.0	61.4	
153 Benzo[k]fluoranthene	252	16.677	16.656	0.021	99	4563372	60.0	63.1	
219 Benzo[e]pyrene	252	17.185	17.158	0.027	0	4171014	60.0	62.7	
154 Benzo[a]pyrene	252	17.286	17.265	0.021	76	4146954	60.0	62.4	
157 Indeno[1,2,3-cd]pyrene	276	19.813	19.787	0.026	93	4723890	60.0	67.6	M
158 Dibenz(a,h)anthracene	278	19.861	19.824	0.037	69	3894722	60.0	67.0	
159 Benzo[g,h,i]perylene	276	20.529	20.481	0.048	89	4010862	60.0	67.2	
S 199 Total Cresols	108				0		120.0	112.7	
S 197 Methyl Phenols,Total	108				0		120.0	112.7	

### QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

### Reagents:

SVTAPSTD60I\_00005

Amount Added: 1.00

Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203009.D

Injection Date: 03-Feb-2015 08:33:30

Instrument ID: CH732

Operator ID: 003200

Lims ID: IC

Worklist Smp#: 9

Client ID:

Injection Vol: 2.0 ul

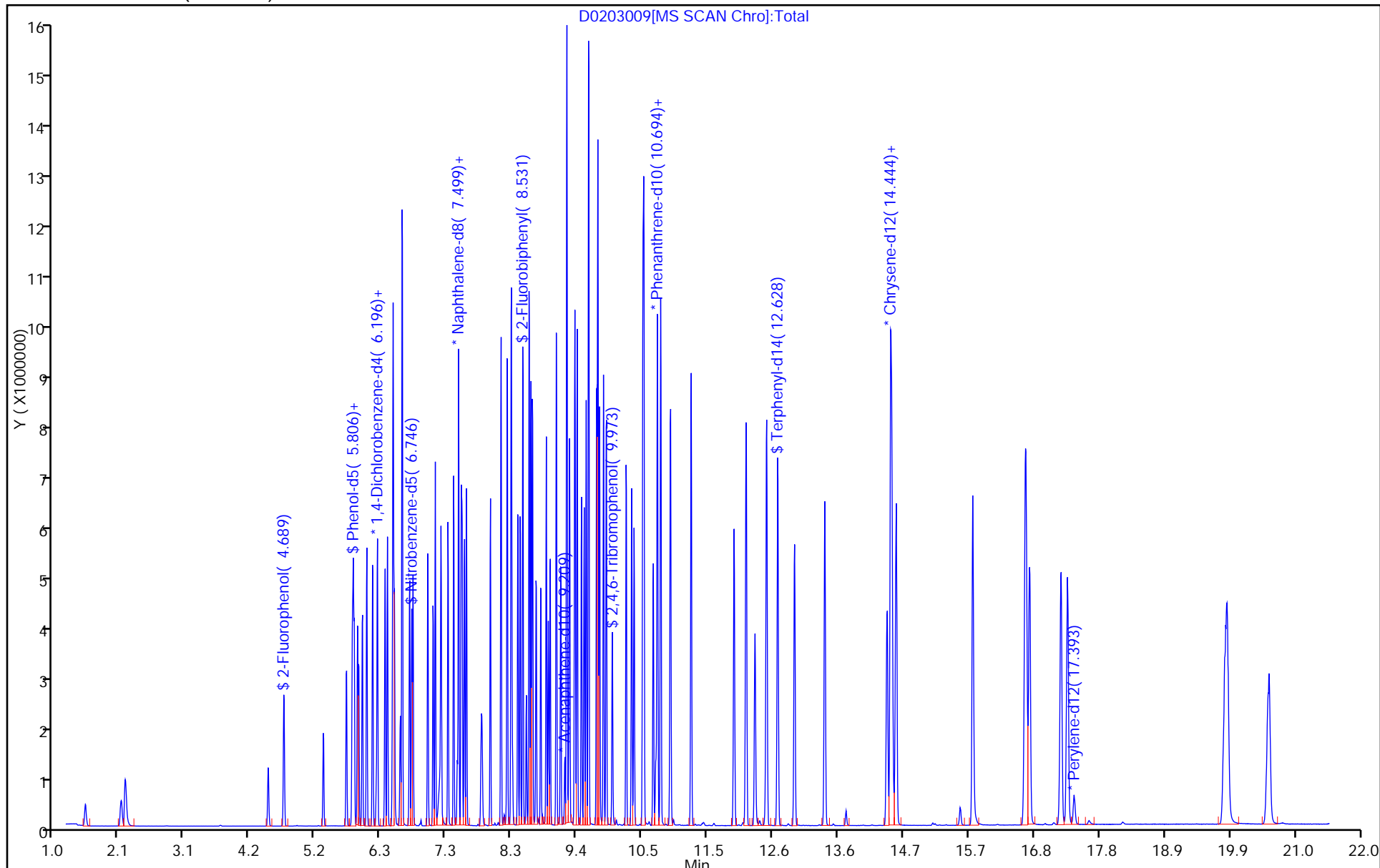
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: BNA\_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



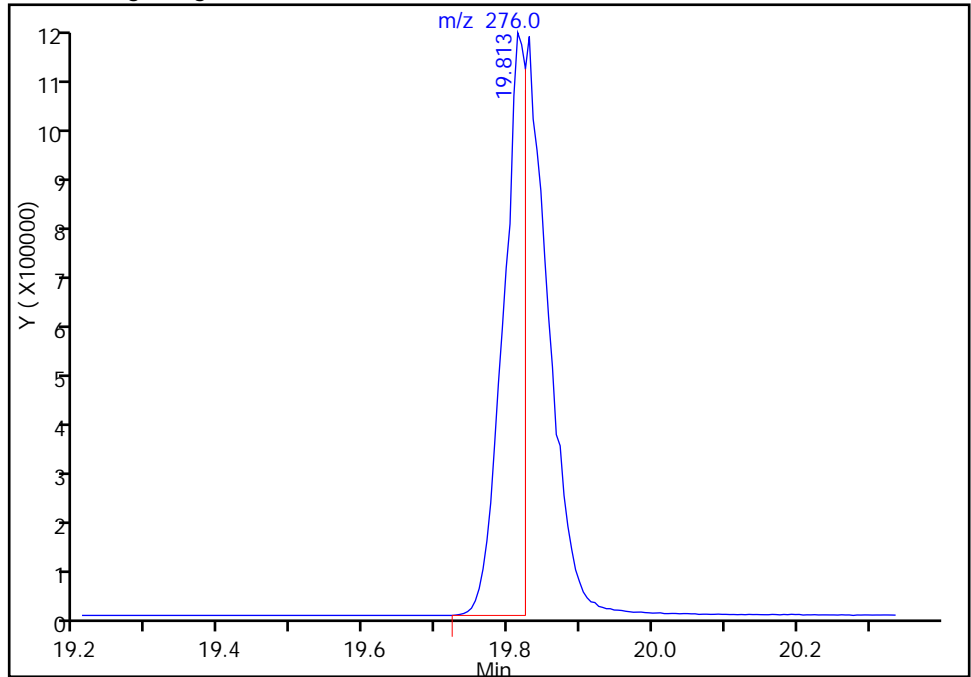
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203009.D  
 Injection Date: 03-Feb-2015 08:33:30 Instrument ID: CH732  
 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\_CH732 Limit Group: BNA 8270D ICAL  
 Column: Rxi-5SiIMS (0.32 mm) Detector: MS SCAN

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

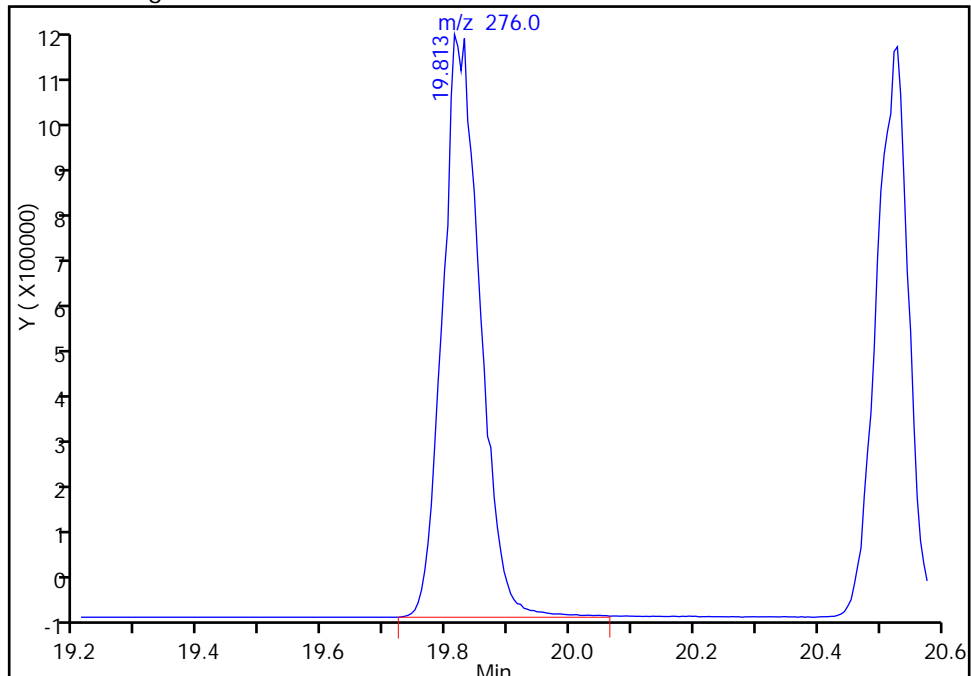
Processing Integration Results

RT: 19.81  
 Area: 2423593  
 Amount: 38.592788  
 Amount Units: ng



Manual Integration Results

RT: 19.81  
 Area: 4723890  
 Amount: 67.557379  
 Amount Units: ng



Reviewer: piccolinov, 03-Feb-2015 08:59:37  
 Audit Action: Manually Integrated  
 Audit Reason: Poor chromatography

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203010.D  
 Lims ID: IC  
 Client ID:  
 Sample Type: IC Calib Level: 8  
 Inject. Date: 03-Feb-2015 09:00:30 ALS Bottle#: 9 Worklist Smp#: 10  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0005518-010  
 Misc. Info.: IC  
 Operator ID: 003200 Instrument ID: CH732  
 Sublist: chrom-BNA\_CH732\*sub4  
 Method: \\PITCHROM\ChromData\CH732\20150203-5518.b\BNA\_CH732.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 04-Feb-2015 06:41:39 Calib Date: 03-Feb-2015 09:00:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203010.D  
 Column 1 : Rxi-5SiIMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK011

First Level Reviewer: piccolinov

Date: 03-Feb-2015 09:33:58

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	6.185	6.175	0.010	95	130134	8.00	8.00	
* 2 Naphthalene-d8	136	7.483	7.473	0.010	100	562776	8.00	8.00	
* 3 Acenaphthene-d10	164	9.209	9.204	0.005	91	336979	8.00	8.00	
* 4 Phenanthrene-d10	188	10.673	10.662	0.011	56	562981	8.00	8.00	
* 5 Chrysene-d12	240	14.487	14.471	0.016	75	533575	8.00	8.00	
* 6 Perylene-d12	264	17.399	17.377	0.022	95	473099	8.00	8.00	
\$ 7 2-Fluorophenol	112	4.706	4.695	0.011	91	1350034	80.0	80.0	
\$ 8 Phenol-d5	99	5.801	5.785	0.016	96	1756748	80.0	77.3	
\$ 9 Nitrobenzene-d5	82	6.757	6.741	0.016	89	1821929	80.0	77.1	
\$ 10 2-Fluorobiphenyl	172	8.536	8.525	0.011	92	4264201	80.0	77.1	
\$ 11 2,4,6-Tribromophenol	330	9.978	9.962	0.016	92	533212	80.0	86.2	
\$ 12 Terphenyl-d14	244	12.633	12.617	0.016	98	4739579	80.0	81.6	
13 1,4-Dioxane	88	1.532	1.511	0.021	94	408930	80.0	78.9	
14 N-Nitrosodimethylamine	74	2.115	2.077	0.037	83	570621	80.0	81.5	
15 Pyridine	79	2.173	2.157	0.016	93	993662	80.0	81.3	
21 Methyl methanesulfonate	80	4.460	4.438	0.022	90	750302	80.0	76.1	
25 Benzaldehyde	77	5.704	5.694	0.010	85	827212	80.0	75.3	
26 Phenol	94	5.817	5.801	0.016	94	1910430	80.0	74.0	
27 Aniline	93	5.833	5.817	0.016	95	2127696	80.0	74.5	
29 Bis(2-chloroethyl)ether	93	5.908	5.892	0.016	92	1360669	80.0	74.7	
30 2-Chlorophenol	128	5.961	5.950	0.011	96	1719757	80.0	78.0	
31 n-Decane	43	6.030	6.020	0.010	92	1778933	80.0	68.8	
32 1,3-Dichlorobenzene	146	6.127	6.116	0.011	98	1969048	80.0	76.7	
33 1,4-Dichlorobenzene	146	6.201	6.191	0.010	94	2013954	80.0	76.4	
34 Benzyl alcohol	108	6.330	6.314	0.016	89	1052255	80.0	75.9	
35 1,2-Dichlorobenzene	146	6.362	6.356	0.006	91	1943533	80.0	75.9	
36 2-Methylphenol	108	6.452	6.431	0.021	69	1418095	80.0	72.4	
37 Indene	116	6.458	6.447	0.011	76	2585818	80.0	72.7	
38 2,2'-oxybis[1-chloropropan	45	6.474	6.463	0.011	91	2627938	80.0	68.5	
39 N-Nitrosopyrrolidine	100	6.575	6.549	0.026	79	735704	80.0	77.1	

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	6.602	6.586	0.016	44	911733	80.0	65.5	
40 Acetophenone	105	6.602	6.586	0.016	84	1999395	80.0	67.7	
42 4-Methylphenol	108	6.602	6.586	0.016	73	1370355	80.0	68.2	
45 Hexachloroethane	117	6.720	6.709	0.011	97	865068	80.0	75.8	
46 Nitrobenzene	77	6.773	6.762	0.011	90	1755924	80.0	74.9	
48 Isophorone	82	7.013	6.997	0.016	96	3163519	80.0	76.6	
49 2-Nitrophenol	139	7.099	7.088	0.011	97	1023420	80.0	78.9	
50 2,4-Dimethylphenol	107	7.131	7.120	0.011	53	1691801	80.0	71.4	
52 Benzoic acid	122	7.243	7.168	0.075	84	1152352	80.0	81.8	
53 Bis(2-chloroethoxy)methane	93	7.222	7.211	0.011	96	1856791	80.0	73.1	
54 2,4-Dichlorophenol	162	7.334	7.323	0.011	94	1589300	80.0	76.8	
56 1,2,4-Trichlorobenzene	180	7.425	7.414	0.011	94	1794324	80.0	75.6	
58 Naphthalene	128	7.505	7.494	0.011	96	5845912	80.0	76.8	
59 4-Chloroaniline	127	7.548	7.537	0.011	79	2275054	80.0	74.6	
60 2,6-Dichlorophenol	162	7.564	7.553	0.011	97	1537038	80.0	74.7	
62 Hexachlorobutadiene	225	7.633	7.622	0.011	53	1078670	80.0	75.9	
64 Caprolactam	113	7.889	7.841	0.048	72	544085	80.0	78.5	
67 4-Chloro-3-methylphenol	107	8.018	8.002	0.016	94	1628392	80.0	75.0	
69 2-Methylnaphthalene	142	8.189	8.178	0.011	87	4039867	80.0	75.0	
71 1-Methylnaphthalene	142	8.285	8.274	0.011	83	3757680	80.0	74.4	
72 Hexachlorocyclopentadiene	237	8.349	8.338	0.011	95	1063917	80.0	72.6	
73 1,2,4,5-Tetrachlorobenzene	216	8.354	8.344	0.010	98	1614990	80.0	73.5	
74 2,4,6-Trichlorophenol	196	8.461	8.445	0.016	91	1196597	80.0	79.9	
75 2,4,5-Trichlorophenol	196	8.498	8.482	0.016	95	1271911	80.0	80.0	
76 1,1'-Biphenyl	154	8.637	8.627	0.010	94	4916975	80.0	77.5	
77 2-Chloronaphthalene	162	8.669	8.659	0.010	77	3914388	80.0	76.2	
79 2-Nitroaniline	65	8.750	8.739	0.011	81	1173309	80.0	80.4	
82 Dimethyl phthalate	163	8.915	8.899	0.016	98	4183619	80.0	78.2	
83 1,3-Dinitrobenzene	168	8.947	8.937	0.010	60	672638	80.0	83.5	
84 2,6-Dinitrotoluene	165	8.979	8.963	0.016	72	940800	80.0	80.0	
85 Acenaphthylene	152	9.075	9.065	0.010	90	6481156	80.0	79.6	
86 3-Nitroaniline	138	9.145	9.134	0.011	93	1147441	80.0	80.2	
87 2,4-Dinitrophenol	184	9.246	9.230	0.016	66	1253184	160.0	158.3	
88 Acenaphthene	153	9.246	9.236	0.010	86	3512775	80.0	70.6	
89 4-Nitrophenol	109	9.294	9.273	0.021	39	1337557	160.0	169.0	
91 2,4-Dinitrotoluene	165	9.369	9.359	0.010	89	1210224	80.0	78.4	
93 Dibenzofuran	168	9.412	9.401	0.011	79	5571795	80.0	78.1	
95 2,3,5,6-Tetrachlorophenol	232	9.481	9.471	0.010	89	1122675	80.0	81.2	
96 2,3,4,6-Tetrachlorophenol	232	9.524	9.514	0.010	72	1088782	80.0	80.4	
97 2-Naphthylamine	143	9.556	9.540	0.016	88	3745510	80.0	73.7	
98 Diethyl phthalate	149	9.594	9.578	0.016	92	3962742	80.0	72.5	
99 Hexadecane	57	9.599	9.588	0.011	92	2544862	80.0	61.3	
100 4-Chlorophenyl phenyl ethe	204	9.722	9.711	0.011	94	2002066	80.0	76.4	
101 4-Nitroaniline	138	9.743	9.722	0.021	55	1112682	80.0	78.8	
103 Fluorene	166	9.743	9.733	0.010	73	4227850	80.0	76.2	
104 4,6-Dinitro-2-methylphenol	198	9.775	9.754	0.021	66	1636050	160.0	178.8	
105 N-Nitrosodiphenylamine	169	9.834	9.823	0.011	60	3320829	80.0	83.0	
90 1,2-Diphenylhydrazine	77	9.877	9.866	0.011	99	4555078	80.0	79.5	
110 4-Bromophenyl phenyl ether	248	10.197	10.192	0.005	65	1183915	80.0	80.5	
112 Hexachlorobenzene	284	10.288	10.277	0.011	93	1175832	80.0	80.0	
113 Atrazine	200	10.326	10.310	0.016	73	876625	80.0	75.5	
116 Pentachlorophenol	266	10.470	10.454	0.016	90	1657954	160.0	160.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.480	10.470	0.010	92	3002594	80.0	64.8	
121 Phenanthrene	178	10.699	10.689	0.010	96	6996513	80.0	82.7	
122 Anthracene	178	10.753	10.742	0.011	96	7270383	80.0	84.1	
124 Carbazole	167	10.908	10.897	0.011	82	6310858	80.0	83.3	
126 Di-n-butyl phthalate	149	11.239	11.234	0.005	99	8182573	80.0	86.4	
57 Azobenzene	77		11.923				ND	ND	
131 Fluoranthene	202	12.126	12.110	0.016	97	7033592	80.0	82.4	
132 Benzidine	184	12.270	12.254	0.016	99	2219269	80.0	56.6	
133 Pyrene	202	12.452	12.441	0.011	98	7357760	80.0	83.6	
138 Butyl benzyl phthalate	149	13.392	13.376	0.016	96	3249211	80.0	83.1	
144 3,3'-Dichlorobenzidine	252	14.391	14.375	0.016	72	2244278	80.0	87.2	
145 Bis(2-ethylhexyl) phthalat	149	14.444	14.434	0.010	95	4655604	80.0	86.0	
146 Benzo[a]anthracene	228	14.466	14.450	0.016	93	6389372	80.0	82.8	
147 Chrysene	228	14.535	14.519	0.016	93	5985101	80.0	82.3	
150 Di-n-octyl phthalate	149	15.769	15.753	0.016	99	8321767	80.0	90.5	
151 7,12-Dimethylbenz(a)anthra	256	16.613	16.581	0.032	70	2745346	80.0	84.1	
152 Benzo[b]fluoranthene	252	16.629	16.597	0.032	94	6275756	80.0	81.8	
153 Benzo[k]fluoranthene	252	16.683	16.656	0.027	95	6303252	80.0	83.9	
219 Benzo[e]pyrene	252	17.190	17.158	0.032	0	5734616	80.0	82.9	
154 Benzo[a]pyrene	252	17.297	17.265	0.032	75	5893073	80.0	85.3	
157 Indeno[1,2,3-cd]pyrene	276	19.829	19.787	0.042	97	6772582	80.0	93.2	
158 Dibenz(a,h)anthracene	278	19.867	19.824	0.043	69	5554542	80.0	91.9	
159 Benzo[g,h,i]perylene	276	20.535	20.481	0.054	91	5811207	80.0	93.7	
S 197 Methyl Phenols, Total	108				0		160.0	140.6	
S 199 Total Cresols	108				0		160.0	140.6	

### QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

### Reagents:

SVTAPSTD80i\_00005

Amount Added: 1.00

Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203010.D

Injection Date: 03-Feb-2015 09:00:30

Instrument ID: CH732

Operator ID: 003200

Lims ID: IC

Worklist Smp#: 10

Client ID:

Injection Vol: 2.0 ul

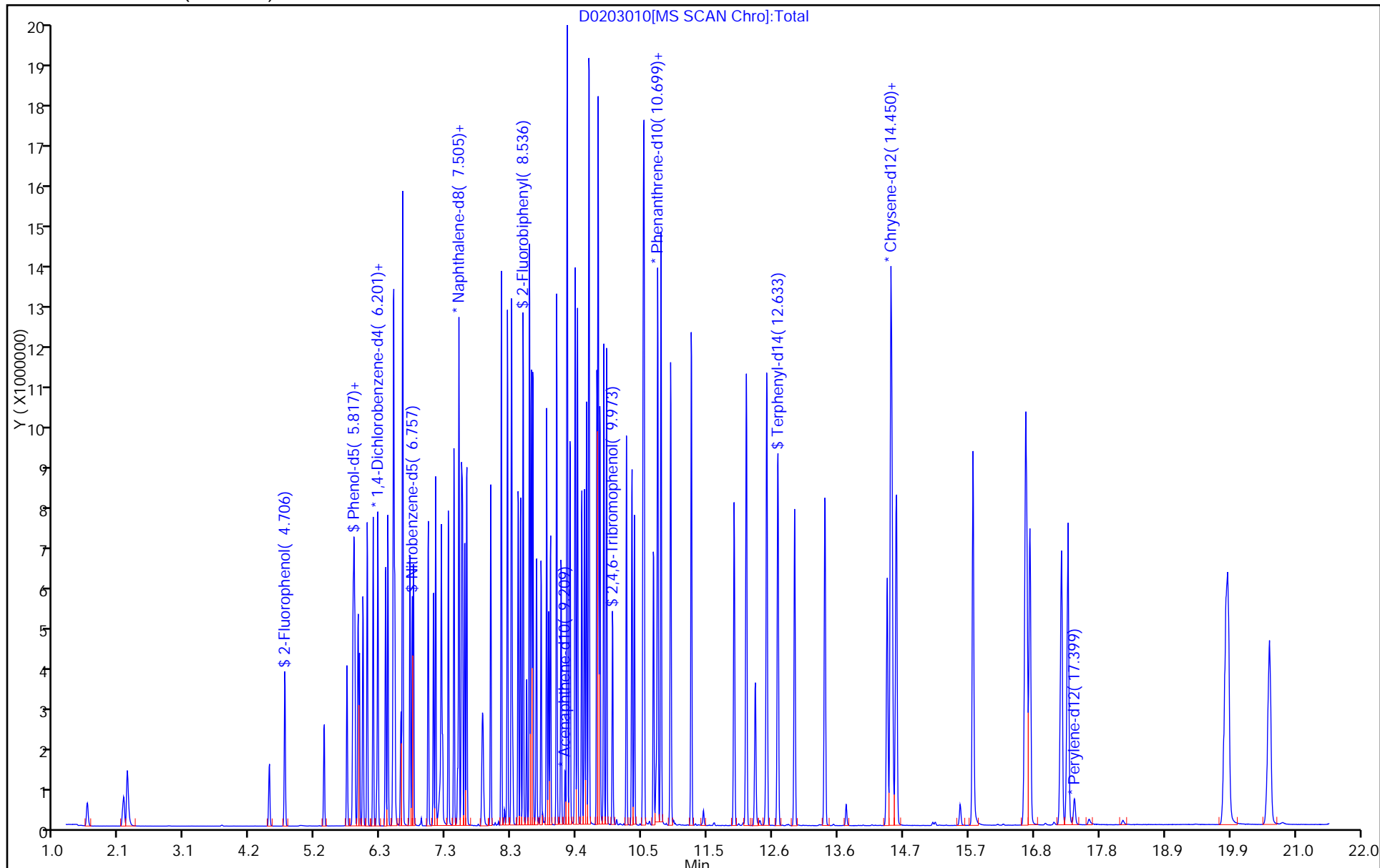
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: BNA\_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)





FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 180-140564/3 Calibration Date: 05/05/2015 10:42  
 Instrument ID: CH732 Calib Start Date: 02/03/2015 05:53  
 GC Column: Rxi-5SilMS ID: 0.32 (mm) Calib End Date: 02/03/2015 09:00  
 Lab File ID: D0505003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.3186	0.2667	0.0100	4.18	5.00	-16.3	20.0
N-Nitrosodimethylamine	Ave	0.4305	0.3536	0.0100	4.11	5.00	-17.9	20.0
Pyridine	Ave	0.7509	0.6236	0.0100	4.15	5.00	-17.0	20.0
Methyl methanesulfonate	Ave	0.6060	0.5880	0.0100	4.85	5.00	-3.0	20.0
Benzaldehyde	Ave	0.6754	0.8101	0.0100	6.00	5.00	19.9	20.0
Phenol	Ave	1.587	1.746	0.8000	5.50	5.00	10.0	20.0
Aniline	Ave	1.756	1.886	0.0100	5.37	5.00	7.4	20.0
Bis(2-chloroethyl)ether	Ave	1.120	1.223	0.7000	5.46	5.00	9.2	20.0
2-Chlorophenol	Ave	1.355	1.385	0.8000	5.11	5.00	2.2	20.0
n-Decane	Ave	1.590	1.674		5.27	5.00	5.3	20.0
1,3-Dichlorobenzene	Ave	1.578	1.594	0.0100	5.05	5.00	1.0	20.0
1,4-Dichlorobenzene	Ave	1.619	1.633	0.0100	5.04	5.00	0.8	20.0
Benzyl alcohol	Ave	0.8521	0.8807	0.0100	5.17	5.00	3.4	20.0
1,2-Dichlorobenzene	Ave	1.574	1.590	0.0100	5.05	5.00	1.0	20.0
2-Methylphenol	Ave	1.204	1.278	0.7000	5.31	5.00	6.2	20.0
Indene	Ave	2.185	2.284	0.0100	5.23	5.00	4.5	20.0
2,2'-oxybis[1-chloropropane]	Ave	2.359	2.493	0.0100	5.28	5.00	5.7	20.0
N-Nitrosopyrrolidine	Ave	0.5864	0.6170	0.0100	5.26	5.00	5.2	20.0
Acetophenone	Ave	1.815	1.860	0.0100	5.12	5.00	2.5	20.0
Methylphenol, 3 & 4	Ave	1.236	1.305	0.6000	5.28	5.00	5.6	20.0
N-Nitrosodi-n-propylamine	Ave	0.8551	0.8922	0.5000	5.22	5.00	4.3	20.0
Hexachloroethane	Ave	0.7013	0.6985	0.3000	4.98	5.00	-0.4	20.0
Nitrobenzene	Ave	0.3334	0.3354	0.2000	5.03	5.00	0.6	20.0
Isophorone	Ave	0.5870	0.6022	0.4000	5.13	5.00	2.6	20.0
2-Nitrophenol	Ave	0.1845	0.1716	0.1000	4.65	5.00	-7.0	20.0
2,4-Dimethylphenol	Ave	0.3367	0.3298	0.2000	4.90	5.00	-2.0	20.0
Benzoic acid	Lin1		0.1822	0.0100	5.14	5.00	2.9	20.0
Bis(2-chloroethoxy)methane	Ave	0.3611	0.3832	0.3000	5.31	5.00	6.1	20.0
2,4-Dichlorophenol	Ave	0.2941	0.2844	0.2000	4.84	5.00	-3.3	20.0
1,2,4-Trichlorobenzene	Ave	0.3374	0.3171	0.0100	4.70	5.00	-6.0	20.0
Naphthalene	Ave	1.082	1.091	0.7000	5.04	5.00	0.8	20.0
4-Chloroaniline	Ave	0.4336	0.4436	0.0100	5.12	5.00	2.3	20.0
2,6-Dichlorophenol	Ave	0.2924	0.2884	0.0100	4.93	5.00	-1.4	20.0
Hexachlorobutadiene	Ave	0.2019	0.1804	0.0100	4.47	5.00	-10.6	20.0
Caprolactam	Ave	0.0985	0.1000	0.0100	5.07	5.00	1.5	20.0
4-Chloro-3-methylphenol	Ave	0.3085	0.2928	0.2000	4.75	5.00	-5.1	20.0
2-Methylnaphthalene	Ave	0.7654	0.7496	0.4000	4.90	5.00	-2.1	20.0
1-Methylnaphthalene	Ave	0.7177	0.6987	0.0100	4.87	5.00	-2.7	20.0
Hexachlorocyclopentadiene	Ave	0.3480	0.3209	0.0500	4.61	5.00	-7.8	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5214	0.5213	0.0100	5.00	5.00	-0.0	20.0
2,4,6-Trichlorophenol	Ave	0.3558	0.3489	0.2000	4.90	5.00	-1.9	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 180-140564/3 Calibration Date: 05/05/2015 10:42  
 Instrument ID: CH732 Calib Start Date: 02/03/2015 05:53  
 GC Column: Rxi-5SilMS ID: 0.32 (mm) Calib End Date: 02/03/2015 09:00  
 Lab File ID: D0505003.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	0.3774	0.3586	0.2000	4.75	5.00	-5.0	20.0
1,1'-Biphenyl	Ave	1.505	1.526	0.0100	5.07	5.00	1.4	20.0
2-Chloronaphthalene	Ave	1.220	1.209	0.8000	4.96	5.00	-0.8	20.0
2-Nitroaniline	Ave	0.3466	0.3483	0.0100	5.03	5.00	0.5	20.0
Dimethyl phthalate	Ave	1.270	1.227	0.0100	4.83	5.00	-3.4	20.0
1,3-Dinitrobenzene	Ave	0.1913	0.1798	0.0100	4.70	5.00	-6.0	20.0
2,6-Dinitrotoluene	Ave	0.2790	0.2718	0.2000	4.87	5.00	-2.6	20.0
Acenaphthylene	Ave	1.934	1.929	0.9000	4.99	5.00	-0.2	20.0
3-Nitroaniline	Ave	0.3396	0.3464	0.0100	5.10	5.00	2.0	20.0
2,4-Dinitrophenol	Lin1		0.1453	0.0100	8.07	10.0	-19.3	20.0
Acenaphthene	Ave	1.181	1.212	0.9000	5.13	5.00	2.7	20.0
4-Nitrophenol	Ave	0.1879	0.1732	0.0100	9.22	10.0	-7.8	20.0
2,4-Dinitrotoluene	Ave	0.3667	0.3516	0.2000	4.79	5.00	-4.1	20.0
Dibenzofuran	Ave	1.694	1.667	0.8000	4.92	5.00	-1.6	20.0
2,3,5,6-Tetrachlorophenol	Ave	0.3283	0.2978	0.0100	4.53	5.00	-9.3	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3217	0.3006	0.0100	4.67	5.00	-6.6	20.0
2-Naphthylamine	Ave	1.207	1.221	0.0100	5.06	5.00	1.1	20.0
Diethyl phthalate	Ave	1.298	1.299	0.0100	5.01	5.00	0.1	20.0
Hexadecane	Ave	0.5903	0.6328		5.36	5.00	7.2	20.0
4-Chlorophenyl phenyl ether	Ave	0.6218	0.5781	0.4000	4.65	5.00	-7.0	20.0
4-Nitroaniline	Ave	0.3352	0.3454	0.0100	5.15	5.00	3.0	20.0
Fluorene	Ave	1.318	1.334	0.9000	5.06	5.00	1.2	20.0
4,6-Dinitro-2-methylphenol	Ave	0.1300	0.1230	0.0100	9.46	10.0	-5.4	20.0
N-Nitrosodiphenylamine	Ave	0.5683	0.5850	0.0100	5.15	5.00	2.9	20.0
1,2-Diphenylhydrazine (as Azobenzene)	Ave	0.8141	0.9504	0.0100	5.84	5.00	16.7	20.0
4-Bromophenyl phenyl ether	Ave	0.2089	0.1954	0.1000	4.68	5.00	-6.5	20.0
Hexachlorobenzene	Ave	0.2088	0.2014	0.1000	4.82	5.00	-3.5	20.0
Atrazine	Ave	0.1650	0.1691	0.0100	5.12	5.00	2.5	20.0
Pentachlorophenol	Ave	0.1472	0.1310	0.0500	8.90	10.0	-11.0	20.0
n-Octadecane	Ave	2.847	2.897		5.09	5.00	1.7	20.0
Phenanthrene	Ave	1.202	1.201	0.7000	5.00	5.00	-0.0	20.0
Anthracene	Ave	1.229	1.239	0.7000	5.04	5.00	0.8	20.0
Carbazole	Ave	1.076	1.126	0.0100	5.23	5.00	4.6	20.0
Di-n-butyl phthalate	Ave	1.346	1.374	0.0100	5.10	5.00	2.1	20.0
Fluoranthene	Ave	1.213	1.164	0.6000	4.80	5.00	-4.0	20.0
Benzidine	Lin1		0.4649	0.0100		5.00	-9.5	20.0
Pyrene	Ave	1.320	1.369	0.6000	5.18	5.00	3.7	20.0
Butyl benzyl phthalate	Ave	0.5863	0.6288	0.0100	5.36	5.00	7.3	20.0
3,3'-Dichlorobenzidine	Ave	0.3859	0.3384	0.0100	4.39	5.00	-12.3	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.8121	0.8489	0.0100	5.23	5.00	4.5	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 180-140564/3 Calibration Date: 05/05/2015 10:42  
 Instrument ID: CH732 Calib Start Date: 02/03/2015 05:53  
 GC Column: Rxi-5SilMS ID: 0.32 (mm) Calib End Date: 02/03/2015 09:00  
 Lab File ID: D0505003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[a]anthracene	Ave	1.158	1.168	0.8000	5.04	5.00	0.9	20.0
Chrysene	Ave	1.091	1.107	0.7000	5.07	5.00	1.5	20.0
Di-n-octyl phthalate	Ave	1.554	1.751	0.0100	5.63	5.00	12.6	20.0
7,12-Dimethylbenz(a)anthracene	Ave	0.5519	0.5214	0.0100	4.72	5.00	-5.5	20.0
Benzo[b]fluoranthene	Ave	1.297	1.405	0.7000	5.42	5.00	8.3	20.0
Benzo[k]fluoranthene	Ave	1.271	1.353	0.7000	5.32	5.00	6.5	20.0
Benzo[e]pyrene	Ave	1.169	1.237	0.0100	5.29	5.00	5.8	20.0
Benzo[a]pyrene	Ave	1.168	1.210	0.7000	5.18	5.00	3.6	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.229	1.232	0.5000	5.01	5.00	0.2	20.0
Dibenz(a,h)anthracene	Ave	1.022	1.011	0.4000	4.95	5.00	-1.1	20.0
Benzo[g,h,i]perylene	Ave	1.048	1.055	0.5000	5.03	5.00	0.6	20.0
2-Fluorophenol (Surr)	Ave	1.037	0.9688		4.67	5.00	-6.6	20.0
Phenol-d5 (Surr)	Ave	1.397	1.541		5.52	5.00	10.3	20.0
Nitrobenzene-d5 (Surr)	Ave	0.3358	0.3287		4.89	5.00	-2.1	20.0
2-Fluorobiphenyl	Ave	1.314	1.309		4.98	5.00	-0.3	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.0879	0.0807	0.0100	4.59	5.00	-8.3	20.0
Terphenyl-d14 (Surr)	Ave	0.8709	0.8582		4.93	5.00	-1.5	20.0

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150505-6771.b\D0505003.D  
 Lims ID: CCVIS  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 05-May-2015 10:42:30 ALS Bottle#: 2 Worklist Smp#: 3  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0006771-003  
 Misc. Info.: CCVIS  
 Operator ID: 003200 Instrument ID: CH732  
 Sublist: chrom-BNA\_CH732\*sub4  
 Method: \\PITCHROM\ChromData\CH732\20150505-6771.b\BNA\_CH732.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 06-May-2015 06:09:37 Calib Date: 18-Mar-2015 11:54:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last Ical File: \\PITCHROM\ChromData\CH732\20150318-6063.b\D0318011.D  
 Column 1 : Rxi-5SiIMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK033

First Level Reviewer: piccolinov

Date: 05-May-2015 11:37:16

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	6.207	6.207	0.000	97	221698	8.00	8.00	
* 2 Naphthalene-d8	136	7.494	7.494	0.000	100	1000997	8.00	8.00	
* 3 Acenaphthene-d10	164	9.209	9.209	0.000	92	586151	8.00	8.00	
* 4 Phenanthrene-d10	188	10.657	10.657	0.000	95	948110	8.00	8.00	
* 5 Chrysene-d12	240	14.445	14.445	0.000	94	834462	8.00	8.00	
* 6 Perylene-d12	264	17.345	17.345	0.000	94	603716	8.00	8.00	
\$ 7 2-Fluorophenol	112	4.759	4.759	0.000	91	268483	10.0	9.34	
\$ 8 Phenol-d5	99	5.828	5.828	0.000	97	426962	10.0	11.0	
\$ 9 Nitrobenzene-d5	82	6.768	6.768	0.000	90	411227	10.0	9.79	
\$ 10 2-Fluorobiphenyl	172	8.536	8.536	0.000	99	959415	10.0	9.97	
\$ 11 2,4,6-Tribromophenol	330	9.962	9.962	0.000	82	95628	10.0	9.17	
\$ 12 Terphenyl-d14	244	12.601	12.601	0.000	98	895131	10.0	9.85	
13 1,4-Dioxane	88	1.591	1.591	0.000	92	73895	10.0	8.37	
14 N-Nitrosodimethylamine	74	2.184	2.184	0.000	75	97997	10.0	8.21	
15 Pyridine	79	2.270	2.270	0.000	89	172809	10.0	8.30	
21 Methyl methanesulfonate	80	4.503	4.503	0.000	90	162937	10.0	9.70	
25 Benzaldehyde	77	5.731	5.731	0.000	87	224497	10.0	12.0	
26 Phenol	94	5.844	5.844	0.000	94	483727	10.0	11.0	
27 Aniline	93	5.854	5.854	0.000	92	522679	10.0	10.7	
29 Bis(2-chloroethyl)ether	93	5.924	5.924	0.000	91	338970	10.0	10.9	
30 2-Chlorophenol	128	5.988	5.988	0.000	97	383901	10.0	10.2	
31 n-Decane	43	6.057	6.057	0.000	95	463880	10.0	10.5	
32 1,3-Dichlorobenzene	146	6.148	6.148	0.000	97	441868	10.0	10.1	
33 1,4-Dichlorobenzene	146	6.228	6.228	0.000	93	452453	10.0	10.1	
34 Benzyl alcohol	108	6.346	6.346	0.000	91	244059	10.0	10.3	
35 1,2-Dichlorobenzene	146	6.383	6.383	0.000	90	440589	10.0	10.1	
36 2-Methylphenol	108	6.469	6.469	0.000	95	354214	10.0	10.6	
37 Indene	116	6.479	6.479	0.000	81	633023	10.0	10.5	
38 2,2'-oxybis[1-chloropropan	45	6.495	6.495	0.000	91	690877	10.0	10.6	
39 N-Nitrosopyrrolidine	100	6.581	6.581	0.000	82	170977	10.0	10.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
40 Acetophenone	105	6.618	6.618	0.000	78	515415	10.0	10.2	
41 N-Nitrosodi-n-propylamine	70	6.618	6.618	0.000	66	247257	10.0	10.4	
42 4-Methylphenol	108	6.618	6.618	0.000	69	361773	10.0	10.6	
45 Hexachloroethane	117	6.741	6.741	0.000	97	193563	10.0	9.96	
46 Nitrobenzene	77	6.789	6.789	0.000	92	419623	10.0	10.1	
48 Isophorone	82	7.024	7.024	0.000	97	753471	10.0	10.3	
49 2-Nitrophenol	139	7.115	7.115	0.000	94	214692	10.0	9.30	
50 2,4-Dimethylphenol	107	7.147	7.147	0.000	59	412648	10.0	9.80	
52 Benzoic acid	122	7.200	7.200	0.000	85	227972	10.0	10.3	
53 Bis(2-chloroethoxy)methane	93	7.233	7.233	0.000	92	479459	10.0	10.6	
54 2,4-Dichlorophenol	162	7.350	7.350	0.000	94	355881	10.0	9.67	
56 1,2,4-Trichlorobenzene	180	7.441	7.441	0.000	94	396786	10.0	9.40	
58 Naphthalene	128	7.516	7.516	0.000	95	1365263	10.0	10.1	
59 4-Chloroaniline	127	7.558	7.558	0.000	79	555051	10.0	10.2	
60 2,6-Dichlorophenol	162	7.574	7.574	0.000	97	360890	10.0	9.86	
62 Hexachlorobutadiene	225	7.644	7.644	0.000	77	225771	10.0	8.94	
64 Caprolactam	113	7.863	7.863	0.000	67	125113	10.0	10.1	
67 4-Chloro-3-methylphenol	107	8.018	8.018	0.000	94	366411	10.0	9.49	
69 2-Methylnaphthalene	142	8.194	8.194	0.000	90	937893	10.0	9.79	
71 1-Methylnaphthalene	142	8.290	8.290	0.000	90	874220	10.0	9.73	
72 Hexachlorocyclopentadiene	237	8.354	8.354	0.000	86	235143	10.0	9.22	
73 1,2,4,5-Tetrachlorobenzene	216	8.360	8.360	0.000	98	381957	10.0	10.0	
74 2,4,6-Trichlorophenol	196	8.461	8.461	0.000	93	255649	10.0	9.81	
75 2,4,5-Trichlorophenol	196	8.493	8.493	0.000	93	262714	10.0	9.50	
76 1,1'-Biphenyl	154	8.638	8.638	0.000	95	1118070	10.0	10.1	
77 2-Chloronaphthalene	162	8.670	8.670	0.000	78	886038	10.0	9.92	
79 2-Nitroaniline	65	8.750	8.750	0.000	84	255223	10.0	10.1	
82 Dimethyl phthalate	163	8.910	8.910	0.000	98	898749	10.0	9.66	
83 1,3-Dinitrobenzene	168	8.942	8.942	0.000	82	131709	10.0	9.40	
84 2,6-Dinitrotoluene	165	8.969	8.969	0.000	70	199107	10.0	9.74	
85 Acenaphthylene	152	9.076	9.076	0.000	90	1413626	10.0	9.98	
86 3-Nitroaniline	138	9.140	9.140	0.000	93	253831	10.0	10.2	
87 2,4-Dinitrophenol	184	9.236	9.236	0.000	54	212862	20.0	16.1	
88 Acenaphthene	153	9.241	9.241	0.000	89	888203	10.0	10.3	
89 4-Nitrophenol	109	9.279	9.279	0.000	77	253826	20.0	18.4	
91 2,4-Dinitrotoluene	165	9.359	9.359	0.000	85	257597	10.0	9.59	
93 Dibenzofuran	168	9.401	9.401	0.000	79	1221310	10.0	9.84	
95 2,3,5,6-Tetrachlorophenol	232	9.476	9.476	0.000	92	218177	10.0	9.07	
96 2,3,4,6-Tetrachlorophenol	232	9.514	9.514	0.000	76	220231	10.0	9.34	
97 2-Naphthylamine	143	9.546	9.546	0.000	88	894365	10.0	10.1	
98 Diethyl phthalate	149	9.578	9.578	0.000	96	951940	10.0	10.0	
99 Hexadecane	57	9.583	9.583	0.000	90	791773	10.0	10.7	
100 4-Chlorophenyl phenyl ethe	204	9.711	9.711	0.000	97	423552	10.0	9.30	
101 4-Nitroaniline	138	9.727	9.727	0.000	67	253037	10.0	10.3	
103 Fluorene	166	9.733	9.733	0.000	81	977591	10.0	10.1	
104 4,6-Dinitro-2-methylphenol	198	9.754	9.754	0.000	50	291440	20.0	18.9	
105 N-Nitrosodiphenylamine	169	9.824	9.824	0.000	60	693299	10.0	10.3	
90 1,2-Diphenylhydrazine	77	9.866	9.866	0.000	100	1126341	10.0	11.7	
110 4-Bromophenyl phenyl ether	248	10.187	10.187	0.000	67	231541	10.0	9.35	
112 Hexachlorobenzene	284	10.278	10.278	0.000	93	238671	10.0	9.65	
113 Atrazine	200	10.310	10.310	0.000	70	200426	10.0	10.2	
116 Pentachlorophenol	266	10.454	10.454	0.000	85	310583	20.0	17.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.459	10.459	0.000	92	802851	10.0	10.2	
121 Phenanthrene	178	10.684	10.684	0.000	97	1423251	10.0	10.0	
122 Anthracene	178	10.737	10.737	0.000	97	1468916	10.0	10.1	
124 Carbazole	167	10.887	10.887	0.000	83	1334054	10.0	10.5	
126 Di-n-butyl phthalate	149	11.218	11.218	0.000	99	1628017	10.0	10.2	
57 Azobenzene	77		11.902				ND	ND	
131 Fluoranthene	202	12.094	12.094	0.000	98	1379132	10.0	9.60	
132 Benzidine	184	12.238	12.238	0.000	98	484884	10.0	9.05	
133 Pyrene	202	12.425	12.425	0.000	97	1427574	10.0	10.4	
138 Butyl benzyl phthalate	149	13.355	13.355	0.000	97	655914	10.0	10.7	
144 3,3'-Dichlorobenzidine	252	14.354	14.354	0.000	71	352984	10.0	8.77	
145 Bis(2-ethylhexyl) phthalat	149	14.407	14.407	0.000	97	885486	10.0	10.5	
146 Benzo[a]anthracene	228	14.423	14.423	0.000	98	1218017	10.0	10.1	
147 Chrysene	228	14.498	14.498	0.000	93	1154678	10.0	10.1	
150 Di-n-octyl phthalate	149	15.716	15.716	0.000	99	1321226	10.0	11.3	
151 7,12-Dimethylbenz(a)anthra	256	16.560	16.560	0.000	68	393498	10.0	9.45	
152 Benzo[b]fluoranthene	252	16.571	16.571	0.000	96	1060065	10.0	10.8	
153 Benzo[k]fluoranthene	252	16.630	16.630	0.000	94	1021311	10.0	10.6	
219 Benzo[e]pyrene	252	17.132	17.132	0.000	0	933804	10.0	10.6	
154 Benzo[a]pyrene	252	17.239	17.239	0.000	78	912962	10.0	10.4	
157 Indeno[1,2,3-cd]pyrene	276	19.728	19.728	0.000	94	929357	10.0	10.0	
158 Dibenz(a,h)anthracene	278	19.771	19.771	0.000	64	762795	10.0	9.89	
159 Benzo[g,h,i]perylene	276	20.428	20.428	0.000	87	796028	10.0	10.1	
S 199 Total Cresols	108				0		20.0	21.2	
S 197 Methyl Phenols,Total	108				0		20.0	21.2	

**QC Flag Legend**

Processing Flags

ND - Not Detected or Marked ND

**Reagents:**

SVTAPSTD10i\_00102

Amount Added: 1.00

Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150505-6771.b\D0505003.D

Injection Date: 05-May-2015 10:42:30

Instrument ID: CH732

Operator ID: 003200

Lims ID: CCVIS

Worklist Smp#: 3

Client ID:

Injection Vol: 2.0 ul

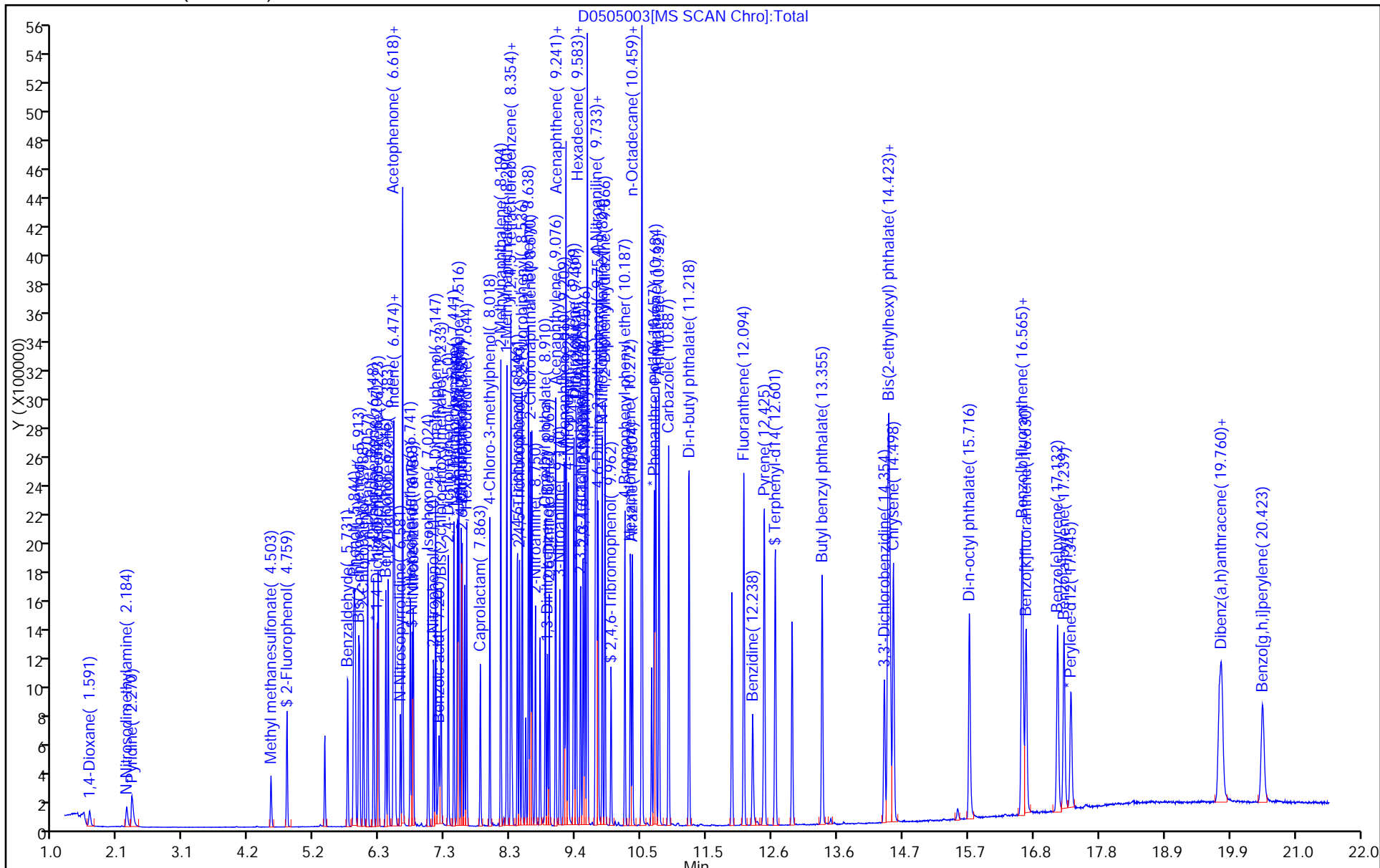
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: BNA\_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 180-140958/3 Calibration Date: 05/08/2015 08:31  
 Instrument ID: CH732 Calib Start Date: 02/03/2015 05:53  
 GC Column: Rxi-5SilMS ID: 0.32 (mm) Calib End Date: 02/03/2015 09:00  
 Lab File ID: D0508003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.3186	0.2722	0.0100	4.27	5.00	-14.6	20.0
N-Nitrosodimethylamine	Ave	0.4305	0.3580	0.0100	4.16	5.00	-16.9	20.0
Pyridine	Ave	0.7509	0.6503	0.0100	4.33	5.00	-13.4	20.0
Methyl methanesulfonate	Ave	0.6060	0.5831	0.0100	4.81	5.00	-3.8	20.0
Benzaldehyde	Ave	0.6754	0.8887	0.0100	6.58	5.00	31.6*	20.0
Phenol	Ave	1.587	1.533	0.8000	4.83	5.00	-3.4	20.0
Aniline	Ave	1.756	1.747	0.0100	4.97	5.00	-0.5	20.0
Bis(2-chloroethyl)ether	Ave	1.120	1.080	0.7000	4.82	5.00	-3.5	20.0
2-Chlorophenol	Ave	1.355	1.338	0.8000	4.94	5.00	-1.3	20.0
n-Decane	Ave	1.590	1.535		4.83	5.00	-3.4	20.0
1,3-Dichlorobenzene	Ave	1.578	1.539	0.0100	4.88	5.00	-2.5	20.0
1,4-Dichlorobenzene	Ave	1.619	1.578	0.0100	4.87	5.00	-2.5	20.0
Benzyl alcohol	Ave	0.8521	0.8221	0.0100	4.82	5.00	-3.5	20.0
1,2-Dichlorobenzene	Ave	1.574	1.553	0.0100	4.93	5.00	-1.4	20.0
2-Methylphenol	Ave	1.204	1.212	0.7000	5.03	5.00	0.7	20.0
Indene	Ave	2.185	2.225	0.0100	5.09	5.00	1.8	20.0
2,2'-oxybis[1-chloropropane]	Ave	2.359	2.336	0.0100	4.95	5.00	-1.0	20.0
N-Nitrosopyrrolidine	Ave	0.5864	0.5990	0.0100	5.11	5.00	2.2	20.0
Acetophenone	Ave	1.815	1.791	0.0100	4.93	5.00	-1.3	20.0
Methylphenol, 3 & 4	Ave	1.236	1.234	0.6000	4.99	5.00	-0.1	20.0
N-Nitrosodi-n-propylamine	Ave	0.8551	0.8479	0.5000	4.96	5.00	-0.8	20.0
Hexachloroethane	Ave	0.7013	0.7452	0.3000	5.31	5.00	6.3	20.0
Nitrobenzene	Ave	0.3334	0.2998	0.2000	4.50	5.00	-10.1	20.0
Isophorone	Ave	0.5870	0.5229	0.4000	4.45	5.00	-10.9	20.0
2-Nitrophenol	Ave	0.1845	0.1661	0.1000	4.50	5.00	-9.9	20.0
2,4-Dimethylphenol	Ave	0.3367	0.3047	0.2000	4.52	5.00	-9.5	20.0
Benzoic acid	Lin1		0.1575	0.0100	4.54	5.00	-9.2	20.0
Bis(2-chloroethoxy)methane	Ave	0.3611	0.3424	0.3000	4.74	5.00	-5.2	20.0
2,4-Dichlorophenol	Ave	0.2941	0.2650	0.2000	4.50	5.00	-9.9	20.0
1,2,4-Trichlorobenzene	Ave	0.3374	0.3034	0.0100	4.50	5.00	-10.1	20.0
Naphthalene	Ave	1.082	1.011	0.7000	4.67	5.00	-6.6	20.0
4-Chloroaniline	Ave	0.4336	0.4142	0.0100	4.78	5.00	-4.5	20.0
2,6-Dichlorophenol	Ave	0.2924	0.2717	0.0100	4.65	5.00	-7.1	20.0
Hexachlorobutadiene	Ave	0.2019	0.1789	0.0100	4.43	5.00	-11.4	20.0
Caprolactam	Ave	0.0985	0.0915	0.0100	4.64	5.00	-7.2	20.0
4-Chloro-3-methylphenol	Ave	0.3085	0.2866	0.2000	4.65	5.00	-7.1	20.0
2-Methylnaphthalene	Ave	0.7654	0.7384	0.4000	4.82	5.00	-3.5	20.0
1-Methylnaphthalene	Ave	0.7177	0.6950	0.0100	4.84	5.00	-3.2	20.0
Hexachlorocyclopentadiene	Ave	0.3480	0.3286	0.0500	4.72	5.00	-5.6	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5214	0.4727	0.0100	4.53	5.00	-9.3	20.0
2,4,6-Trichlorophenol	Ave	0.3558	0.3216	0.2000	4.52	5.00	-9.6	20.0



FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 180-140958/3 Calibration Date: 05/08/2015 08:31  
 Instrument ID: CH732 Calib Start Date: 02/03/2015 05:53  
 GC Column: Rxi-5SilMS ID: 0.32 (mm) Calib End Date: 02/03/2015 09:00  
 Lab File ID: D0508003.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	0.3774	0.3358	0.2000	4.45	5.00	-11.0	20.0
1,1'-Biphenyl	Ave	1.505	1.406	0.0100	4.67	5.00	-6.6	20.0
2-Chloronaphthalene	Ave	1.220	1.130	0.8000	4.63	5.00	-7.4	20.0
2-Nitroaniline	Ave	0.3466	0.3192	0.0100	4.60	5.00	-7.9	20.0
Dimethyl phthalate	Ave	1.270	1.118	0.0100	4.40	5.00	-12.0	20.0
1,3-Dinitrobenzene	Ave	0.1913	0.1768	0.0100	4.62	5.00	-7.6	20.0
2,6-Dinitrotoluene	Ave	0.2790	0.2522	0.2000	4.52	5.00	-9.6	20.0
Acenaphthylene	Ave	1.934	1.823	0.9000	4.71	5.00	-5.8	20.0
3-Nitroaniline	Ave	0.3396	0.3227	0.0100	4.75	5.00	-5.0	20.0
2,4-Dinitrophenol	Lin1		0.1706	0.0100	9.41	10.0	-5.9	20.0
Acenaphthene	Ave	1.181	1.121	0.9000	4.75	5.00	-5.1	20.0
4-Nitrophenol	Ave	0.1879	0.1582	0.0100	8.42	10.0	-15.8	20.0
2,4-Dinitrotoluene	Ave	0.3667	0.3304	0.2000	4.50	5.00	-9.9	20.0
Dibenzofuran	Ave	1.694	1.589	0.8000	4.69	5.00	-6.2	20.0
2,3,5,6-Tetrachlorophenol	Ave	0.3283	0.2976	0.0100	4.53	5.00	-9.4	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3217	0.2890	0.0100	4.49	5.00	-10.2	20.0
2-Naphthylamine	Ave	1.207	1.169	0.0100	4.84	5.00	-3.1	20.0
Diethyl phthalate	Ave	1.298	1.170	0.0100	4.51	5.00	-9.8	20.0
Hexadecane	Ave	0.5903	0.6240		5.29	5.00	5.7	20.0
4-Chlorophenyl phenyl ether	Ave	0.6218	0.5520	0.4000	4.44	5.00	-11.2	20.0
4-Nitroaniline	Ave	0.3352	0.3113	0.0100	4.64	5.00	-7.1	20.0
Fluorene	Ave	1.318	1.256	0.9000	4.76	5.00	-4.7	20.0
4,6-Dinitro-2-methylphenol	Ave	0.1300	0.1197	0.0100	9.20	10.0	-8.0	20.0
N-Nitrosodiphenylamine	Ave	0.5683	0.5447	0.0100	4.79	5.00	-4.2	20.0
1,2-Diphenylhydrazine (as Azobenzene)	Ave	0.8141	0.8581	0.0100	5.27	5.00	5.4	20.0
4-Bromophenyl phenyl ether	Ave	0.2089	0.1923	0.1000	4.60	5.00	-8.0	20.0
Hexachlorobenzene	Ave	0.2088	0.1925	0.1000	4.61	5.00	-7.8	20.0
Atrazine	Ave	0.1650	0.1826	0.0100	5.53	5.00	10.6	20.0
Pentachlorophenol	Ave	0.1472	0.1468	0.0500	9.97	10.0	-0.3	20.0
n-Octadecane	Ave	2.847	3.285		5.77	5.00	15.4	20.0
Phenanthrene	Ave	1.202	1.124	0.7000	4.68	5.00	-6.5	20.0
Anthracene	Ave	1.229	1.155	0.7000	4.70	5.00	-6.1	20.0
Carbazole	Ave	1.076	1.017	0.0100	4.73	5.00	-5.4	20.0
Di-n-butyl phthalate	Ave	1.346	1.245	0.0100	4.63	5.00	-7.5	20.0
Fluoranthene	Ave	1.213	1.064	0.6000	4.39	5.00	-12.3	20.0
Benzidine	Lin1		0.4776	0.0100		5.00	-7.4	20.0
Pyrene	Ave	1.320	1.339	0.6000	5.07	5.00	1.5	20.0
Butyl benzyl phthalate	Ave	0.5863	0.6090	0.0100	5.19	5.00	3.9	20.0
3,3'-Dichlorobenzidine	Ave	0.3859	0.3521	0.0100	4.56	5.00	-8.7	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.8121	0.8205	0.0100	5.05	5.00	1.0	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 180-140958/3 Calibration Date: 05/08/2015 08:31  
 Instrument ID: CH732 Calib Start Date: 02/03/2015 05:53  
 GC Column: Rxi-5SilMS ID: 0.32 (mm) Calib End Date: 02/03/2015 09:00  
 Lab File ID: D0508003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[a]anthracene	Ave	1.158	1.096	0.8000	4.74	5.00	-5.3	20.0
Chrysene	Ave	1.091	1.036	0.7000	4.75	5.00	-5.0	20.0
Di-n-octyl phthalate	Ave	1.554	1.566	0.0100	5.04	5.00	0.8	20.0
7,12-Dimethylbenz(a)anthracene	Ave	0.5519	0.4543	0.0100	4.12	5.00	-17.7	20.0
Benzo[b]fluoranthene	Ave	1.297	1.226	0.7000	4.73	5.00	-5.5	20.0
Benzo[k]fluoranthene	Ave	1.271	1.248	0.7000	4.91	5.00	-1.8	20.0
Benzo[e]pyrene	Ave	1.169	1.139	0.0100	4.87	5.00	-2.6	20.0
Benzo[a]pyrene	Ave	1.168	1.145	0.7000	4.90	5.00	-2.0	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.229	1.166	0.5000	4.75	5.00	-5.1	20.0
Dibenz(a,h)anthracene	Ave	1.022	0.9515	0.4000	4.66	5.00	-6.9	20.0
Benzo[g,h,i]perylene	Ave	1.048	1.004	0.5000	4.79	5.00	-4.2	20.0
2-Fluorophenol (Surr)	Ave	1.037	0.9193		4.43	5.00	-11.4	20.0
Phenol-d5 (Surr)	Ave	1.397	1.379		4.94	5.00	-1.3	20.0
Nitrobenzene-d5 (Surr)	Ave	0.3358	0.3012		4.49	5.00	-10.3	20.0
2-Fluorobiphenyl	Ave	1.314	1.216		4.63	5.00	-7.4	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.0879	0.0791	0.0100	4.50	5.00	-10.1	20.0
Terphenyl-d14 (Surr)	Ave	0.8709	0.8402		4.82	5.00	-3.5	20.0

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150508-6828.b\D0508003.D  
 Lims ID: CCVIS  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 08-May-2015 08:31:30 ALS Bottle#: 2 Worklist Smp#: 3  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0006828-003  
 Misc. Info.: CCVIS  
 Operator ID: 003200 Instrument ID: CH732  
 Sublist: chrom-BNA\_CH732\*sub4  
 Method: \\PITCHROM\ChromData\CH732\20150508-6828.b\BNA\_CH732.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 11-May-2015 04:41:55 Calib Date: 18-Mar-2015 11:54:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\PITCHROM\ChromData\CH732\20150318-6063.b\D0318011.D  
 Column 1 : Rxi-5SiIMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK011

First Level Reviewer: piccolinov

Date: 08-May-2015 09:59:44

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	6.217	6.217	0.000	97	175471	8.00	8.00	
* 2 Naphthalene-d8	136	7.500	7.500	0.000	100	896196	8.00	8.00	
* 3 Acenaphthene-d10	164	9.204	9.204	0.000	92	566149	8.00	8.00	
* 4 Phenanthrene-d10	188	10.651	10.651	0.000	97	930308	8.00	8.00	
* 5 Chrysene-d12	240	14.402	14.402	0.000	96	756308	8.00	8.00	
* 6 Perylene-d12	264	17.287	17.287	0.000	95	600011	8.00	8.00	
\$ 7 2-Fluorophenol	112	4.775	4.775	0.000	92	201646	10.0	8.86	
\$ 8 Phenol-d5	99	5.838	5.838	0.000	95	302489	10.0	9.87	
\$ 9 Nitrobenzene-d5	82	6.778	6.778	0.000	91	337413	10.0	8.97	
\$ 10 2-Fluorobiphenyl	172	8.536	8.536	0.000	99	860800	10.0	9.26	
\$ 11 2,4,6-Tribromophenol	330	9.962	9.962	0.000	92	91966	10.0	8.99	
\$ 12 Terphenyl-d14	244	12.575	12.575	0.000	98	794320	10.0	9.65	
13 1,4-Dioxane	88	1.628	1.628	0.000	93	59704	10.0	8.54	
14 N-Nitrosodimethylamine	74	2.227	2.227	0.000	85	78514	10.0	8.31	
15 Pyridine	79	2.318	2.318	0.000	93	142637	10.0	8.66	
21 Methyl methanesulfonate	80	4.524	4.524	0.000	91	127895	10.0	9.62	
25 Benzaldehyde	77	5.747	5.747	0.000	90	194916	10.0	13.2	
26 Phenol	94	5.849	5.849	0.000	98	336186	10.0	9.66	
27 Aniline	93	5.870	5.870	0.000	96	383099	10.0	9.95	
29 Bis(2-chloroethyl)ether	93	5.940	5.940	0.000	93	236973	10.0	9.65	
30 2-Chlorophenol	128	5.998	5.998	0.000	96	293493	10.0	9.87	
31 n-Decane	43	6.068	6.068	0.000	93	336779	10.0	9.66	
32 1,3-Dichlorobenzene	146	6.164	6.164	0.000	97	337591	10.0	9.75	
33 1,4-Dichlorobenzene	146	6.239	6.239	0.000	93	346210	10.0	9.75	
34 Benzyl alcohol	108	6.356	6.356	0.000	90	180310	10.0	9.65	
35 1,2-Dichlorobenzene	146	6.394	6.394	0.000	96	340546	10.0	9.86	
36 2-Methylphenol	108	6.474	6.474	0.000	96	265768	10.0	10.1	
37 Indene	116	6.485	6.485	0.000	90	488122	10.0	10.2	
38 2,2'-oxybis[1-chloropropan	45	6.501	6.501	0.000	91	512400	10.0	9.90	
39 N-Nitrosopyrrolidine	100	6.591	6.591	0.000	81	131392	10.0	10.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
40 Acetophenone	105	6.623	6.623	0.000	78	392731	10.0	9.87	
41 N-Nitrosodi-n-propylamine	70	6.623	6.623	0.000	76	185969	10.0	9.92	
42 4-Methylphenol	108	6.623	6.623	0.000	67	270756	10.0	9.99	
45 Hexachloroethane	117	6.746	6.746	0.000	97	163450	10.0	10.6	
46 Nitrobenzene	77	6.794	6.794	0.000	92	335830	10.0	8.99	
48 Isophorone	82	7.029	7.029	0.000	99	585754	10.0	8.91	
49 2-Nitrophenol	139	7.120	7.120	0.000	96	186113	10.0	9.01	
50 2,4-Dimethylphenol	107	7.147	7.147	0.000	96	341290	10.0	9.05	
52 Benzoic acid	122	7.200	7.200	0.000	89	176434	10.0	9.08	
53 Bis(2-chloroethoxy)methane	93	7.238	7.238	0.000	97	383574	10.0	9.48	
54 2,4-Dichlorophenol	162	7.355	7.355	0.000	95	296817	10.0	9.01	
56 1,2,4-Trichlorobenzene	180	7.441	7.441	0.000	95	339908	10.0	8.99	
58 Naphthalene	128	7.521	7.521	0.000	97	1132217	10.0	9.34	
59 4-Chloroaniline	127	7.558	7.558	0.000	96	463984	10.0	9.55	
60 2,6-Dichlorophenol	162	7.574	7.574	0.000	96	304370	10.0	9.29	
62 Hexachlorobutadiene	225	7.644	7.644	0.000	97	200387	10.0	8.86	
64 Caprolactam	113	7.863	7.863	0.000	75	102472	10.0	9.28	
67 4-Chloro-3-methylphenol	107	8.018	8.018	0.000	97	321073	10.0	9.29	
69 2-Methylnaphthalene	142	8.194	8.194	0.000	93	827191	10.0	9.65	
71 1-Methylnaphthalene	142	8.290	8.290	0.000	94	778558	10.0	9.68	
72 Hexachlorocyclopentadiene	237	8.354	8.354	0.000	97	232519	10.0	9.44	
73 1,2,4,5-Tetrachlorobenzene	216	8.360	8.360	0.000	98	334522	10.0	9.07	
74 2,4,6-Trichlorophenol	196	8.461	8.461	0.000	94	227562	10.0	9.04	
75 2,4,5-Trichlorophenol	196	8.493	8.493	0.000	93	237628	10.0	8.90	
76 1,1'-Biphenyl	154	8.637	8.637	0.000	95	994924	10.0	9.34	
77 2-Chloronaphthalene	162	8.669	8.669	0.000	96	799536	10.0	9.26	
79 2-Nitroaniline	65	8.750	8.750	0.000	85	225867	10.0	9.21	
82 Dimethyl phthalate	163	8.905	8.905	0.000	98	791096	10.0	8.80	
83 1,3-Dinitrobenzene	168	8.942	8.942	0.000	84	125144	10.0	9.24	
84 2,6-Dinitrotoluene	165	8.969	8.969	0.000	93	178504	10.0	9.04	
85 Acenaphthylene	152	9.070	9.070	0.000	98	1289875	10.0	9.42	
86 3-Nitroaniline	138	9.140	9.140	0.000	95	228344	10.0	9.50	
88 Acenaphthene	153	9.236	9.236	0.000	90	793380	10.0	9.49	
87 2,4-Dinitrophenol	184	9.236	9.236	0.000	81	241430	20.0	18.8	
89 4-Nitrophenol	109	9.273	9.273	0.000	94	223946	20.0	16.8	
91 2,4-Dinitrotoluene	165	9.359	9.359	0.000	92	233794	10.0	9.01	
93 Dibenzofuran	168	9.401	9.401	0.000	97	1124229	10.0	9.38	
95 2,3,5,6-Tetrachlorophenol	232	9.471	9.471	0.000	93	210629	10.0	9.06	
96 2,3,4,6-Tetrachlorophenol	232	9.514	9.514	0.000	75	204523	10.0	8.98	
97 2-Naphthylamine	143	9.540	9.540	0.000	97	827381	10.0	9.69	
98 Diethyl phthalate	149	9.572	9.572	0.000	98	828191	10.0	9.02	
99 Hexadecane	57	9.578	9.578	0.000	91	698979	10.0	10.6	
100 4-Chlorophenyl phenyl ether	204	9.711	9.711	0.000	94	390640	10.0	8.88	
101 4-Nitroaniline	138	9.722	9.722	0.000	84	220287	10.0	9.29	
103 Fluorene	166	9.733	9.733	0.000	95	888703	10.0	9.53	
104 4,6-Dinitro-2-methylphenol	198	9.754	9.754	0.000	82	278286	20.0	18.4	
105 N-Nitrosodiphenylamine	169	9.818	9.818	0.000	63	633424	10.0	9.58	
90 1,2-Diphenylhydrazine	77	9.861	9.861	0.000	100	997825	10.0	10.5	
110 4-Bromophenyl phenyl ether	248	10.181	10.181	0.000	71	223621	10.0	9.20	
112 Hexachlorobenzene	284	10.272	10.272	0.000	93	223803	10.0	9.22	
113 Atrazine	200	10.299	10.299	0.000	88	212302	10.0	11.1	
116 Pentachlorophenol	266	10.443	10.443	0.000	91	341341	20.0	19.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.448	10.448	0.000	94	720626	10.0	11.5	
121 Phenanthrene	178	10.673	10.673	0.000	97	1307093	10.0	9.35	
122 Anthracene	178	10.726	10.726	0.000	98	1342644	10.0	9.39	
124 Carbazole	167	10.881	10.881	0.000	96	1183114	10.0	9.46	
126 Di-n-butyl phthalate	149	11.202	11.202	0.000	99	1447917	10.0	9.25	
131 Fluoranthene	202	12.078	12.078	0.000	98	1237027	10.0	8.77	
57 Azobenzene	77		12.185				ND	ND	
132 Benzidine	184	12.211	12.211	0.000	99	451495	10.0	9.26	
133 Pyrene	202	12.404	12.404	0.000	97	1266243	10.0	10.1	
138 Butyl benzyl phthalate	149	13.312	13.312	0.000	98	575779	10.0	10.4	
144 3,3'-Dichlorobenzidine	252	14.306	14.306	0.000	75	332898	10.0	9.13	
145 Bis(2-ethylhexyl) phthalat	149	14.348	14.348	0.000	97	775724	10.0	10.1	
146 Benzo[a]anthracene	228	14.380	14.380	0.000	98	1036400	10.0	9.47	
147 Chrysene	228	14.450	14.450	0.000	98	979730	10.0	9.50	
150 Di-n-octyl phthalate	149	15.646	15.646	0.000	99	1174595	10.0	10.1	
151 7,12-Dimethylbenz(a)anthra	256	16.496	16.496	0.000	87	340690	10.0	8.23	
152 Benzo[b]fluoranthene	252	16.512	16.512	0.000	98	919451	10.0	9.45	
153 Benzo[k]fluoranthene	252	16.565	16.565	0.000	98	936380	10.0	9.82	
219 Benzo[e]pyrene	252	17.067	17.067	0.000	0	854348	10.0	9.74	
154 Benzo[a]pyrene	252	17.174	17.174	0.000	80	858834	10.0	9.80	
157 Indeno[1,2,3-cd]pyrene	276	19.653	19.653	0.000	95	874858	10.0	9.49	
158 Dibenz(a,h)anthracene	278	19.685	19.685	0.000	94	713662	10.0	9.31	
159 Benzo[g,h,i]perylene	276	20.332	20.332	0.000	94	753176	10.0	9.58	
S 197 Methyl Phenols, Total	108				0		20.0	20.1	
S 199 Total Cresols	108				0		20.0	20.1	

### QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

### Reagents:

SVTAPSTD10i\_00102

Amount Added: 1.00

Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150508-6828.b\D0508003.D

Injection Date: 08-May-2015 08:31:30 Instrument ID: CH732

Lims ID: CCVIS

Operator ID: 003200

Client ID:

Worklist Smp#: 3

Injection Vol: 2.0 ul

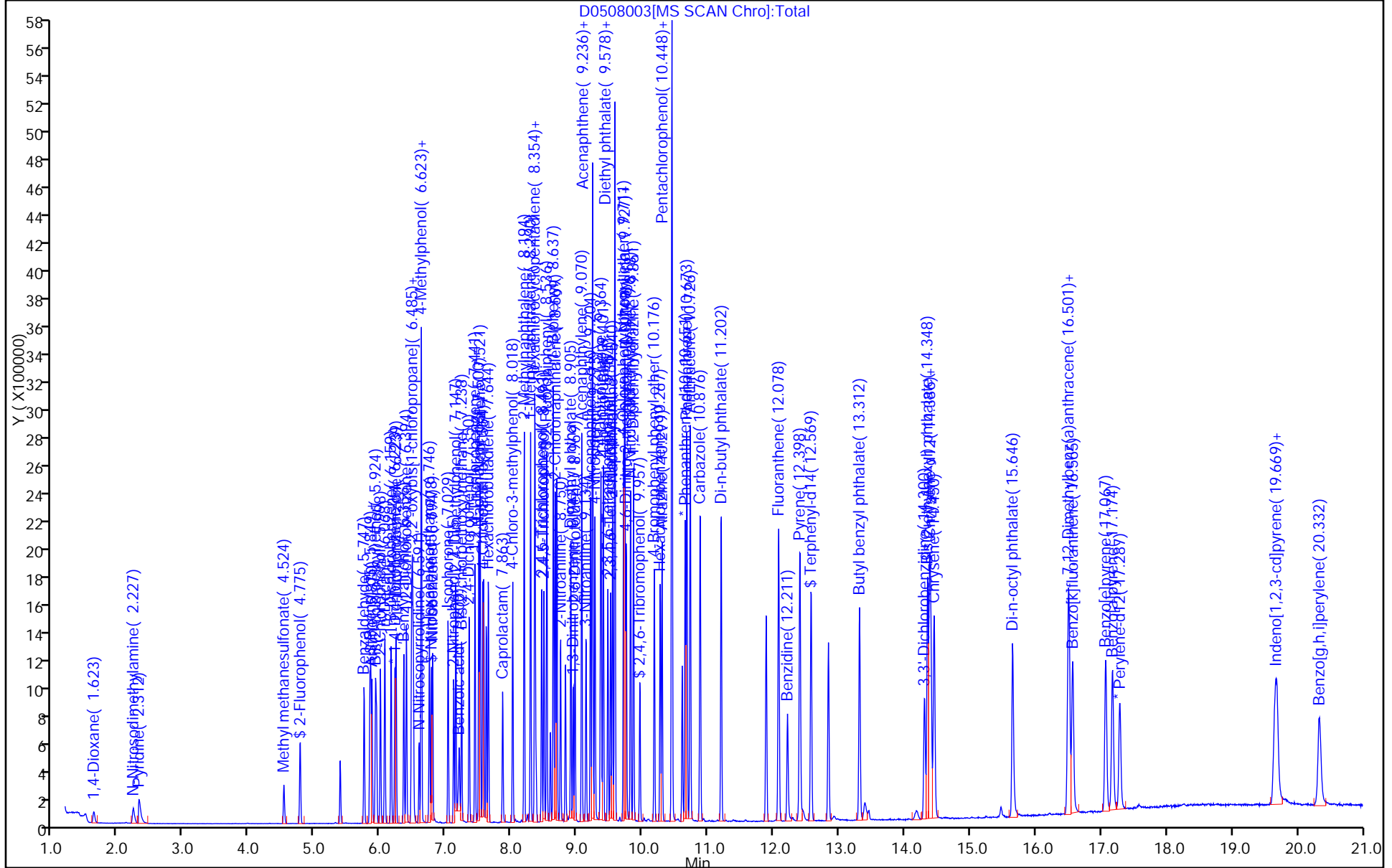
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: BNA\_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203002.D  
 Lims ID: DFTPP  
 Client ID:  
 Sample Type: DFTPP  
 Inject. Date: 03-Feb-2015 05:37:30 ALS Bottle#: 1 Worklist Smp#: 2  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0005518-002  
 Misc. Info.: DFTPP  
 Operator ID: 003200 Instrument ID: CH732  
 Method: \\PITCHROM\ChromData\CH732\20150203-5518.b\BNA\_CH732.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 04-Feb-2015 06:46:42 Calib Date: 03-Feb-2015 09:00:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203010.D  
 Column 1 : Rxi-5SiIMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK011

First Level Reviewer: piccolinov Date: 03-Feb-2015 06:00:13

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
189 Pentachlorophenol_T	266	5.541	5.541	0.000	90	228517	NR	NR	
190 DFTPP									
191 Benzidine_T	184	8.239	8.239	0.000	99	1731687	NR	NR	
192 4,4'-DDE	246		9.229					ND	
193 4,4'-DDD	235		9.644					ND	
194 4,4'-DDT	235	9.943	9.943	0.000	97	677011	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

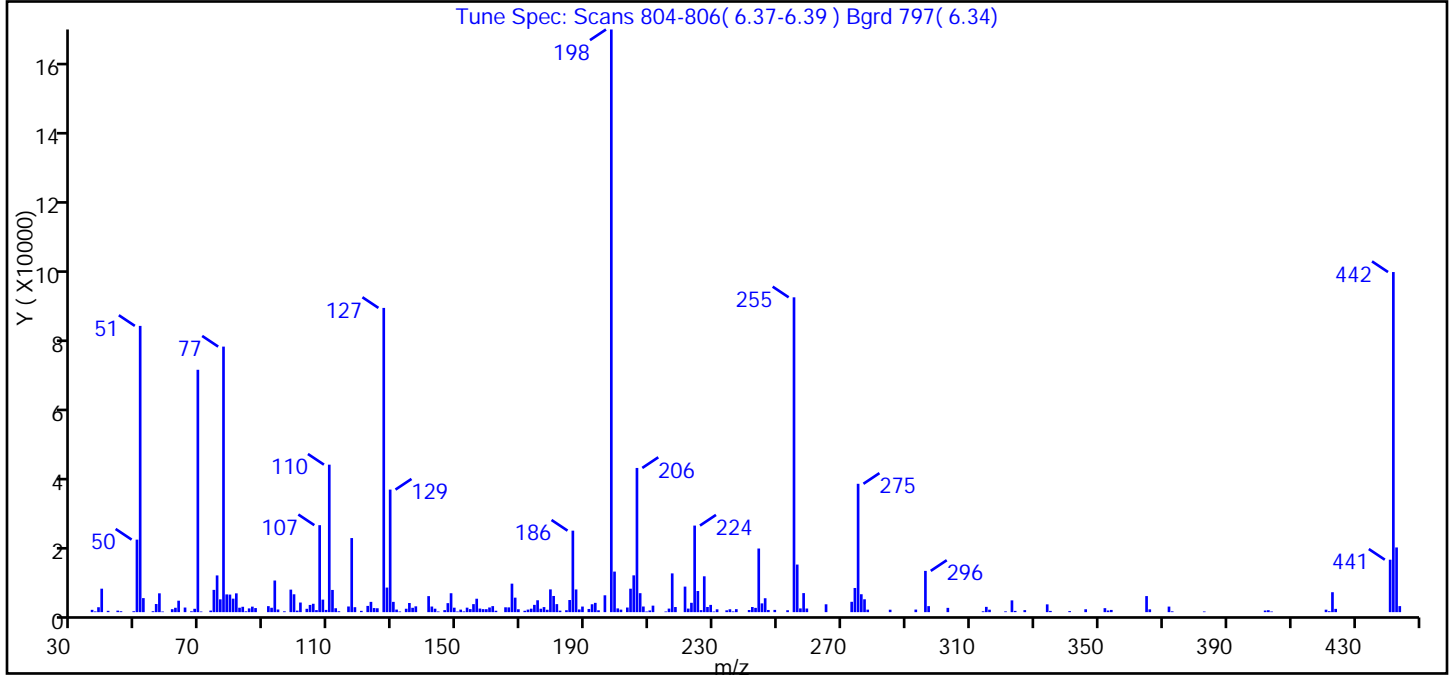
Reagents:

SVDFTPP50i\_00021 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203002.D  
 Injection Date: 03-Feb-2015 05:37:30 Instrument ID: CH732  
 Lims ID: DFTPP  
 Client ID:  
 Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Method: BNA\_CH732 Limit Group: BNA 8270D ICAL  
 Tune Method: DFTPP Method 8270

190 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	49.1
68	<2% of mass 69	0.6 (1.4)
69	Present	41.6
70	<2% of mass 69	0.1 (0.3)
127	40-60% of mass 198	52.2
197	<1% of mass 198	0.0
199	5-9% of mass 198	7.0
275	10-30% of mass 198	22.0
365	>1% of mass 198	2.8
441	Present but less than mass 443	9.0 (81.1)
442	>40% of mass 198	58.4
443	17-23% of mass 442	11.1 (19.0)



Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203002.D\BNA\_CH732.rslt\spectra.d  
 Injection Date: 03-Feb-2015 05:37:30  
 Spectrum: Tune Spec: Scans 804-806( 6.37-6.39 ) Bgrd 797( 6.34)  
 Base Peak: 198.00  
 Minimum % Base Peak: 0  
 Number of Points: 213

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	641	110.00	40888	177.00	1400	246.00	3858
37.00	196	111.00	6157	178.00	667	247.00	605
38.00	1360	112.00	1080	179.00	6308	249.00	622
39.00	6505	113.00	242	180.00	4481	253.00	526
41.00	369	116.00	1570	181.00	2224	255.00	87280
44.00	421	117.00	20536	182.00	417	256.00	13192
45.00	249	118.00	1372	184.00	535	257.00	1032
49.00	256	120.00	362	185.00	3363	258.00	5277
50.00	20104	122.00	1729	186.00	22592	259.00	1004
51.00	79360	123.00	2848	187.00	6291	265.00	2181
52.00	3890	124.00	1133	188.00	750	273.00	2868
55.00	253	125.00	1077	189.00	1549	274.00	6701
56.00	2253	127.00	84344	191.00	882	275.00	35584
57.00	5218	128.00	6813	192.00	2190	276.00	4965
58.00	174	129.00	33976	193.00	2577	277.00	3568
61.00	821	130.00	2850	194.00	515	278.00	695
62.00	1212	131.00	712	196.00	4671	285.00	675
63.00	3174	132.00	181	198.00	161536	293.00	716
65.00	1277	134.00	945	199.00	11241	296.00	11440
67.00	238	135.00	2536	200.00	1039	297.00	1667
68.00	928	136.00	1206	201.00	696	303.00	1188
69.00	67192	137.00	1611	203.00	1280	314.00	233
70.00	176	141.00	4442	204.00	6500	315.00	1463
73.00	435	142.00	1556	205.00	10201	316.00	675
74.00	6175	143.00	957	206.00	39976	321.00	215
75.00	10182	144.00	183	207.00	5259	323.00	3265
76.00	3546	146.00	553	208.00	1563	324.00	344
77.00	73616	147.00	2497	209.00	169	327.00	557
78.00	4918	148.00	5243	210.00	469	334.00	2160
79.00	4871	149.00	1234	211.00	1803	335.00	348
80.00	3741	150.00	167	215.00	179	341.00	288
81.00	5211	151.00	700	216.00	984	346.00	797
82.00	1226	152.00	199	217.00	10744	352.00	1104

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203002.D\BNA\_CH732.rslt\spectra.d

Injection Date: 03-Feb-2015 05:37:30

Spectrum: Tune Spec: Scans 804-806( 6.37-6.39 ) Bgrd 797( 6.34)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 213

m/z	Y	m/z	Y	m/z	Y	m/z	Y
83.00	1487	153.00	1243	218.00	1420	353.00	451
84.00	226	154.00	840	221.00	7080	354.00	616
85.00	1037	155.00	2223	222.00	986	365.00	4455
86.00	1526	156.00	3721	223.00	2592	366.00	776
87.00	1130	157.00	990	224.00	24000	372.00	1542
91.00	1661	158.00	834	225.00	5857	373.00	224
92.00	1215	159.00	819	226.00	557	383.00	182
93.00	8770	160.00	1293	227.00	9937	402.00	444
94.00	734	161.00	1667	228.00	1431	403.00	539
96.00	231	162.00	386	229.00	2011	404.00	179
98.00	6243	165.00	1346	230.00	168	421.00	681
99.00	4952	166.00	1321	231.00	787	422.00	261
100.00	420	167.00	7901	234.00	504	423.00	5526
101.00	2667	168.00	4017	235.00	797	424.00	907
103.00	925	169.00	805	236.00	199	441.00	14539
104.00	1998	171.00	379	237.00	830	442.00	94288
105.00	2322	172.00	707	241.00	582	443.00	17936
106.00	566	173.00	958	242.00	1422	444.00	1672
107.00	24112	174.00	2018	243.00	1186		
108.00	3469	175.00	3293	244.00	17640		
109.00	621	176.00	949	245.00	2431		

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203002.D

Injection Date: 03-Feb-2015 05:37:30

Instrument ID: CH732

Operator ID: 003200

Lims ID: DFTPP

Worklist Smp#: 2

Client ID:

Injection Vol: 2.0 ul

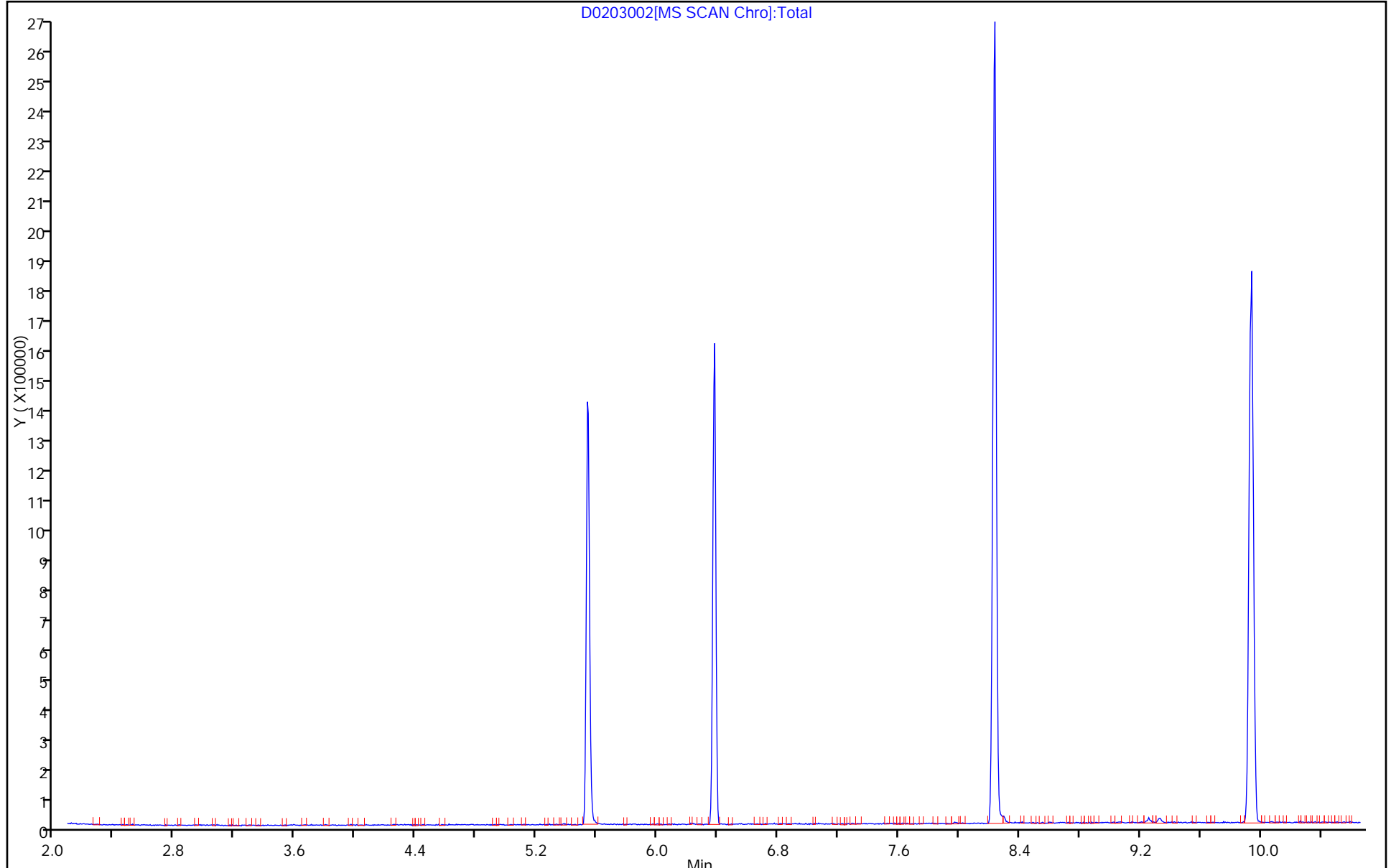
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: BNA\_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



TestAmerica Pittsburgh

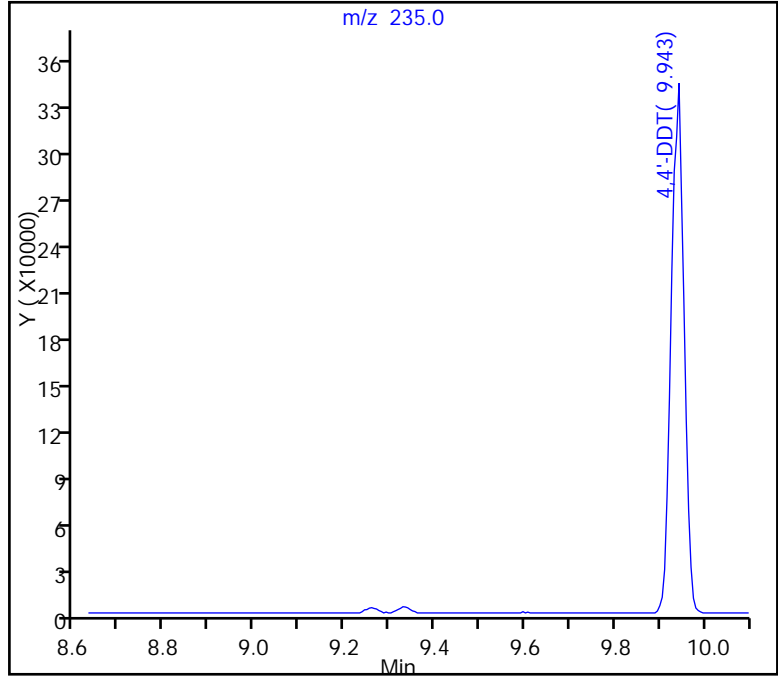
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Injection Date: 03-Feb-2015 05:37:30 Instrument ID: CH732  
Lims ID: DFTPP  
Client ID:  
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH732 Limit Group: BNA 8270D ICAL  
194 4,4'-DDT, Detector: MS SCAN

SW-846 Method

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

194 4,4'-DDT, Area = 677011  
192 4,4'-DDE, Area = 0  
193 4,4'-DDD, Area = 0

%Breakdown: 0.00%, Max Limit: 20.00%  
Passed



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203002.D  
Injection Date: 03-Feb-2015 05:37:30 Instrument ID: CH732  
Lims ID: DFTPP  
Client ID:  
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH732 Limit Group: BNA 8270D ICAL

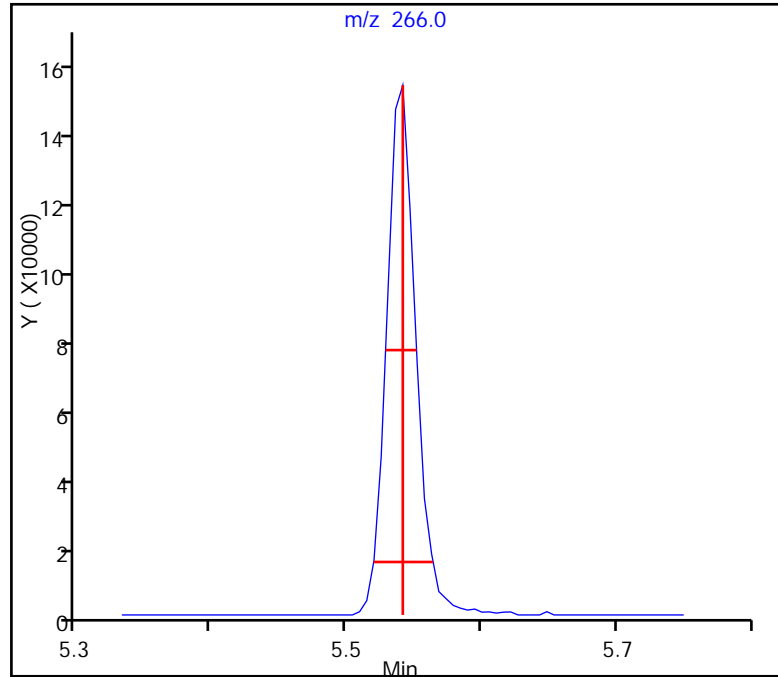
189 Pentachlorophenol\_T, Detector: MS SCAN

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

Back Width = 0.023 (min.)  
Front Width = 0.022 (min.)

Tailing Factor = 1.0, Max. Tailing < 2.00  
Passed

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TestAmerica Pittsburgh

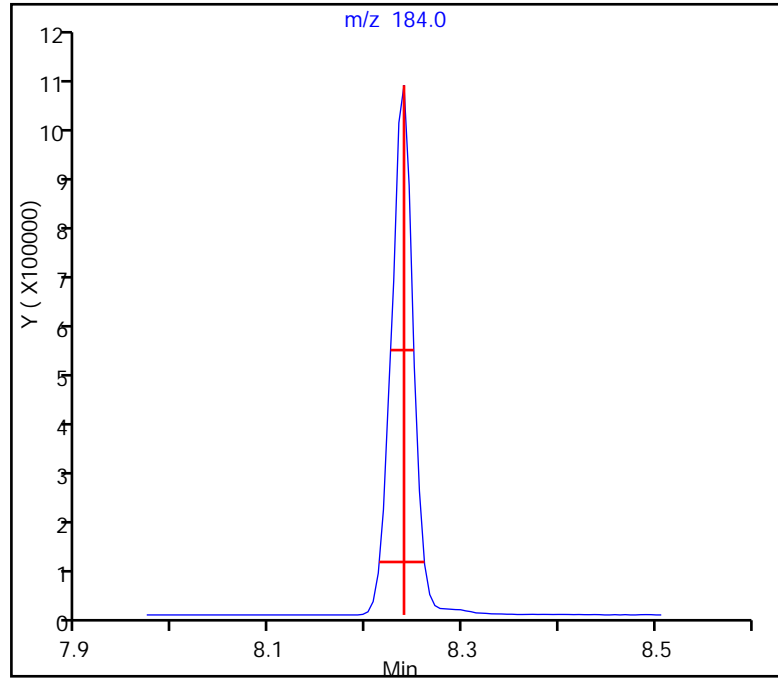
Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203002.D  
Injection Date: 03-Feb-2015 05:37:30 Instrument ID: CH732  
Lims ID: DFTPP  
Client ID:  
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH732 Limit Group: BNA 8270D ICAL  
191 Benzidine\_T, Detector: MS SCAN

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

Back Width = 0.021 (min.)  
Front Width = 0.026 (min.)

Tailing Factor = 0.8, Max. Tailing < 2.00  
Passed

-----



TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150505-6771.b\D0505002.D  
 Lims ID: DFTPP  
 Client ID:  
 Sample Type: DFTPP  
 Inject. Date: 05-May-2015 10:27:30 ALS Bottle#: 1 Worklist Smp#: 2  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0006771-002  
 Misc. Info.: DFTPP  
 Operator ID: 003200 Instrument ID: CH732  
 Method: \\PITCHROM\ChromData\CH732\20150505-6771.b\BNA\_CH732.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 06-May-2015 06:09:35 Calib Date: 18-Mar-2015 11:54:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\PITCHROM\ChromData\CH732\20150318-6063.b\D0318011.D  
 Column 1 : Rxi-5SiIMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK033

First Level Reviewer: piccolinov Date: 06-May-2015 04:36:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
189 Pentachlorophenol_T	266	5.627	5.627	0.000	90	361706	NR	NR	
190 DFTPP									
191 Benzidine_T	184	8.293	8.293	0.000	100	2849696	NR	NR	
193 4,4'-DDD	235		9.137					ND	
192 4,4'-DDE	246		9.137					ND	
194 4,4'-DDT	235	9.992	9.992	0.000	98	1080673	NR	NR	

QC Flag Legend

Processing Flags  
 NR - Missing Quant Standard

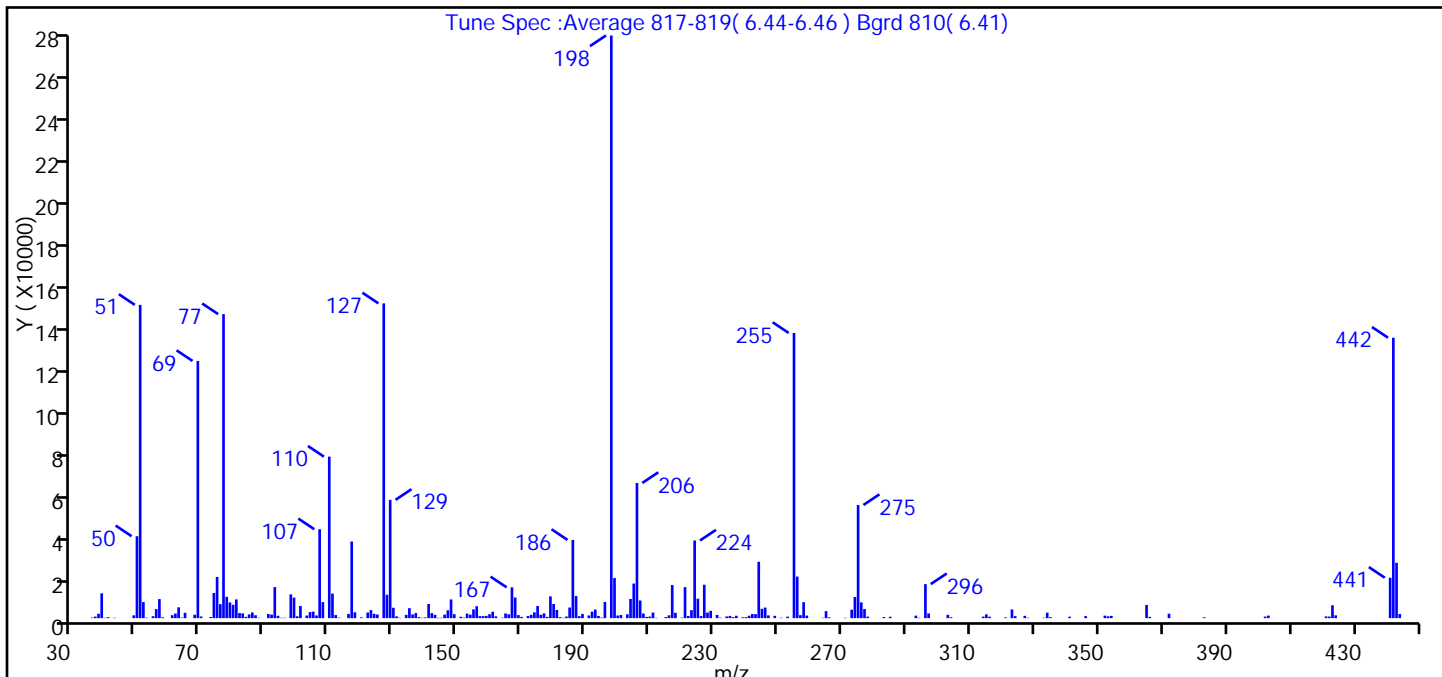
Reagents:

SVDFTPP50i\_00022 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150505-6771.b\D0505002.D  
 Injection Date: 05-May-2015 10:27:30 Instrument ID: CH732  
 Lims ID: DFTPP  
 Client ID:  
 Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Method: BNA\_CH732 Limit Group: BNA 8270D ICAL  
 Tune Method: DFTPP Method 8270

190 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	53.8
68	<2% of mass 69	0.6 (1.3)
69	Present	44.1
70	<2% of mass 69	0.3 (0.6)
127	40-60% of mass 198	54.0
197	<1% of mass 198	0.0
199	5-9% of mass 198	6.9
275	10-30% of mass 198	19.4
365	>1% of mass 198	2.3
441	Present but less than mass 443	6.9 (73.1)
442	>40% of mass 198	48.1
443	17-23% of mass 442	9.5 (19.7)



Data File: \\PITCHROM\ChromData\CH732\20150505-6771.b\D0505002.D\BNA\_CH732.rslt\spectra.d  
 Injection Date: 05-May-2015 10:27:30  
 Spectrum: Tune Spec :Average 817-819( 6.44-6.46 ) Bgrd 810( 6.41)  
 Base Peak: 198.00  
 Minimum % Base Peak: 0  
 Number of Points: 232

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	252	112.00	1454	179.00	10222	246.00	4973
37.00	729	113.00	241	180.00	6628	247.00	1290
38.00	2065	116.00	1973	181.00	3866	249.00	1079
39.00	11636	117.00	35992	182.00	486	251.00	205
40.00	182	118.00	2734	183.00	171	253.00	703
41.00	461	120.00	373	184.00	758	255.00	133952
43.00	185	122.00	2627	185.00	4991	256.00	19520
49.00	1313	123.00	3759	186.00	36744	257.00	1416
50.00	38472	124.00	2026	187.00	10359	258.00	7499
51.00	147136	125.00	1711	188.00	923	259.00	1207
52.00	7550	127.00	147840	189.00	1974	264.00	175
53.00	215	128.00	10976	191.00	1255	265.00	3288
55.00	919	129.00	55560	192.00	3045	266.00	384
56.00	4250	130.00	4875	193.00	4040	271.00	179
57.00	8952	131.00	840	194.00	1039	273.00	3957
58.00	414	132.00	167	195.00	256	274.00	9941
61.00	1382	134.00	1548	196.00	7611	275.00	53144
62.00	2177	135.00	4678	198.00	273664	276.00	7380
63.00	5083	136.00	1732	199.00	18824	277.00	4271
64.00	244	137.00	2388	200.00	1240	278.00	719
65.00	2538	138.00	516	201.00	1470	283.00	516
68.00	1587	139.00	181	203.00	1819	285.00	655
69.00	120792	140.00	354	204.00	9011	293.00	1173
70.00	778	141.00	6624	205.00	16244	294.00	185
73.00	519	142.00	2362	206.00	63488	296.00	15977
74.00	11819	143.00	1540	207.00	8301	297.00	2198
75.00	19344	144.00	194	208.00	2182	303.00	1578
76.00	6570	145.00	179	209.00	590	304.00	432
77.00	142784	146.00	1665	210.00	744	314.00	709
78.00	10023	147.00	3689	211.00	2638	315.00	1783
79.00	7371	148.00	8783	212.00	176	316.00	696
80.00	6284	149.00	1853	215.00	516	321.00	368
81.00	8782	151.00	621	216.00	1321	323.00	4092

Data File: \\PITCHROM\ChromData\CH732\20150505-6771.b\D0505002.D\BNA\_CH732.rslt\spectra.d

Injection Date: 05-May-2015 10:27:30

Spectrum: Tune Spec :Average 817-819( 6.44-6.46 ) Bgrd 810( 6.41)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 232

m/z	Y	m/z	Y	m/z	Y	m/z	Y
82.00	2388	152.00	258	217.00	15544	324.00	945
83.00	2242	153.00	2144	218.00	2539	327.00	1080
84.00	629	154.00	1640	220.00	220	328.00	214
85.00	1754	155.00	4113	221.00	14563	333.00	189
86.00	2670	156.00	5591	222.00	1022	334.00	2570
87.00	1363	157.00	951	223.00	3749	335.00	472
88.00	188	158.00	953	224.00	36464	341.00	687
91.00	1960	159.00	1087	225.00	9129	346.00	962
92.00	1672	160.00	1833	226.00	966	352.00	1179
93.00	14579	161.00	3013	227.00	15690	353.00	866
94.00	1083	162.00	845	228.00	2616	354.00	1067
95.00	174	164.00	187	229.00	3427	365.00	6176
96.00	196	165.00	2197	231.00	1538	366.00	611
98.00	11159	166.00	1800	232.00	226	372.00	2084
99.00	9660	167.00	14469	234.00	790	383.00	402
100.00	875	168.00	9689	235.00	1038	402.00	740
101.00	5722	169.00	1427	236.00	479	403.00	1194
103.00	1239	170.00	573	237.00	1123	421.00	837
104.00	2838	172.00	991	239.00	380	422.00	742
105.00	3062	173.00	1550	240.00	472	423.00	6047
106.00	1245	174.00	2719	241.00	1150	424.00	1308
107.00	41752	175.00	5700	242.00	1922	441.00	18984
108.00	7549	176.00	1592	243.00	1888	442.00	131712
110.00	75856	177.00	2243	244.00	26456	443.00	25976
111.00	11532	178.00	587	245.00	4389	444.00	1950

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150505-6771.b\D0505002.D

Injection Date: 05-May-2015 10:27:30

Instrument ID: CH732

Operator ID: 003200

Lims ID: DFTPP

Worklist Smp#: 2

Client ID:

Injection Vol: 2.0 ul

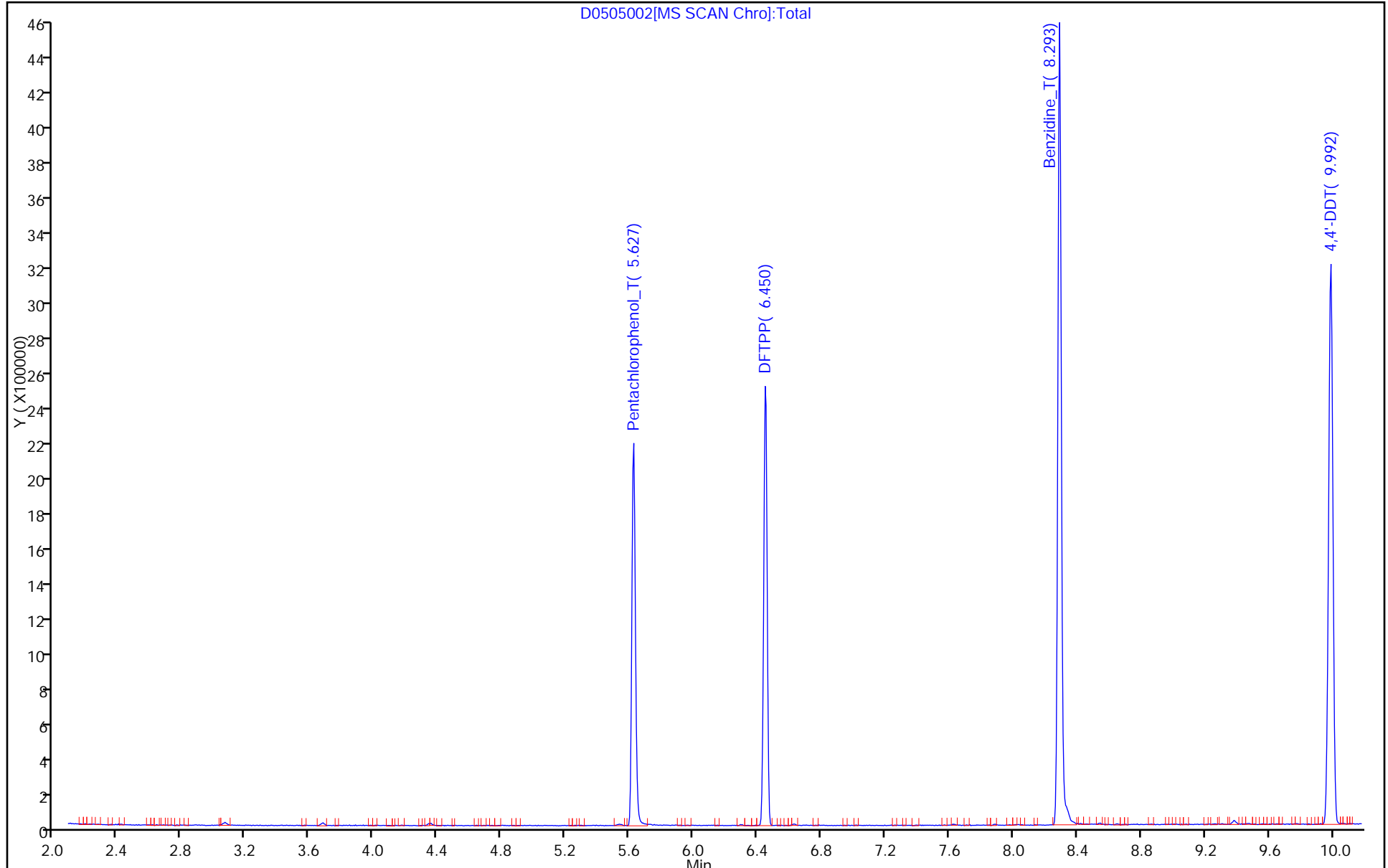
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: BNA\_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150505-6771.b\D0505002.D  
Injection Date: 05-May-2015 10:27:30 Instrument ID: CH732  
Lims ID: DFTPP  
Client ID:  
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH732 Limit Group: BNA 8270D ICAL

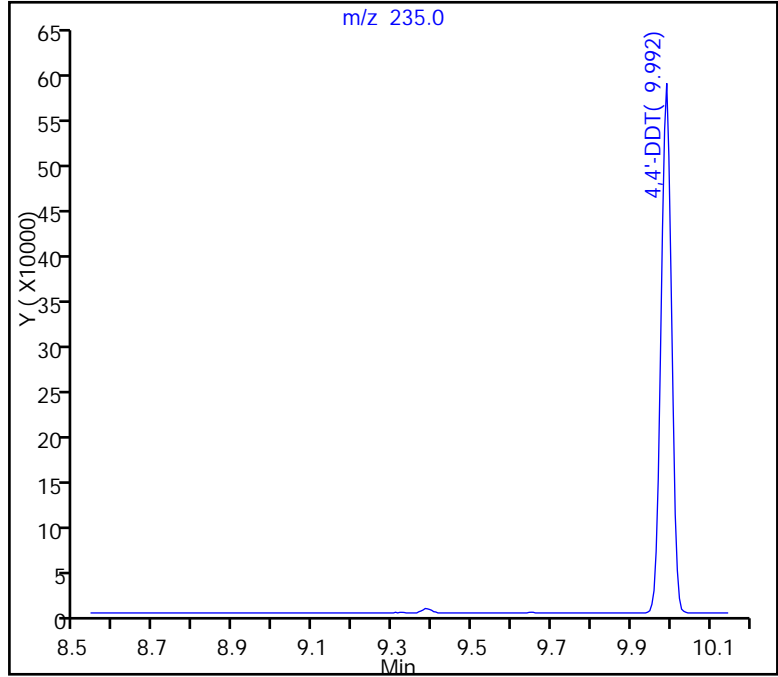
194 4,4'-DDT, Detector: MS SCAN

SW-846 Method

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

194 4,4'-DDT, Area = 1080673  
192 4,4'-DDE, Area = 0  
193 4,4'-DDD, Area = 0

%Breakdown: 0.00%, Max Limit: 20.00%  
Passed



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150505-6771.b\D0505002.D  
Injection Date: 05-May-2015 10:27:30 Instrument ID: CH732  
Lims ID: DFTPP  
Client ID:  
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH732 Limit Group: BNA 8270D ICAL

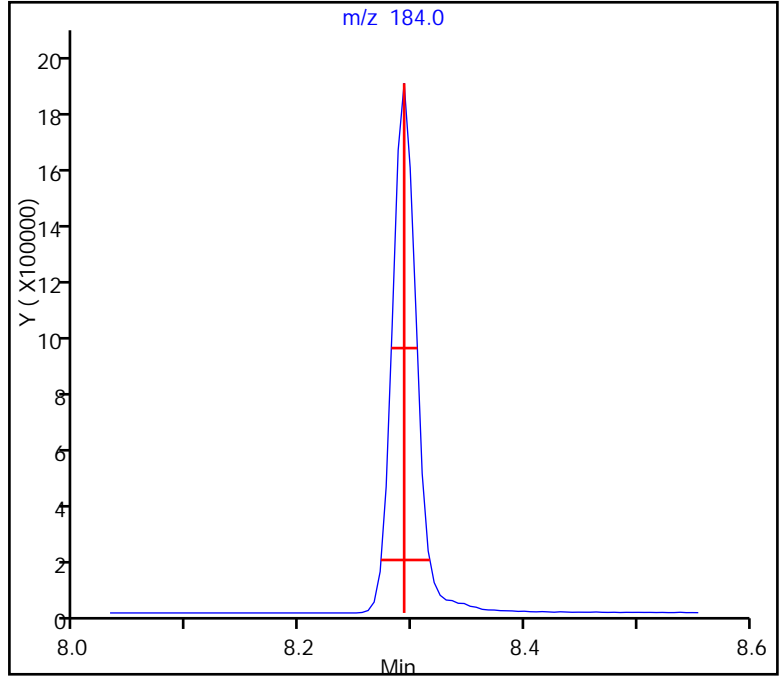
191 Benzidine\_T, Detector: MS SCAN

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

Back Width = 0.023 (min.)  
Front Width = 0.021 (min.)

Tailing Factor = 1.1, Max. Tailing < 2.00  
Passed

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TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150505-6771.b\D0505002.D  
Injection Date: 05-May-2015 10:27:30 Instrument ID: CH732  
Lims ID: DFTPP  
Client ID:  
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH732 Limit Group: BNA 8270D ICAL

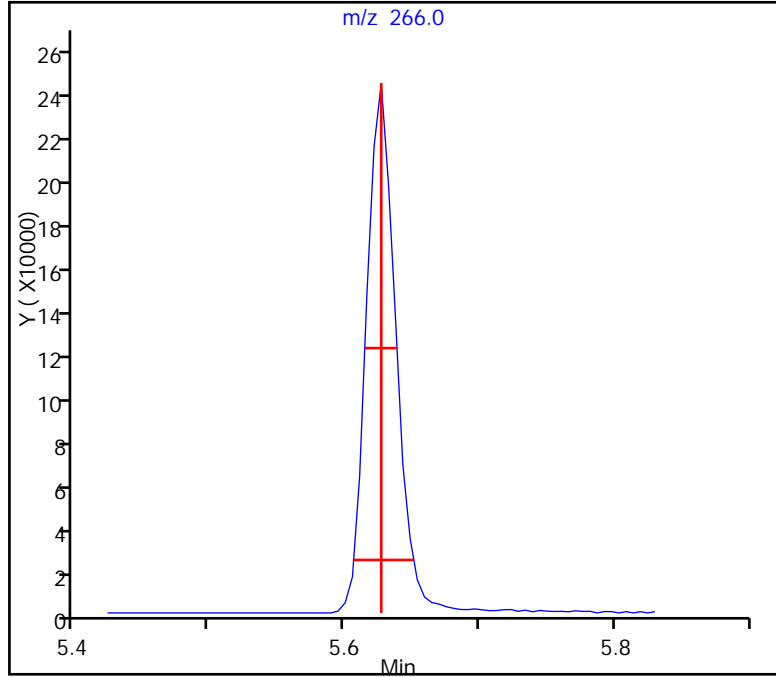
189 Pentachlorophenol\_T, Detector: MS SCAN

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

Back Width = 0.024 (min.)  
Front Width = 0.020 (min.)

Tailing Factor = 1.2, Max. Tailing < 2.00  
Passed

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TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150508-6828.b\D0508002.D  
 Lims ID: DFTPP  
 Client ID:  
 Sample Type: DFTPP  
 Inject. Date: 08-May-2015 08:15:30 ALS Bottle#: 1 Worklist Smp#: 2  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0006828-002  
 Misc. Info.: DFTPP  
 Operator ID: 003200 Instrument ID: CH732  
 Method: \\PITCHROM\ChromData\CH732\20150508-6828.b\BNA\_CH732.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 11-May-2015 04:41:53 Calib Date: 18-Mar-2015 11:54:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\PITCHROM\ChromData\CH732\20150318-6063.b\D0318011.D  
 Column 1 : Rxi-5SiIMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK011

First Level Reviewer: piccolinov Date: 08-May-2015 08:31:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
189 Pentachlorophenol_T	266	5.643	5.643	0.000	91	407449	NR	NR	
190 DFTPP									
191 Benzidine_T	184	8.282	8.282	0.000	100	2811430	NR	NR	
192 4,4'-DDE	246		9.137					ND	
193 4,4'-DDD	235	9.366	9.366	0.000	92	11689		NR	
194 4,4'-DDT	235	9.965	9.965	0.000	97	1112683	NR	NR	

QC Flag Legend

Processing Flags  
 NR - Missing Quant Standard

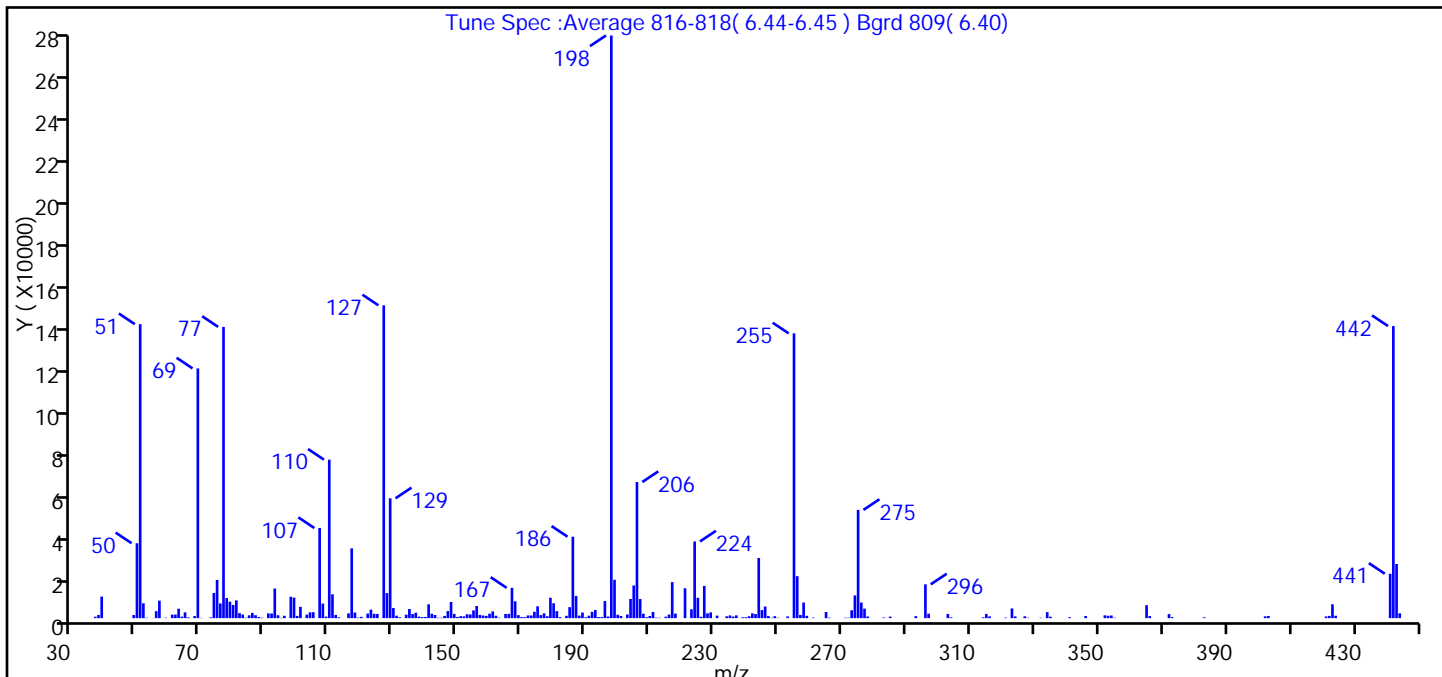
Reagents:

SVDFTPP50i\_00022 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150508-6828.b\D0508002.D  
 Injection Date: 08-May-2015 08:15:30 Instrument ID: CH732  
 Lims ID: DFTPP  
 Client ID:  
 Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Method: BNA\_CH732 Limit Group: BNA 8270D ICAL  
 Tune Method: DFTPP Method 8270

190 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	50.5
68	<2% of mass 69	0.4 (0.8)
69	Present	42.9
70	<2% of mass 69	0.0 (0.1)
127	40-60% of mass 198	53.7
197	<1% of mass 198	0.3
199	5-9% of mass 198	6.6
275	10-30% of mass 198	18.6
365	>1% of mass 198	2.2
441	Present but less than mass 443	7.6 (81.9)
442	>40% of mass 198	50.1
443	17-23% of mass 442	9.3 (18.5)



Data File: \\PITCHROM\ChromData\CH732\20150508-6828.b\D0508002.D\BNA\_CH732.rslt\spectra.d  
 Injection Date: 08-May-2015 08:15:30  
 Spectrum: Tune Spec :Average 816-818( 6.44-6.45 ) Bgrd 809( 6.40)  
 Base Peak: 198.00  
 Minimum % Base Peak: 0  
 Number of Points: 235

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	671	117.00	32968	180.00	7025	249.00	926
38.00	1481	118.00	2651	181.00	3298	250.00	200
39.00	10182	119.00	251	182.00	496	253.00	817
49.00	1498	120.00	611	184.00	1108	255.00	134528
50.00	35376	122.00	2163	185.00	5194	256.00	19832
51.00	138880	123.00	4026	186.00	38472	257.00	1515
52.00	7029	124.00	2059	187.00	10500	258.00	7379
53.00	196	125.00	1972	188.00	1190	259.00	1089
55.00	83	127.00	147776	189.00	2641	261.00	254
56.00	3288	128.00	11819	190.00	420	265.00	2884
57.00	8268	129.00	56616	191.00	1170	266.00	229
59.00	209	130.00	4789	192.00	2967	271.00	194
61.00	1643	131.00	1164	193.00	3876	272.00	193
62.00	1688	132.00	403	194.00	534	273.00	3726
63.00	4451	134.00	1619	195.00	504	274.00	10768
64.00	709	135.00	4326	196.00	8089	275.00	51128
65.00	2718	136.00	1926	197.00	766	276.00	7377
66.00	377	137.00	2557	198.00	275264	277.00	4492
68.00	969	138.00	709	199.00	18120	278.00	774
69.00	117984	139.00	504	200.00	1592	283.00	282
70.00	133	140.00	558	201.00	999	285.00	732
73.00	356	141.00	6526	203.00	1722	293.00	937
74.00	11905	142.00	2078	204.00	9039	296.00	15964
75.00	18056	143.00	1486	205.00	15438	297.00	2086
76.00	6930	144.00	198	206.00	64304	303.00	1992
77.00	137600	145.00	184	207.00	9046	304.00	358
78.00	9477	146.00	1047	208.00	2102	314.00	365
79.00	7780	147.00	3355	209.00	445	315.00	2004
80.00	6249	148.00	7638	210.00	1015	316.00	837
81.00	8388	149.00	1988	211.00	2931	321.00	238
82.00	2370	150.00	568	212.00	210	323.00	4593
83.00	1717	151.00	930	213.00	175	324.00	807
84.00	210	152.00	849	215.00	677	327.00	868

Data File: \\PITCHROM\ChromData\CH732\20150508-6828.b\D0508002.D\BNA\_CH732.rslt\spectra.d

Injection Date: 08-May-2015 08:15:30

Spectrum: Tune Spec :Average 816-818( 6.44-6.45 ) Bgrd 809( 6.40)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 235

m/z	Y	m/z	Y	m/z	Y	m/z	Y
85.00	1348	153.00	1829	216.00	1686	328.00	189
86.00	2472	154.00	1736	217.00	17000	332.00	190
87.00	1381	155.00	3660	218.00	2145	334.00	2839
88.00	546	156.00	5735	221.00	14108	335.00	676
89.00	211	157.00	1477	223.00	4189	341.00	442
91.00	2245	158.00	1237	224.00	36224	346.00	999
92.00	2198	159.00	1064	225.00	9604	352.00	1342
93.00	13979	160.00	2094	226.00	634	353.00	1117
94.00	1371	161.00	3187	227.00	15244	354.00	1255
95.00	178	162.00	1123	228.00	2253	355.00	189
96.00	1116	163.00	186	229.00	2734	365.00	6129
98.00	10117	165.00	1963	231.00	1186	366.00	1003
99.00	9705	166.00	2031	234.00	862	372.00	1926
100.00	1060	167.00	14316	235.00	1296	373.00	510
101.00	5338	168.00	7959	236.00	767	383.00	389
103.00	1651	169.00	1415	237.00	1313	402.00	868
104.00	2752	170.00	508	239.00	412	403.00	1034
105.00	2814	171.00	480	240.00	449	421.00	808
107.00	42584	172.00	1276	241.00	896	422.00	1053
108.00	6894	173.00	1271	242.00	2265	423.00	6543
109.00	723	174.00	3008	243.00	1935	424.00	1142
110.00	74880	175.00	5596	244.00	28416	441.00	20960
111.00	11253	176.00	1441	245.00	3822	442.00	137984
112.00	1504	177.00	2275	246.00	5501	443.00	25592
113.00	392	178.00	909	247.00	991	444.00	2275
116.00	2255	179.00	9640	248.00	196		

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150508-6828.b\D0508002.D

Injection Date: 08-May-2015 08:15:30

Instrument ID: CH732

Operator ID: 003200

Lims ID: DFTPP

Worklist Smp#: 2

Client ID:

Injection Vol: 2.0 ul

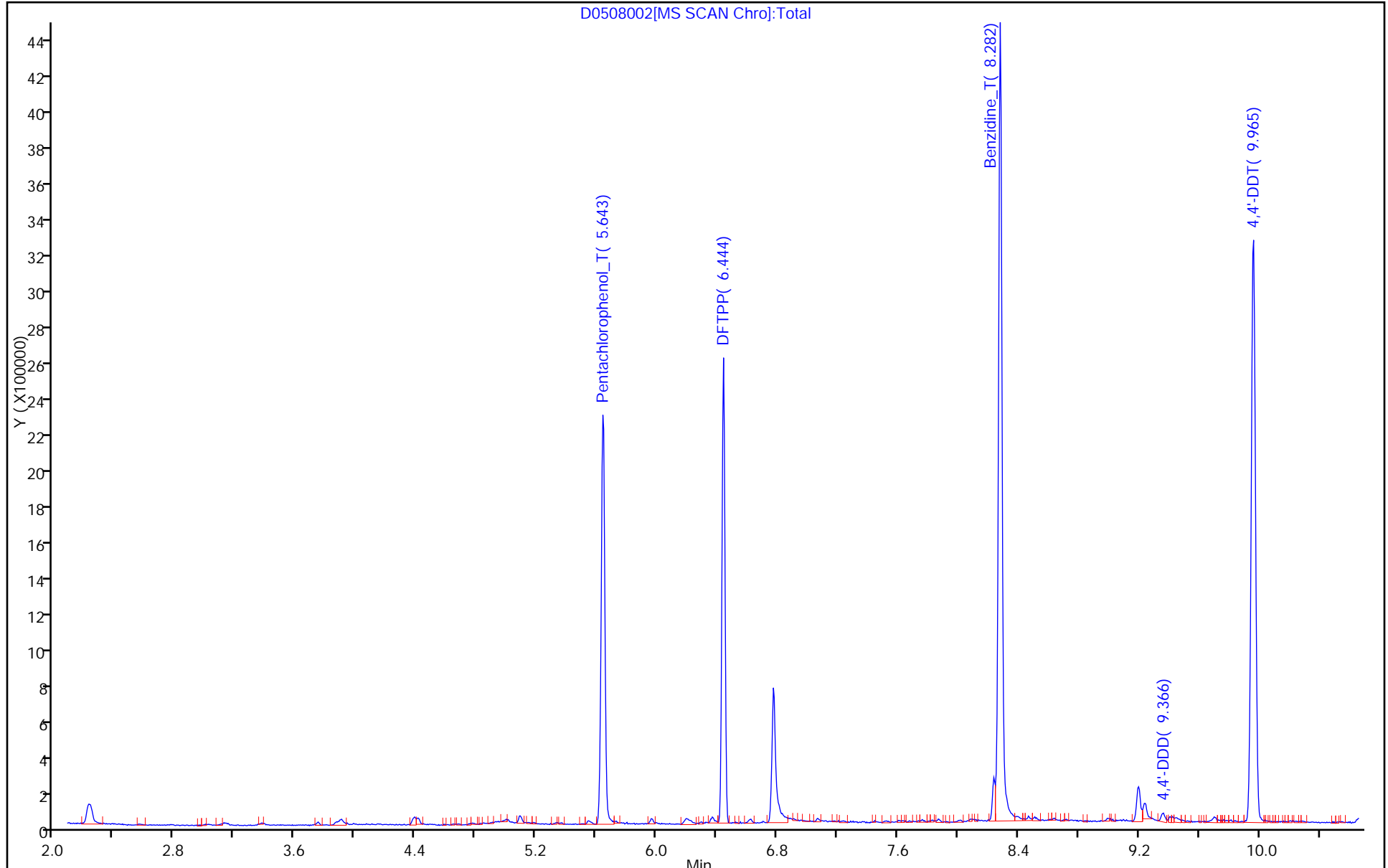
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: BNA\_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150508-6828.b\D0508002.D  
Injection Date: 08-May-2015 08:15:30 Instrument ID: CH732  
Lims ID: DFTPP  
Client ID:  
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH732 Limit Group: BNA 8270D ICAL

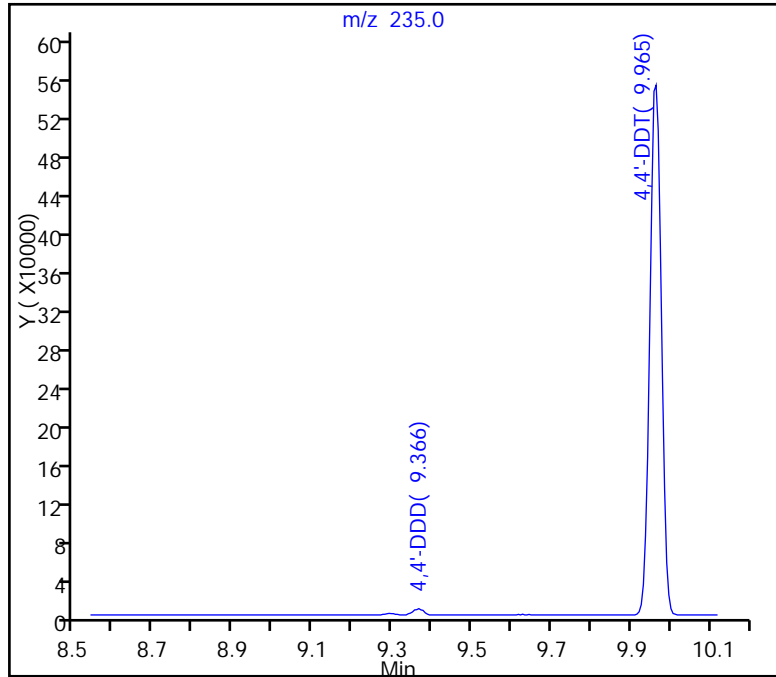
194 4,4'-DDT, Detector: MS SCAN

SW-846 Method

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

194 4,4'-DDT, Area = 1112683  
192 4,4'-DDE, Area = 0  
193 4,4'-DDD, Area = 11689

%Breakdown: 1.04%, Max Limit: 20.00%  
Passed



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150508-6828.b\D0508002.D  
Injection Date: 08-May-2015 08:15:30 Instrument ID: CH732  
Lims ID: DFTPP  
Client ID:  
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH732 Limit Group: BNA 8270D ICAL

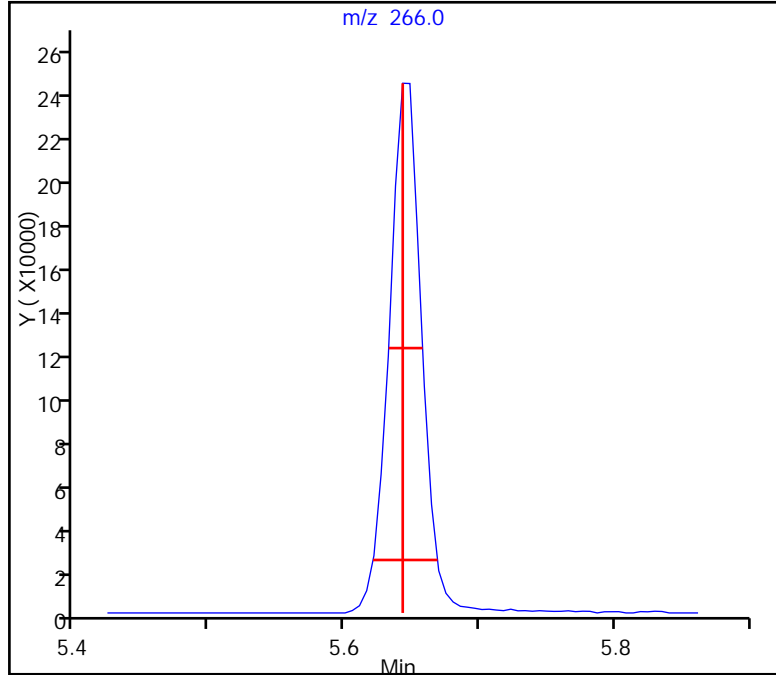
189 Pentachlorophenol\_T, Detector: MS SCAN

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

Back Width = 0.026 (min.)  
Front Width = 0.022 (min.)

Tailing Factor = 1.2, Max. Tailing < 2.00  
Passed

-----



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150508-6828.b\D0508002.D  
Injection Date: 08-May-2015 08:15:30 Instrument ID: CH732  
Lims ID: DFTPP  
Client ID:  
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH732 Limit Group: BNA 8270D ICAL

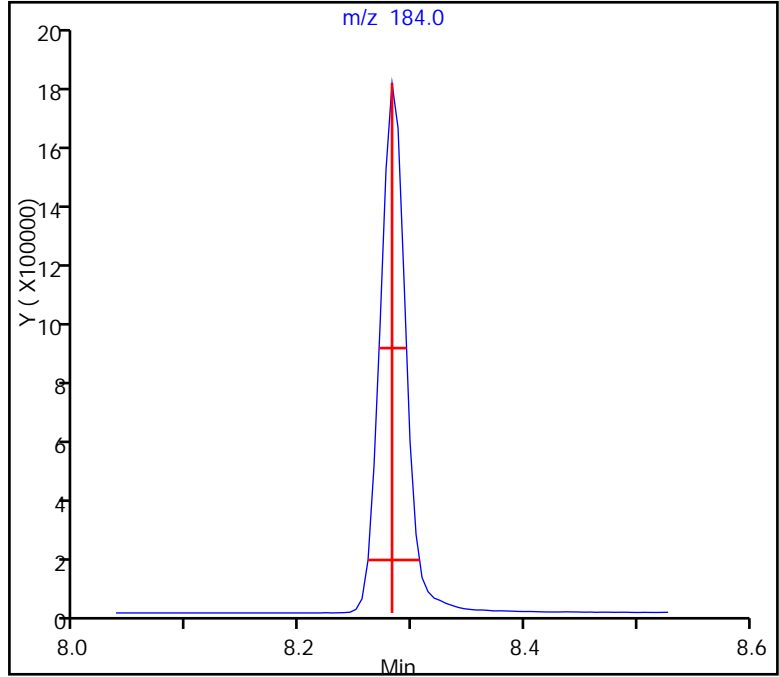
191 Benzidine\_T, Detector: MS SCAN

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

Back Width = 0.025 (min.)  
Front Width = 0.021 (min.)

Tailing Factor = 1.1, Max. Tailing < 2.00  
Passed

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FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 180-140150/1-A  
 Matrix: Water Lab File ID: D0505004.D  
 Analysis Method: 8270D LL Date Collected: \_\_\_\_\_  
 Extract. Method: 3520C Date Extracted: 04/30/2015 10:29  
 Sample wt/vol: 250 (mL) Date Analyzed: 05/05/2015 11:09  
 Con. Extract Vol.: 0.25 (mL) Dilution Factor: 1  
 Injection Volume: 2 (uL) Level: (low/med) Low  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 140564 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-12-7	Anthracene	ND		0.20	0.019
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
191-24-2	Benzo[g,h,i]perylene	ND		0.20	0.029
50-32-8	Benzo[a]pyrene	ND		0.20	0.028
218-01-9	Chrysene	ND		0.20	0.031
53-70-3	Dibenz(a,h)anthracene	ND		0.20	0.027
206-44-0	Fluoranthene	ND		0.20	0.021
86-73-7	Fluorene	ND		0.20	0.024
193-39-5	Indeno[1,2,3-cd]pyrene	ND		0.20	0.043
85-01-8	Phenanthrene	ND		0.20	0.042
129-00-0	Pyrene	ND		0.20	0.023
83-32-9	Acenaphthene	ND		0.20	0.029
208-96-8	Acenaphthylene	ND		0.20	0.022
91-20-3	Naphthalene	ND		0.20	0.023
117-81-7	Bis(2-ethylhexyl) phthalate	ND		2.0	0.44

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	63		27-114
321-60-8	2-Fluorobiphenyl	66		28-109
1718-51-0	Terphenyl-d14 (Surr)	77		20-118
367-12-4	2-Fluorophenol (Surr)	63		20-105
118-79-6	2,4,6-Tribromophenol (Surr)	62		30-118
4165-62-2	Phenol-d5 (Surr)	73		25-105

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150505-6771.b\D0505004.D  
 Lims ID: MB 180-140150/1-A  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 05-May-2015 11:09:30 ALS Bottle#: 3 Worklist Smp#: 4  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0006771-004  
 Operator ID: 003200 Instrument ID: CH732  
 Method: \\PITCHROM\ChromData\CH732\20150505-6771.b\BNA\_CH732.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 06-May-2015 06:09:37 Calib Date: 18-Mar-2015 11:54:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\PITCHROM\ChromData\CH732\20150318-6063.b\D0318011.D  
 Column 1 : Rxi-5SiIMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK033

First Level Reviewer: piccolinov

Date: 06-May-2015 04:37:21

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	6.196	6.207	-0.011	97	217724	8.00	8.00	
* 2 Naphthalene-d8	136	7.489	7.494	-0.005	100	1004626	8.00	8.00	
* 3 Acenaphthene-d10	164	9.204	9.209	-0.005	92	581330	8.00	8.00	
* 4 Phenanthrene-d10	188	10.651	10.657	-0.006	97	922509	8.00	8.00	
* 5 Chrysene-d12	240	14.434	14.445	-0.011	96	685158	8.00	8.00	
* 6 Perylene-d12	264	17.340	17.345	-0.005	94	509260	8.00	8.00	
\$ 7 2-Fluorophenol	112	4.743	4.759	-0.016	92	709089	40.0	25.1	
\$ 8 Phenol-d5	99	5.811	5.828	-0.017	97	1103818	40.0	29.0	
\$ 9 Nitrobenzene-d5	82	6.757	6.768	-0.011	92	1063310	40.0	25.2	
\$ 10 2-Fluorobiphenyl	172	8.531	8.536	-0.005	99	2515368	40.0	26.4	
\$ 11 2,4,6-Tribromophenol	330	9.957	9.962	-0.005	85	252621	40.0	24.9	
\$ 12 Terphenyl-d14	244	12.596	12.601	-0.005	99	2303243	40.0	30.9	
13 1,4-Dioxane	88		1.591						ND
14 N-Nitrosodimethylamine	74		2.184						ND
15 Pyridine	79		2.270						ND
17 Dibromoacetonitrile	120		3.590						ND
18 2-Picoline	93		4.030						ND
19 N-Nitrosomethylethylamine	88		4.233						ND
21 Methyl methanesulfonate	80		4.503						ND
20 Acrylamide	71	4.738	4.597	0.142	26	2436			NC
22 Phenylmercaptan	110	4.743	5.000	-0.257	44	2991			NC
23 N-Nitrosodiethylamine	102		5.115						ND
24 Ethyl methanesulfonate	79		5.256						ND
25 Benzaldehyde	77		5.731						ND
28 Pentachloroethane	167		5.806						ND
26 Phenol	94		5.844						ND
27 Aniline	93		5.854						ND
29 Bis(2-chloroethyl)ether	93		5.924						ND
30 2-Chlorophenol	128		5.988						ND
31 n-Decane	43		6.057						ND
32 1,3-Dichlorobenzene	146		6.148						ND
33 1,4-Dichlorobenzene	146		6.228						ND



Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
34 Benzyl alcohol	108		6.346					ND	
35 1,2-Dichlorobenzene	146		6.383					ND	
36 2-Methylphenol	108		6.469					ND	
37 Indene	116		6.479					ND	
38 2,2'-oxybis[1-chloropropan	45		6.495					ND	
39 N-Nitrosopyrrolidine	100		6.581					ND	
40 Acetophenone	105		6.618					ND	
41 N-Nitrosodi-n-propylamine	70		6.618					ND	
42 4-Methylphenol	108		6.618					ND	
43 N-Nitrosomorpholine	116	6.191	6.632	-0.441	41	9454		NC	
44 2-Toluidine	106		6.664					ND	
45 Hexachloroethane	117		6.741					ND	
46 Nitrobenzene	77		6.789					ND	
47 N-Nitrosopiperidine	114		6.926					ND	
48 Isophorone	82		7.024					ND	
49 2-Nitrophenol	139		7.115					ND	
50 2,4-Dimethylphenol	107		7.147					ND	
51 o,o',o"-Triethylphosphoro	198		7.182					ND	
52 Benzoic acid	122		7.200					ND	
53 Bis(2-chloroethoxy)methane	93		7.233					ND	
54 2,4-Dichlorophenol	162		7.350					ND	
55 alpha,alpha-Dimethyl phene	58	7.489	7.353	0.136	44	1273		NC	
56 1,2,4-Trichlorobenzene	180		7.441					ND	
58 Naphthalene	128		7.516					ND	
61 Hexachloropropene	213		7.526					ND	
59 4-Chloroaniline	127		7.558					ND	
60 2,6-Dichlorophenol	162		7.574					ND	
62 Hexachlorobutadiene	225		7.644					ND	
63 Quinoline	129		7.786					ND	
65 N-Nitrosodi-n-butylamine	84	7.489	7.818	-0.329	42	23936		NC	
66 p-Phenylene diamine	108	7.489	7.834	-0.345	48	102956		NC	
64 Caprolactam	113		7.863					ND	
67 4-Chloro-3-methylphenol	107		8.018					ND	
68 Safrole, Total	162		8.026					ND	
69 2-Methylnaphthalene	142		8.194					ND	
71 1-Methylnaphthalene	142		8.290					ND	
72 Hexachlorocyclopentadiene	237		8.354					ND	
73 1,2,4,5-Tetrachlorobenzene	216		8.360					ND	
74 2,4,6-Trichlorophenol	196		8.461					ND	
75 2,4,5-Trichlorophenol	196		8.493					ND	
180 Isosafrole	162		8.514					ND	
78 1-Chloronaphthalene	162		8.616					ND	
76 1,1'-Biphenyl	154		8.638					ND	
77 2-Chloronaphthalene	162		8.670					ND	
80 1,4-Naphthoquinone	158	8.531	8.750	-0.219	44	4275		NC	
79 2-Nitroaniline	65		8.750					ND	
81 1,4-Dinitrobenzene	168	8.531	8.769	-0.238	31	31047		NC	
82 Dimethyl phthalate	163		8.910					ND	
83 1,3-Dinitrobenzene	168		8.942					ND	
84 2,6-Dinitrotoluene	165		8.969					ND	
85 Acenaphthylene	152		9.076					ND	
86 3-Nitroaniline	138		9.140					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
87 2,4-Dinitrophenol	184		9.236					ND	
88 Acenaphthene	153		9.241					ND	
89 4-Nitrophenol	109		9.279					ND	
92 Pentachlorobenzene	250		9.294					ND	
94 1-Naphthylamine	143		9.340					ND	
91 2,4-Dinitrotoluene	165		9.359					ND	
93 Dibenzofuran	168		9.401					ND	
95 2,3,5,6-Tetrachlorophenol	232		9.476					ND	
96 2,3,4,6-Tetrachlorophenol	232		9.514					ND	
97 2-Naphthylamine	143		9.546					ND	
98 Diethyl phthalate	149	9.572	9.578	-0.006	97	26108		0.2768	
99 Hexadecane	57		9.583					ND	
102 N-Nitro-o-toluidine	152	9.957	9.586	0.371	40	4789		NC	
100 4-Chlorophenyl phenyl ethe	204		9.711					ND	
101 4-Nitroaniline	138		9.727					ND	
103 Fluorene	166		9.733					ND	
104 4,6-Dinitro-2-methylphenol	198		9.754					ND	
105 N-Nitrosodiphenylamine	169		9.824					ND	
90 1,2-Diphenylhydrazine	77		9.866					ND	
107 1,3,5-Trinitrobenzene	213		9.896					ND	
108 Phenacetin	108		9.939					ND	
109 Phorate	121		9.944					ND	
111 Dimethoate	87		10.099					ND	
110 4-Bromophenyl phenyl ether	248		10.187					ND	
114 4-Aminobiphenyl	169	9.957	10.265	-0.307	55	12438		NC	
112 Hexachlorobenzene	284		10.278					ND	
117 Pronamide	173	9.957	10.297	-0.340	56	6419		NC	
118 Pentachloronitrobenzene	237		10.302					ND	
113 Atrazine	200		10.310					ND	
119 Disulfoton	88		10.419					ND	
116 Pentachlorophenol	266		10.454					ND	
115 n-Octadecane	57		10.459					ND	
120 Dinoseb	211		10.545					ND	
123 Hexachlorophene TIC	198		10.600					ND	
121 Phenanthrene	178		10.684					ND	
122 Anthracene	178		10.737					ND	
125 Methyl parathion	109		10.793					ND	
124 Carbazole	167		10.887					ND	
127 Ethyl Parathion	109		11.189					ND	
126 Di-n-butyl phthalate	149		11.218					ND	
128 4-Nitroquinoline-1-oxide	190		11.263					ND	
129 Methapyrilene	58		11.317					ND	
70 Diphenamid	167		11.474					ND	
106 Diphenylamine	167		11.620					ND	
130 Isodrin	193		11.821					ND	
57 Azobenzene	77		11.902					ND	
131 Fluoranthene	202		12.094					ND	
134 1,2,3,4 -Tetrachlorobenzen	216	12.591	12.215	0.376	49	4131		NC	
132 Benzidine	184		12.238					ND	
133 Pyrene	202		12.425					ND	
135 p-Dimethylamino azobenzene	225	12.596	12.428	0.168	44	12322		NC	
136 Chlorobenzilate	139		12.783					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
137 Famphur	218		12.850					ND	
139 3,3'-Dimethylbenzidine	212	12.596	12.936	-0.340	56	156632			NC
140 Kepone	272		13.030					ND	
138 Butyl benzyl phthalate	149		13.355					ND	
141 2-Acetylaminofluorene	181		13.363					ND	
142 Thionazin	97		13.789					ND	
143 4,4'-Methylene bis(2-chlor	231		13.881					ND	
144 3,3'-Dichlorobenzidine	252		14.354					ND	
145 Bis(2-ethylhexyl) phthalat	149		14.407					ND	
146 Benzo[a]anthracene	228		14.423					ND	
147 Chrysene	228		14.498					ND	
148 Sulfotepp	97		14.530					ND	
149 6-Methylchrysene	242	14.439	14.907	-0.468	57	11865			NC
150 Di-n-octyl phthalate	149		15.716					ND	
151 7,12-Dimethylbenz(a)anthra	256		16.560					ND	
152 Benzo[b]fluoranthene	252		16.571					ND	
153 Benzo[k]fluoranthene	252		16.630					ND	
219 Benzo[e]pyrene	252		17.132					ND	
154 Benzo[a]pyrene	252		17.239					ND	
155 3-Methylcholanthrene	268		17.524					ND	
156 Dibenz[a,h]acridine	279		18.636					ND	
220 Dibenz[a,j]acridine	279		19.247					ND	
157 Indeno[1,2,3-cd]pyrene	276		19.728					ND	
158 Dibenz(a,h)anthracene	278		19.771					ND	
159 Benzo[g,h,i]perylene	276		20.428					ND	
212 2,3,7,8-TCDD TIC	1		0.000					ND	
178 Trifluralin	306		0.000					ND	
173 Octachlorocyclopentene	307		0.000					ND	
170 4-tert-Octylphenol	135		0.000					ND	
169 Octachlorostyrene	308		0.000					ND	
177 1,2,3,4-Tetrahydronaphthal	104		0.000					ND	
165 Benzotrichloride	159		0.000					ND	
176 Dimethylformamide	73		0.000					ND	
182 4-Chlorophenol	128		0.000					ND	
167 Phthalic anhydride	104		0.000					ND	
214 1-Phenyl-1-(4-methylphenyl	1		0.000					ND	
218 Benzotrichloride TIC	1		0.000					ND	
183 2,3-Dichlorophenol	162		0.000					ND	
213 3-Methylphenol	1		0.000					ND	
216 1-Phenyl-1-(2,4-dimethylph	1		0.000					ND	
185 4-Nitrobiphenyl	199		0.000					ND	
217 1-Phenyl-1-(4-methylphenyl	1		0.000					ND	
166 4-Chloro-3-nitro-alpha,alp	179		0.000					ND	
160 n,n'-Dimethylaniline	120		0.000					ND	
188 2-Bromonaphthalene	127		0.000					ND	
179 2,5-Dichlorophenol	162		0.000					ND	
184 Diallate Peak 1	86		0.000					ND	
172 Carbaryl	144		0.000					ND	
164 Aramite Peak 2	185		0.000					ND	
162 3-Chlorobenzoic Acid	139		0.000					ND	
168 Aramite Peak 1	185		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
174 2-Chlorobenzoic Acid	139		0.000					ND	
215 1-Phenyl-1-(2,4-dimethylph	1		0.000					ND	
161 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
186 o-Phenylphenol	1		0.000					ND	
181 4-Chlorobenzoic Acid	139		0.000					ND	
175 1,2,3-Trimethylbenzene	105		0.000					ND	
171 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
163 Diallate Peak 2	86		0.000					ND	
189 Pentachlorophenol_T	266		5.627					ND	
191 Benzidine_T	184		8.293					ND	
193 4,4'-DDD	235		9.137					ND	
192 4,4'-DDE	246		9.137					ND	
194 4,4'-DDT	235		9.992					ND	
S 195 Aramite, Total	185		1.000					ND	
S 198 Diallate	86		0.000					ND	
S 199 Total Cresols	108		0.000					ND	
S 196 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
S 197 Methyl Phenols, Total	108		0.000					ND	
T 221 Phenyl ether TIC	170	10.651	11.500	-0.849	0	4772		0.0657	
T 200 Quinoline TIC	129		0.000					ND	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

**Reagents:**

SVTAPITINTRNi\_00007

Amount Added: 1.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150505-6771.b\D0505004.D

Injection Date: 05-May-2015 11:09:30

Instrument ID: CH732

Operator ID: 003200

Lims ID: MB 180-140150/1-A

Worklist Smp#: 4

Client ID:

Injection Vol: 2.0 ul

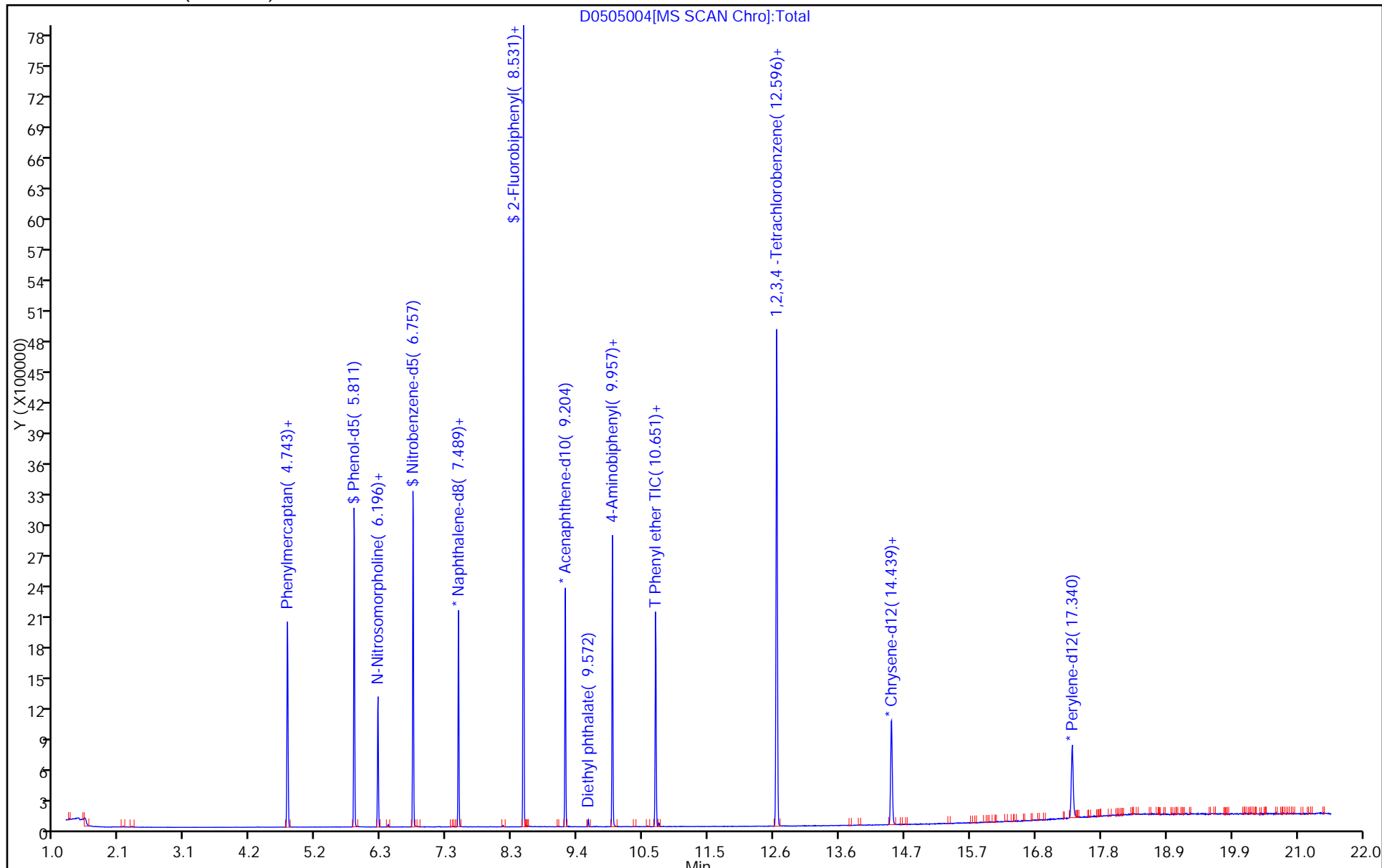
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: BNA\_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 180-140150/2-A  
 Matrix: Water Lab File ID: D0505005.D  
 Analysis Method: 8270D LL Date Collected: \_\_\_\_\_  
 Extract. Method: 3520C Date Extracted: 04/30/2015 10:29  
 Sample wt/vol: 250 (mL) Date Analyzed: 05/05/2015 11:36  
 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.: 140564 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-12-7	Anthracene	14.4		0.20	0.019
56-55-3	Benzo[a]anthracene	14.1		0.20	0.037
205-99-2	Benzo[b]fluoranthene	15.2		0.20	0.049
207-08-9	Benzo[k]fluoranthene	15.7		0.20	0.030
191-24-2	Benzo[g,h,i]perylene	15.3		0.20	0.029
50-32-8	Benzo[a]pyrene	15.5		0.20	0.028
218-01-9	Chrysene	13.7		0.20	0.031
53-70-3	Dibenz(a,h)anthracene	15.6		0.20	0.027
206-44-0	Fluoranthene	13.7		0.20	0.021
86-73-7	Fluorene	14.2		0.20	0.024
193-39-5	Indeno[1,2,3-cd]pyrene	15.7		0.20	0.043
85-01-8	Phenanthrene	14.4		0.20	0.042
129-00-0	Pyrene	14.7		0.20	0.023
83-32-9	Acenaphthene	13.2		0.20	0.029
208-96-8	Acenaphthylene	13.7		0.20	0.022
91-20-3	Naphthalene	12.8		0.20	0.023
117-81-7	Bis(2-ethylhexyl) phthalate	14.7		2.0	0.44

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	63		27-114
321-60-8	2-Fluorobiphenyl	64		28-109
1718-51-0	Terphenyl-d14 (Surr)	62		20-118
367-12-4	2-Fluorophenol (Surr)	62		20-105
118-79-6	2,4,6-Tribromophenol (Surr)	65		30-118
4165-62-2	Phenol-d5 (Surr)	69		25-105

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150505-6771.b\D0505005.D  
 Lims ID: LCS 180-140150/2-A  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 05-May-2015 11:36:30 ALS Bottle#: 4 Worklist Smp#: 5  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0006771-005  
 Operator ID: 003200 Instrument ID: CH732  
 Method: \\PITCHROM\ChromData\CH732\20150505-6771.b\BNA\_CH732.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 06-May-2015 06:09:37 Calib Date: 18-Mar-2015 11:54:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\PITCHROM\ChromData\CH732\20150318-6063.b\D0318011.D  
 Column 1 : Rxi-5SilMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK033

First Level Reviewer: piccolinov

Date: 06-May-2015 04:38:13

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.201	6.207	-0.006	95	174109	8.00	8.00	
* 2 Naphthalene-d8	136	7.489	7.494	-0.005	100	788643	8.00	8.00	
* 3 Acenaphthene-d10	164	9.204	9.209	-0.005	90	462643	8.00	8.00	
* 4 Phenanthrene-d10	188	10.657	10.657	0.000	97	752043	8.00	8.00	
* 5 Chrysene-d12	240	14.444	14.445	-0.001	87	685658	8.00	8.00	
* 6 Perylene-d12	264	17.351	17.345	0.006	94	470408	8.00	8.00	
\$ 7 2-Fluorophenol	112	4.748	4.759	-0.011	90	556481	40.0	24.6	
\$ 8 Phenol-d5	99	5.817	5.828	-0.011	97	842788	40.0	27.7	
\$ 9 Nitrobenzene-d5	82	6.762	6.768	-0.006	90	836526	40.0	25.3	
\$ 10 2-Fluorobiphenyl	172	8.536	8.536	0.000	98	1957602	40.0	25.8	
\$ 11 2,4,6-Tribromophenol	330	9.962	9.962	0.000	87	213688	40.0	25.8	
\$ 12 Terphenyl-d14	244	12.596	12.601	-0.005	98	1839212	40.0	24.6	
13 1,4-Dioxane	88	1.570	1.591	-0.021	92	155291	40.0	22.4	
14 N-Nitrosodimethylamine	74	2.163	2.184	-0.021	74	210191	40.0	22.4	
15 Pyridine	79	2.243	2.270	-0.027	90	400946	40.0	24.5	
25 Benzaldehyde	77	5.721	5.731	-0.010	87	465297	40.0	31.7	
26 Phenol	94	5.833	5.844	-0.011	94	954033	40.0	27.6	
27 Aniline	93	5.843	5.854	-0.011	89	1040940	40.0	27.2	
29 Bis(2-chloroethyl)ether	93	5.918	5.924	-0.006	95	671169	40.0	27.5	
30 2-Chlorophenol	128	5.977	5.988	-0.011	97	777232	40.0	26.3	
31 n-Decane	43	6.046	6.057	-0.011	93	904979	40.0	26.2	
32 1,3-Dichlorobenzene	146	6.143	6.148	-0.005	98	876584	40.0	25.5	
33 1,4-Dichlorobenzene	146	6.217	6.228	-0.011	93	915726	40.0	26.0	
34 Benzyl alcohol	108	6.340	6.346	-0.006	91	489499	40.0	26.4	
35 1,2-Dichlorobenzene	146	6.378	6.383	-0.005	92	877139	40.0	25.6	
36 2-Methylphenol	108	6.458	6.469	-0.011	96	706834	40.0	27.0	
37 Indene	116	6.468	6.479	-0.011	85	1309791	40.0	27.5	
38 2,2'-oxybis[1-chloropropan	45	6.484	6.495	-0.011	92	1298622	40.0	25.3	
40 Acetophenone	105	6.607	6.618	-0.011	79	964311	40.0	24.4	
41 N-Nitrosodi-n-propylamine	70	6.607	6.618	-0.011	75	457004	40.0	24.6	
42 4-Methylphenol	108	6.613	6.618	-0.005	77	699496	40.0	26.0	
45 Hexachloroethane	117	6.730	6.741	-0.011	96	398487	40.0	26.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
46 Nitrobenzene	77	6.784	6.789	-0.005	88	849940	40.0	25.9	
48 Isophorone	82	7.019	7.024	-0.005	97	1506827	40.0	26.0	
49 2-Nitrophenol	139	7.104	7.115	-0.011	96	455307	40.0	25.0	
50 2,4-Dimethylphenol	107	7.142	7.147	-0.005	57	851781	40.0	25.7	
52 Benzoic acid	122	7.216	7.200	0.016	85	485412	40.0	25.5	
53 Bis(2-chloroethoxy)methane	93	7.227	7.233	-0.006	93	950222	40.0	26.7	
54 2,4-Dichlorophenol	162	7.345	7.350	-0.005	95	734562	40.0	25.3	
56 1,2,4-Trichlorobenzene	180	7.435	7.441	-0.006	91	805981	40.0	24.2	
58 Naphthalene	128	7.510	7.516	-0.006	97	2729483	40.0	25.6	
59 4-Chloroaniline	127	7.553	7.558	-0.005	79	1107890	40.0	25.9	
60 2,6-Dichlorophenol	162	7.569	7.574	-0.005	96	732719	40.0	25.4	
62 Hexachlorobutadiene	225	7.638	7.644	-0.006	97	443542	40.0	22.3	
64 Caprolactam	113	7.868	7.863	0.005	72	266441	40.0	27.4	
67 4-Chloro-3-methylphenol	107	8.018	8.018	0.000	93	782066	40.0	25.7	
69 2-Methylnaphthalene	142	8.189	8.194	-0.005	90	1958597	40.0	26.0	
71 1-Methylnaphthalene	142	8.285	8.290	-0.005	91	1736414	40.0	24.5	
72 Hexachlorocyclopentadiene	237	8.349	8.354	-0.005	95	481213	40.0	23.9	
73 1,2,4,5-Tetrachlorobenzene	216	8.354	8.360	-0.006	98	750042	40.0	24.9	
74 2,4,6-Trichlorophenol	196	8.456	8.461	-0.005	94	543238	40.0	26.4	
75 2,4,5-Trichlorophenol	196	8.493	8.493	0.000	95	575641	40.0	26.4	
76 1,1'-Biphenyl	154	8.632	8.638	-0.006	94	2339767	40.0	26.9	
77 2-Chloronaphthalene	162	8.664	8.670	-0.006	71	1748469	40.0	24.8	
79 2-Nitroaniline	65	8.744	8.750	-0.006	84	564723	40.0	28.2	
82 Dimethyl phthalate	163	8.905	8.910	-0.005	98	1954906	40.0	26.6	
83 1,3-Dinitrobenzene	168	8.942	8.942	0.000	65	313215	40.0	28.3	
84 2,6-Dinitrotoluene	165	8.969	8.969	0.000	71	440475	40.0	27.3	
85 Acenaphthylene	152	9.070	9.076	-0.006	91	3073642	40.0	27.5	
86 3-Nitroaniline	138	9.140	9.140	0.000	95	531106	40.0	27.0	
87 2,4-Dinitrophenol	184	9.236	9.236	0.000	56	515489	80.0	47.9	
88 Acenaphthene	153	9.236	9.241	-0.005	87	1801786	40.0	26.4	
89 4-Nitrophenol	109	9.278	9.279	-0.001	53	600459	80.0	55.3	
91 2,4-Dinitrotoluene	165	9.359	9.359	0.000	91	587109	40.0	27.7	
93 Dibenzofuran	168	9.401	9.401	0.000	89	2623460	40.0	26.8	
96 2,3,4,6-Tetrachlorophenol	232	9.514	9.514	0.000	75	469618	40.0	25.2	
98 Diethyl phthalate	149	9.578	9.578	0.000	97	2041423	40.0	27.2	
99 Hexadecane	57	9.583	9.583	0.000	91	1520331	40.0	26.1	
100 4-Chlorophenyl phenyl ethe	204	9.711	9.711	0.000	96	919521	40.0	25.6	
101 4-Nitroaniline	138	9.727	9.727	0.000	61	558267	40.0	28.8	
103 Fluorene	166	9.733	9.733	0.000	83	2161396	40.0	28.4	
104 4,6-Dinitro-2-methylphenol	198	9.754	9.754	0.000	63	708765	80.0	58.0	
105 N-Nitrosodiphenylamine	169	9.818	9.824	-0.006	61	3054316	80.0	57.2	
90 1,2-Diphenylhydrazine	77	9.866	9.866	0.000	100	2332608	40.0	30.5	
110 4-Bromophenyl phenyl ether	248	10.187	10.187	0.000	65	525128	40.0	26.7	
112 Hexachlorobenzene	284	10.272	10.278	-0.006	91	524526	40.0	26.7	
113 Atrazine	200	10.304	10.310	-0.006	68	498617	40.0	32.1	
116 Pentachlorophenol	266	10.454	10.454	0.000	82	667828	80.0	48.3	
115 n-Octadecane	57	10.459	10.459	0.000	92	1631838	40.0	26.3	
121 Phenanthrene	178	10.678	10.684	-0.006	97	3259285	40.0	28.8	
122 Anthracene	178	10.732	10.737	-0.005	97	3337100	40.0	28.9	
124 Carbazole	167	10.886	10.887	-0.001	82	3045865	40.0	30.1	
126 Di-n-butyl phthalate	149	11.212	11.218	-0.006	99	3709121	40.0	29.3	
57 Azobenzene	77		11.902				ND	ND	



Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
131 Fluoranthene	202	12.094	12.094	0.000	98	3130732	40.0	27.5	
132 Benzidine	184	12.233	12.238	-0.005	99	659890	40.0	14.1	
133 Pyrene	202	12.420	12.425	-0.005	97	3330869	40.0	29.4	
138 Butyl benzyl phthalate	149	13.349	13.355	-0.006	97	1470845	40.0	29.3	
144 3,3'-Dichlorobenzidine	252	14.348	14.354	-0.006	74	793741	40.0	24.0	
145 Bis(2-ethylhexyl) phthalat	149	14.402	14.407	-0.005	97	2041113	40.0	29.3	
146 Benzo[a]anthracene	228	14.423	14.423	0.000	98	2802201	40.0	28.2	
147 Chrysene	228	14.498	14.498	0.000	95	2558246	40.0	27.4	
150 Di-n-octyl phthalate	149	15.711	15.716	-0.005	99	3175300	40.0	34.7	
152 Benzo[b]fluoranthene	252	16.576	16.571	0.005	93	2324384	40.0	30.5	
153 Benzo[k]fluoranthene	252	16.629	16.630	-0.001	94	2341560	40.0	31.3	
154 Benzo[a]pyrene	252	17.238	17.239	-0.001	78	2127938	40.0	31.0	
157 Indeno[1,2,3-cd]pyrene	276	19.744	19.728	0.016	38	2270768	40.0	31.4	M
158 Dibenz(a,h)anthracene	278	19.765	19.771	-0.006	67	1878675	40.0	31.3	
159 Benzo[g,h,i]perylene	276	20.433	20.428	0.005	88	1880551	40.0	30.5	
S 199 Total Cresols	108				0		80.0	53.0	
S 197 Methyl Phenols,Total	108				0		80.0	53.0	

### QC Flag Legend

#### Processing Flags

ND - Not Detected or Marked ND

#### Review Flags

M - Manually Integrated

### Reagents:

SVTAPITINTRNi\_00007

Amount Added: 1.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150505-6771.b\D0505005.D

Injection Date: 05-May-2015 11:36:30

Instrument ID: CH732

Operator ID: 003200

Lims ID: LCS 180-140150/2-A

Worklist Smp#: 5

Client ID:

Injection Vol: 2.0 ul

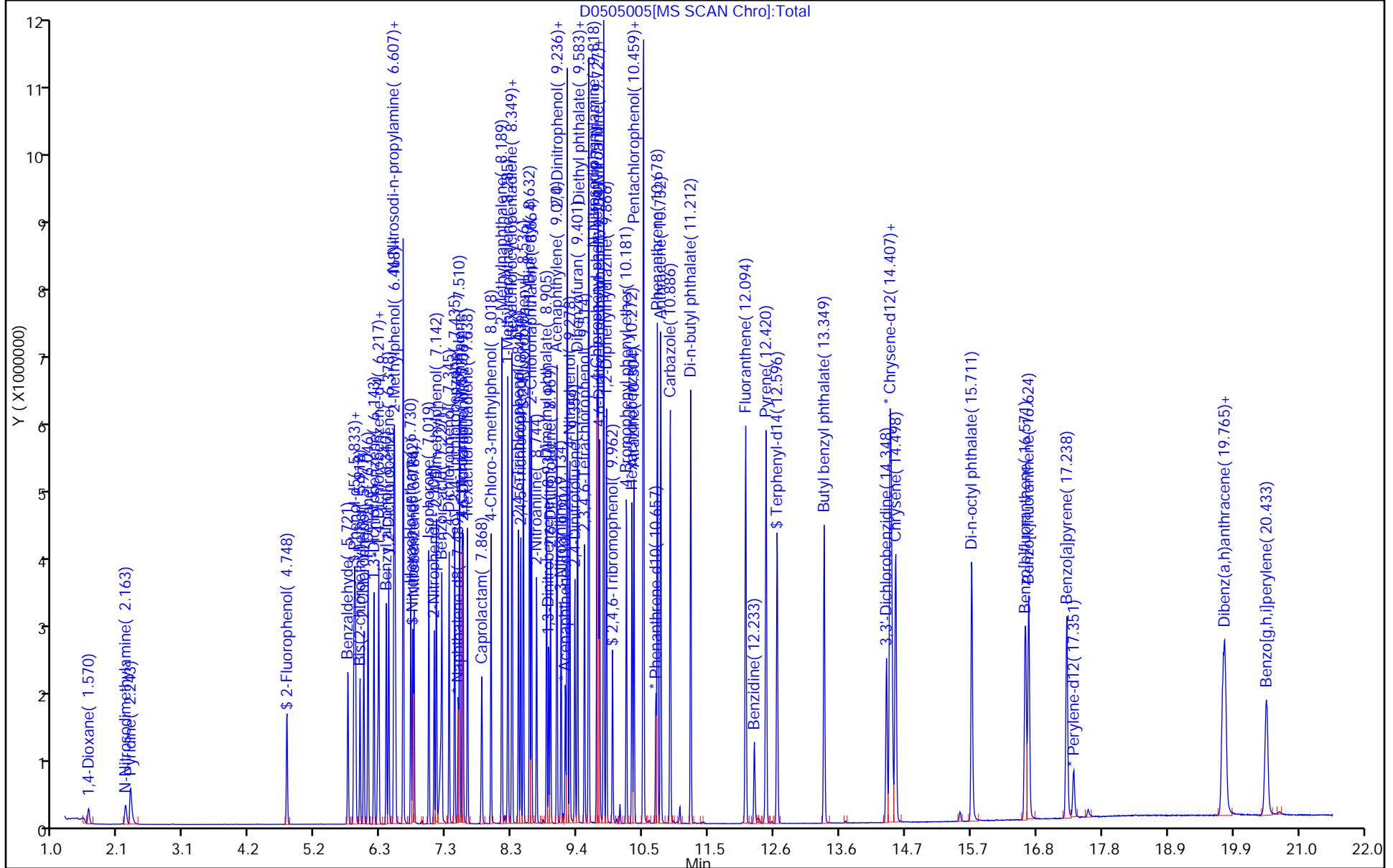
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: BNA\_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



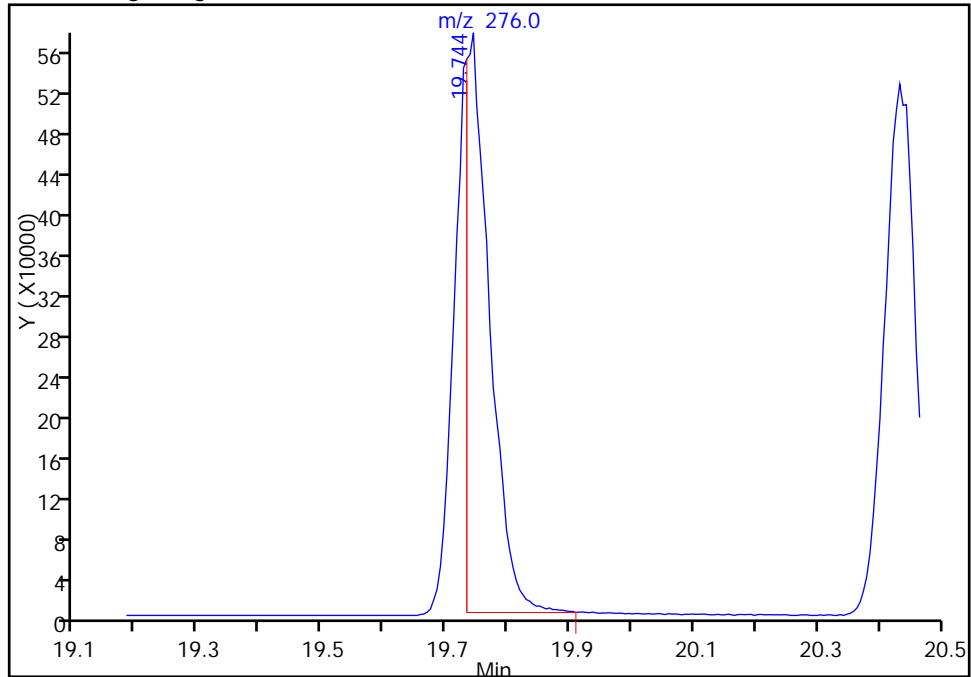
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150505-6771.b\D0505005.D  
Injection Date: 05-May-2015 11:36:30 Instrument ID: CH732  
Lims ID: LCS 180-140150/2-A  
Client ID:  
Operator ID: 003200 ALS Bottle#: 4 Worklist Smp#: 5  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH732 Limit Group: BNA 8270D ICAL  
Column: Rxi-5SiIMS (0.32 mm) Detector: MS SCAN

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

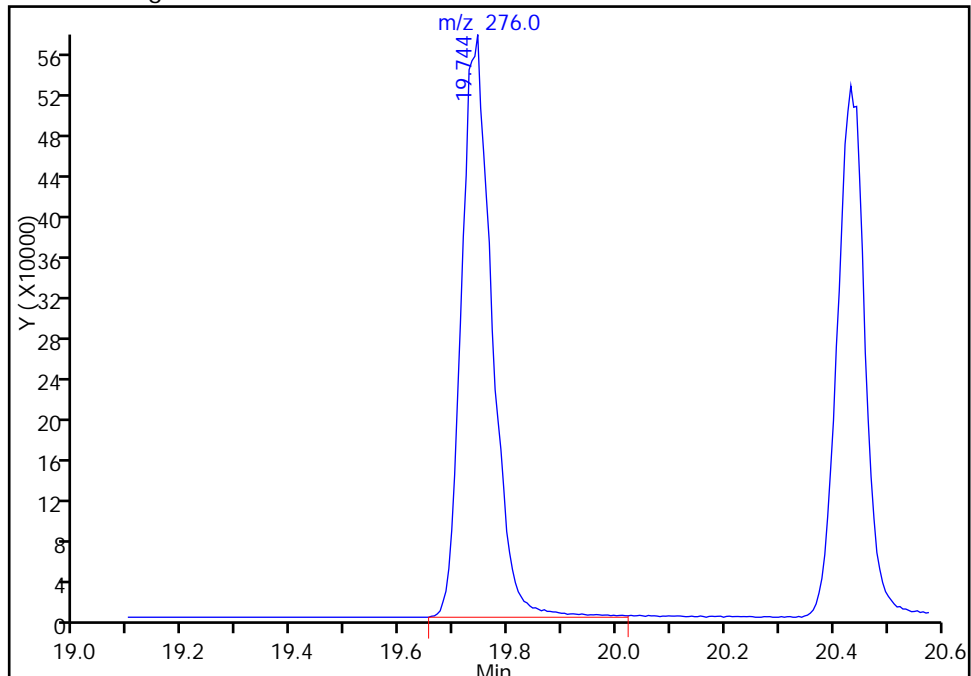
Processing Integration Results

RT: 19.74  
Area: 1519469  
Amount: 21.029394  
Amount Units: ng



Manual Integration Results

RT: 19.74  
Area: 2270768  
Amount: 31.427344  
Amount Units: ng



Reviewer: piccolinov, 06-May-2015 04:38:13  
Audit Action: Manually Integrated  
Audit Reason: Poor chromatography

## GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Instrument ID: CH732 Start Date: 02/03/2015 05:37Analysis Batch Number: 132436 End Date: 02/03/2015 10:48

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-132436/2		02/03/2015 05:37	1	D0203002.D	Rxi-5SilMS 0.32 (mm)
IC 180-132436/3		02/03/2015 05:53	1	D0203003.D	Rxi-5SilMS 0.32 (mm)
IC 180-132436/4		02/03/2015 06:20	1	D0203004.D	Rxi-5SilMS 0.32 (mm)
IC 180-132436/5		02/03/2015 06:46	1	D0203005.D	Rxi-5SilMS 0.32 (mm)
ICIS 180-132436/6		02/03/2015 07:13	1	D0203006.D	Rxi-5SilMS 0.32 (mm)
IC 180-132436/7		02/03/2015 07:40	1	D0203007.D	Rxi-5SilMS 0.32 (mm)
IC 180-132436/8		02/03/2015 08:07	1	D0203008.D	Rxi-5SilMS 0.32 (mm)
IC 180-132436/9		02/03/2015 08:33	1	D0203009.D	Rxi-5SilMS 0.32 (mm)
IC 180-132436/10		02/03/2015 09:00	1	D0203010.D	Rxi-5SilMS 0.32 (mm)
ICV 180-132436/11		02/03/2015 09:27	1		Rxi-5SilMS 0.32 (mm)
ICV 180-132436/12		02/03/2015 09:54	1		Rxi-5SilMS 0.32 (mm)
ICV 180-132436/13		02/03/2015 10:21	1		Rxi-5SilMS 0.32 (mm)
ICV 180-132436/14		02/03/2015 10:48	1		Rxi-5SilMS 0.32 (mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Instrument ID: CH732 Start Date: 05/05/2015 10:27

Analysis Batch Number: 140564 End Date: 05/05/2015 20:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-140564/2		05/05/2015 10:27	1	D0505002.D	Rxi-5SilMS 0.32 (mm)
CCVIS 180-140564/3		05/05/2015 10:42	1	D0505003.D	Rxi-5SilMS 0.32 (mm)
MB 180-140150/1-A		05/05/2015 11:09	1	D0505004.D	Rxi-5SilMS 0.32 (mm)
LCS 180-140150/2-A		05/05/2015 11:36	1	D0505005.D	Rxi-5SilMS 0.32 (mm)
ZZZZZ		05/05/2015 17:03	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		05/05/2015 17:30	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		05/05/2015 17:57	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		05/05/2015 18:25	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		05/05/2015 18:52	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		05/05/2015 19:19	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		05/05/2015 19:47	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		05/05/2015 20:14	1		Rxi-5SilMS 0.32 (mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Instrument ID: CH732 Start Date: 05/08/2015 08:15

Analysis Batch Number: 140958 End Date: 05/08/2015 20:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-140958/2		05/08/2015 08:15	1	D0508002.D	Rxi-5SilMS 0.32 (mm)
CCVIS 180-140958/3		05/08/2015 08:31	1	D0508003.D	Rxi-5SilMS 0.32 (mm)
ZZZZZ		05/08/2015 09:47	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		05/08/2015 11:26	1		Rxi-5SilMS 0.32 (mm)
180-43409-1	PW-DE01	05/08/2015 13:12	1	D0508014.D	Rxi-5SilMS 0.32 (mm)
180-43409-2	PW-F05	05/08/2015 13:38	1	D0508015.D	Rxi-5SilMS 0.32 (mm)
ZZZZZ		05/08/2015 16:01	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		05/08/2015 16:27	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		05/08/2015 16:54	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		05/08/2015 17:20	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		05/08/2015 17:47	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		05/08/2015 18:13	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		05/08/2015 18:40	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		05/08/2015 19:07	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		05/08/2015 19:33	1		Rxi-5SilMS 0.32 (mm)
ZZZZZ		05/08/2015 20:00	1		Rxi-5SilMS 0.32 (mm)

## GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Batch Number: 140150 Batch Start Date: 04/30/15 14:25 Batch Analyst: Trout, BillBatch Method: 3520C Batch End Date: 05/01/15 08:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	FirstAdjustpH	OPLVISPKMIXli 00038	OPQL8270SURI 00029
MB 180-140150/1		3520C, 8270D LL		5 SU	250 mL	0.25 mL	2		25 uL
LCS 180-140150/2		3520C, 8270D LL		5 SU	250 mL	0.25 mL	2	25 uL	25 uL
180-43409-A-1	PW-DE01	3520C, 8270D LL	T	7 SU	270 mL	0.25 mL	2		25 uL
180-43409-A-2	PW-F05	3520C, 8270D LL	T	7 SU	260 mL	0.25 mL	2		25 uL

Batch Notes	
Acid used for pH adjustment	1:1 Sulfuric acid
Acid used for pH adjust Lot #	1455123
Person's name who did the concentration	cdm
Time the first extraction ended 24hr	0845
Time the first extraction started 24 hr	1420
N-evap #	1
Na2SO4 Lot Number	1505618
pH Paper Lot Number	Ph paper HC432654
Prep Solvent Lot #	1543718
Prep Solvent Name	Methylene chloride
Prep Solvent Volume Used	100 mL
Person's name who did the prep	BT
Sufficient volume for MS/MSD?	Yes
Uncorrected N-evap Temperature	26 Degrees C
Uncorrected Temperature	75 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# **METALS**



COVER PAGE  
METALS

Lab Name: TestAmerica Pittsburgh Job Number: 180-43409-1

SDG No.: \_\_\_\_\_

Project: Sparrows Point Trust Offshore Investigat

Client Sample ID	Lab Sample ID
<u>PW-DE01</u>	<u>180-43409-1</u>
<u>PW-F05</u>	<u>180-43409-2</u>

Comments:

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

Client Sample ID: PW-DE01

Lab Sample ID: 180-43409-1

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG ID.: \_\_\_\_\_

Matrix: Water

Date Sampled: 04/23/2015 12:30

Reporting Basis: WET

Date Received: 04/24/2015 08:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-92-1	Lead	10	10	0.19	ug/L			10	6020A
7440-02-0	Nickel	20	10	1.7	ug/L			10	6020A
7440-66-6	Zinc	160	50	9.6	ug/L			10	6020A
7440-50-8	Copper	11	20	2.4	ug/L	J		10	6020A
7440-47-3	Chromium	37	20	5.4	ug/L			10	6020A
7440-43-9	Cadmium	ND	10	1.1	ug/L			10	6020A

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

Client Sample ID: PW-F05

Lab Sample ID: 180-43409-2

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG ID.: \_\_\_\_\_

Matrix: Water

Date Sampled: 04/23/2015 15:00

Reporting Basis: WET

Date Received: 04/24/2015 08:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-92-1	Lead	1.1	10	0.19	ug/L	J		10	6020A
7440-02-0	Nickel	ND	10	1.7	ug/L			10	6020A
7440-66-6	Zinc	ND	50	9.6	ug/L			10	6020A
7440-50-8	Copper	ND	20	2.4	ug/L			10	6020A
7440-47-3	Chromium	ND	20	5.4	ug/L			10	6020A

2A-IN  
 CALIBRATION VERIFICATIONS  
 METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

ICV Source: MICVX\_00031 Concentration Units: ug/L

CCV Source: MCCV1X\_00075

Analyte	ICV 180-140450/5 05/01/2015 11:03				CCV 180-140450/10 05/01/2015 11:54				CCV 180-140450/34 05/01/2015 13:31			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
<b>Cadmium</b>	82.7		80.0	103	106		100	106	100		100	100
<b>Chromium</b>	81.8		80.0	102	102		100	102	102		100	102
<b>Copper</b>	82.8		80.0	104	102		100	102	106		100	106
<b>Lead</b>	84.4		80.0	106	106		100	106	109		100	109
<b>Nickel</b>	82.1		80.0	103	102		100	102	104		100	104
<b>Zinc</b>	84.9		80.0	106	106		100	106	105		100	105

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.: 180-43409-1

SDG No.: \_\_\_\_\_

ICV Source: MICVX\_00031 Concentration Units: ug/L

CCV Source: MCCV1X\_00075

Analyte	CCV 180-140450/46 05/01/2015 14:20				CCV 180-140450/58 05/01/2015 15:09				CCV 180-140450/70 05/01/2015 15:57			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
<b>Cadmium</b>	101		100	101	101		100	101	100		100	100
<b>Chromium</b>	102		100	102	103		100	103	99.7		100	100
<b>Copper</b>	105		100	105	106		100	106	104		100	104
<b>Lead</b>	106		100	106	103		100	103	106		100	106
<b>Nickel</b>	104		100	104	105		100	105	103		100	103
<b>Zinc</b>	103		100	103	106		100	106	104		100	104

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.  
 Italicized analytes were not requested for this sequence.

2A-IN  
 CALIBRATION VERIFICATIONS  
 METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

ICV Source: MICVX\_00031 Concentration Units: ug/L

CCV Source: MCCV1X\_00075

Analyte	CCV 180-140450/81 05/01/2015 16:49											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
<b>Cadmium</b>	100		100	100								
<b>Chromium</b>	102		100	102								
<b>Copper</b>	105		100	105								
<b>Lead</b>	106		100	106								
<b>Nickel</b>	104		100	104								
<b>Zinc</b>	102		100	102								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.  
 Italicized analytes were not requested for this sequence.

2B-IN  
CRQL CHECK STANDARD  
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1  
 SDG No.: \_\_\_\_\_  
 Method: 6020A Instrument ID: M  
 Lab Sample ID: CRI 180-140450/7 Concentration Units: ug/L  
 CRQL Check Standard Source: MCRIX\_00066

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Lead	1.00	1.09		109	70-130
Nickel	1.00	1.04		104	70-130
Zinc	5.00	6.00		120	70-130
Copper	2.00	2.23		112	70-130
Chromium	2.00	2.14		107	70-130
Cadmium	1.00	1.06		106	70-130

Lab Sample ID: CRI 180-140450/76 Concentration Units: ug/L  
 CRQL Check Standard Source: MCRIX\_00066

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Lead	1.00	1.08		108	70-130
Nickel	1.00	1.01		101	70-130
Zinc	5.00	5.67		113	70-130
Copper	2.00	2.16		108	70-130
Chromium	2.00	2.09		105	70-130
Cadmium	1.00	1.12		112	70-130

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.: 180-43409-1

SDG No.: \_\_\_\_\_

Concentration Units: ug/L

Analyte	RL	ICB 180-140450/6 05/01/2015 11:07		CCB1 180-140450/11 05/01/2015 11:57		CCB3 180-140450/35 05/01/2015 13:37		CCB4 180-140450/47 05/01/2015 14:27	
		Found	C	Found	C	Found	C	Found	C
<b>Cadmium</b>	1.0	ND		ND		ND		ND	
<b>Chromium</b>	2.0	ND		ND		ND		ND	
<b>Copper</b>	2.0	0.418	J	0.402	J	0.479	J	0.487	J
<b>Lead</b>	1.0	0.0360	J	0.0370	J	0.0330	J	0.0350	J
<b>Nickel</b>	1.0	ND		ND		ND		ND	
<b>Zinc</b>	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.: 180-43409-1

SDG No.: \_\_\_\_\_

Concentration Units: ug/L

Analyte	RL	CCB5 180-140450/59 05/01/2015 15:15		CCB6 180-140450/71 05/01/2015 16:04		CCB7 180-140450/82 05/01/2015 16:56		Found	C
		Found	C	Found	C	Found	C		
<b>Cadmium</b>	1.0	ND		ND		ND			
<b>Chromium</b>	2.0	ND		ND		ND			
<b>Copper</b>	2.0	0.510	J	0.477	J	0.519	J		
<b>Lead</b>	1.0	0.0380	J	0.0370	J	0.0360	J		
<b>Nickel</b>	1.0	ND		ND		ND			
<b>Zinc</b>	5.0	ND		0.977	J	0.994	J		

Italicized analytes were not requested for this sequence.

3-IN  
METHOD BLANK  
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1  
SDG No.: \_\_\_\_\_  
Concentration Units: ug/L Lab Sample ID: MB 180-139894/1-A  
Instrument Code: M Batch No.: 140450

CAS No.	Analyte	Concentration	C	Q	Method
7439-92-1	Lead	ND			6020A
7440-02-0	Nickel	ND			6020A
7440-66-6	Zinc	ND			6020A
7440-50-8	Copper	ND			6020A
7440-47-3	Chromium	ND			6020A
7440-43-9	Cadmium	ND			6020A

4A-IN  
INTERFERENCE CHECK STANDARD  
METALS

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Lab Sample ID: ICSA 180-140450/8

Instrument ID: M

Lab File ID: M50501A.xml

ICS Source: MICSAX\_00065

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
<b>Cadmium</b>		<b>0.218</b>	
<b>Chromium</b>		<b>0.678</b>	
<b>Copper</b>		<b>1.35</b>	
<b>Lead</b>		<b>0.212</b>	
<b>Nickel</b>		<b>0.0560</b>	
<b>Zinc</b>		<b>2.44</b>	
<i>Aluminum</i>	<i>100000</i>	<i>106200</i>	<i>106</i>
<i>Antimony</i>		<i>0.0010</i>	
<i>Arsenic</i>		<i>-0.0060</i>	
<i>Barium</i>		<i>0.0960</i>	
<i>Beryllium</i>		<i>-0.0110</i>	
<i>Boron</i>		<i>0.266</i>	
<i>Calcium</i>	<i>100000</i>	<i>115600</i>	<i>116</i>
<i>Cobalt</i>		<i>0.0650</i>	
<i>Iron</i>	<i>100000</i>	<i>113000</i>	<i>113</i>
<i>Magnesium</i>	<i>100000</i>	<i>108400</i>	<i>108</i>
<i>Manganese</i>		<i>0.517</i>	
<i>Molybdenum</i>	<i>2000</i>	<i>2345</i>	<i>117</i>
<i>Potassium</i>	<i>100000</i>	<i>111200</i>	<i>111</i>
<i>Selenium</i>		<i>0.116</i>	
<i>Silicon</i>		<i>-291</i>	
<i>Silver</i>		<i>-0.0250</i>	
<i>Sodium</i>	<i>100000</i>	<i>109200</i>	<i>109</i>
<i>Strontium</i>		<i>0.802</i>	
<i>Thallium</i>		<i>0.0060</i>	
<i>Tin</i>		<i>-0.0270</i>	
<i>Titanium</i>	<i>2000</i>	<i>2281</i>	<i>114</i>
<i>Vanadium</i>		<i>-0.291</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.: 180-43409-1

SDG No.: \_\_\_\_\_

Lab Sample ID: ICSAB 180-140450/9

Instrument ID: M

Lab File ID: M50501A.xml

ICS Source: MICSABX\_00070

Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution AB	Solution AB	
<b>Cadmium</b>	<b>20.0</b>	<b>21.2</b>	<b>106</b>
<b>Chromium</b>	<b>20.0</b>	<b>22.2</b>	<b>111</b>
<b>Copper</b>	<b>20.0</b>	<b>21.5</b>	<b>108</b>
<b>Lead</b>	<b>20.0</b>	<b>22.1</b>	<b>110</b>
<b>Nickel</b>	<b>20.0</b>	<b>20.5</b>	<b>103</b>
<b>Zinc</b>	<b>25.0</b>	<b>22.7</b>	<b>91</b>
<i>Aluminum</i>	<i>100000</i>	<i>105900</i>	<i>106</i>
<i>Antimony</i>	<i>20.0</i>	<i>20.8</i>	<i>104</i>
<i>Arsenic</i>	<i>20.0</i>	<i>21.4</i>	<i>107</i>
<i>Barium</i>	<i>20.0</i>	<i>21.4</i>	<i>107</i>
<i>Beryllium</i>	<i>20.0</i>	<i>21.3</i>	<i>107</i>
<i>Boron</i>	<i>50.0</i>	<i>49.1</i>	<i>98</i>
<i>Calcium</i>	<i>100000</i>	<i>115233</i>	<i>115</i>
<i>Cobalt</i>	<i>20.0</i>	<i>21.0</i>	<i>105</i>
<i>Iron</i>	<i>100000</i>	<i>110667</i>	<i>111</i>
<i>Magnesium</i>	<i>100000</i>	<i>108400</i>	<i>108</i>
<i>Manganese</i>	<i>22.5</i>	<i>22.1</i>	<i>98</i>
<i>Molybdenum</i>	<i>2000</i>	<i>2302</i>	<i>115</i>
<i>Potassium</i>	<i>100000</i>	<i>110467</i>	<i>110</i>
<i>Selenium</i>	<i>50.0</i>	<i>52.5</i>	<i>105</i>
<i>Silver</i>	<i>20.0</i>	<i>20.6</i>	<i>103</i>
<i>Sodium</i>	<i>100000</i>	<i>106000</i>	<i>106</i>
<i>Strontium</i>	<i>25.0</i>	<i>23.7</i>	<i>95</i>
<i>Thallium</i>	<i>20.0</i>	<i>21.3</i>	<i>107</i>
<i>Tin</i>	<i>100</i>	<i>107</i>	<i>107</i>
<i>Titanium</i>	<i>2000</i>	<i>2285</i>	<i>114</i>
<i>Vanadium</i>	<i>20.0</i>	<i>21.4</i>	<i>107</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 180-139894/2-A

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

Sample Matrix: Water

LCS Source: MTAPITPICPMS\_00020

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Lead	20.0	22.7		114	80	120		6020A
Nickel	500	511		102	80	120		6020A
Zinc	500	514		103	80	120		6020A
Copper	250	260		104	80	120		6020A
Chromium	200	209		104	80	120		6020A
Cadmium	50.0	49.8		100	80	120		6020A

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

FORM VIIA - IN

9-IN  
DETECTION LIMITS  
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Pittsburgh

Job Number: 180-43409-1

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)
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
Zinc	66	5	0.9609

9-IN  
CALIBRATION BLANK DETECTION LIMITS  
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Pittsburgh

Job Number: 180-43409-1

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)
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
Zinc	66	5	0.9609

11-IN  
LINEAR RANGES  
METALS

Lab Name: TestAmerica Pittsburgh

Job No: 180-43409-1

SDG No.: \_\_\_\_\_

Instrument ID: M

Date: 03/14/2011 22:35

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Lead		20000	6020A
Nickel		13500	6020A
Zinc		25000	6020A
Copper		20000	6020A
Chromium		13500	6020A
Cadmium		13500	6020A



12-IN  
PREPARATION LOG  
METALS

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 180-139894/1-A	04/28/2015 11:24	139894		50	50
LCS 180-139894/2-A	04/28/2015 11:24	139894		50	50
180-43409-1	04/28/2015 11:24	139894		50	50
180-43409-2	04/28/2015 11:24	139894		50	50

13-IN  
ANALYSIS RUN LOG  
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Instrument ID: M Analysis Method: 6020A

Start Date: 05/01/2015 09:24 End Date: 05/01/2015 19:02

Lab Sample Id	D/F	Type	Time	Analytes																											
				Cd	Cr	Cu	Ni	Pb	Zn																						
ITUNE 180-140450/1			09:24																												
STD1 180-140450/2 IC	1		10:53	X	X	X	X	X	X																						
STD2 180-140450/3 IC	1		10:56	X	X	X	X	X	X																						
STD3 180-140450/4 IC	1		11:00	X	X	X	X	X	X																						
ICV 180-140450/5	1		11:03	X	X	X	X	X	X																						
ICB 180-140450/6	1		11:07	X	X	X	X	X	X																						
CRI 180-140450/7	1		11:40	X	X	X	X	X	X																						
ICSA 180-140450/8	1		11:44	X	X	X	X	X	X																						
ICSAB 180-140450/9	1		11:47	X	X	X	X	X	X																						
CCV 180-140450/10	1		11:54	X	X	X	X	X	X																						
CCB1 180-140450/11	1		11:57	X	X	X	X	X	X																						
ZZZZZZ			12:01																												
ZZZZZZ			12:05																												
ZZZZZZ			12:09																												
ZZZZZZ			12:13																												
ZZZZZZ			12:16																												
ZZZZZZ			12:20																												
ZZZZZZ			12:27																												
ZZZZZZ			12:31																												
ZZZZZZ			12:35																												
ZZZZZZ			12:38																												
CCV 180-140450/22			12:42																												
CCB2 180-140450/23			12:49																												
ZZZZZZ			12:53																												
ZZZZZZ			12:57																												
ZZZZZZ			13:00																												
ZZZZZZ			13:04																												
ZZZZZZ			13:08																												
ZZZZZZ			13:12																												
ZZZZZZ			13:16																												
ZZZZZZ			13:19																												
ZZZZZZ			13:23																												
ZZZZZZ			13:27																												
CCV 180-140450/34	1		13:31	X	X	X	X	X	X																						
CCB3 180-140450/35	1		13:37	X	X	X	X	X	X																						
ZZZZZZ			13:41																												
ZZZZZZ			13:45																												
ZZZZZZ			13:49																												
ZZZZZZ			13:53																												
ZZZZZZ			13:57																												
ZZZZZZ			14:00																												
ZZZZZZ			14:04																												

13-IN  
ANALYSIS RUN LOG  
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Instrument ID: M Analysis Method: 6020A

Start Date: 05/01/2015 09:24 End Date: 05/01/2015 19:02

Lab Sample Id	D/F	Type	Time	Analytes																											
				Cd	Cr	Cu	Ni	Pb	Zn																						
ZZZZZZ			14:08																												
MB 180-139894/1-A	1	R	14:12	X	X	X	X	X	X																						
LCS 180-139894/2-A	1	R	14:16	X	X	X	X	X	X																						
CCV 180-140450/46	1		14:20	X	X	X	X	X	X																						
CCB4 180-140450/47	1		14:27	X	X	X	X	X	X																						
ZZZZZZ			14:31																												
ZZZZZZ			14:34																												
ZZZZZZ			14:38																												
ZZZZZZ			14:42																												
ZZZZZZ			14:46																												
ZZZZZZ			14:50																												
ZZZZZZ			14:53																												
ZZZZZZ			14:57																												
ZZZZZZ			15:01																												
ZZZZZZ			15:05																												
CCV 180-140450/58	1		15:09	X	X	X	X	X	X																						
CCB5 180-140450/59	1		15:15	X	X	X	X	X	X																						
ZZZZZZ			15:19																												
ZZZZZZ			15:23																												
ZZZZZZ			15:27																												
ZZZZZZ			15:31																												
ZZZZZZ			15:34																												
ZZZZZZ			15:38																												
ZZZZZZ			15:42																												
ZZZZZZ			15:46																												
ZZZZZZ			15:50																												
ZZZZZZ			15:53																												
CCV 180-140450/70	1		15:57	X	X	X	X	X	X																						
CCB6 180-140450/71	1		16:04	X	X	X	X	X	X																						
180-43409-1	10	R	16:08	X	X	X	X	X	X																						
180-43409-2	10	R	16:12		X	X	X	X	X																						
ZZZZZZ			16:15																												
ZZZZZZ			16:19																												
CRI 180-140450/76	1		16:30	X	X	X	X	X	X																						
ZZZZZZ			16:34																												
ZZZZZZ			16:37																												
ZZZZZZ			16:41																												
ZZZZZZ			16:45																												
CCV 180-140450/81	1		16:49	X	X	X	X	X	X																						
CCB7 180-140450/82	1		16:56	X	X	X	X	X	X																						
ZZZZZZ			16:59																												
ZZZZZZ			17:03																												

13-IN  
ANALYSIS RUN LOG  
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Instrument ID: M Analysis Method: 6020A

Start Date: 05/01/2015 09:24 End Date: 05/01/2015 19:02

Lab Sample Id	D/F	Type	Time	Analytes																											
				Cd	Cr	Cu	Ni	Pb	Zn																						
ZZZZZZ			17:07																												
ZZZZZZ			17:11																												
ZZZZZZ			17:15																												
ZZZZZZ			17:18																												
ZZZZZZ			17:22																												
ZZZZZZ			17:26																												
ZZZZZZ			17:30																												
ZZZZZZ			17:34																												
CCV 180-140450/93			17:38																												
CCB8 180-140450/94			17:44																												
ZZZZZZ			17:48																												
ZZZZZZ			17:52																												
ZZZZZZ			17:56																												
ZZZZZZ			17:59																												
ZZZZZZ			18:03																												
ZZZZZZ			18:07																												
ZZZZZZ			18:11																												
ZZZZZZ			18:15																												
ZZZZZZ			18:19																												
CCV 180-140450/104			18:22																												
CCB9 180-140450/105			18:29																												
ZZZZZZ			18:33																												
ZZZZZZ			18:37																												
ZZZZZZ			18:40																												
ZZZZZZ			18:44																												
ZZZZZZ			18:48																												
ZZZZZZ			18:52																												
CCV 180-140450/112			18:56																												
CCB10 180-140450/113			19:02																												

Prep Types: \_\_\_\_\_  
R = Total Recoverable

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

ICP-MS Instrument ID: M Start Date: 05/01/2015 End Date: 05/01/2015

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 180-140450/2 I	10:53	100		100		100		100		100	
STD2 180-140450/3 I	10:56	94		105		99		92		94	
STD3 180-140450/4 I	11:00	97		100		98		98		96	
ICV 180-140450/5	11:03	95		102		106		95		95	
ICB 180-140450/6	11:07	101		106		105		106		105	
CRI 180-140450/7	11:40	93		93		92		92		92	
ICSA 180-140450/8	11:44	65		70		71		70		75	
ICSAB 180-140450/9	11:47	64		72		78		71		78	
CCV 180-140450/10	11:54	77		92		97		87		91	
CCB1 180-140450/11	11:57	90		97		101		101		102	
CCV 180-140450/34	13:31	95		98		96		90		92	
CCB3 180-140450/35	13:37	115		116		113		112		108	
MB 180-139894/1-A	14:12	106		102		102		101		101	
LCS 180-139894/2-A	14:16	55		48		62		58		64	
CCV 180-140450/46	14:20	97		95		93		86		88	
CCB4 180-140450/47	14:27	116		113		104		104		100	
CCV 180-140450/58	15:09	94		88		84		82		81	
CCB5 180-140450/59	15:15	117		99		94		96		91	
CCV 180-140450/70	15:57	94		94		87		85		84	
CCB6 180-140450/71	16:04	110		109		98		100		94	
180-43409-1	16:08	80		79		77		75		75	
180-43409-2	16:12	76		79		80		77		78	
CRI 180-140450/76	16:30	113		116		107		97		91	
CCV 180-140450/81	16:49	107		104		97		91		88	
CCB7 180-140450/82	16:56	114		119		103		106		97	

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

ICP-MS Instrument ID: M Start Date: 05/01/2015 End Date: 05/01/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 180-140450/2 I	10:53	100		100		100					
STD2 180-140450/3 I	10:56	95		95		89					
STD3 180-140450/4 I	11:00	99		98		96					
ICV 180-140450/5	11:03	98		98		89					
ICB 180-140450/6	11:07	104		104		101					
CRI 180-140450/7	11:40	94		95		91					
ICSA 180-140450/8	11:44	80		79		90					
ICSAB 180-140450/9	11:47	82		83		80					
CCV 180-140450/10	11:54	96		97		92					
CCB1 180-140450/11	11:57	105		104		100					
CCV 180-140450/34	13:31	93		93		79					
CCB3 180-140450/35	13:37	103		101		92					
MB 180-139894/1-A	14:12	100		99		89					
LCS 180-139894/2-A	14:16	75		77		64					
CCV 180-140450/46	14:20	89		89		78					
CCB4 180-140450/47	14:27	95		94		88					
CCV 180-140450/58	15:09	85		85		79					
CCB5 180-140450/59	15:15	89		88		86					
CCV 180-140450/70	15:57	85		86		77					
CCB6 180-140450/71	16:04	90		90		86					
180-43409-1	16:08	81		82		77					
180-43409-2	16:12	85		86		76					
CRI 180-140450/76	16:30	88		87		85					
CCV 180-140450/81	16:49	88		88		78					
CCB7 180-140450/82	16:56	92		91		85					

## Dilution Corrected Concentrations

STD1 1542084 INT STD 5/1/2015 10:53:20 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:53:39	101.475%	-0.008	-0.130	-0.010	0.000	-0.343	0.103	0.069
2	10:53:58	96.661%	-0.005	0.111	0.019	0.000	0.298	0.031	-0.049
3	10:54:17	101.864%	0.012	0.019	-0.009	0.000	0.045	-0.134	-0.020
X		100.000%	0.000	0.000	-0.000	0.000	0.000	-0.000	-0.000
σ		2.898%	0.011	0.122	0.017	0.000	0.323	0.121	0.061
%RSD		2.898	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:53:39	-0.034	-19.810	0.000	0.163	0.204	-0.561	102.497%	0.040
2	10:53:58	-0.008	13.680	0.000	-0.488	-1.914	0.086	99.248%	-0.055
3	10:54:17	0.043	6.129	0.000	0.325	1.710	0.475	98.255%	0.016
X		0.000	0.000	0.000	-0.000	0.000	0.000	100.000%	-0.000
σ		0.039	17.570	0.000	0.430	1.820	0.523	2.219%	0.050
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	2.219	0.000
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:53:39	-0.001	0.004	-0.000	2.065	-0.036	-0.000	-0.022	-0.009
2	10:53:58	-0.000	-0.012	0.008	-1.062	0.176	0.000	0.001	0.024
3	10:54:17	0.001	0.008	-0.008	-1.003	-0.140	0.000	0.021	-0.015
X		0.000	0.000	-0.000	0.000	0.000	0.000	0.000	0.000
σ		0.001	0.010	0.008	1.789	0.161	0.000	0.021	0.021
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:53:39	-0.016	-0.117	0.091	-0.001	-0.066	-0.035	0.000	0.000
2	10:53:58	-0.020	0.060	-0.009	0.008	0.030	0.076	0.000	-0.002
3	10:54:17	0.036	0.057	-0.082	-0.007	0.036	-0.041	0.000	0.002
X		-0.000	-0.000	0.000	0.000	-0.000	0.000	0.000	0.000
σ		0.031	0.101	0.087	0.007	0.057	0.066	0.000	0.002
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:53:39	99.302%	0.008	0.001	99.946%	-0.003	-0.005	0.007	0.001
2	10:53:58	100.717%	-0.006	-0.003	100.096%	-0.008	-0.005	-0.020	-0.012
3	10:54:17	99.981%	-0.003	0.002	99.958%	0.011	0.010	0.013	0.012
X		100.000%	0.000	0.000	100.000%	-0.000	0.000	-0.000	-0.000
σ		0.708%	0.007	0.003	0.083%	0.010	0.009	0.017	0.012
%RSD		0.708	0.000	0.000	0.083	0.000	0.000	0.000	0.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:53:39	99.129%	-0.015	-0.007	0.001	-0.002	0.007	99.117%	98.386%
2	10:53:58	99.785%	0.016	-0.004	0.003	-0.002	-0.006	99.782%	99.966%
3	10:54:17	101.086%	-0.001	0.011	-0.003	0.004	-0.000	101.100%	101.648%
X		100.000%	-0.000	0.000	0.000	-0.000	-0.000	100.000%	100.000%
σ		0.996%	0.015	0.010	0.003	0.004	0.007	1.009%	1.631%
%RSD		0.996	0.000	0.000	0.000	0.000	0.000	1.009	1.631
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	10:53:39	0.002	-0.001	-0.002	100.071%				
2	10:53:58	-0.001	0.000	-0.000	101.084%				
3	10:54:17	-0.000	0.001	0.003	98.845%				
X		-0.000	0.000	0.000	100.000%				
σ		0.001	0.001	0.002	1.121%				
%RSD		0.000	0.000	0.000	1.121				

STD2 1558995 5/1/2015 10:56:36 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:56:36	96.565%	200.200	0.147	0.115	0.000	96980.000	97420.000	97750.000
2	10:56:55	93.611%	199.100	0.641	0.034	0.000	98550.000	99440.000	98700.000
3	10:57:14	92.236%	200.700	0.208	0.024	0.000	104500.000	103100.000	103500.000
x		94.137%	200.000	0.332	0.058	0.000	100000.000	100000.000	100000.000
σ		2.212%	0.834	0.269	0.050	0.000	3944.000	2897.000	3109.000
%RSD		2.350	0.417	81.050	86.250	0.000	3.944	2.897	3.109
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:56:36	965.200	-180.300	0.000	97140.000	102800.000	96950.000	107.778%	0.135
2	10:56:55	999.800	-149.700	0.000	100300.000	97370.000	100500.000	104.794%	0.113
3	10:57:14	1035.000	-150.600	0.000	102600.000	99780.000	102600.000	102.962%	0.097
x		1000.000	-160.200	0.000	100000.000	100000.000	100000.000	105.178%	0.115
σ		34.870	17.400	0.000	2738.000	2739.000	2845.000	2.431%	0.019
%RSD		3.487	10.860	0.000	2.738	2.739	2.845	2.311	16.480
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:56:36	196.200	198.500	986.300	49700.000	49490.000	200.700	200.500	198.200
2	10:56:55	201.900	203.000	1010.000	50620.000	50960.000	203.900	201.600	203.600
3	10:57:14	201.900	198.500	1004.000	49680.000	49550.000	195.400	197.800	198.200
x		200.000	200.000	1000.000	50000.000	50000.000	200.000	200.000	200.000
σ		3.255	2.594	12.220	537.300	830.600	4.323	1.948	3.117
%RSD		1.627	1.297	1.222	1.075	1.661	2.161	0.974	1.558
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:56:36	198.500	196.100	197.000	195.700	198.300	197.200	0.000	198.900
2	10:56:55	202.900	202.400	202.400	202.600	201.700	201.400	0.000	200.500
3	10:57:14	198.600	201.500	200.600	201.600	200.000	201.300	0.000	200.600
x		200.000	200.000	200.000	200.000	200.000	200.000	0.000	200.000
σ		2.537	3.374	2.750	3.729	1.682	2.384	0.000	0.983
%RSD		1.269	1.687	1.375	1.865	0.841	1.192	0.000	0.492
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:56:36	98.000%	0.069	0.066	91.724%	197.800	199.500	198.100	198.900
2	10:56:55	98.217%	0.097	0.081	91.552%	201.700	200.500	199.200	201.100
3	10:57:14	99.489%	0.094	0.091	92.380%	200.500	200.000	202.600	200.000
x		98.569%	0.087	0.079	91.886%	200.000	200.000	200.000	200.000
σ		0.805%	0.016	0.013	0.437%	2.007	0.509	2.345	1.086
%RSD		0.816	17.970	15.920	0.476	1.003	0.255	1.173	0.543
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:56:36	93.293%	-0.038	0.172	0.121	198.600	199.200	93.308%	93.567%
2	10:56:55	93.792%	-0.011	0.131	0.155	201.400	199.000	95.278%	95.380%
3	10:57:14	93.463%	-0.004	0.138	0.153	200.100	201.700	96.913%	95.558%
x		93.516%	-0.018	0.147	0.143	200.000	200.000	95.166%	94.835%
σ		0.253%	0.018	0.022	0.019	1.386	1.500	1.805%	1.102%
%RSD		0.271	101.000	14.860	13.490	0.693	0.750	1.897	1.162
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	10:56:36	195.800	196.700	193.900	89.627%				
2	10:56:55	199.500	200.000	201.100	88.808%				
3	10:57:14	204.700	203.300	205.000	87.903%				
x		200.000	200.000	200.000	88.779%				
σ		4.499	3.334	5.639	0.862%				
%RSD		2.250	1.667	2.820	0.971				



STD3 1558996 5/1/2015 11:00:11 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:11	97.696%	0.057	195.800	202.800	0.000	25.500	20.350	21.150
2	11:00:31	96.854%	0.027	200.900	199.800	0.000	22.510	16.550	17.950
3	11:00:50	95.891%	0.070	203.300	197.400	0.000	21.540	16.990	17.450
X		96.813%	0.051	200.000	200.000	0.000	23.180	17.960	18.850
σ		0.903%	0.022	3.808	2.667	0.000	2.063	2.078	2.007
%RSD		0.933	43.580	1.904	1.334	0.000	8.901	11.570	10.650
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:11	22.170	10280.000	0.000	23.150	25.040	70.130	104.392%	195.800
2	11:00:31	21.420	9977.000	0.000	21.210	7.748	68.660	99.175%	201.500
3	11:00:50	21.570	9743.000	0.000	21.030	20.220	64.630	96.084%	202.600
X		21.720	10000.000	0.000	21.800	17.670	67.800	99.884%	200.000
σ		0.397	268.900	0.000	1.175	8.924	2.848	4.199%	3.648
%RSD		1.828	2.689	0.000	5.390	50.510	4.200	4.204	1.824
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:11	0.074	0.071	0.356	43.270	41.350	0.045	0.164	0.029
2	11:00:31	0.099	0.087	0.355	30.850	30.650	0.045	0.131	0.017
3	11:00:50	0.050	0.066	0.350	27.460	26.170	0.035	0.130	0.076
X		0.074	0.074	0.353	33.860	32.720	0.042	0.141	0.040
σ		0.024	0.011	0.003	8.320	7.799	0.006	0.019	0.031
%RSD		32.700	14.620	0.920	24.570	23.840	14.350	13.490	77.470
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:11	0.037	3.170	3.322	0.399	0.133	0.537	0.000	0.070
2	11:00:31	0.042	3.124	3.223	0.327	0.172	0.328	0.000	0.069
3	11:00:50	0.019	3.264	3.177	0.259	0.027	0.178	0.000	0.067
X		0.033	3.186	3.241	0.329	0.111	0.348	0.000	0.069
σ		0.012	0.071	0.074	0.070	0.075	0.180	0.000	0.002
%RSD		37.390	2.243	2.282	21.360	67.650	51.810	0.000	2.613
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:11	97.921%	197.500	197.000	99.160%	0.005	-0.016	0.061	-0.537
2	11:00:31	97.669%	201.300	201.200	97.903%	-0.001	-0.005	0.041	-0.517
3	11:00:50	96.907%	201.200	201.900	97.398%	0.010	0.005	0.043	-0.488
X		97.499%	200.000	200.000	98.154%	0.004	-0.005	0.048	-0.514
σ		0.528%	2.181	2.657	0.907%	0.006	0.010	0.011	0.025
%RSD		0.542	1.090	1.328	0.924	124.900	189.700	22.620	4.821
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:11	95.975%	198.100	197.400	197.500	0.062	0.236	97.228%	96.994%
2	11:00:31	96.040%	201.500	199.300	197.800	0.068	0.209	98.220%	97.785%
3	11:00:50	96.971%	200.400	203.300	204.700	0.102	0.215	101.264%	99.842%
X		96.329%	200.000	200.000	200.000	0.077	0.220	98.904%	98.207%
σ		0.557%	1.725	3.016	4.108	0.021	0.014	2.103%	1.470%
%RSD		0.578	0.862	1.508	2.054	27.770	6.502	2.127	1.497
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	11:00:11	0.068	0.074	0.120	95.655%				
2	11:00:31	0.066	0.062	0.114	96.177%				
3	11:00:50	0.065	0.066	0.116	94.601%				
X		0.066	0.067	0.117	95.478%				
σ		0.002	0.006	0.003	0.803%				
%RSD		2.984	9.411	2.859	0.841				

ICV 1527873 5/1/2015 11:03:51 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:03:51	100.953%	84.320	86.200	83.220	0.000	39740.000	39250.000	39510.000
2	11:04:10	92.851%	86.400	88.900	85.760	0.000	41240.000	41350.000	40720.000
3	11:04:29	91.900%	84.160	88.220	85.310	0.000	40880.000	41040.000	41420.000
X		95.235%	106.201%	109.716%	105.950%	0.000	101.545%	101.369%	101.383%
σ		4.975%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		5.224	1.468	1.603	1.600	0.000	1.930	2.801	2.386
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:03:51	401.900	4226.000	0.000	39840.000	39050.000	39870.000	103.829%	78.320
2	11:04:10	419.800	4377.000	0.000	41310.000	40070.000	40770.000	103.404%	81.720
3	11:04:29	418.100	4497.000	0.000	41350.000	40120.000	41240.000	99.129%	81.150
X		103.317%	109.168%	0.000	102.077%	99.364%	101.566%	102.121%	100.498%
σ		n/a	n/a	0.000	n/a	n/a	n/a	2.599%	n/a
%RSD		2.393	3.107	0.000	2.109	1.523	1.716	2.545	2.270
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:03:51	79.050	80.900	399.800	20130.000	20100.000	82.410	83.740	84.640
2	11:04:10	80.500	81.480	399.000	19820.000	19540.000	78.990	81.180	81.400
3	11:04:29	81.340	82.980	399.400	19960.000	19610.000	80.000	81.430	81.300
X		100.367%	102.232%	99.846%	99.835%	98.749%	100.586%	102.645%	103.056%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.443	1.314	0.104	0.777	1.542	2.184	1.718	2.306
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:03:51	84.220	84.510	84.200	82.570	86.560	85.850	0.000	78.880
2	11:04:10	81.610	84.630	84.500	82.350	86.960	86.800	0.000	79.980
3	11:04:29	82.610	85.570	85.950	83.030	87.350	87.000	0.000	79.870
X		103.517%	106.132%	106.102%	103.311%	108.695%	108.189%	0.000	99.472%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.591	0.685	1.105	0.419	0.454	0.708	0.000	0.761
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:03:51	106.984%	77.660	79.410	95.807%	81.280	81.160	81.320	80.920
2	11:04:10	106.445%	80.410	81.960	94.913%	81.930	82.560	83.780	83.770
3	11:04:29	105.020%	80.910	82.590	93.364%	82.050	82.960	83.140	82.630
X		106.150%	99.574%	101.650%	94.695%	102.189%	102.784%	103.431%	103.049%
σ		1.015%	n/a	n/a	1.236%	n/a	n/a	n/a	n/a
%RSD		0.956	2.200	2.072	1.305	0.506	1.150	1.543	1.739
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:03:51	96.338%	80.100	79.810	79.020	79.560	78.620	96.448%	95.665%
2	11:04:10	95.165%	80.710	80.300	80.080	80.010	79.940	98.355%	97.762%
3	11:04:29	94.766%	81.360	80.650	81.530	79.570	80.870	99.859%	99.534%
X		95.423%	100.908%	100.315%	100.263%	99.645%	99.767%	98.220%	97.653%
σ		0.817%	n/a	n/a	n/a	n/a	n/a	1.710%	1.937%
%RSD		0.856	0.782	0.524	1.573	0.323	1.416	1.741	1.983
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	11:03:51	83.290	83.220	81.790	89.449%				
2	11:04:10	85.280	86.550	84.530	90.485%				
3	11:04:29	88.550	89.720	87.020	87.903%				
X		107.135%	108.119%	105.558%	89.279%				
σ		n/a	n/a	n/a	1.300%				
%RSD		3.100	3.758	3.095	1.456				

ICB 5/1/2015 11:07:30 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:07:30	105.018%	0.048	0.295	0.406	0.000	8.426	5.585	5.910
2	11:07:50	103.796%	0.030	0.340	0.409	0.000	7.381	4.373	4.093
3	11:08:09	95.184%	0.060	0.155	0.346	0.000	6.736	3.574	3.307
x		101.332%	0.046	0.263	0.387	0.000	7.514	4.511	4.437
σ		5.360%	0.015	0.096	0.035	0.000	0.853	1.012	1.335
%RSD		5.289	32.550	36.520	9.114	0.000	11.350	22.440	30.080
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:07:30	1.351	-136.200	0.000	9.125	4.733	8.553	110.014%	0.066
2	11:07:50	1.429	-114.800	0.000	7.717	0.557	6.958	105.799%	-0.012
3	11:08:09	1.550	-90.490	0.000	8.327	8.081	6.190	101.740%	0.070
x		1.443	-113.900	0.000	8.389	4.457	7.234	105.851%	0.041
σ		0.100	22.880	0.000	0.706	3.770	1.205	4.137%	0.046
%RSD		6.945	20.100	0.000	8.416	84.580	16.660	3.908	111.200
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:07:30	0.022	0.018	0.162	17.100	13.670	0.011	-0.003	0.496
2	11:07:50	0.021	0.014	0.123	11.710	9.982	0.012	-0.014	0.512
3	11:08:09	0.025	0.027	0.122	10.660	7.341	0.007	-0.004	0.443
x		0.023	0.020	0.136	13.160	10.330	0.010	-0.007	0.483
σ		0.002	0.007	0.023	3.456	3.181	0.003	0.006	0.036
%RSD		8.587	34.220	16.770	26.270	30.780	27.550	88.450	7.480
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:07:30	0.413	0.745	0.760	-0.012	0.124	-0.041	0.000	0.035
2	11:07:50	0.423	0.769	0.758	0.014	-0.046	-0.015	0.000	0.035
3	11:08:09	0.418	0.758	0.717	-0.005	0.053	-0.042	0.000	0.028
x		0.418	0.757	0.745	-0.001	0.044	-0.033	0.000	0.033
σ		0.005	0.012	0.024	0.013	0.085	0.015	0.000	0.004
%RSD		1.151	1.610	3.243	1497.000	195.100	46.480	0.000	11.540
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:07:30	104.515%	0.635	0.594	106.386%	-0.029	-0.041	0.042	0.021
2	11:07:50	106.305%	0.469	0.501	106.218%	-0.023	-0.033	0.033	0.025
3	11:08:09	105.046%	0.401	0.405	104.898%	-0.036	-0.022	0.030	0.019
x		105.289%	0.502	0.500	105.834%	-0.030	-0.032	0.035	0.022
σ		0.919%	0.120	0.095	0.815%	0.007	0.009	0.006	0.003
%RSD		0.873	23.930	18.920	0.770	22.930	28.790	17.920	14.200
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:07:30	104.186%	0.161	-0.012	-0.007	0.032	0.018	102.947%	101.046%
2	11:07:50	104.648%	0.154	0.004	0.001	0.025	0.027	104.420%	103.776%
3	11:08:09	105.542%	0.140	0.006	0.009	0.038	0.030	105.621%	105.700%
x		104.792%	0.152	-0.001	0.001	0.032	0.025	104.329%	103.508%
σ		0.689%	0.011	0.010	0.008	0.006	0.007	1.339%	2.339%
%RSD		0.658	7.232	1139.000	888.400	19.950	26.240	1.284	2.259
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	11:07:30	0.019	0.027	0.038	100.796%				
2	11:07:50	0.026	0.023	0.035	102.379%				
3	11:08:09	0.025	0.028	0.035	99.255%				
x		0.023	0.026	0.036	100.810%				
σ		0.004	0.003	0.002	1.562%				
%RSD		15.550	10.280	5.148	1.550				

CRI 1554040 5/1/2015 11:40:21 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:40:21	97.860%	1.028	20.060	19.780	0.000	463.700	464.700	470.300
2	11:40:40	90.135%	1.185	21.280	19.890	0.000	481.100	472.200	478.400
3	11:40:59	90.805%	1.099	19.860	18.960	0.000	478.400	478.200	486.500
X		92.934%	110.393%	101.996%	97.724%	0.000	94.882%	94.336%	95.681%
σ		4.279%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		4.605	7.148	3.769	2.588	0.000	1.969	1.437	1.696
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:40:21	31.980	246.600	0.000	483.700	485.500	460.500	95.223%	5.481
2	11:40:40	33.050	262.500	0.000	493.800	491.100	478.900	91.645%	5.149
3	11:40:59	33.090	271.500	0.000	498.800	509.100	479.600	90.915%	5.005
X		109.017%	52.047%	0.000	98.416%	99.043%	94.603%	92.594%	104.226%
σ		n/a	n/a	0.000	n/a	n/a	n/a	2.305%	n/a
%RSD		1.922	4.840	0.000	1.566	2.484	2.284	2.490	4.682
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:40:21	1.164	2.144	5.219	58.990	57.480	0.530	1.105	2.257
2	11:40:40	1.161	2.139	5.320	59.790	58.150	0.549	1.074	2.183
3	11:40:59	1.014	2.137	5.250	58.070	56.960	0.508	0.940	2.264
X		111.291%	106.989%	105.259%	117.903%	115.058%	105.803%	103.955%	111.742%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		7.733	0.182	0.989	1.457	1.037	3.865	8.461	2.022
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:40:21	2.217	5.995	6.007	1.253	5.796	6.007	0.000	5.247
2	11:40:40	2.345	6.138	6.179	1.340	5.730	6.413	0.000	5.339
3	11:40:59	2.141	5.858	5.913	0.999	5.629	5.537	0.000	5.402
X		111.730%	119.940%	120.662%	119.737%	114.366%	119.719%	0.000	106.588%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		4.611	2.339	2.237	14.800	1.474	7.323	0.000	1.458
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:40:21	92.137%	4.756	4.777	93.078%	1.014	1.036	0.976	1.064
2	11:40:40	91.882%	4.871	4.914	92.235%	1.057	1.017	1.093	1.078
3	11:40:59	91.377%	4.750	4.988	91.882%	1.064	1.013	1.102	1.097
X		91.799%	95.851%	97.862%	92.398%	104.496%	102.181%	105.697%	107.948%
σ		0.387%	n/a	n/a	0.615%	n/a	n/a	n/a	n/a
%RSD		0.422	1.426	2.188	0.665	2.611	1.206	6.665	1.529
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:40:21	91.667%	4.623	1.884	1.929	9.808	10.220	92.975%	93.303%
2	11:40:40	91.790%	5.067	1.916	1.962	9.862	10.060	93.322%	93.684%
3	11:40:59	92.085%	4.914	1.972	1.983	9.924	10.110	96.323%	96.730%
X		91.847%	97.360%	96.203%	97.908%	98.648%	101.283%	94.207%	94.573%
σ		0.215%	n/a	n/a	n/a	n/a	n/a	1.841%	1.878%
%RSD		0.234	4.634	2.320	1.382	0.590	0.808	1.954	1.986
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	11:40:21	1.022	1.036	1.045	91.154%				
2	11:40:40	1.030	1.020	1.093	92.303%				
3	11:40:59	1.058	1.047	1.121	90.861%				
X		103.667%	103.404%	108.645%	91.440%				
σ		n/a	n/a	n/a	0.762%				
%RSD		1.801	1.331	3.572	0.834				

ICSA 1533081 5/1/2015 11:44:00 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:44:00	65.512%	-0.037	0.519	0.235	0.000	108900.000	107600.000	109600.000
2	11:44:19	64.794%	0.011	0.305	0.319	0.000	112100.000	110800.000	110500.000
3	11:44:38	65.117%	-0.006	0.125	0.243	0.000	106700.000	105100.000	105000.000
X		65.141%	-0.011	0.316	0.266	0.000	109200.000	107900.000	108400.000
σ		0.360%	0.024	0.197	0.046	0.000	2686.000	2852.000	2962.000
%RSD		0.552	228.700	62.430	17.480	0.000	2.459	2.645	2.733
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:44:00	107000.000	-297.600	0.000	107600.000	106100.000	110400.000	75.256%	2198.000
2	11:44:19	107900.000	-282.200	0.000	118300.000	119500.000	124300.000	64.653%	2424.000
3	11:44:38	103700.000	-292.700	0.000	107800.000	108400.000	112100.000	70.173%	2221.000
X		106200.000	-290.800	0.000	111200.000	111300.000	115600.000	70.027%	2281.000
σ		2224.000	7.848	0.000	6157.000	7182.000	7623.000	5.303%	124.100
%RSD		2.094	2.699	0.000	5.536	6.453	6.596	7.573	5.443
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:44:00	-0.302	0.709	0.487	108200.000	107700.000	0.065	0.031	1.456
2	11:44:19	-0.282	0.695	0.546	119200.000	118200.000	0.075	-0.036	1.586
3	11:44:38	-0.289	0.629	0.519	111500.000	110200.000	0.054	0.174	1.518
X		-0.291	0.678	0.517	113000.000	112000.000	0.065	0.056	1.520
σ		0.010	0.042	0.030	5649.000	5455.000	0.010	0.107	0.065
%RSD		3.559	6.266	5.722	5.000	4.868	16.140	190.400	4.283
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:44:00	1.252	2.425	1.244	0.044	-0.228	0.129	0.000	0.830
2	11:44:19	1.465	2.522	1.937	-0.077	-0.057	0.194	0.000	0.786
3	11:44:38	1.317	2.369	1.467	0.015	-0.043	0.026	0.000	0.789
X		1.345	2.439	1.549	-0.006	-0.109	0.116	0.000	0.802
σ		0.109	0.077	0.354	0.063	0.103	0.085	0.000	0.024
%RSD		8.128	3.176	22.840	1123.000	94.650	72.800	0.000	3.034
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:44:00	71.227%	2377.000	2324.000	69.910%	-0.037	-0.050	0.315	0.322
2	11:44:19	70.935%	2415.000	2363.000	69.304%	-0.024	-0.031	0.212	0.239
3	11:44:38	72.024%	2395.000	2348.000	69.455%	-0.015	-0.028	0.128	0.203
X		71.395%	2396.000	2345.000	69.556%	-0.025	-0.036	0.218	0.255
σ		0.564%	18.950	19.420	0.315%	0.011	0.012	0.094	0.061
%RSD		0.789	0.791	0.828	0.453	42.660	32.650	43.050	23.910
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:44:00	73.851%	-0.029	0.002	0.001	0.150	0.085	78.065%	77.593%
2	11:44:19	75.017%	-0.036	0.004	0.012	0.128	0.114	80.481%	80.047%
3	11:44:38	76.253%	-0.017	-0.003	0.014	0.099	0.088	80.913%	80.407%
X		75.040%	-0.027	0.001	0.009	0.126	0.096	79.820%	79.349%
σ		1.201%	0.009	0.004	0.007	0.025	0.016	1.535%	1.531%
%RSD		1.600	34.500	296.600	76.030	20.210	16.960	1.923	1.930
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	11:44:00	0.008	0.005	0.185	100.646%				
2	11:44:19	0.004	0.008	0.211	87.651%				
3	11:44:38	0.006	0.006	0.240	80.738%				
X		0.006	0.006	0.212	89.678%				
σ		0.002	0.001	0.028	10.107%				
%RSD		26.100	22.340	13.010	11.271				

IC SAB 1558998 5/1/2015 11:47:39 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:47:39	68.957%	21.380	49.010	50.600	0.000	106500.000	104900.000	104800.000
2	11:47:59	61.443%	22.390	53.200	49.220	0.000	106000.000	106100.000	109900.000
3	11:48:18	60.134%	20.260	55.190	47.590	0.000	105500.000	106900.000	110500.000
X		63.511%	106.728%	104.936%	98.273%	0.000	106.018%	105.962%	108.425%
σ		4.761%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		7.496	4.998	6.012	3.071	0.000	0.476	0.946	2.890
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:47:39	103400.000	231.600	0.000	104400.000	105100.000	108300.000	77.739%	2168.000
2	11:47:59	107700.000	285.800	0.000	109900.000	110600.000	113200.000	72.179%	2234.000
3	11:48:18	106600.000	301.700	0.000	117100.000	118500.000	124200.000	65.291%	2454.000
X		105.913%	54.608%	0.000	110.476%	111.411%	115.236%	71.736%	114.267%
σ		n/a	n/a	0.000	n/a	n/a	n/a	6.236%	n/a
%RSD		2.098	13.480	0.000	5.776	6.054	7.096	8.693	6.562
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:47:39	20.400	21.140	20.880	105200.000	104700.000	19.900	20.010	21.030
2	11:47:59	21.060	21.760	21.960	109700.000	108900.000	21.100	20.550	21.480
3	11:48:18	22.690	23.820	23.370	117100.000	115500.000	22.070	21.000	22.710
X		106.925%	111.212%	95.967%	110.677%	109.688%	105.118%	102.596%	108.707%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		5.502	6.315	5.665	5.429	4.922	5.185	2.422	3.983
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:47:39	21.640	22.090	21.010	20.480	50.610	52.610	0.000	23.490
2	11:47:59	21.030	22.400	22.230	21.640	51.610	52.020	0.000	23.850
3	11:48:18	21.910	23.690	23.860	21.980	52.950	52.890	0.000	23.690
X		107.631%	90.919%	89.466%	106.838%	103.443%	105.015%	0.000	118.373%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.095	3.737	6.408	3.690	2.267	0.841	0.000	0.758
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:47:39	78.100%	2289.000	2273.000	72.266%	20.260	20.010	21.000	20.400
2	11:47:59	77.189%	2336.000	2322.000	70.628%	20.790	20.330	21.430	20.940
3	11:48:18	77.602%	2315.000	2311.000	70.231%	20.650	20.250	21.070	20.790
X		77.630%	115.663%	115.091%	71.042%	102.833%	100.980%	105.817%	103.542%
σ		0.456%	n/a	n/a	1.079%	n/a	n/a	n/a	n/a
%RSD		0.588	1.026	1.108	1.518	1.334	0.838	1.091	1.345
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:47:39	78.352%	106.300	20.540	20.860	20.990	21.370	81.641%	81.296%
2	11:47:59	78.046%	108.300	20.780	21.160	22.090	21.730	81.920%	83.116%
3	11:48:18	77.985%	107.600	20.930	20.920	21.470	20.990	83.352%	83.349%
X		78.128%	107.414%	103.747%	104.903%	107.589%	106.812%	82.304%	82.587%
σ		0.197%	n/a	n/a	n/a	n/a	n/a	0.918%	1.124%
%RSD		0.252	0.974	0.947	0.744	2.560	1.711	1.115	1.361
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	11:47:39	20.380	20.210	20.640	82.796%				
2	11:47:59	21.690	21.410	22.400	79.744%				
3	11:48:18	22.020	22.420	23.190	77.678%				
X		106.807%	106.718%	110.382%	80.073%				
σ		n/a	n/a	n/a	2.575%				
%RSD		4.063	5.173	5.931	3.215				

CCV 1558997 5/1/2015 11:54:16 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:54:16	79.491%	106.100	105.800	100.100	0.000	49730.000	50190.000	50720.000
2	11:54:36	76.496%	110.500	103.600	100.300	0.000	51240.000	51540.000	51620.000
3	11:54:55	74.420%	111.600	109.000	104.100	0.000	52130.000	53780.000	53980.000
X		76.803%	109.382%	106.153%	101.505%	0.000	102.063%	103.676%	104.213%
σ		2.549%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		3.319	2.679	2.538	2.194	0.000	2.372	3.494	3.235
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:54:16	512.400	5007.000	0.000	50650.000	49030.000	49930.000	95.801%	99.400
2	11:54:36	511.400	4970.000	0.000	52360.000	51040.000	51870.000	89.903%	103.800
3	11:54:55	554.900	5152.000	0.000	53320.000	53080.000	53010.000	88.823%	104.500
X		105.242%	100.861%	0.000	104.223%	102.097%	103.213%	91.509%	102.571%
σ		n/a	n/a	0.000	n/a	n/a	n/a	3.756%	n/a
%RSD		4.718	1.908	0.000	2.591	3.964	3.017	4.105	2.702
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:54:16	96.840	98.480	494.700	24730.000	24630.000	97.470	98.170	98.890
2	11:54:36	102.800	102.700	520.800	26250.000	25920.000	102.500	103.600	103.600
3	11:54:55	103.000	104.500	528.900	26120.000	26130.000	102.300	103.600	105.200
X		100.869%	101.882%	102.960%	102.788%	102.227%	100.757%	101.782%	102.564%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		3.465	3.025	3.468	3.279	3.177	2.826	3.077	3.205
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:54:16	99.090	104.200	103.500	100.600	106.600	103.700	0.000	105.000
2	11:54:36	102.600	107.000	106.200	104.300	108.400	107.400	0.000	105.800
3	11:54:55	103.700	106.900	107.000	102.900	108.100	104.800	0.000	106.400
X		101.822%	106.041%	105.557%	102.635%	107.724%	105.336%	0.000	105.713%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.384	1.490	1.772	1.810	0.884	1.815	0.000	0.628
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:54:16	97.103%	101.100	104.000	87.701%	104.700	104.400	103.600	104.500
2	11:54:36	96.883%	102.800	104.700	87.292%	105.300	105.000	106.100	107.100
3	11:54:55	96.368%	104.300	108.000	85.999%	106.100	105.000	106.900	106.500
X		96.785%	102.728%	105.553%	86.997%	105.344%	104.792%	105.541%	106.032%
σ		0.377%	n/a	n/a	0.888%	n/a	n/a	n/a	n/a
%RSD		0.390	1.582	2.019	1.021	0.687	0.292	1.612	1.276
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:54:16	90.727%	101.400	99.860	100.300	101.300	102.500	94.816%	95.496%
2	11:54:36	90.646%	103.300	102.800	102.300	102.000	102.900	96.847%	97.387%
3	11:54:55	90.317%	104.300	104.200	103.100	102.700	104.000	96.514%	97.728%
X		90.564%	103.017%	102.270%	101.890%	102.016%	103.153%	96.059%	96.870%
σ		0.217%	n/a	n/a	n/a	n/a	n/a	1.089%	1.202%
%RSD		0.240	1.397	2.147	1.449	0.673	0.733	1.134	1.241
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	11:54:16	102.600	102.500	103.900	92.300%				
2	11:54:36	104.200	103.900	105.300	91.607%				
3	11:54:55	106.900	106.600	108.700	90.953%				
X		104.577%	104.326%	105.992%	91.620%				
σ		n/a	n/a	n/a	0.673%				
%RSD		2.113	2.006	2.321	0.735				

CCB1 5/1/2015 11:57:48 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:58:07	92.270%	-0.002	0.372	0.200	0.000	13.500	5.284	5.328
2	11:58:27	87.345%	0.025	0.107	0.143	0.000	12.820	4.491	4.762
3	11:58:46	88.985%	0.023	0.566	0.211	0.000	11.300	5.211	4.460
X		89.533%	0.015	0.348	0.185	0.000	12.540	4.995	4.850
σ		2.508%	0.015	0.231	0.036	0.000	1.128	0.439	0.441
%RSD		2.801	97.810	66.150	19.650	0.000	8.998	8.779	9.095
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:58:07	1.782	-340.200	0.000	10.350	6.872	4.710	99.439%	0.004
2	11:58:27	1.617	-335.700	0.000	9.423	1.232	3.763	96.502%	0.059
3	11:58:46	1.782	-340.200	0.000	9.673	6.956	5.422	95.055%	0.113
X		1.727	-338.700	0.000	9.817	5.020	4.632	96.998%	0.059
σ		0.095	2.598	0.000	0.482	3.281	0.832	2.234%	0.054
%RSD		5.527	0.767	0.000	4.906	65.360	17.970	2.303	92.830
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:58:07	0.025	0.041	0.149	26.050	25.490	0.020	-0.007	0.472
2	11:58:27	0.026	0.033	0.126	22.190	18.060	0.013	0.005	0.410
3	11:58:46	0.044	0.028	0.136	17.140	14.110	0.012	0.015	0.498
X		0.032	0.034	0.137	21.790	19.220	0.015	0.004	0.460
σ		0.011	0.006	0.012	4.466	5.777	0.004	0.011	0.045
%RSD		34.280	17.820	8.650	20.490	30.060	29.590	268.500	9.844
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:58:07	0.414	0.768	0.821	-0.003	-0.039	-0.082	0.000	0.037
2	11:58:27	0.420	0.693	0.783	0.049	0.137	-0.063	0.000	0.036
3	11:58:46	0.373	0.789	0.827	0.021	0.008	0.023	0.000	0.031
X		0.402	0.750	0.810	0.022	0.035	-0.040	0.000	0.035
σ		0.025	0.050	0.024	0.026	0.091	0.056	0.000	0.003
%RSD		6.278	6.681	2.948	116.900	256.500	138.100	0.000	8.982
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:58:07	100.877%	1.967	1.852	101.922%	-0.050	-0.064	0.024	0.019
2	11:58:27	100.616%	1.428	1.532	101.499%	-0.044	-0.053	0.028	0.019
3	11:58:46	100.252%	1.266	1.206	100.054%	-0.041	-0.047	-0.004	-0.003
X		100.581%	1.554	1.530	101.158%	-0.045	-0.054	0.016	0.012
σ		0.314%	0.367	0.323	0.979%	0.004	0.009	0.018	0.013
%RSD		0.312	23.630	21.100	0.968	9.936	16.110	110.500	108.200
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:58:07	102.010%	0.178	0.074	0.064	0.035	0.027	103.378%	102.492%
2	11:58:27	99.177%	0.213	0.070	0.093	0.036	0.012	104.234%	104.261%
3	11:58:46	103.930%	0.191	0.068	0.063	0.027	0.026	106.136%	105.379%
X		101.706%	0.194	0.071	0.073	0.033	0.022	104.583%	104.044%
σ		2.391%	0.018	0.003	0.017	0.005	0.008	1.412%	1.456%
%RSD		2.351	9.089	4.661	23.500	15.280	37.700	1.350	1.399
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	11:58:07	0.040	0.043	0.039	99.860%				
2	11:58:27	0.044	0.039	0.036	99.855%				
3	11:58:46	0.037	0.039	0.037	99.011%				
X		0.040	0.040	0.037	99.575%				
σ		0.003	0.002	0.001	0.488%				
%RSD		8.654	5.668	3.793	0.490				



MB 180-140168/1-A 5/1/2015 12:01:38 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:01:57	89.312%	0.012	-0.153	-0.079	0.000	-1.292	0.445	0.402
2	12:02:16	86.954%	0.014	0.067	-0.013	0.000	-1.594	0.150	-0.207
3	12:02:35	81.617%	-0.043	-0.004	0.040	0.000	-1.330	-0.109	-0.185
X		85.961%	-0.006	-0.030	-0.017	0.000	-1.405	0.162	0.003
σ		3.943%	0.032	0.112	0.059	0.000	0.165	0.277	0.345
%RSD		4.587	544.300	369.900	339.600	0.000	11.710	170.700	10060.000
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:01:57	-1.857	-370.100	0.000	-1.651	-13.250	-10.910	95.747%	-0.023
2	12:02:16	-2.138	-359.500	0.000	-1.832	-9.439	-10.770	92.949%	-0.042
3	12:02:35	-2.104	-356.700	0.000	-1.635	-14.120	-11.240	92.578%	0.065
X		-2.033	-362.100	0.000	-1.706	-12.270	-10.970	93.758%	0.000
σ		0.154	7.097	0.000	0.109	2.491	0.240	1.733%	0.057
%RSD		7.551	1.960	0.000	6.415	20.300	2.185	1.848	13670.000
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:01:57	-0.006	0.002	-0.035	4.836	4.510	-0.002	-0.067	-0.189
2	12:02:16	0.010	0.021	-0.045	4.449	2.835	-0.001	-0.069	-0.173
3	12:02:35	0.003	0.024	-0.030	3.018	3.058	0.002	-0.046	-0.186
X		0.002	0.016	-0.037	4.101	3.468	-0.000	-0.061	-0.183
σ		0.008	0.012	0.008	0.958	0.910	0.002	0.013	0.009
%RSD		331.300	76.700	20.680	23.360	26.230	467.500	20.690	4.667
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:01:57	-0.231	-1.149	-1.150	-0.024	-0.076	-0.037	0.000	-0.013
2	12:02:16	-0.216	-1.138	-1.169	-0.029	-0.126	-0.081	0.000	-0.014
3	12:02:35	-0.204	-1.123	-1.153	-0.042	-0.114	-0.054	0.000	-0.015
X		-0.217	-1.137	-1.158	-0.032	-0.105	-0.057	0.000	-0.014
σ		0.014	0.013	0.010	0.009	0.026	0.022	0.000	0.001
%RSD		6.306	1.127	0.897	29.740	25.090	39.020	0.000	6.063
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:01:57	97.612%	0.420	0.425	98.843%	-0.069	-0.082	0.001	-0.008
2	12:02:16	98.560%	0.434	0.379	98.118%	-0.079	-0.079	0.006	-0.001
3	12:02:35	98.717%	0.295	0.311	98.532%	-0.064	-0.072	-0.003	-0.008
X		98.296%	0.383	0.372	98.498%	-0.071	-0.078	0.001	-0.006
σ		0.597%	0.076	0.057	0.364%	0.007	0.005	0.005	0.004
%RSD		0.608	19.970	15.380	0.369	10.270	6.770	397.400	65.550
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:01:57	99.975%	-0.047	-0.012	-0.009	-0.030	-0.029	102.418%	102.540%
2	12:02:16	99.944%	-0.043	-0.010	-0.013	-0.030	-0.035	104.462%	105.377%
3	12:02:35	100.494%	-0.063	-0.010	-0.012	-0.033	-0.035	104.250%	105.226%
X		100.137%	-0.051	-0.011	-0.011	-0.031	-0.033	103.710%	104.381%
σ		0.309%	0.010	0.001	0.002	0.001	0.004	1.124%	1.596%
%RSD		0.308	20.160	11.820	19.970	4.311	11.290	1.084	1.529
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:01:57	0.008	0.010	-0.017	100.095%				
2	12:02:16	0.008	0.007	-0.013	99.792%				
3	12:02:35	0.012	0.009	-0.014	100.674%				
X		0.009	0.008	-0.015	100.187%				
σ		0.003	0.002	0.002	0.448%				
%RSD		28.220	18.320	11.910	0.447				

LCS 180-140168/2-A 5/1/2015 12:05:26 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:05:45	75.424%	45.660	864.900	814.700	0.000	38750.000	39310.000	40030.000
2	12:06:04	73.154%	46.620	901.000	848.700	0.000	42430.000	42330.000	43350.000
3	12:06:23	74.566%	45.900	892.600	844.000	0.000	39110.000	40050.000	39980.000
X		74.381%	46.060	886.200	835.800	0.000	40100.000	40570.000	41120.000
σ		1.146%	0.500	18.900	18.450	0.000	2031.000	1575.000	1935.000
%RSD		1.541	1.086	2.133	2.207	0.000	5.066	3.882	4.705
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:05:45	1640.000	7975.000	0.000	43620.000	44870.000	45910.000	73.537%	908.500
2	12:06:04	1751.000	8503.000	0.000	48140.000	48720.000	50420.000	67.364%	976.400
3	12:06:23	1614.000	7942.000	0.000	44020.000	45250.000	45560.000	71.427%	916.300
X		1668.000	8140.000	0.000	45260.000	46280.000	47300.000	70.776%	933.700
σ		73.060	314.500	0.000	2504.000	2122.000	2713.000	3.137%	37.180
%RSD		4.379	3.864	0.000	5.531	4.584	5.737	4.433	3.982
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:05:45	472.600	187.100	465.200	952.500	992.500	464.000	458.500	230.400
2	12:06:04	506.200	198.200	496.800	1033.000	1078.000	494.000	473.800	239.900
3	12:06:23	467.400	185.100	467.900	957.100	1017.000	460.500	463.700	232.700
X		482.100	190.100	476.600	980.800	1029.000	472.800	465.300	234.300
σ		21.060	7.061	17.560	45.080	43.840	18.430	7.749	4.964
%RSD		4.369	3.714	3.684	4.597	4.261	3.898	1.665	2.118
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:05:45	233.100	458.800	460.600	36.730	9.488	9.837	0.000	899.600
2	12:06:04	242.300	484.300	478.400	36.760	9.934	9.683	0.000	899.600
3	12:06:23	231.000	465.600	463.900	35.160	9.532	9.779	0.000	905.800
X		235.500	469.600	467.600	36.220	9.651	9.766	0.000	901.700
σ		6.003	13.210	9.491	0.913	0.246	0.078	0.000	3.547
%RSD		2.549	2.813	2.030	2.521	2.547	0.796	0.000	0.393
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:05:45	75.277%	960.700	953.000	71.599%	46.900	47.160	47.790	43.100
2	12:06:04	77.361%	973.000	964.200	72.101%	47.120	47.540	47.900	44.340
3	12:06:23	76.914%	973.000	971.400	71.898%	46.830	47.280	48.150	43.020
X		76.518%	968.900	962.900	71.866%	46.950	47.330	47.950	43.480
σ		1.097%	7.088	9.224	0.253%	0.154	0.194	0.181	0.743
%RSD		1.434	0.732	0.958	0.351	0.328	0.411	0.378	1.709
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:05:45	75.173%	1792.000	432.800	443.700	1806.000	1766.000	82.529%	84.053%
2	12:06:04	76.969%	1792.000	434.800	448.500	1815.000	1763.000	83.788%	84.989%
3	12:06:23	76.791%	1803.000	440.000	467.700	1827.000	1782.000	85.288%	86.344%
X		76.311%	1795.000	435.900	453.300	1816.000	1770.000	83.868%	85.129%
σ		0.989%	6.343	3.725	12.710	10.330	10.170	1.381%	1.152%
%RSD		1.297	0.353	0.855	2.804	0.569	0.575	1.646	1.353
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:05:45	47.610	47.860	20.190	73.525%				
2	12:06:04	49.940	50.860	21.400	71.093%				
3	12:06:23	51.630	52.590	21.580	69.854%				
X		49.730	50.440	21.060	71.491%				
σ		2.020	2.393	0.756	1.867%				
%RSD		4.062	4.744	3.588	2.612				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:33	75.474%	45.700	858.900	835.600	0.000	38950.000	39010.000	39590.000
2	12:09:52	74.726%	47.260	919.200	847.400	0.000	40880.000	42160.000	42430.000
3	12:10:11	68.702%	45.700	901.600	892.000	0.000	41460.000	41610.000	41630.000
X		72.967%	46.220	893.200	858.300	0.000	40430.000	40930.000	41220.000
σ		3.713%	0.900	31.010	29.760	0.000	1313.000	1686.000	1465.000
%RSD		5.088	1.947	3.471	3.468	0.000	3.247	4.121	3.553
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:33	1580.000	7691.000	0.000	44680.000	45100.000	46290.000	70.482%	910.800
2	12:09:52	1690.000	8194.000	0.000	47620.000	49480.000	50130.000	63.397%	967.000
3	12:10:11	1657.000	8202.000	0.000	45770.000	47180.000	48010.000	67.083%	932.900
X		1642.000	8029.000	0.000	46020.000	47260.000	48140.000	66.987%	936.900
σ		56.020	292.900	0.000	1488.000	2190.000	1926.000	3.544%	28.300
%RSD		3.411	3.648	0.000	3.233	4.635	4.000	5.290	3.020
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:33	473.700	184.500	467.100	954.500	993.300	466.400	470.800	237.400
2	12:09:52	491.200	193.500	491.000	994.900	1053.000	488.000	484.600	245.300
3	12:10:11	481.600	185.000	469.500	932.900	986.400	452.300	444.200	228.100
X		482.200	187.700	475.900	960.700	1011.000	468.900	466.500	236.900
σ		8.782	5.056	13.170	31.450	36.450	18.000	20.500	8.597
%RSD		1.821	2.694	2.768	3.273	3.606	3.839	4.395	3.628
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:33	229.300	468.600	467.200	36.190	9.555	9.452	0.000	902.800
2	12:09:52	242.800	486.100	489.700	37.660	9.745	10.350	0.000	895.900
3	12:10:11	229.700	470.600	471.300	36.140	9.472	9.535	0.000	904.000
X		233.900	475.100	476.100	36.660	9.591	9.780	0.000	900.900
σ		7.657	9.579	11.970	0.864	0.140	0.498	0.000	4.340
%RSD		3.273	2.016	2.515	2.358	1.457	5.091	0.000	0.482
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:33	75.294%	964.400	963.800	71.325%	47.070	47.030	47.760	43.610
2	12:09:52	75.523%	976.200	967.000	70.798%	47.250	47.110	47.390	43.810
3	12:10:11	73.452%	976.800	978.500	69.008%	47.570	47.490	48.260	44.340
X		74.756%	972.500	969.700	70.377%	47.300	47.210	47.800	43.920
σ		1.136%	6.995	7.715	1.215%	0.253	0.249	0.436	0.375
%RSD		1.519	0.719	0.796	1.726	0.534	0.527	0.912	0.855
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:33	74.503%	1818.000	442.400	457.300	1830.000	1790.000	81.658%	83.256%
2	12:09:52	74.657%	1804.000	443.800	471.200	1843.000	1801.000	83.753%	84.781%
3	12:10:11	73.850%	1824.000	448.400	469.500	1838.000	1810.000	83.417%	84.523%
X		74.337%	1815.000	444.900	466.000	1837.000	1800.000	82.943%	84.187%
σ		0.428%	10.630	3.161	7.568	6.572	9.914	1.125%	0.817%
%RSD		0.576	0.586	0.711	1.624	0.358	0.551	1.356	0.970
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:09:33	51.550	51.960	21.670	67.190%				
2	12:09:52	52.870	53.420	22.380	67.081%				
3	12:10:11	52.430	53.480	21.950	68.256%				
X		52.290	52.950	22.000	67.509%				
σ		0.673	0.860	0.356	0.650%				
%RSD		1.288	1.625	1.620	0.962				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:21	67.101%	-0.023	195.600	193.800	0.000	799200.000	98940.000	98010.000
2	12:13:40	65.827%	0.055	194.100	193.700	0.000	811400.000	99980.000	99590.000
3	12:13:59	66.135%	0.024	188.800	192.700	0.000	810200.000	100700.000	102000.000
x		66.355%	0.018	192.800	193.400	0.000	807000.000	99860.000	99860.000
σ		0.665%	0.039	3.591	0.627	0.000	6737.000	871.400	2008.000
%RSD		1.002	211.000	1.862	0.324	0.000	0.835	0.873	2.010
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:21	116.200	324.900	0.000	36120.000	30810.000	32170.000	78.366%	2.258
2	12:13:40	133.100	368.300	0.000	37460.000	31690.000	32420.000	76.614%	2.194
3	12:13:59	120.500	372.000	0.000	37330.000	31020.000	32820.000	76.773%	1.981
x		123.300	355.100	0.000	36970.000	31180.000	32470.000	77.251%	2.145
σ		8.755	26.210	0.000	740.100	460.900	326.000	0.969%	0.145
%RSD		7.103	7.381	0.000	2.002	1.478	1.004	1.254	6.761
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:21	1.723	0.170	14.470	94.970	135.300	0.090	0.350	6.337
2	12:13:40	1.931	0.209	14.730	103.100	131.900	0.103	0.387	6.244
3	12:13:59	1.708	0.176	14.450	92.960	129.900	0.074	0.276	6.187
x		1.787	0.185	14.550	97.020	132.400	0.089	0.338	6.256
σ		0.125	0.021	0.157	5.393	2.685	0.015	0.057	0.075
%RSD		6.966	11.340	1.077	5.558	2.029	16.550	16.790	1.207
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:21	-0.014	0.681	0.308	3.730	-0.000	3.707	0.000	626.200
2	12:13:40	0.037	0.522	0.329	3.573	0.191	3.746	0.000	629.500
3	12:13:59	0.033	0.613	0.253	3.634	0.079	3.603	0.000	627.300
x		0.019	0.605	0.297	3.646	0.090	3.686	0.000	627.700
σ		0.028	0.080	0.039	0.079	0.096	0.074	0.000	1.676
%RSD		151.600	13.150	13.140	2.164	106.700	2.001	0.000	0.267
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:21	78.745%	6.792	6.987	71.210%	-0.074	-0.081	0.008	0.005
2	12:13:40	78.633%	5.930	6.106	70.084%	-0.072	-0.075	-0.011	-0.023
3	12:13:59	80.173%	5.500	5.516	70.561%	-0.070	-0.080	-0.006	-0.003
x		79.183%	6.074	6.203	70.618%	-0.072	-0.079	-0.003	-0.007
σ		0.859%	0.658	0.740	0.565%	0.002	0.003	0.010	0.014
%RSD		1.085	10.840	11.930	0.800	2.563	4.335	328.300	198.300
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:21	76.381%	1.074	0.301	0.297	88.420	86.890	80.364%	80.440%
2	12:13:40	76.445%	0.881	0.267	0.272	88.250	87.470	82.080%	82.276%
3	12:13:59	76.778%	0.783	0.211	0.241	89.130	88.590	82.964%	83.720%
x		76.535%	0.913	0.260	0.270	88.600	87.650	81.803%	82.145%
σ		0.213%	0.148	0.045	0.028	0.465	0.866	1.322%	1.644%
%RSD		0.278	16.240	17.400	10.260	0.525	0.988	1.616	2.001
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:13:21	0.242	0.242	0.099	63.300%				
2	12:13:40	0.215	0.222	0.109	62.980%				
3	12:13:59	0.204	0.201	0.108	63.772%				
x		0.220	0.222	0.105	63.351%				
σ		0.020	0.020	0.005	0.398%				
%RSD		9.007	9.072	4.873	0.629				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:17:09	71.727%	0.030	215.300	214.100	0.000	876300.000	110000.000	111900.000
2	12:17:28	73.316%	-0.040	215.800	210.200	0.000	860600.000	108900.000	111300.000
3	12:17:48	68.336%	0.035	206.700	209.900	0.000	868100.000	110100.000	112100.000
X		71.126%	0.008	212.600	211.400	0.000	868300.000	109700.000	111700.000
σ		2.544%	0.042	5.106	2.331	0.000	7834.000	645.100	398.100
%RSD		3.576	517.200	2.402	1.103	0.000	0.902	0.588	0.356
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:17:09	11.210	30.400	0.000	39760.000	33760.000	34130.000	89.401%	0.562
2	12:17:28	11.240	21.640	0.000	40330.000	34100.000	34940.000	86.233%	0.527
3	12:17:48	10.950	34.080	0.000	40300.000	34230.000	35010.000	88.041%	0.571
X		11.130	28.700	0.000	40130.000	34030.000	34690.000	87.892%	0.553
σ		0.157	6.390	0.000	320.500	241.900	490.900	1.589%	0.023
%RSD		1.412	22.260	0.000	0.799	0.711	1.415	1.808	4.151
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:17:09	1.428	0.116	13.900	8.145	60.250	0.065	0.267	6.877
2	12:17:28	1.822	0.081	14.160	7.527	58.850	0.066	0.235	7.186
3	12:17:48	1.931	0.123	14.060	6.391	59.240	0.057	0.260	6.962
X		1.727	0.107	14.040	7.354	59.440	0.063	0.254	7.009
σ		0.265	0.022	0.133	0.890	0.724	0.005	0.017	0.160
%RSD		15.330	20.920	0.950	12.100	1.218	8.205	6.571	2.278
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:17:09	0.431	4.922	4.595	4.837	0.015	8.204	0.000	667.000
2	12:17:28	0.417	5.261	5.117	4.950	0.029	8.518	0.000	675.000
3	12:17:48	0.460	4.869	4.445	4.905	0.009	8.167	0.000	670.600
X		0.436	5.017	4.719	4.897	0.018	8.296	0.000	670.900
σ		0.022	0.212	0.353	0.057	0.011	0.193	0.000	3.968
%RSD		4.999	4.232	7.477	1.165	59.520	2.323	0.000	0.592
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:17:09	84.119%	3.952	4.076	74.354%	-0.084	-0.085	0.060	0.044
2	12:17:28	84.488%	4.083	4.181	73.466%	-0.072	-0.080	0.026	0.011
3	12:17:48	85.564%	3.818	4.039	74.023%	-0.078	-0.082	0.008	0.000
X		84.724%	3.951	4.099	73.948%	-0.078	-0.082	0.031	0.019
σ		0.751%	0.132	0.074	0.449%	0.006	0.003	0.026	0.023
%RSD		0.886	3.349	1.795	0.607	7.404	3.234	84.030	123.500
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:17:09	79.292%	0.314	0.230	0.248	94.920	95.350	81.531%	82.379%
2	12:17:28	79.694%	0.331	0.249	0.252	96.060	95.520	84.700%	84.854%
3	12:17:48	80.056%	0.283	0.247	0.253	94.660	94.890	84.524%	85.451%
X		79.681%	0.309	0.242	0.251	95.210	95.250	83.585%	84.228%
σ		0.382%	0.024	0.011	0.003	0.743	0.326	1.781%	1.629%
%RSD		0.479	7.769	4.345	1.182	0.781	0.343	2.131	1.934
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:17:09	0.055	0.066	0.428	66.696%				
2	12:17:28	0.077	0.076	0.458	64.664%				
3	12:17:48	0.071	0.066	0.443	65.331%				
X		0.068	0.070	0.443	65.564%				
σ		0.011	0.006	0.015	1.036%				
%RSD		16.860	7.940	3.384	1.580				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:58	91.942%	0.020	46.400	49.350	0.000	187800.000	22290.000	22610.000
2	12:21:17	86.771%	-0.021	48.910	48.230	0.000	192100.000	22760.000	22680.000
3	12:21:36	84.003%	-0.020	48.600	48.620	0.000	193000.000	22410.000	22650.000
X		87.572%	-0.007	47.970	48.730	0.000	191000.000	22490.000	22650.000
σ		4.030%	0.024	1.368	0.571	0.000	2769.000	246.700	33.400
%RSD		4.602	333.300	2.851	1.172	0.000	1.450	1.097	0.147
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:58	-1.436	-320.700	0.000	8011.000	6796.000	6602.000	102.214%	0.060
2	12:21:17	-1.651	-310.500	0.000	8106.000	6898.000	6628.000	100.521%	0.013
3	12:21:36	-1.572	-300.200	0.000	8210.000	6958.000	6684.000	99.826%	0.043
X		-1.553	-310.500	0.000	8109.000	6884.000	6638.000	100.853%	0.039
σ		0.109	10.260	0.000	99.790	81.820	41.910	1.229%	0.024
%RSD		7.006	3.306	0.000	1.231	1.188	0.631	1.218	61.360
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:58	0.361	0.026	2.792	5.830	11.670	0.013	0.002	1.264
2	12:21:17	0.342	0.073	2.768	3.519	10.180	0.008	-0.007	1.227
3	12:21:36	0.414	0.044	2.752	3.608	11.130	0.013	-0.037	1.240
X		0.372	0.047	2.771	4.319	10.990	0.011	-0.014	1.244
σ		0.038	0.023	0.020	1.309	0.754	0.003	0.021	0.019
%RSD		10.080	49.480	0.711	30.320	6.860	26.460	146.200	1.515
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:58	-0.149	-0.509	-0.617	1.090	-0.151	1.900	0.000	144.500
2	12:21:17	-0.180	-0.579	-0.716	1.061	-0.062	1.828	0.000	143.900
3	12:21:36	-0.133	-0.514	-0.590	1.186	0.031	1.840	0.000	144.400
X		-0.154	-0.534	-0.641	1.112	-0.061	1.856	0.000	144.300
σ		0.024	0.039	0.066	0.065	0.091	0.039	0.000	0.323
%RSD		15.580	7.276	10.330	5.879	150.100	2.080	0.000	0.224
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:58	100.476%	0.899	0.971	93.215%	-0.081	-0.093	0.023	0.010
2	12:21:17	101.305%	0.928	0.936	93.013%	-0.082	-0.094	0.007	0.007
3	12:21:36	102.137%	1.048	0.965	93.755%	-0.075	-0.074	0.001	-0.001
X		101.306%	0.959	0.957	93.328%	-0.079	-0.087	0.010	0.005
σ		0.831%	0.079	0.019	0.384%	0.004	0.011	0.011	0.006
%RSD		0.820	8.205	1.944	0.411	4.862	12.720	113.100	117.300
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:58	96.437%	-0.003	0.010	-0.002	18.200	18.970	99.230%	99.798%
2	12:21:17	97.914%	-0.018	0.012	0.013	19.110	18.470	101.961%	102.765%
3	12:21:36	98.334%	-0.008	0.020	-0.004	18.840	18.750	101.964%	102.962%
X		97.562%	-0.010	0.014	0.003	18.720	18.730	101.052%	101.841%
σ		0.996%	0.008	0.005	0.009	0.470	0.252	1.578%	1.773%
%RSD		1.021	78.500	37.830	375.200	2.511	1.347	1.561	1.741
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:20:58	0.050	0.044	0.001	81.930%				
2	12:21:17	0.043	0.039	0.002	82.607%				
3	12:21:36	0.048	0.034	0.003	83.661%				
X		0.047	0.039	0.002	82.733%				
σ		0.004	0.005	0.001	0.872%				
%RSD		7.528	12.450	57.890	1.054				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:27:45	93.097%	-0.046	1.022	0.637	0.000	14.080	0.572	0.586
2	12:28:04	94.768%	-0.046	0.563	0.491	0.000	10.760	0.050	0.089
3	12:28:23	91.302%	0.033	0.715	0.670	0.000	10.140	-0.008	0.120
X		93.056%	-0.020	0.767	0.600	0.000	11.660	0.205	0.265
		1.733%	0.045	0.234	0.095	0.000	2.118	0.319	0.278
		1.863	227.900	30.520	15.860	0.000	18.160	155.900	104.900
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:27:45	-2.050	-411.800	0.000	-4.163	-13.200	-12.030	93.051%	-0.063
2	12:28:04	-2.107	-409.400	0.000	-5.415	-13.170	-12.360	91.283%	-0.073
3	12:28:23	-2.151	-407.300	0.000	-6.256	-14.130	-12.820	92.283%	-0.052
X		-2.103	-409.500	0.000	-5.278	-13.500	-12.400	92.206%	-0.062
		0.051	2.275	0.000	1.053	0.544	0.398	0.886%	0.011
		2.403	0.556	0.000	19.950	4.031	3.210	0.961	16.870
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:27:45	0.025	0.033	-0.040	1.864	0.027	0.000	-0.043	-0.176
2	12:28:04	0.006	0.014	-0.044	-0.057	-0.171	-0.001	-0.066	-0.182
3	12:28:23	0.012	0.017	-0.041	-1.641	-0.830	-0.002	-0.060	-0.196
X		0.014	0.021	-0.042	0.055	-0.325	-0.001	-0.057	-0.184
		0.009	0.010	0.002	1.755	0.449	0.001	0.012	0.010
		63.620	48.040	5.597	3163.000	138.200	129.500	21.010	5.469
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:27:45	-0.237	-1.086	-1.210	-0.030	-0.022	0.001	0.000	-0.010
2	12:28:04	-0.224	-1.127	-1.183	-0.037	0.042	-0.097	0.000	-0.010
3	12:28:23	-0.237	-1.158	-1.189	-0.017	-0.375	0.068	0.000	-0.012
X		-0.232	-1.124	-1.194	-0.028	-0.118	-0.009	0.000	-0.011
		0.007	0.036	0.014	0.010	0.224	0.083	0.000	0.001
		3.176	3.206	1.169	34.790	189.800	889.800	0.000	11.290
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:27:45	96.732%	0.110	0.090	94.940%	-0.080	-0.090	0.031	0.017
2	12:28:04	96.806%	0.102	0.092	94.894%	-0.079	-0.081	0.015	0.008
3	12:28:23	97.302%	0.078	0.095	94.902%	-0.077	-0.085	-0.042	-0.032
X		96.947%	0.097	0.093	94.912%	-0.079	-0.086	0.001	-0.002
		0.310%	0.017	0.002	0.024%	0.001	0.005	0.038	0.026
		0.320	17.150	2.368	0.026	1.805	5.374	2733.000	1214.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:27:45	97.606%	-0.103	-0.054	-0.057	-0.023	-0.025	98.769%	98.666%
2	12:28:04	97.783%	-0.099	-0.042	-0.043	-0.026	-0.031	101.765%	101.767%
3	12:28:23	98.343%	-0.091	-0.049	-0.049	-0.028	-0.033	102.603%	103.569%
X		97.911%	-0.098	-0.048	-0.050	-0.025	-0.030	101.046%	101.334%
		0.385%	0.006	0.006	0.007	0.002	0.004	2.016%	2.480%
		0.393	6.153	11.870	13.610	9.700	14.750	1.995	2.448
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:27:45	0.028	0.022	-0.020	92.859%				
2	12:28:04	0.020	0.025	-0.019	93.532%				
3	12:28:23	0.020	0.022	-0.018	95.712%				
X		0.023	0.023	-0.019	94.035%				
		0.005	0.002	0.001	1.491%				
		20.620	7.562	4.913	1.586				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:31:34	81.504%	45.810	919.900	869.000	0.000	42820.000	43040.000	42740.000
2	12:31:53	77.911%	46.840	940.400	892.000	0.000	41960.000	42490.000	43640.000
3	12:32:12	80.364%	46.820	924.000	871.600	0.000	42210.000	42260.000	43210.000
X		79.927%	46.490	928.100	877.500	0.000	42330.000	42600.000	43190.000
σ		1.836%	0.587	10.840	12.600	0.000	439.100	398.400	450.100
%RSD		2.297	1.262	1.168	1.435	0.000	1.037	0.935	1.042
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:31:34	1663.000	8224.000	0.000	47120.000	50760.000	49060.000	67.030%	1008.000
2	12:31:53	1729.000	8211.000	0.000	46520.000	48080.000	48040.000	71.718%	971.200
3	12:32:12	1690.000	8073.000	0.000	47710.000	51710.000	50860.000	67.805%	989.700
X		1694.000	8169.000	0.000	47120.000	50190.000	49320.000	68.851%	989.500
σ		33.310	83.770	0.000	595.100	1883.000	1429.000	2.513%	18.250
%RSD		1.966	1.025	0.000	1.263	3.752	2.898	3.650	1.845
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:31:34	502.500	203.200	487.800	1016.000	1106.000	500.300	511.600	254.500
2	12:31:53	480.800	197.300	470.100	961.000	1033.000	473.400	477.500	236.800
3	12:32:12	495.000	200.600	486.600	1007.000	1094.000	496.300	500.200	249.600
X		492.700	200.400	481.500	994.800	1078.000	490.000	496.400	246.900
σ		11.030	2.988	9.905	29.630	39.130	14.550	17.390	9.139
%RSD		2.238	1.491	2.057	2.979	3.632	2.969	3.503	3.701
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:31:34	252.400	486.600	485.100	36.850	9.809	9.987	0.000	897.600
2	12:31:53	236.400	469.500	470.500	36.720	9.348	10.230	0.000	897.800
3	12:32:12	248.500	484.800	487.200	36.400	9.695	10.140	0.000	893.600
X		245.800	480.300	481.000	36.660	9.618	10.120	0.000	896.300
σ		8.316	9.424	9.101	0.231	0.240	0.125	0.000	2.374
%RSD		3.384	1.962	1.892	0.631	2.496	1.230	0.000	0.265
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:31:34	74.948%	995.100	967.000	70.015%	49.340	49.130	48.290	45.460
2	12:31:53	77.179%	1008.000	980.600	70.985%	49.030	48.890	48.340	44.340
3	12:32:12	77.733%	1004.000	977.900	71.132%	49.020	48.710	49.060	46.420
X		76.620%	1002.000	975.200	70.711%	49.130	48.910	48.570	45.410
σ		1.474%	6.535	7.216	0.607%	0.181	0.210	0.432	1.038
%RSD		1.924	0.652	0.740	0.859	0.369	0.430	0.889	2.286
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:31:34	74.679%	1794.000	429.900	454.000	1793.000	1755.000	83.746%	83.838%
2	12:31:53	76.488%	1799.000	425.500	454.900	1802.000	1764.000	84.404%	85.403%
3	12:32:12	76.725%	1801.000	434.100	469.200	1807.000	1776.000	85.374%	86.601%
X		75.964%	1798.000	429.800	459.300	1801.000	1765.000	84.508%	85.281%
σ		1.119%	3.715	4.281	8.526	7.092	10.830	0.819%	1.385%
%RSD		1.473	0.207	0.996	1.856	0.394	0.614	0.969	1.624
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:31:34	51.590	51.660	21.740	70.503%				
2	12:31:53	51.900	53.190	21.910	72.179%				
3	12:32:12	55.210	56.110	23.200	67.987%				
X		52.900	53.650	22.280	70.223%				
σ		2.004	2.258	0.800	2.110%				
%RSD		3.789	4.209	3.589	3.004				



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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:35:24	80.260%	-0.042	237.800	233.600	0.000	61500.000	32590.000	33300.000
2	12:35:43	73.765%	-0.026	228.500	222.600	0.000	63010.000	33820.000	34610.000
3	12:36:02	72.036%	0.004	244.100	232.700	0.000	65260.000	34720.000	35720.000
X		75.354%	-0.021	236.800	229.600	0.000	63260.000	33710.000	34540.000
σ		4.336%	0.023	7.864	6.126	0.000	1891.000	1069.000	1212.000
%RSD		5.755	110.300	3.321	2.668	0.000	2.990	3.172	3.508
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:35:24	7.994	4342.000	0.000	6304.000	215200.000	202600.000	68.139%	0.533
2	12:35:43	8.175	4295.000	0.000	6787.000	224700.000	216600.000	61.192%	0.603
3	12:36:02	8.705	4457.000	0.000	6760.000	232300.000	217200.000	58.632%	0.482
X		8.291	4365.000	0.000	6617.000	224100.000	212100.000	62.654%	0.539
σ		0.369	83.110	0.000	271.200	8588.000	8273.000	4.919%	0.061
%RSD		4.451	1.904	0.000	4.099	3.833	3.901	7.852	11.270
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:35:24	-0.862	0.311	12610.000	5945.000	6361.000	11.270	3.891	1.373
2	12:35:43	-0.637	0.263	13630.000	6420.000	6755.000	11.730	4.222	1.380
3	12:36:02	-0.667	0.239	13450.000	6332.000	6684.000	11.940	3.628	1.489
X		-0.722	0.271	13230.000	6232.000	6600.000	11.650	3.913	1.414
σ		0.122	0.037	546.200	252.900	210.100	0.341	0.297	0.065
%RSD		16.910	13.650	4.129	4.058	3.183	2.925	7.597	4.583
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:35:24	1.098	11.220	10.740	4.304	-0.287	0.731	0.000	682.400
2	12:35:43	0.974	11.560	11.020	3.074	-0.280	0.427	0.000	686.800
3	12:36:02	1.070	11.710	11.220	4.224	-0.304	0.380	0.000	686.900
X		1.048	11.500	10.990	3.867	-0.290	0.512	0.000	685.400
σ		0.065	0.254	0.241	0.688	0.012	0.191	0.000	2.535
%RSD		6.197	2.205	2.190	17.790	4.201	37.230	0.000	0.370
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:35:24	70.699%	4.377	4.477	65.517%	-0.076	-0.077	0.476	0.402
2	12:35:43	69.720%	3.491	3.442	64.184%	-0.071	-0.088	0.454	0.400
3	12:36:02	69.446%	2.857	2.973	63.865%	-0.078	-0.071	0.422	0.444
X		69.955%	3.575	3.631	64.522%	-0.075	-0.079	0.451	0.415
σ		0.659%	0.763	0.770	0.876%	0.004	0.008	0.027	0.025
%RSD		0.942	21.340	21.200	1.358	4.846	10.630	6.048	6.020
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:35:24	68.841%	1.696	0.266	0.308	143.600	144.300	76.372%	77.144%
2	12:35:43	69.363%	1.278	0.296	0.302	142.800	142.900	76.638%	77.604%
3	12:36:02	69.454%	1.128	0.295	0.303	142.500	143.600	78.049%	78.219%
X		69.219%	1.367	0.285	0.305	143.000	143.600	77.019%	77.656%
σ		0.331%	0.294	0.017	0.003	0.552	0.706	0.901%	0.540%
%RSD		0.478	21.530	6.014	0.928	0.386	0.491	1.170	0.695
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:35:24	0.229	0.250	0.073	63.131%				
2	12:35:43	0.256	0.250	0.075	61.167%				
3	12:36:02	0.211	0.224	0.076	61.089%				
X		0.232	0.241	0.075	61.796%				
σ		0.023	0.015	0.002	1.157%				
%RSD		9.849	6.092	2.309	1.872				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:39:14	78.394%	-0.029	44.620	46.580	0.000	12820.000	6982.000	6968.000
2	12:39:33	72.545%	-0.054	44.590	46.550	0.000	12510.000	6692.000	6722.000
3	12:39:52	78.077%	-0.002	46.070	45.220	0.000	12210.000	6704.000	6760.000
X		76.339%	-0.028	45.090	46.120	0.000	12510.000	6793.000	6816.000
σ		3.289%	0.026	0.844	0.775	0.000	305.300	164.300	132.300
%RSD		4.308	91.440	1.872	1.681	0.000	2.440	2.418	1.941
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:39:14	-0.213	593.000	0.000	1273.000	38880.000	38430.000	79.716%	0.044
2	12:39:33	-0.042	561.800	0.000	1254.000	38980.000	40310.000	74.651%	-0.026
3	12:39:52	-0.275	526.000	0.000	1267.000	40140.000	40170.000	71.142%	0.033
X		-0.176	560.300	0.000	1265.000	39330.000	39640.000	75.170%	0.017
σ		0.121	33.570	0.000	9.462	697.100	1047.000	4.310%	0.038
%RSD		68.400	5.991	0.000	0.748	1.772	2.642	5.734	221.300
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:39:14	0.188	0.078	2521.000	1212.000	1265.000	2.288	0.786	0.081
2	12:39:33	-0.142	0.094	2562.000	1219.000	1267.000	2.361	0.901	0.106
3	12:39:52	-0.438	0.050	2634.000	1252.000	1324.000	2.307	0.740	0.127
X		-0.130	0.074	2572.000	1228.000	1285.000	2.319	0.809	0.105
σ		0.313	0.022	57.530	21.300	33.470	0.038	0.083	0.023
%RSD		240.000	29.720	2.236	1.736	2.605	1.634	10.300	21.650
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:39:14	0.016	1.890	1.848	1.022	-0.279	0.203	0.000	146.700
2	12:39:33	0.002	1.862	1.913	0.769	-0.215	0.004	0.000	146.700
3	12:39:52	0.031	1.994	1.899	1.117	-0.212	0.184	0.000	148.300
X		0.016	1.915	1.886	0.969	-0.235	0.130	0.000	147.200
σ		0.014	0.070	0.034	0.180	0.038	0.110	0.000	0.912
%RSD		88.310	3.646	1.800	18.570	16.120	84.460	0.000	0.619
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:39:14	81.292%	0.625	0.633	79.101%	-0.086	-0.084	0.106	0.067
2	12:39:33	81.002%	0.571	0.559	77.654%	-0.082	-0.090	0.128	0.071
3	12:39:52	79.988%	0.529	0.555	77.178%	-0.079	-0.079	0.079	0.074
X		80.761%	0.575	0.582	77.978%	-0.082	-0.084	0.104	0.071
σ		0.684%	0.048	0.044	1.001%	0.003	0.005	0.024	0.003
%RSD		0.848	8.314	7.556	1.284	3.875	6.336	23.060	4.934
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:39:14	82.457%	0.127	0.015	0.011	28.100	27.850	86.183%	86.974%
2	12:39:33	82.441%	0.164	0.007	0.009	27.820	27.790	87.815%	88.282%
3	12:39:52	82.100%	0.087	0.007	0.012	27.820	28.240	88.454%	89.576%
X		82.333%	0.126	0.010	0.011	27.910	27.960	87.484%	88.277%
σ		0.202%	0.038	0.005	0.002	0.162	0.242	1.171%	1.301%
%RSD		0.245	30.390	46.070	15.460	0.580	0.866	1.339	1.474
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:39:14	0.056	0.060	0.005	80.871%				
2	12:39:33	0.064	0.063	0.007	79.042%				
3	12:39:52	0.065	0.063	0.007	77.329%				
X		0.062	0.062	0.006	79.081%				
σ		0.005	0.002	0.001	1.772%				
%RSD		7.589	2.746	15.890	2.240				

CCV 1558997 5/1/2015 12:42:52 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:42:52	96.146%	105.600	110.700	100.900	0.000	48870.000	50210.000	51580.000
2	12:43:11	91.692%	110.200	110.700	103.800	0.000	50420.000	51510.000	52910.000
3	12:43:30	95.029%	106.800	100.300	99.300	0.000	50540.000	50960.000	50700.000
X		94.289%	107.527%	107.251%	101.332%	0.000	99.881%	101.788%	103.465%
σ		2.317%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.458	2.181	5.601	2.268	0.000	1.865	1.276	2.156
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:42:52	521.500	4877.000	0.000	50460.000	50070.000	50960.000	102.467%	103.900
2	12:43:11	530.900	4894.000	0.000	52930.000	52730.000	52980.000	95.843%	104.800
3	12:43:30	508.800	4730.000	0.000	53070.000	53540.000	52980.000	94.953%	107.700
X		104.075%	96.671%	0.000	104.302%	104.229%	104.615%	97.754%	105.472%
σ		n/a	n/a	0.000	n/a	n/a	n/a	4.106%	n/a
%RSD		2.132	1.861	0.000	2.819	3.480	2.234	4.200	1.894
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:42:52	104.000	104.700	493.600	25250.000	25000.000	100.200	102.400	104.400
2	12:43:11	104.300	104.800	520.000	26210.000	25770.000	104.000	106.400	108.100
3	12:43:30	105.700	107.500	532.500	26770.000	26100.000	106.700	108.300	108.200
X		104.652%	105.696%	103.074%	104.303%	102.498%	103.634%	105.682%	106.894%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.864	1.489	3.857	2.953	2.193	3.169	2.872	2.060
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:42:52	103.400	103.900	104.300	101.300	104.300	101.700	0.000	101.900
2	12:43:11	105.500	108.600	107.100	102.000	105.900	103.800	0.000	102.700
3	12:43:30	107.300	108.400	109.600	102.500	105.700	105.600	0.000	103.200
X		105.416%	106.985%	106.977%	101.938%	105.319%	103.663%	0.000	102.603%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.891	2.509	2.484	0.558	0.825	1.868	0.000	0.668
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:42:52	104.714%	97.840	100.700	90.963%	105.300	105.500	104.500	104.600
2	12:43:11	104.836%	100.600	103.800	90.611%	107.700	107.300	106.900	106.400
3	12:43:30	104.377%	102.900	105.600	90.050%	107.400	107.100	106.500	106.100
X		104.642%	100.427%	103.368%	90.541%	106.806%	106.667%	105.966%	105.695%
σ		0.238%	n/a	n/a	0.460%	n/a	n/a	n/a	n/a
%RSD		0.227	2.509	2.400	0.508	1.198	0.943	1.201	0.942
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:42:52	93.062%	101.900	100.500	102.500	102.200	103.000	92.957%	93.714%
2	12:43:11	93.478%	104.100	104.700	105.100	102.200	103.500	95.463%	95.461%
3	12:43:30	94.054%	104.300	104.500	104.000	104.000	104.100	96.124%	96.487%
X		93.531%	103.419%	103.237%	103.852%	102.784%	103.554%	94.848%	95.221%
σ		0.499%	n/a	n/a	n/a	n/a	n/a	1.671%	1.402%
%RSD		0.533	1.299	2.257	1.244	1.004	0.552	1.761	1.473
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:42:52	105.300	103.700	106.200	87.259%				
2	12:43:11	107.300	105.600	107.500	87.307%				
3	12:43:30	108.000	106.200	108.200	87.768%				
X		106.881%	105.169%	107.323%	87.445%				
σ		n/a	n/a	n/a	0.281%				
%RSD		1.317	1.231	0.953	0.321				

CCB2 5/1/2015 12:49:22 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	12:49:41	116.911%	0.045	0.660	0.824	0.000	10.760	4.270	3.734
2	12:50:00	115.713%	-0.006	1.031	0.894	0.000	9.407	3.597	3.551
3	12:50:19	112.654%	-0.023	1.163	0.857	0.000	9.240	3.425	3.747
X		115.092%	0.006	0.951	0.858	0.000	9.802	3.764	3.677
σ		2.195%	0.036	0.261	0.035	0.000	0.834	0.447	0.110
%RSD		1.907	644.100	27.420	4.133	0.000	8.503	11.860	2.979
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:49:41	2.011	-426.900	0.000	6.596	-0.958	3.932	117.048%	0.013
2	12:50:00	2.030	-426.400	0.000	6.367	1.608	4.118	114.612%	0.067
3	12:50:19	1.989	-438.500	0.000	5.370	4.582	4.966	115.140%	0.032
X		2.010	-430.600	0.000	6.111	1.744	4.339	115.600%	0.038
σ		0.021	6.869	0.000	0.652	2.773	0.551	1.282%	0.027
%RSD		1.026	1.595	0.000	10.670	159.000	12.710	1.109	73.000
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:49:41	0.039	0.048	0.183	15.660	7.607	0.009	0.013	0.543
2	12:50:00	0.047	0.043	0.154	12.140	6.685	0.011	-0.005	0.543
3	12:50:19	0.035	0.065	0.177	13.360	6.797	0.014	0.006	0.512
X		0.040	0.052	0.171	13.720	7.029	0.012	0.005	0.533
σ		0.006	0.012	0.015	1.789	0.503	0.002	0.009	0.018
%RSD		14.890	22.140	8.997	13.040	7.155	21.140	200.800	3.391
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:49:41	0.510	0.933	0.922	-0.006	0.102	0.116	0.000	0.044
2	12:50:00	0.424	0.948	0.990	0.038	0.339	0.069	0.000	0.045
3	12:50:19	0.488	0.887	0.947	0.029	0.102	0.042	0.000	0.038
X		0.474	0.922	0.953	0.020	0.181	0.076	0.000	0.042
σ		0.045	0.031	0.034	0.023	0.137	0.038	0.000	0.004
%RSD		9.454	3.408	3.598	114.900	75.600	49.830	0.000	8.730
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:49:41	115.629%	0.339	0.288	115.546%	-0.057	-0.057	0.065	0.044
2	12:50:00	118.054%	0.230	0.258	115.400%	-0.056	-0.062	0.044	0.037
3	12:50:19	117.627%	0.247	0.254	115.787%	-0.050	-0.056	0.028	0.012
X		117.103%	0.272	0.267	115.578%	-0.054	-0.058	0.046	0.031
σ		1.295%	0.059	0.018	0.196%	0.003	0.004	0.019	0.017
%RSD		1.106	21.590	6.925	0.169	6.447	6.048	40.730	53.390
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:49:41	112.076%	0.081	0.013	-0.010	0.048	0.026	107.153%	105.076%
2	12:50:00	108.303%	0.076	0.006	0.010	0.034	0.030	108.252%	106.753%
3	12:50:19	113.737%	0.034	0.002	0.007	0.021	0.008	108.712%	108.564%
X		111.372%	0.064	0.007	0.002	0.034	0.021	108.039%	106.798%
σ		2.784%	0.026	0.006	0.011	0.013	0.012	0.801%	1.744%
%RSD		2.500	41.140	84.160	505.000	38.470	55.330	0.741	1.633
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:49:41	0.034	0.029	0.034	98.141%				
2	12:50:00	0.033	0.030	0.038	97.418%				
3	12:50:19	0.033	0.033	0.038	97.487%				
X		0.033	0.031	0.037	97.682%				
σ		0.001	0.002	0.003	0.399%				
%RSD		1.897	6.466	7.246	0.408				

180-43511-D-1-B MS 5/1/2015 12:53:13 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:53:32	64.208%	45.450	1139.000	1099.000	0.000	111400.000	79940.000	79910.000
2	12:53:51	62.717%	41.480	1057.000	1057.000	0.000	107100.000	78040.000	79660.000
3	12:54:10	60.682%	43.980	1117.000	1082.000	0.000	109900.000	77850.000	79290.000
x		62.536%	43.640	1104.000	1079.000	0.000	109500.000	78610.000	79620.000
σ		1.770%	2.004	42.350	21.120	0.000	2176.000	1157.000	313.500
%RSD		2.831	4.592	3.834	1.957	0.000	1.988	1.472	0.394
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:53:32	1714.000	13480.000	0.000	55100.000	285700.000	271000.000	61.425%	987.700
2	12:53:51	1742.000	13480.000	0.000	55390.000	287600.000	270900.000	58.913%	1010.000
3	12:54:10	1713.000	13170.000	0.000	55310.000	287600.000	280000.000	57.830%	975.100
x		1723.000	13370.000	0.000	55260.000	287000.000	274000.000	59.389%	991.100
σ		16.610	178.000	0.000	152.500	1087.000	5250.000	1.844%	17.930
%RSD		0.964	1.331	0.000	0.276	0.379	1.916	3.105	1.809
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:53:32	501.900	195.600	13720.000	7228.000	7501.000	478.800	453.800	223.400
2	12:53:51	514.300	196.600	13980.000	7321.000	7578.000	480.800	451.400	220.400
3	12:54:10	504.400	196.900	13890.000	7150.000	7547.000	484.300	456.900	224.700
x		506.900	196.400	13860.000	7233.000	7542.000	481.300	454.000	222.800
σ		6.569	0.677	129.900	85.330	38.990	2.788	2.788	2.175
%RSD		1.296	0.345	0.937	1.180	0.517	0.579	0.614	0.976
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:53:32	225.700	441.000	441.700	39.210	9.197	9.924	0.000	1590.000
2	12:53:51	221.000	446.700	444.800	39.390	9.303	9.527	0.000	1604.000
3	12:54:10	224.700	447.800	444.600	40.130	9.233	9.997	0.000	1600.000
x		223.800	445.200	443.700	39.580	9.245	9.816	0.000	1598.000
σ		2.451	3.651	1.744	0.485	0.054	0.253	0.000	7.304
%RSD		1.095	0.820	0.393	1.227	0.584	2.575	0.000	0.457
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:53:32	69.815%	1001.000	1004.000	63.529%	45.830	45.150	46.020	41.780
2	12:53:51	68.522%	1004.000	1012.000	62.632%	45.960	45.720	46.390	41.530
3	12:54:10	68.243%	1009.000	1015.000	61.510%	45.930	45.880	45.880	41.680
x		68.860%	1005.000	1010.000	62.557%	45.910	45.580	46.090	41.660
σ		0.839%	4.122	5.986	1.012%	0.065	0.380	0.264	0.129
%RSD		1.218	0.410	0.593	1.617	0.141	0.833	0.572	0.310
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:53:32	68.711%	1833.000	437.400	454.400	1970.000	1920.000	76.315%	77.252%
2	12:53:51	68.193%	1838.000	433.300	454.200	1978.000	1930.000	76.948%	77.725%
3	12:54:10	67.743%	1843.000	439.400	456.900	1984.000	1937.000	77.162%	78.057%
x		68.216%	1838.000	436.700	455.200	1977.000	1929.000	76.809%	77.678%
σ		0.484%	5.031	3.105	1.465	7.099	8.630	0.440%	0.405%
%RSD		0.710	0.274	0.711	0.322	0.359	0.447	0.573	0.521
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:53:32	52.140	53.210	22.010	60.341%				
2	12:53:51	53.320	54.360	22.720	60.456%				
3	12:54:10	54.370	54.920	22.700	60.275%				
x		53.280	54.160	22.470	60.357%				
σ		1.114	0.868	0.402	0.092%				
%RSD		2.090	1.603	1.790	0.152				

180-43511-D-1-C MSD 5/1/2015 12:57:02 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:57:21	64.722%	42.490	1069.000	1054.000	0.000	106800.000	74420.000	75260.000
2	12:57:40	57.949%	45.170	1132.000	1079.000	0.000	108900.000	77380.000	77400.000
3	12:58:00	57.830%	42.980	1048.000	1093.000	0.000	106700.000	75070.000	76500.000
X		60.167%	43.550	1083.000	1075.000	0.000	107500.000	75630.000	76390.000
σ		3.945%	1.430	43.900	19.510	0.000	1265.000	1555.000	1075.000
%RSD		6.557	3.284	4.053	1.814	0.000	1.177	2.057	1.407
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:57:21	1636.000	12630.000	0.000	54300.000	279900.000	269300.000	56.974%	986.100
2	12:57:40	1714.000	13120.000	0.000	55220.000	286600.000	274600.000	53.837%	977.200
3	12:58:00	1604.000	12810.000	0.000	54560.000	283500.000	272900.000	52.127%	980.800
X		1651.000	12850.000	0.000	54690.000	283300.000	272300.000	54.313%	981.300
σ		56.670	246.300	0.000	475.300	3345.000	2740.000	2.458%	4.483
%RSD		3.432	1.916	0.000	0.869	1.181	1.006	4.526	0.457
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:57:21	490.700	192.700	13720.000	7235.000	7583.000	478.500	467.200	225.200
2	12:57:40	495.600	191.400	13860.000	7222.000	7575.000	489.900	468.200	230.200
3	12:58:00	497.500	192.000	13890.000	7167.000	7620.000	482.100	452.900	227.300
X		494.600	192.000	13820.000	7208.000	7593.000	483.500	462.800	227.600
σ		3.479	0.647	90.140	36.210	24.040	5.825	8.555	2.527
%RSD		0.703	0.337	0.652	0.502	0.317	1.205	1.848	1.110
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:57:21	223.200	441.900	449.100	38.990	9.237	10.150	0.000	1608.000
2	12:57:40	230.800	452.500	456.600	41.220	9.555	9.830	0.000	1604.000
3	12:58:00	226.800	453.700	449.000	39.570	9.275	9.532	0.000	1613.000
X		226.900	449.400	451.600	39.930	9.356	9.838	0.000	1608.000
σ		3.830	6.480	4.354	1.158	0.173	0.310	0.000	4.439
%RSD		1.688	1.442	0.964	2.900	1.851	3.153	0.000	0.276
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:57:21	66.499%	1007.000	1001.000	60.936%	45.990	46.000	47.700	42.410
2	12:57:40	65.611%	1004.000	1002.000	59.648%	46.210	45.940	46.970	42.160
3	12:58:00	64.463%	1009.000	1012.000	57.981%	46.040	45.910	46.100	42.270
X		65.524%	1007.000	1005.000	59.522%	46.080	45.950	46.920	42.280
σ		1.021%	2.473	6.295	1.481%	0.115	0.043	0.801	0.128
%RSD		1.558	0.246	0.626	2.489	0.249	0.094	1.706	0.304
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:57:21	66.317%	1843.000	442.600	464.100	1982.000	1948.000	76.112%	76.853%
2	12:57:40	66.210%	1837.000	461.300	458.900	1995.000	1945.000	75.891%	77.394%
3	12:58:00	65.593%	1844.000	437.800	458.000	1973.000	1942.000	75.714%	77.502%
X		66.040%	1841.000	447.200	460.300	1983.000	1945.000	75.906%	77.250%
σ		0.391%	3.499	12.380	3.299	11.030	3.053	0.199%	0.348%
%RSD		0.592	0.190	2.769	0.717	0.556	0.157	0.263	0.450
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:57:21	52.530	53.070	21.870	61.716%				
2	12:57:40	54.620	55.290	22.800	60.885%				
3	12:58:00	54.050	54.910	22.470	61.309%				
X		53.730	54.430	22.380	61.303%				
σ		1.077	1.188	0.469	0.416%				
%RSD		2.004	2.183	2.095	0.678				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:01:09	61.040%	47.050	1172.000	1145.000	0.000	107500.000	80380.000	81680.000
2	13:01:28	58.788%	49.350	1135.000	1082.000	0.000	108700.000	79030.000	79110.000
3	13:01:47	55.606%	45.330	1148.000	1104.000	0.000	105800.000	78150.000	79710.000
x		58.478%	47.250	1152.000	1110.000	0.000	107300.000	79190.000	80170.000
σ		2.731%	2.014	18.810	31.990	0.000	1435.000	1123.000	1348.000
%RSD		4.670	4.263	1.633	2.882	0.000	1.337	1.418	1.682
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:01:09	1868.000	14610.000	0.000	60310.000	283400.000	272400.000	54.756%	1168.000
2	13:01:28	1803.000	14480.000	0.000	59920.000	280200.000	267800.000	52.759%	1164.000
3	13:01:47	1811.000	13500.000	0.000	58920.000	279700.000	269000.000	51.329%	1175.000
x		1827.000	14200.000	0.000	59720.000	281100.000	269800.000	52.948%	1169.000
σ		35.190	607.100	0.000	720.800	2038.000	2413.000	1.721%	5.779
%RSD		1.926	4.277	0.000	1.207	0.725	0.894	3.251	0.495
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:01:09	539.600	213.800	13440.000	7102.000	7418.000	522.400	503.100	246.400
2	13:01:28	536.700	211.700	13420.000	7117.000	7385.000	519.100	492.900	243.200
3	13:01:47	544.100	211.200	13600.000	7210.000	7638.000	534.700	506.800	250.700
x		540.100	212.200	13490.000	7143.000	7481.000	525.400	500.900	246.800
σ		3.719	1.378	96.560	58.690	137.700	8.243	7.179	3.758
%RSD		0.689	0.649	0.716	0.822	1.841	1.569	1.433	1.523
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:01:09	248.900	492.400	496.800	43.500	10.280	10.680	0.000	1644.000
2	13:01:28	243.900	487.200	489.600	42.370	10.210	11.020	0.000	1651.000
3	13:01:47	247.800	492.400	492.500	42.460	10.230	9.948	0.000	1649.000
x		246.900	490.700	493.000	42.780	10.240	10.550	0.000	1648.000
σ		2.645	2.992	3.583	0.627	0.034	0.548	0.000	3.539
%RSD		1.071	0.610	0.727	1.465	0.334	5.199	0.000	0.215
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:01:09	64.683%	1190.000	1187.000	59.110%	44.720	44.650	49.950	46.320
2	13:01:28	64.154%	1188.000	1179.000	58.724%	44.790	44.590	51.990	44.980
3	13:01:47	63.318%	1197.000	1192.000	57.355%	44.730	44.350	52.060	46.780
x		64.052%	1192.000	1186.000	58.396%	44.750	44.530	51.330	46.030
σ		0.688%	4.924	6.661	0.922%	0.039	0.155	1.201	0.933
%RSD		1.074	0.413	0.562	1.579	0.086	0.349	2.339	2.028
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:01:09	64.881%	2148.000	505.100	538.900	2120.000	2086.000	74.446%	75.686%
2	13:01:28	64.484%	2187.000	516.400	543.100	2102.000	2065.000	74.649%	75.882%
3	13:01:47	63.877%	2184.000	521.000	537.500	2126.000	2073.000	74.751%	76.497%
x		64.414%	2173.000	514.200	539.800	2116.000	2074.000	74.615%	76.022%
σ		0.506%	21.400	8.215	2.900	12.450	10.270	0.155%	0.423%
%RSD		0.785	0.985	1.598	0.537	0.589	0.495	0.208	0.556
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:01:09	59.510	59.540	24.840	58.661%				
2	13:01:28	58.790	60.500	24.660	59.356%				
3	13:01:47	59.520	60.170	24.850	59.057%				
x		59.270	60.070	24.780	59.025%				
σ		0.417	0.485	0.105	0.348%				
%RSD		0.704	0.808	0.423	0.590				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:04:56	64.743%	-0.004	234.100	236.200	0.000	63310.000	33720.000	34410.000
2	13:05:15	60.753%	0.000	238.600	242.100	0.000	63520.000	34440.000	34790.000
3	13:05:34	58.827%	-0.033	242.800	236.300	0.000	64510.000	33200.000	33830.000
X		61.441%	-0.012	238.500	238.200	0.000	63780.000	33780.000	34340.000
σ		3.017%	0.018	4.355	3.406	0.000	638.100	623.000	484.500
%RSD		4.910	147.300	1.826	1.430	0.000	1.001	1.844	1.411
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:04:56	0.603	4412.000	0.000	7278.000	230600.000	219900.000	53.546%	0.777
2	13:05:15	0.916	4315.000	0.000	7359.000	233300.000	223100.000	51.895%	1.032
3	13:05:34	0.854	4458.000	0.000	7408.000	235400.000	228400.000	50.403%	0.772
X		0.791	4395.000	0.000	7348.000	233100.000	223800.000	51.948%	0.860
σ		0.165	73.130	0.000	65.620	2423.000	4254.000	1.572%	0.148
%RSD		20.900	1.664	0.000	0.893	1.040	1.901	3.027	17.270
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:04:56	0.138	0.240	13200.000	8899.000	9127.000	10.700	3.421	1.114
2	13:05:15	1.597	0.236	13340.000	8942.000	9277.000	10.480	3.230	1.079
3	13:05:34	0.938	0.220	13550.000	9066.000	9245.000	10.750	3.496	1.029
X		0.891	0.232	13360.000	8969.000	9216.000	10.640	3.382	1.074
σ		0.730	0.011	180.300	86.730	78.690	0.141	0.137	0.043
%RSD		81.980	4.546	1.350	0.967	0.854	1.328	4.048	3.982
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:04:56	0.784	8.639	8.862	5.946	-0.260	0.669	0.000	702.700
2	13:05:15	0.714	8.796	8.775	5.841	-0.226	0.641	0.000	708.600
3	13:05:34	0.911	8.247	8.307	6.736	-0.409	0.616	0.000	714.800
X		0.803	8.561	8.648	6.174	-0.298	0.642	0.000	708.700
σ		0.100	0.283	0.298	0.490	0.097	0.026	0.000	6.094
%RSD		12.430	3.301	3.449	7.930	32.610	4.086	0.000	0.860
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:04:56	63.275%	5.738	5.954	59.438%	-0.082	-0.089	0.347	0.305
2	13:05:15	62.204%	4.613	4.618	58.366%	-0.084	-0.079	0.327	0.327
3	13:05:34	61.476%	3.778	3.778	57.399%	-0.070	-0.077	0.390	0.401
X		62.319%	4.710	4.784	58.401%	-0.079	-0.082	0.354	0.344
σ		0.905%	0.984	1.097	1.020%	0.008	0.007	0.032	0.050
%RSD		1.452	20.890	22.940	1.747	9.685	7.952	9.068	14.600
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:04:56	63.665%	1.520	0.153	0.151	148.300	148.400	73.234%	74.838%
2	13:05:15	63.606%	1.176	0.162	0.132	145.700	146.800	73.452%	75.454%
3	13:05:34	63.027%	1.069	0.123	0.138	148.600	150.200	72.951%	74.257%
X		63.433%	1.255	0.146	0.140	147.500	148.500	73.212%	74.850%
σ		0.353%	0.235	0.021	0.009	1.618	1.683	0.251%	0.599%
%RSD		0.556	18.760	14.160	6.751	1.097	1.134	0.343	0.800
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:04:56	0.292	0.290	0.052	60.686%				
2	13:05:15	0.275	0.274	0.054	60.255%				
3	13:05:34	0.240	0.243	0.054	61.356%				
X		0.269	0.269	0.053	60.766%				
σ		0.027	0.024	0.001	0.555%				
%RSD		9.887	8.750	2.651	0.913				



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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:08:43	60.073%	-0.017	98.560	87.350	0.000	124100.000	13720.000	13430.000
2	13:09:02	58.201%	-0.015	92.550	89.720	0.000	121600.000	13650.000	13920.000
3	13:09:22	56.191%	-0.013	88.830	91.430	0.000	121100.000	13660.000	13670.000
X		58.155%	-0.015	93.310	89.500	0.000	122300.000	13680.000	13670.000
σ		1.941%	0.002	4.909	2.049	0.000	1588.000	34.210	243.600
%RSD		3.338	12.650	5.261	2.290	0.000	1.298	0.250	1.782
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:08:43	3.580	3383.000	0.000	8808.000	108500.000	111400.000	55.387%	0.908
2	13:09:02	3.505	3501.000	0.000	8719.000	110900.000	113700.000	52.964%	1.121
3	13:09:22	3.625	3279.000	0.000	8572.000	110900.000	112700.000	49.547%	1.024
X		3.570	3388.000	0.000	8700.000	110100.000	112600.000	52.633%	1.018
σ		0.060	110.900	0.000	119.300	1397.000	1114.000	2.934%	0.106
%RSD		1.694	3.274	0.000	1.371	1.269	0.989	5.574	10.440
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:08:43	1.296	0.416	1367.000	4052.000	4143.000	0.338	0.340	1.090
2	13:09:02	-0.654	0.371	1321.000	4029.000	4169.000	0.276	0.190	1.181
3	13:09:22	-0.883	0.374	1363.000	4005.000	4109.000	0.287	0.349	1.179
X		-0.080	0.387	1350.000	4029.000	4140.000	0.300	0.293	1.150
σ		1.197	0.025	25.360	23.380	30.160	0.033	0.089	0.052
%RSD		1493.000	6.473	1.878	0.580	0.729	10.990	30.510	4.525
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:08:43	0.363	3.164	2.772	2.837	-0.100	0.560	0.000	409.500
2	13:09:02	0.372	3.238	2.804	3.486	-0.020	0.470	0.000	412.100
3	13:09:22	0.361	3.215	3.120	3.381	-0.109	0.304	0.000	409.500
X		0.366	3.206	2.899	3.235	-0.076	0.445	0.000	410.400
σ		0.006	0.038	0.192	0.348	0.049	0.130	0.000	1.471
%RSD		1.560	1.180	6.626	10.760	64.130	29.170	0.000	0.358
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:08:43	63.309%	3.205	3.177	60.209%	-0.074	-0.086	-0.017	-0.031
2	13:09:02	62.649%	2.859	2.888	58.871%	-0.080	-0.086	-0.059	-0.052
3	13:09:22	61.867%	2.850	3.022	58.275%	-0.071	-0.080	-0.028	-0.018
X		62.608%	2.971	3.029	59.118%	-0.075	-0.084	-0.035	-0.034
σ		0.722%	0.203	0.144	0.990%	0.005	0.003	0.022	0.017
%RSD		1.153	6.821	4.772	1.675	6.057	4.111	63.140	49.980
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:08:43	64.751%	0.849	0.212	0.248	73.080	73.270	74.155%	75.385%
2	13:09:02	63.906%	0.764	0.215	0.231	74.100	74.080	74.583%	75.771%
3	13:09:22	64.317%	0.736	0.244	0.234	73.990	72.660	75.212%	76.292%
X		64.324%	0.783	0.224	0.238	73.730	73.340	74.650%	75.816%
σ		0.423%	0.059	0.017	0.009	0.561	0.710	0.531%	0.455%
%RSD		0.657	7.507	7.732	3.863	0.761	0.969	0.712	0.600
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:08:43	0.105	0.107	0.436	61.380%				
2	13:09:02	0.111	0.110	0.448	62.786%				
3	13:09:22	0.112	0.104	0.458	62.289%				
X		0.109	0.107	0.447	62.152%				
σ		0.004	0.003	0.011	0.713%				
%RSD		3.524	2.895	2.486	1.147				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:12:32	48.261%	0.058	274.300	261.400	0.000	726700.000	26690.000	27680.000
2	13:12:51	47.954%	0.059	257.400	241.000	0.000	709200.000	26010.000	26070.000
3	13:13:10	46.243%	-0.024	254.900	236.700	0.000	702200.000	25950.000	25980.000
x		47.486%	0.031	262.200	246.400	0.000	712700.000	26220.000	26580.000
σ		1.088%	0.048	10.530	13.170	0.000	12600.000	411.700	953.500
%RSD		2.290	153.300	4.016	5.346	0.000	1.768	1.570	3.587
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:12:32	0.147	11500.000	0.000	22900.000	382000.000	362700.000	51.718%	1.092
2	13:12:51	-0.289	11130.000	0.000	22870.000	384000.000	365900.000	50.137%	0.972
3	13:13:10	-0.107	10780.000	0.000	22950.000	389000.000	372800.000	49.049%	1.517
x		-0.083	11140.000	0.000	22910.000	385000.000	367100.000	50.301%	1.194
σ		0.219	362.700	0.000	38.320	3640.000	5140.000	1.342%	0.286
%RSD		264.700	3.257	0.000	0.167	0.946	1.400	2.668	23.960
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:12:32	-0.247	0.228	1539.000	37390.000	37650.000	0.556	0.555	6.036
2	13:12:51	0.076	0.229	1585.000	38270.000	37670.000	0.505	0.495	6.174
3	13:13:10	-0.213	0.280	1565.000	37980.000	37480.000	0.538	0.425	6.168
x		-0.128	0.246	1563.000	37880.000	37600.000	0.533	0.492	6.126
σ		0.178	0.029	23.090	452.000	104.500	0.026	0.065	0.078
%RSD		138.800	12.000	1.477	1.193	0.278	4.838	13.210	1.270
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:12:32	0.582	7.219	7.342	0.237	-0.018	0.617	0.000	1701.000
2	13:12:51	0.428	7.095	7.624	0.255	-0.196	0.329	0.000	1709.000
3	13:13:10	0.401	7.079	6.900	0.493	0.078	0.325	0.000	1713.000
x		0.470	7.131	7.289	0.328	-0.045	0.423	0.000	1708.000
σ		0.098	0.077	0.365	0.143	0.139	0.168	0.000	6.094
%RSD		20.760	1.074	5.004	43.510	307.600	39.560	0.000	0.357
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:12:32	62.322%	0.747	0.706	55.303%	-0.084	-0.089	-0.001	-0.016
2	13:12:51	61.572%	0.722	0.725	53.712%	-0.080	-0.086	-0.024	-0.026
3	13:13:10	60.608%	0.675	0.709	53.101%	-0.081	-0.087	-0.015	-0.017
x		61.501%	0.715	0.713	54.038%	-0.082	-0.087	-0.013	-0.020
σ		0.859%	0.037	0.010	1.137%	0.002	0.001	0.012	0.006
%RSD		1.397	5.146	1.379	2.103	2.139	1.480	88.460	28.260
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:12:32	61.449%	0.347	0.063	0.093	511.400	510.100	68.518%	69.489%
2	13:12:51	61.158%	0.381	0.044	0.079	508.200	506.400	69.533%	69.538%
3	13:13:10	60.759%	0.330	0.042	0.086	505.300	505.900	68.893%	69.910%
x		61.122%	0.352	0.050	0.086	508.300	507.500	68.981%	69.646%
σ		0.346%	0.026	0.011	0.007	3.017	2.310	0.514%	0.230%
%RSD		0.566	7.322	22.770	8.142	0.594	0.455	0.744	0.330
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:12:32	0.066	0.062	0.018	54.445%				
2	13:12:51	0.054	0.064	0.015	53.969%				
3	13:13:10	0.052	0.057	0.017	55.173%				
x		0.057	0.061	0.017	54.529%				
σ		0.008	0.004	0.001	0.606%				
%RSD		13.130	5.940	7.398	1.112				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:20	45.094%	-0.001	306.600	281.300	0.000	1037000.000	35690.000	36360.000
2	13:16:39	47.401%	-0.004	297.500	271.900	0.000	965500.000	32820.000	34350.000
3	13:16:59	47.333%	-0.025	288.800	274.600	0.000	959400.000	33160.000	34670.000
X		46.609%	-0.010	297.600	276.000	0.000	987300.000	33890.000	35130.000
σ		1.313%	0.013	8.898	4.827	0.000	43200.000	1567.000	1080.000
%RSD		2.817	134.300	2.989	1.749	0.000	4.375	4.623	3.075
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:20	1.690	10990.000	0.000	25610.000	502900.000	473300.000	52.126%	0.725
2	13:16:39	1.360	10240.000	0.000	25020.000	491600.000	477200.000	51.118%	0.895
3	13:16:59	1.550	10070.000	0.000	24940.000	498400.000	477000.000	49.343%	0.771
X		1.533	10430.000	0.000	25190.000	497600.000	475800.000	50.862%	0.797
σ		0.166	493.200	0.000	365.000	5655.000	2221.000	1.409%	0.088
%RSD		10.820	4.727	0.000	1.449	1.136	0.467	2.770	11.020
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:20	1.204	0.271	777.100	14970.000	15640.000	0.956	0.661	9.181
2	13:16:39	-1.378	0.224	791.400	15160.000	15630.000	1.007	0.574	9.235
3	13:16:59	-1.288	0.202	775.200	14940.000	15630.000	1.001	0.513	9.520
X		-0.487	0.232	781.300	15020.000	15640.000	0.988	0.583	9.312
σ		1.466	0.035	8.850	120.300	6.808	0.028	0.074	0.182
%RSD		300.800	15.250	1.133	0.800	0.044	2.855	12.760	1.955
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:20	0.872	3.724	3.188	3.313	0.264	0.655	0.000	2069.000
2	13:16:39	0.851	3.083	2.916	3.888	0.327	0.770	0.000	2052.000
3	13:16:59	0.854	3.093	3.054	3.314	0.323	0.918	0.000	2064.000
X		0.859	3.300	3.053	3.505	0.305	0.781	0.000	2062.000
σ		0.011	0.367	0.136	0.332	0.035	0.132	0.000	8.578
%RSD		1.313	11.130	4.464	9.469	11.520	16.930	0.000	0.416
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:20	61.402%	2.060	1.919	52.789%	-0.088	-0.090	-0.024	-0.020
2	13:16:39	61.065%	1.903	1.996	52.022%	-0.083	-0.090	-0.040	-0.032
3	13:16:59	60.066%	1.994	1.917	50.802%	-0.080	-0.082	-0.042	-0.040
X		60.844%	1.986	1.944	51.871%	-0.084	-0.087	-0.035	-0.031
σ		0.695%	0.079	0.045	1.003%	0.004	0.005	0.010	0.010
%RSD		1.142	3.971	2.320	1.933	5.149	5.208	27.360	32.800
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:20	60.111%	0.239	0.637	0.651	231.300	230.500	67.163%	67.577%
2	13:16:39	59.571%	0.242	0.662	0.714	229.900	230.500	67.702%	68.112%
3	13:16:59	59.832%	0.204	0.691	0.735	230.300	228.400	67.834%	68.042%
X		59.838%	0.228	0.663	0.700	230.500	229.800	67.566%	67.910%
σ		0.270%	0.021	0.027	0.044	0.712	1.206	0.356%	0.291%
%RSD		0.452	9.079	4.092	6.257	0.309	0.525	0.526	0.429
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:16:20	0.045	0.041	0.060	51.054%				
2	13:16:39	0.053	0.048	0.058	50.887%				
3	13:16:59	0.040	0.039	0.062	49.703%				
X		0.046	0.042	0.060	50.548%				
σ		0.007	0.005	0.002	0.736%				
%RSD		14.620	10.920	2.938	1.457				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:20:10	45.800%	2.027	421.900	401.300	0.000	1306000.000	66600.000	67090.000
2	13:20:29	44.272%	1.758	412.800	394.000	0.000	1294000.000	64190.000	63930.000
3	13:20:48	40.228%	2.060	404.400	388.900	0.000	1269000.000	63290.000	64410.000
X		43.433%	1.949	413.000	394.700	0.000	1289000.000	64690.000	65140.000
σ		2.879%	0.166	8.744	6.263	0.000	18750.000	1711.000	1707.000
%RSD		6.628	8.492	2.117	1.587	0.000	1.454	2.645	2.621
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:20:10	3089.000	12330.000	0.000	39550.000	598100.000	566400.000	51.531%	9.343
2	13:20:29	3018.000	11910.000	0.000	39050.000	595400.000	565800.000	49.407%	9.207
3	13:20:48	3115.000	12080.000	0.000	39140.000	602000.000	573100.000	47.347%	8.950
X		3074.000	12110.000	0.000	39250.000	598500.000	568500.000	49.428%	9.167
σ		50.260	212.400	0.000	271.000	3331.000	4054.000	2.092%	0.199
%RSD		1.635	1.754	0.000	0.691	0.556	0.713	4.233	2.175
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:20:10	8.150	3.531	3231.000	7636.000	8343.000	9.207	11.140	22.360
2	13:20:29	8.347	3.532	3278.000	7648.000	8258.000	9.204	10.760	22.450
3	13:20:48	8.007	3.667	3292.000	7685.000	8284.000	9.023	10.490	22.310
X		8.168	3.577	3267.000	7657.000	8295.000	9.145	10.800	22.370
σ		0.171	0.078	31.600	25.480	43.440	0.106	0.329	0.066
%RSD		2.091	2.188	0.967	0.333	0.524	1.155	3.044	0.295
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:20:10	13.000	32.670	32.450	1.706	3.474	4.294	0.000	2782.000
2	13:20:29	12.690	33.170	32.830	1.786	3.734	4.414	0.000	2778.000
3	13:20:48	12.730	34.710	33.770	1.888	3.693	4.342	0.000	2824.000
X		12.810	33.510	33.010	1.793	3.634	4.350	0.000	2794.000
σ		0.169	1.065	0.679	0.091	0.140	0.061	0.000	25.220
%RSD		1.317	3.176	2.058	5.089	3.841	1.397	0.000	0.902
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:20:10	68.557%	1.788	2.161	50.930%	-0.050	-0.052	0.478	0.417
2	13:20:29	67.277%	2.005	2.097	49.913%	-0.049	-0.053	0.448	0.551
3	13:20:48	64.412%	1.822	2.013	48.489%	-0.053	-0.050	0.489	0.514
X		66.749%	1.872	2.091	49.777%	-0.051	-0.052	0.472	0.494
σ		2.122%	0.117	0.074	1.226%	0.002	0.001	0.021	0.069
%RSD		3.180	6.233	3.553	2.464	4.831	2.848	4.538	13.950
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:20:10	57.790%	0.292	0.204	0.262	275.000	271.300	66.243%	66.220%
2	13:20:29	57.548%	0.232	0.221	0.227	273.700	271.600	64.925%	64.871%
3	13:20:48	56.472%	0.234	0.215	0.287	270.700	271.900	64.505%	64.938%
X		57.270%	0.253	0.214	0.259	273.100	271.600	65.225%	65.343%
σ		0.701%	0.034	0.009	0.030	2.225	0.340	0.907%	0.760%
%RSD		1.225	13.370	4.036	11.720	0.815	0.125	1.391	1.163
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:20:10	0.219	0.224	42.540	43.977%				
2	13:20:29	0.238	0.237	42.280	44.068%				
3	13:20:48	0.198	0.226	41.570	45.548%				
X		0.218	0.229	42.130	44.531%				
σ		0.020	0.007	0.500	0.882%				
%RSD		9.348	3.128	1.188	1.981				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:23:59	50.179%	-0.007	334.900	312.600	0.000	714900.000	46910.000	46920.000
2	13:24:18	49.034%	-0.006	323.100	301.100	0.000	666300.000	43880.000	45970.000
3	13:24:37	46.461%	0.063	324.800	309.800	0.000	707700.000	46730.000	46450.000
x		48.558%	0.017	327.600	307.900	0.000	696300.000	45840.000	46450.000
σ		1.904%	0.040	6.400	5.994	0.000	26190.000	1697.000	476.900
%RSD		3.922	239.500	1.953	1.947	0.000	3.762	3.703	1.027
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:23:59	6.094	13040.000	0.000	19820.000	411700.000	389800.000	52.681%	1.447
2	13:24:18	7.043	12590.000	0.000	19590.000	414500.000	397000.000	50.773%	1.329
3	13:24:37	5.788	12720.000	0.000	19920.000	418200.000	395700.000	48.934%	1.160
x		6.308	12780.000	0.000	19780.000	414800.000	394200.000	50.796%	1.312
σ		0.654	228.200	0.000	169.500	3297.000	3887.000	1.874%	0.144
%RSD		10.370	1.785	0.000	0.857	0.795	0.986	3.688	11.000
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:23:59	-0.232	0.313	2848.000	30670.000	30590.000	1.104	0.259	5.713
2	13:24:18	-1.416	0.356	2893.000	30610.000	30750.000	1.095	0.210	5.719
3	13:24:37	-0.243	0.354	2834.000	30390.000	30550.000	1.082	0.070	5.889
x		-0.630	0.341	2859.000	30560.000	30630.000	1.093	0.180	5.774
σ		0.681	0.024	30.940	146.900	105.300	0.011	0.098	0.100
%RSD		108.000	7.030	1.082	0.481	0.344	1.006	54.510	1.726
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:23:59	0.426	39.960	38.540	2.238	-0.079	0.663	0.000	2056.000
2	13:24:18	0.487	38.920	40.470	2.422	-0.179	0.497	0.000	2087.000
3	13:24:37	0.436	39.190	40.140	2.768	0.021	0.599	0.000	2043.000
x		0.450	39.360	39.710	2.476	-0.079	0.587	0.000	2062.000
σ		0.033	0.537	1.031	0.269	0.100	0.084	0.000	22.810
%RSD		7.288	1.363	2.595	10.870	125.900	14.270	0.000	1.106
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:23:59	60.214%	0.973	0.916	53.219%	-0.081	-0.086	-0.034	-0.023
2	13:24:18	59.581%	1.032	1.039	51.886%	-0.086	-0.091	-0.006	-0.004
3	13:24:37	59.679%	0.979	0.938	52.237%	-0.080	-0.090	-0.043	-0.049
x		59.825%	0.995	0.964	52.447%	-0.082	-0.089	-0.028	-0.025
σ		0.341%	0.032	0.066	0.691%	0.004	0.003	0.019	0.023
%RSD		0.569	3.243	6.818	1.317	4.392	3.064	69.750	89.120
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:23:59	59.679%	0.127	0.029	0.054	580.900	580.600	66.924%	67.720%
2	13:24:18	59.116%	0.144	0.046	0.090	591.900	596.200	66.502%	67.203%
3	13:24:37	60.114%	0.118	0.051	0.095	575.600	577.400	68.073%	68.390%
x		59.636%	0.130	0.042	0.080	582.800	584.800	67.166%	67.771%
σ		0.501%	0.013	0.011	0.023	8.300	10.040	0.813%	0.595%
%RSD		0.840	10.280	27.090	28.230	1.424	1.717	1.210	0.878
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:23:59	0.033	0.027	6.641	49.104%				
2	13:24:18	0.019	0.027	6.374	53.337%				
3	13:24:37	0.027	0.031	6.562	51.117%				
x		0.027	0.028	6.525	51.186%				
σ		0.007	0.002	0.137	2.118%				
%RSD		26.440	8.018	2.100	4.137				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:27:47	71.312%	0.004	12.380	10.940	0.000	113.600	11.020	9.720
2	13:28:07	65.661%	0.010	13.700	11.940	0.000	97.550	9.160	9.962
3	13:28:27	63.727%	0.077	10.800	11.470	0.000	91.040	7.631	8.457
X		66.900%	0.031	12.290	11.450	0.000	100.700	9.272	9.380
σ		3.942%	0.040	1.449	0.497	0.000	11.590	1.699	0.808
%RSD		5.892	132.000	11.790	4.338	0.000	11.500	18.330	8.614
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:27:47	0.885	-457.300	0.000	8.799	34.580	58.060	62.639%	0.272
2	13:28:07	0.962	-450.700	0.000	7.025	68.640	50.640	59.964%	0.124
3	13:28:27	0.984	-449.900	0.000	6.267	27.470	45.890	59.042%	-0.005
X		0.943	-452.600	0.000	7.364	43.560	51.530	60.548%	0.130
σ		0.052	4.038	0.000	1.299	22.010	6.136	1.868%	0.139
%RSD		5.508	0.892	0.000	17.640	50.520	11.910	3.086	106.600
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:27:47	1.144	0.373	1.023	35.720	34.510	0.136	0.160	0.227
2	13:28:07	0.515	0.376	0.912	29.890	25.160	0.125	0.164	0.262
3	13:28:27	1.023	0.380	0.947	31.270	28.080	0.113	0.095	0.189
X		0.894	0.376	0.961	32.290	29.250	0.125	0.140	0.226
σ		0.334	0.004	0.057	3.045	4.783	0.011	0.039	0.037
%RSD		37.350	1.002	5.884	9.428	16.350	9.005	27.790	16.240
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:27:47	0.219	5.937	5.657	-1.007	-0.271	0.125	0.000	0.351
2	13:28:07	0.143	5.867	5.764	-0.523	-0.382	0.231	0.000	0.277
3	13:28:27	0.194	5.917	5.624	-0.573	0.069	0.107	0.000	0.288
X		0.185	5.907	5.681	-0.701	-0.195	0.155	0.000	0.305
σ		0.039	0.036	0.073	0.266	0.235	0.067	0.000	0.040
%RSD		20.970	0.613	1.290	38.000	120.700	43.360	0.000	13.140
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:27:47	73.308%	0.106	0.096	72.054%	-0.083	-0.085	-0.020	-0.006
2	13:28:07	73.091%	0.100	0.095	71.557%	-0.078	-0.095	-0.025	-0.025
3	13:28:27	71.239%	0.064	0.092	69.998%	-0.073	-0.084	-0.001	-0.006
X		72.546%	0.090	0.094	71.203%	-0.078	-0.088	-0.016	-0.012
σ		1.137%	0.023	0.002	1.073%	0.005	0.006	0.013	0.011
%RSD		1.567	25.420	1.742	1.507	6.048	6.577	80.320	87.910
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:27:47	76.266%	0.137	-0.018	-0.016	0.176	0.200	84.053%	84.366%
2	13:28:07	77.051%	0.168	-0.020	-0.012	0.254	0.171	85.577%	86.495%
3	13:28:27	75.709%	0.111	-0.007	-0.016	0.200	0.172	84.574%	86.026%
X		76.342%	0.139	-0.015	-0.015	0.210	0.181	84.735%	85.629%
σ		0.674%	0.029	0.007	0.002	0.040	0.016	0.775%	1.119%
%RSD		0.883	20.720	46.560	14.060	19.000	9.073	0.914	1.307
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:27:47	0.013	0.020	0.088	76.460%				
2	13:28:07	0.018	0.017	0.081	76.679%				
3	13:28:27	0.019	0.020	0.088	76.282%				
X		0.017	0.019	0.086	76.473%				
σ		0.003	0.002	0.004	0.199%				
%RSD		19.180	8.863	4.420	0.260				

CCV 1558997 5/1/2015 1:31:26 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:31:26	98.319%	107.900	102.500	98.080	0.000	47780.000	48180.000	49300.000
2	13:31:45	94.745%	105.500	101.100	99.780	0.000	47130.000	48400.000	49170.000
3	13:32:04	92.337%	103.000	100.100	98.570	0.000	48420.000	48790.000	49020.000
x		95.134%	105.490%	101.219%	98.807%	0.000	95.556%	96.912%	98.324%
σ		3.010%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		3.164	2.297	1.172	0.886	0.000	1.351	0.633	0.288
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:31:26	501.600	4673.000	0.000	48480.000	48010.000	48070.000	103.063%	98.490
2	13:31:45	493.900	4713.000	0.000	49190.000	48830.000	48970.000	98.986%	102.100
3	13:32:04	497.000	4663.000	0.000	50450.000	51100.000	50410.000	92.813%	104.700
x		99.505%	93.657%	0.000	98.746%	98.633%	98.300%	98.287%	101.753%
σ		n/a	n/a	0.000	n/a	n/a	n/a	5.161%	n/a
%RSD		0.775	0.560	0.000	2.017	3.248	2.401	5.251	3.065
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:31:26	100.400	101.300	478.900	24320.000	24310.000	100.600	102.800	104.100
2	13:31:45	101.100	100.600	489.800	24730.000	24390.000	102.600	103.700	106.400
3	13:32:04	102.600	103.200	503.100	25520.000	25220.000	104.700	105.600	106.600
x		101.357%	101.703%	98.125%	99.442%	98.557%	102.635%	104.002%	105.692%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.092	1.338	2.470	2.456	2.041	1.971	1.368	1.314
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:31:26	105.400	104.100	103.700	104.500	106.700	107.600	0.000	103.900
2	13:31:45	105.400	105.100	105.400	105.600	109.200	108.700	0.000	105.000
3	13:32:04	108.500	106.600	107.400	105.800	111.600	107.600	0.000	104.700
x		106.422%	105.258%	105.527%	105.302%	109.182%	107.966%	0.000	104.517%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.697	1.220	1.765	0.672	2.237	0.569	0.000	0.565
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:31:26	96.287%	96.840	96.860	91.045%	100.900	100.700	98.810	99.200
2	13:31:45	95.462%	99.470	99.880	89.584%	101.500	101.800	100.500	99.090
3	13:32:04	95.504%	101.200	101.500	88.968%	101.500	102.100	101.800	102.100
x		95.751%	99.179%	99.423%	89.866%	101.290%	101.550%	100.394%	100.122%
σ		0.465%	n/a	n/a	1.066%	n/a	n/a	n/a	n/a
%RSD		0.485	2.224	2.381	1.187	0.360	0.715	1.514	1.687
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:31:26	92.951%	96.360	96.420	96.110	97.420	97.230	91.886%	91.477%
2	13:31:45	92.088%	96.220	96.460	97.020	95.990	96.970	93.443%	93.527%
3	13:32:04	91.557%	98.710	98.770	100.400	98.600	98.730	93.534%	93.668%
x		92.199%	97.095%	97.217%	97.848%	97.337%	97.642%	92.955%	92.891%
σ		0.703%	n/a	n/a	n/a	n/a	n/a	0.927%	1.226%
%RSD		0.763	1.440	1.385	2.320	1.344	0.973	0.997	1.320
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:31:26	105.600	104.500	107.700	78.225%				
2	13:31:45	106.300	104.800	108.800	80.073%				
3	13:32:04	107.800	107.500	110.200	79.512%				
x		106.588%	105.586%	108.899%	79.270%				
σ		n/a	n/a	n/a	0.948%				
%RSD		1.057	1.575	1.185	1.196				

CCB3 5/1/2015 1:37:55 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:38:14	121.723%	0.016	1.436	0.966	0.000	17.450	4.241	4.209
2	13:38:34	112.119%	-0.041	1.302	1.136	0.000	13.610	4.230	3.540
3	13:38:53	111.036%	-0.004	1.218	1.040	0.000	13.770	3.319	3.769
x		114.959%	-0.009	1.319	1.047	0.000	14.940	3.930	3.839
σ		5.882%	0.029	0.110	0.085	0.000	2.172	0.529	0.340
%RSD		5.117	304.300	8.345	8.159	0.000	14.540	13.460	8.849
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:38:14	1.934	-472.400	0.000	5.269	12.740	8.390	118.609%	0.037
2	13:38:34	2.041	-471.700	0.000	5.210	11.900	6.519	116.251%	-0.012
3	13:38:53	1.867	-471.400	0.000	6.138	-0.482	5.870	113.341%	0.008
x		1.947	-471.800	0.000	5.539	8.055	6.926	116.067%	0.011
σ		0.087	0.514	0.000	0.520	7.405	1.309	2.639%	0.024
%RSD		4.488	0.109	0.000	9.384	91.930	18.890	2.273	216.100
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:38:14	0.053	0.045	0.255	14.990	7.767	0.006	0.027	0.514
2	13:38:34	0.038	0.036	0.203	12.790	6.496	0.013	0.028	0.514
3	13:38:53	0.040	0.034	0.224	11.840	5.965	0.014	0.020	0.510
x		0.044	0.039	0.228	13.210	6.743	0.011	0.025	0.513
σ		0.008	0.006	0.026	1.616	0.926	0.004	0.004	0.002
%RSD		17.980	14.570	11.420	12.240	13.730	38.260	16.240	0.464
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:38:14	0.480	0.989	0.953	-0.071	0.268	-0.068	0.000	0.063
2	13:38:34	0.511	0.944	0.954	0.001	0.031	0.086	0.000	0.049
3	13:38:53	0.447	0.868	1.043	0.032	0.365	0.048	0.000	0.061
x		0.479	0.934	0.983	-0.012	0.222	0.022	0.000	0.058
σ		0.032	0.061	0.052	0.053	0.172	0.080	0.000	0.008
%RSD		6.636	6.584	5.253	425.400	77.630	361.800	0.000	13.110
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:38:14	112.237%	0.281	0.292	112.034%	-0.062	-0.063	0.039	0.028
2	13:38:34	113.940%	0.215	0.229	111.257%	-0.064	-0.059	0.045	0.020
3	13:38:53	112.909%	0.197	0.213	111.173%	-0.056	-0.059	0.040	0.030
x		113.028%	0.231	0.245	111.488%	-0.061	-0.061	0.041	0.026
σ		0.858%	0.045	0.042	0.475%	0.004	0.002	0.003	0.005
%RSD		0.759	19.280	16.980	0.426	7.067	3.588	7.496	19.790
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:38:14	106.985%	0.033	-0.003	-0.009	0.050	0.032	101.692%	99.664%
2	13:38:34	108.259%	0.032	-0.006	-0.008	0.035	0.027	102.606%	101.347%
3	13:38:53	107.938%	0.043	-0.003	0.007	0.044	0.046	103.702%	102.843%
x		107.727%	0.036	-0.004	-0.003	0.043	0.035	102.667%	101.285%
σ		0.662%	0.006	0.002	0.009	0.007	0.010	1.006%	1.591%
%RSD		0.615	17.850	39.950	278.400	16.520	28.720	0.980	1.570
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:38:14	0.027	0.025	0.032	91.829%				
2	13:38:34	0.022	0.028	0.034	92.559%				
3	13:38:53	0.026	0.022	0.034	91.284%				
x		0.025	0.025	0.033	91.891%				
σ		0.003	0.003	0.001	0.640%				
%RSD		11.280	10.800	3.363	0.696				



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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	13:42:05	79.589%	-0.016	34.420	35.810	0.000	137.200	5.404	5.835	
2	13:42:25	76.192%	0.014	39.120	35.640	0.000	140.700	5.850	5.721	
3	13:42:44	75.207%	-0.013	35.440	35.150	0.000	139.500	5.469	5.561	
X		76.996%	-0.005	36.330	35.540	0.000	139.200	5.574	5.706	
		σ	2.299%	0.016	2.472	0.344	0.000	1.800	0.241	0.138
		%RSD	2.986	323.300	6.805	0.969	0.000	1.294	4.325	2.409
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	13:42:05	10.900	-363.400	0.000	14.400	38.010	46.310	69.985%	0.191	
2	13:42:25	11.240	-356.000	0.000	15.370	51.200	54.030	63.737%	0.126	
3	13:42:44	10.990	-353.200	0.000	15.660	54.800	51.770	59.065%	0.227	
X		11.050	-357.500	0.000	15.140	48.000	50.700	64.263%	0.181	
		σ	0.178	5.241	0.000	0.660	8.838	3.967	5.479%	0.051
		%RSD	1.608	1.466	0.000	4.358	18.410	7.824	8.526	28.110
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	13:42:05	-0.265	0.564	0.569	13.170	10.140	0.013	0.126	0.151	
2	13:42:25	-1.578	0.607	0.564	12.280	10.150	0.020	0.076	0.101	
3	13:42:44	-0.165	0.606	0.534	12.160	11.120	0.018	0.149	0.185	
X		-0.670	0.592	0.556	12.530	10.470	0.017	0.117	0.146	
		σ	0.788	0.024	0.019	0.553	0.562	0.004	0.037	0.042
		%RSD	117.700	4.107	3.397	4.414	5.365	20.970	31.770	28.860
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	13:42:05	0.065	3.529	3.626	-0.640	-0.197	-0.019	0.000	0.166	
2	13:42:25	0.173	3.722	3.440	-0.380	-0.169	0.235	0.000	0.153	
3	13:42:44	0.107	3.256	3.283	-0.730	-0.250	-0.098	0.000	0.138	
X		0.115	3.502	3.450	-0.583	-0.205	0.039	0.000	0.152	
		σ	0.054	0.234	0.172	0.182	0.041	0.174	0.000	0.014
		%RSD	47.170	6.686	4.979	31.200	19.880	444.300	0.000	9.216
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	13:42:05	75.053%	0.137	0.146	74.771%	-0.080	-0.084	-0.052	-0.036	
2	13:42:25	73.490%	0.108	0.125	73.406%	-0.073	-0.079	-0.010	-0.012	
3	13:42:44	73.529%	0.086	0.138	72.971%	-0.071	-0.074	-0.042	-0.038	
X		74.024%	0.110	0.136	73.716%	-0.075	-0.079	-0.035	-0.029	
		σ	0.892%	0.026	0.011	0.939%	0.005	0.005	0.022	0.014
		%RSD	1.204	23.210	7.887	1.274	6.754	6.179	62.930	49.760
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	13:42:05	76.925%	0.558	0.058	0.035	0.124	0.100	82.724%	83.536%	
2	13:42:25	77.122%	0.514	0.029	0.036	0.105	0.085	84.034%	85.688%	
3	13:42:44	76.348%	0.515	0.032	0.042	0.116	0.122	85.498%	85.524%	
X		76.798%	0.529	0.040	0.038	0.115	0.102	84.086%	84.916%	
		σ	0.402%	0.025	0.016	0.004	0.009	0.019	1.388%	1.198%
		%RSD	0.524	4.738	41.200	10.730	8.204	18.180	1.650	1.411
Run	Time	203Tl	205Tl	208Pb	209Bi					
		ppb	ppb	ppb	ppb					
1	13:42:05	0.014	0.015	0.043	76.660%					
2	13:42:25	0.024	0.019	0.043	77.320%					
3	13:42:44	0.024	0.022	0.041	76.968%					
X		0.021	0.019	0.043	76.983%					
		σ	0.006	0.003	0.001	0.330%				
		%RSD	27.070	16.470	2.636	0.429				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:45:54	63.512%	-0.035	18.530	19.670	0.000	20130.000	27840.000	28320.000
2	13:46:14	60.648%	-0.051	17.960	18.050	0.000	19050.000	26010.000	26460.000
3	13:46:33	58.425%	-0.015	17.450	17.580	0.000	18660.000	25820.000	26000.000
X		60.862%	-0.034	17.980	18.430	0.000	19280.000	26560.000	26930.000
σ		2.550%	0.018	0.541	1.098	0.000	757.900	1114.000	1231.000
%RSD		4.191	53.280	3.010	5.959	0.000	3.930	4.194	4.572
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:45:54	1.553	4213.000	0.000	1174.000	88490.000	88750.000	55.672%	0.496
2	13:46:14	0.963	4074.000	0.000	1167.000	87980.000	88350.000	54.839%	0.289
3	13:46:33	1.086	4010.000	0.000	1174.000	88660.000	89610.000	51.822%	0.444
X		1.201	4099.000	0.000	1172.000	88380.000	88900.000	54.111%	0.410
σ		0.312	103.900	0.000	3.901	354.200	647.100	2.026%	0.107
%RSD		25.960	2.535	0.000	0.333	0.401	0.728	3.744	26.200
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:45:54	0.271	0.772	1.442	10.450	128.500	0.066	0.794	0.205
2	13:46:14	2.659	0.776	1.460	10.510	121.000	0.077	0.458	0.290
3	13:46:33	0.793	0.878	1.435	12.630	136.500	0.060	0.673	0.271
X		1.241	0.809	1.446	11.200	128.700	0.068	0.642	0.255
σ		1.255	0.060	0.013	1.243	7.750	0.008	0.170	0.044
%RSD		101.200	7.389	0.908	11.100	6.023	12.110	26.530	17.300
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:45:54	0.104	6.126	6.427	-0.242	0.115	0.637	0.000	104.300
2	13:46:14	0.098	5.869	6.173	-0.667	0.222	0.504	0.000	106.100
3	13:46:33	0.154	5.561	6.019	-1.197	0.299	0.604	0.000	105.800
X		0.119	5.852	6.206	-0.702	0.212	0.582	0.000	105.400
σ		0.030	0.283	0.206	0.478	0.092	0.069	0.000	0.974
%RSD		25.540	4.832	3.321	68.160	43.550	11.890	0.000	0.924
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:45:54	65.646%	0.443	0.460	62.473%	-0.079	-0.083	-0.008	-0.017
2	13:46:14	64.830%	0.473	0.521	61.016%	-0.070	-0.091	-0.039	-0.038
3	13:46:33	64.306%	0.425	0.475	60.352%	-0.079	-0.075	-0.026	-0.018
X		64.927%	0.447	0.486	61.280%	-0.076	-0.083	-0.024	-0.024
σ		0.676%	0.024	0.032	1.085%	0.005	0.008	0.016	0.012
%RSD		1.041	5.431	6.604	1.771	7.067	9.605	64.700	48.300
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:45:54	67.128%	0.113	0.021	0.039	79.690	80.820	77.690%	79.071%
2	13:46:14	67.379%	0.080	0.027	0.032	80.580	79.860	77.253%	78.806%
3	13:46:33	67.337%	0.076	0.022	0.027	80.570	79.630	77.634%	79.230%
X		67.281%	0.090	0.023	0.033	80.280	80.100	77.526%	79.036%
σ		0.135%	0.020	0.003	0.006	0.509	0.630	0.238%	0.214%
%RSD		0.200	22.630	14.420	17.590	0.634	0.786	0.307	0.271
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:45:54	0.022	0.024	0.064	68.394%				
2	13:46:14	0.031	0.029	0.069	67.743%				
3	13:46:33	0.025	0.028	0.069	68.520%				
X		0.026	0.027	0.067	68.219%				
σ		0.005	0.003	0.003	0.417%				
%RSD		17.340	11.140	4.440	0.612				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:45	57.012%	0.022	582.400	590.200	0.000	75290.000	47410.000	48080.000
2	13:50:04	53.702%	0.008	596.400	562.500	0.000	73110.000	47180.000	46690.000
3	13:50:23	51.374%	-0.008	580.200	540.300	0.000	71020.000	45160.000	45000.000
X		54.029%	0.007	586.300	564.400	0.000	73140.000	46580.000	46590.000
σ		2.833%	0.015	8.789	25.000	0.000	2136.000	1235.000	1542.000
%RSD		5.244	202.600	1.499	4.429	0.000	2.921	2.650	3.310
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:45	5.087	8786.000	0.000	5277.000	118000.000	119400.000	54.395%	0.999
2	13:50:04	4.871	8631.000	0.000	5499.000	123100.000	122400.000	50.431%	0.693
3	13:50:23	4.666	8242.000	0.000	5256.000	120200.000	121000.000	48.379%	0.889
X		4.874	8553.000	0.000	5344.000	120400.000	120900.000	51.069%	0.860
σ		0.210	280.300	0.000	134.500	2600.000	1486.000	3.058%	0.155
%RSD		4.319	3.277	0.000	2.518	2.159	1.229	5.989	18.010
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:45	0.043	0.952	787.400	940.300	1085.000	4.643	17.850	1.668
2	13:50:04	2.381	0.989	808.300	994.200	1108.000	4.872	17.740	1.690
3	13:50:23	-0.211	1.004	813.200	999.100	1119.000	4.696	18.980	1.662
X		0.738	0.982	803.000	977.900	1104.000	4.737	18.190	1.674
σ		1.429	0.027	13.710	32.620	17.480	0.120	0.684	0.015
%RSD		193.600	2.707	1.708	3.336	1.583	2.531	3.761	0.877
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:45	1.124	3.705	4.631	0.668	-0.279	1.077	0.000	401.400
2	13:50:04	1.142	3.862	4.030	1.325	-0.201	1.360	0.000	404.400
3	13:50:23	1.196	3.743	3.702	0.986	-0.136	1.170	0.000	405.400
X		1.154	3.770	4.121	0.993	-0.205	1.202	0.000	403.700
σ		0.037	0.082	0.471	0.329	0.072	0.144	0.000	2.063
%RSD		3.248	2.179	11.430	33.110	34.910	12.000	0.000	0.511
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:45	62.668%	0.359	0.408	58.883%	-0.089	-0.091	-0.047	-0.026
2	13:50:04	62.361%	0.381	0.390	58.577%	-0.085	-0.083	-0.050	-0.038
3	13:50:23	61.056%	0.335	0.421	57.241%	-0.079	-0.080	-0.032	-0.017
X		62.028%	0.358	0.406	58.234%	-0.085	-0.085	-0.043	-0.027
σ		0.856%	0.023	0.016	0.873%	0.005	0.005	0.010	0.011
%RSD		1.380	6.429	3.889	1.499	6.172	6.401	22.560	38.960
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:45	64.265%	0.139	0.073	0.094	414.400	414.600	74.940%	76.723%
2	13:50:04	64.373%	0.159	0.092	0.095	410.000	414.400	76.404%	77.910%
3	13:50:23	64.353%	0.188	0.071	0.087	412.300	415.300	75.636%	77.118%
X		64.330%	0.162	0.079	0.092	412.300	414.800	75.660%	77.250%
σ		0.057%	0.025	0.012	0.005	2.185	0.435	0.732%	0.604%
%RSD		0.089	15.290	15.000	4.925	0.530	0.105	0.968	0.782
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:49:45	0.098	0.100	0.070	64.516%				
2	13:50:04	0.097	0.102	0.066	65.092%				
3	13:50:23	0.102	0.103	0.061	65.543%				
X		0.099	0.102	0.066	65.050%				
σ		0.003	0.002	0.004	0.515%				
%RSD		2.974	1.637	6.408	0.792				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:53:33	57.586%	0.057	26.630	26.060	0.000	41150.000	42380.000	42570.000
2	13:53:52	58.241%	-0.050	24.700	22.100	0.000	37700.000	39180.000	39270.000
3	13:54:11	54.071%	0.046	24.520	25.650	0.000	38600.000	40980.000	41910.000
X		56.633%	0.018	25.280	24.600	0.000	39150.000	40840.000	41250.000
σ		2.242%	0.059	1.169	2.175	0.000	1792.000	1604.000	1748.000
%RSD		3.960	333.500	4.622	8.841	0.000	4.577	3.927	4.237
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:53:33	17.590	6181.000	0.000	1820.000	144000.000	145100.000	52.363%	1.041
2	13:53:52	17.240	5796.000	0.000	1804.000	146600.000	148500.000	49.177%	1.173
3	13:54:11	18.050	6092.000	0.000	1804.000	144400.000	147600.000	48.539%	0.987
X		17.630	6023.000	0.000	1809.000	145000.000	147100.000	50.026%	1.067
σ		0.405	201.500	0.000	8.957	1400.000	1752.000	2.049%	0.095
%RSD		2.296	3.346	0.000	0.495	0.965	1.191	4.095	8.939
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:53:33	1.248	1.155	3.867	55.370	238.900	0.152	0.367	4.467
2	13:53:52	0.549	1.315	3.931	56.700	243.200	0.150	0.363	4.745
3	13:54:11	-0.256	1.243	3.918	53.590	223.800	0.147	0.256	4.424
X		0.514	1.238	3.905	55.220	235.300	0.150	0.329	4.545
σ		0.752	0.080	0.034	1.564	10.210	0.002	0.063	0.174
%RSD		146.400	6.495	0.866	2.833	4.341	1.663	19.290	3.831
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:53:33	4.065	2.833	2.713	-0.272	0.041	0.264	0.000	178.600
2	13:53:52	4.383	2.476	2.878	0.298	-0.287	0.305	0.000	180.600
3	13:54:11	4.212	2.440	2.300	0.064	-0.215	0.357	0.000	180.100
X		4.220	2.583	2.630	0.030	-0.154	0.309	0.000	179.800
σ		0.159	0.217	0.298	0.286	0.172	0.047	0.000	1.059
%RSD		3.769	8.405	11.330	953.100	112.100	15.240	0.000	0.589
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:53:33	61.542%	0.066	0.085	58.458%	-0.089	-0.086	0.015	0.006
2	13:53:52	61.107%	0.088	0.093	57.412%	-0.082	-0.088	-0.031	-0.024
3	13:54:11	60.112%	0.099	0.093	56.073%	-0.079	-0.080	-0.046	-0.032
X		60.921%	0.084	0.090	57.314%	-0.083	-0.085	-0.021	-0.017
σ		0.733%	0.017	0.005	1.195%	0.005	0.004	0.032	0.020
%RSD		1.203	19.770	5.269	2.086	5.796	5.106	150.800	118.700
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:53:33	64.456%	0.007	-0.000	0.000	139.400	139.500	74.410%	75.359%
2	13:53:52	63.546%	0.024	-0.008	-0.011	141.800	141.400	74.076%	76.119%
3	13:54:11	62.882%	0.035	-0.013	-0.012	141.700	141.700	74.960%	76.284%
X		63.628%	0.022	-0.007	-0.008	141.000	140.900	74.482%	75.921%
σ		0.790%	0.014	0.007	0.007	1.373	1.192	0.447%	0.493%
%RSD		1.242	63.020	92.770	87.880	0.974	0.846	0.600	0.649
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:53:33	0.021	0.019	0.292	65.118%				
2	13:53:52	0.020	0.020	0.318	64.374%				
3	13:54:11	0.019	0.022	0.295	65.009%				
X		0.020	0.020	0.302	64.833%				
σ		0.001	0.002	0.014	0.402%				
%RSD		5.851	8.103	4.783	0.620				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:57:20	60.733%	0.034	349.400	342.400	0.000	47870.000	44000.000	45780.000
2	13:57:39	53.032%	0.029	357.100	341.500	0.000	46960.000	43180.000	45040.000
3	13:57:58	53.939%	-0.049	350.600	353.600	0.000	48110.000	43720.000	44250.000
X		55.901%	0.005	352.400	345.800	0.000	47650.000	43630.000	45020.000
σ		4.209%	0.046	4.170	6.742	0.000	609.700	416.900	763.800
%RSD		7.529	946.100	1.183	1.950	0.000	1.280	0.955	1.696
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:57:20	0.905	6430.000	0.000	7458.000	136700.000	138000.000	50.289%	0.481
2	13:57:39	0.557	6273.000	0.000	7507.000	137400.000	137400.000	47.815%	0.675
3	13:57:58	0.582	6308.000	0.000	7333.000	134200.000	137100.000	45.252%	0.544
X		0.681	6337.000	0.000	7433.000	136100.000	137500.000	47.785%	0.567
σ		0.194	81.920	0.000	89.350	1688.000	473.000	2.519%	0.099
%RSD		28.510	1.293	0.000	1.202	1.240	0.344	5.271	17.450
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:57:20	0.563	0.917	1130.000	69.330	241.000	5.345	11.550	1.796
2	13:57:39	0.051	0.916	1158.000	72.290	235.300	5.315	11.250	1.714
3	13:57:58	0.821	0.852	1158.000	75.080	228.300	5.401	12.100	1.683
X		0.478	0.895	1149.000	72.230	234.900	5.354	11.630	1.731
σ		0.392	0.037	16.290	2.878	6.387	0.044	0.431	0.058
%RSD		81.910	4.152	1.418	3.984	2.720	0.817	3.709	3.359
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:57:20	1.454	10.710	10.060	-0.407	-0.310	0.876	0.000	282.800
2	13:57:39	1.454	10.400	10.450	-0.074	-0.240	0.996	0.000	281.400
3	13:57:58	1.471	10.180	10.400	-0.165	-0.132	0.871	0.000	280.700
X		1.460	10.430	10.300	-0.216	-0.227	0.915	0.000	281.700
σ		0.010	0.268	0.209	0.172	0.089	0.071	0.000	1.071
%RSD		0.705	2.565	2.027	79.800	39.360	7.735	0.000	0.380
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:57:20	60.627%	0.303	0.250	58.172%	-0.091	-0.085	0.047	0.053
2	13:57:39	59.693%	0.293	0.309	56.304%	-0.086	-0.088	0.070	0.090
3	13:57:58	60.245%	0.287	0.308	55.954%	-0.082	-0.081	0.091	0.086
X		60.189%	0.295	0.289	56.810%	-0.086	-0.085	0.069	0.076
σ		0.469%	0.008	0.034	1.193%	0.004	0.003	0.022	0.021
%RSD		0.780	2.668	11.750	2.100	4.907	4.003	32.370	26.990
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:57:20	62.477%	0.130	0.063	0.073	318.200	319.800	73.691%	75.517%
2	13:57:39	62.460%	0.100	0.059	0.057	314.300	314.400	74.246%	76.220%
3	13:57:58	62.587%	0.112	0.054	0.067	320.900	318.800	74.774%	76.555%
X		62.508%	0.114	0.059	0.066	317.800	317.700	74.237%	76.098%
σ		0.069%	0.015	0.004	0.008	3.295	2.861	0.541%	0.530%
%RSD		0.110	13.110	7.614	12.400	1.037	0.901	0.729	0.696
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:57:20	0.051	0.054	0.082	60.607%				
2	13:57:39	0.050	0.048	0.087	61.417%				
3	13:57:58	0.048	0.050	0.086	62.814%				
X		0.050	0.051	0.085	61.612%				
σ		0.002	0.003	0.003	1.117%				
%RSD		3.673	5.551	3.485	1.813				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:01:07	58.969%	0.038	17.760	16.710	0.000	4212.000	20850.000	20910.000
2	14:01:26	53.100%	-0.010	17.950	18.670	0.000	4696.000	22200.000	22170.000
3	14:01:45	50.693%	-0.007	22.040	18.340	0.000	4373.000	21920.000	21940.000
X		54.254%	0.007	19.250	17.910	0.000	4427.000	21660.000	21670.000
σ		4.257%	0.027	2.420	1.045	0.000	246.400	710.400	673.500
%RSD		7.846	374.900	12.570	5.837	0.000	5.565	3.280	3.108
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:01:07	6.182	4540.000	0.000	920.800	65830.000	67050.000	47.403%	0.868
2	14:01:26	7.357	4901.000	0.000	958.200	69950.000	69420.000	45.123%	0.851
3	14:01:45	6.885	4777.000	0.000	945.800	69430.000	69730.000	45.079%	0.830
X		6.808	4739.000	0.000	941.600	68400.000	68730.000	45.868%	0.850
σ		0.591	183.500	0.000	19.070	2241.000	1465.000	1.330%	0.019
%RSD		8.681	3.871	0.000	2.025	3.277	2.131	2.899	2.229
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:01:07	-0.663	0.786	16.420	448.400	535.800	0.053	0.197	0.003
2	14:01:26	1.426	0.764	16.160	440.900	516.800	0.056	0.132	0.016
3	14:01:45	1.056	0.735	16.480	482.500	530.100	0.054	0.081	0.043
X		0.607	0.762	16.360	457.200	527.600	0.054	0.137	0.021
σ		1.115	0.026	0.169	22.200	9.766	0.001	0.058	0.021
%RSD		183.800	3.363	1.031	4.856	1.851	2.381	42.360	100.000
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:01:07	0.026	2.026	2.174	3.526	-0.210	0.008	0.000	303.700
2	14:01:26	0.056	2.157	2.297	3.320	-0.376	0.185	0.000	306.000
3	14:01:45	0.021	1.965	2.463	3.693	-0.267	0.228	0.000	276.200
X		0.034	2.049	2.311	3.513	-0.284	0.140	0.000	295.300
σ		0.019	0.098	0.145	0.187	0.084	0.117	0.000	16.580
%RSD		55.950	4.787	6.289	5.324	29.680	83.230	0.000	5.613
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:01:07	59.007%	0.777	0.758	56.951%	-0.082	-0.086	-0.032	-0.029
2	14:01:26	58.036%	0.829	0.747	56.272%	-0.088	-0.086	-0.075	-0.054
3	14:01:45	57.647%	0.717	0.858	55.574%	-0.081	-0.077	-0.083	-0.064
X		58.230%	0.774	0.788	56.266%	-0.084	-0.083	-0.063	-0.049
σ		0.701%	0.056	0.061	0.689%	0.004	0.005	0.027	0.018
%RSD		1.203	7.197	7.780	1.224	4.734	5.884	43.150	37.220
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:01:07	62.389%	-0.027	-0.028	-0.035	177.200	176.600	73.228%	74.717%
2	14:01:26	61.972%	-0.008	-0.035	-0.021	176.700	177.500	74.868%	76.675%
3	14:01:45	62.050%	0.005	-0.029	-0.028	175.600	174.600	74.686%	75.920%
X		62.137%	-0.010	-0.031	-0.028	176.500	176.200	74.261%	75.771%
σ		0.222%	0.016	0.004	0.007	0.844	1.496	0.899%	0.988%
%RSD		0.357	158.700	12.350	24.830	0.478	0.849	1.211	1.304
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:01:07	0.007	0.008	0.076	64.021%				
2	14:01:26	0.010	0.007	0.067	66.107%				
3	14:01:45	0.010	0.008	0.070	66.080%				
X		0.009	0.008	0.071	65.403%				
σ		0.002	0.001	0.004	1.197%				
%RSD		17.360	8.559	6.073	1.830				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:04:55	58.612%	-0.032	11.020	9.529	0.000	6020.000	15810.000	16370.000
2	14:05:15	54.162%	-0.068	8.570	8.881	0.000	6062.000	15730.000	15930.000
3	14:05:34	54.797%	-0.049	10.920	9.095	0.000	6008.000	15360.000	15900.000
X		55.857%	-0.050	10.170	9.168	0.000	6030.000	15640.000	16070.000
σ		2.407%	0.018	1.387	0.330	0.000	28.680	238.300	259.400
%RSD		4.309	35.570	13.640	3.598	0.000	0.476	1.524	1.615
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:04:55	17.050	2798.000	0.000	282.100	53230.000	54320.000	47.943%	0.755
2	14:05:15	15.790	2810.000	0.000	288.100	55700.000	55880.000	45.045%	0.374
3	14:05:34	15.990	2675.000	0.000	285.400	54790.000	55570.000	43.775%	0.656
X		16.280	2761.000	0.000	285.200	54570.000	55260.000	45.588%	0.595
σ		0.674	74.700	0.000	2.981	1249.000	824.400	2.136%	0.198
%RSD		4.141	2.705	0.000	1.045	2.289	1.492	4.686	33.270
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:04:55	0.225	1.255	2.443	33.090	106.600	0.074	0.117	0.775
2	14:05:15	1.118	1.348	2.589	34.620	106.600	0.072	0.016	0.767
3	14:05:34	-0.467	1.334	2.474	33.640	109.900	0.076	0.117	0.874
X		0.292	1.312	2.502	33.780	107.700	0.074	0.083	0.805
σ		0.794	0.050	0.077	0.774	1.917	0.002	0.059	0.060
%RSD		271.900	3.812	3.071	2.290	1.780	2.800	70.430	7.428
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:04:55	0.679	2.723	2.915	0.087	-0.059	0.332	0.000	76.490
2	14:05:15	0.821	2.657	2.536	-0.366	-0.091	0.240	0.000	77.470
3	14:05:34	0.812	2.697	2.543	-0.816	0.007	0.216	0.000	77.440
X		0.771	2.692	2.664	-0.365	-0.048	0.263	0.000	77.140
σ		0.079	0.033	0.217	0.451	0.050	0.061	0.000	0.556
%RSD		10.280	1.241	8.137	123.700	104.100	23.340	0.000	0.721
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:04:55	58.831%	0.141	0.120	57.160%	-0.089	-0.090	-0.049	-0.041
2	14:05:15	57.642%	0.079	0.100	56.106%	-0.084	-0.087	-0.025	-0.014
3	14:05:34	57.149%	0.125	0.130	55.630%	-0.078	-0.086	-0.027	-0.025
X		57.874%	0.115	0.117	56.299%	-0.084	-0.088	-0.034	-0.027
σ		0.864%	0.032	0.015	0.783%	0.005	0.002	0.014	0.013
%RSD		1.494	28.160	13.060	1.391	6.381	1.886	40.060	50.350
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:04:55	61.991%	-0.049	-0.025	-0.017	7.500	7.120	72.625%	74.169%
2	14:05:15	61.847%	-0.047	-0.007	0.004	7.124	7.132	74.088%	75.234%
3	14:05:34	62.240%	-0.045	-0.018	-0.024	7.363	7.168	74.641%	76.220%
X		62.026%	-0.047	-0.017	-0.013	7.329	7.140	73.785%	75.208%
σ		0.198%	0.002	0.009	0.015	0.190	0.025	1.042%	1.026%
%RSD		0.320	5.193	56.560	117.500	2.592	0.352	1.412	1.364
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:04:55	0.006	0.005	0.108	66.251%				
2	14:05:15	0.007	0.011	0.114	65.594%				
3	14:05:34	0.007	0.009	0.111	66.219%				
X		0.007	0.008	0.111	66.021%				
σ		0.001	0.003	0.003	0.370%				
%RSD		8.481	36.890	2.556	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	14:08:44	75.551%	-0.028	265.600	267.300	0.000	641700.000	80420.000	81050.000
2	14:09:03	69.001%	-0.024	279.300	275.600	0.000	650700.000	81960.000	82270.000
3	14:09:22	68.187%	-0.053	272.100	262.400	0.000	647000.000	81250.000	81930.000
X		70.913%	-0.035	272.300	268.400	0.000	646500.000	81210.000	81750.000
σ		4.037%	0.016	6.834	6.693	0.000	4537.000	767.700	628.200
%RSD		5.693	45.230	2.509	2.493	0.000	0.702	0.945	0.768
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:08:44	20.160	-365.800	0.000	25580.000	26290.000	27120.000	82.802%	1.103
2	14:09:03	20.640	-404.500	0.000	26000.000	26570.000	27600.000	82.260%	1.328
3	14:09:22	20.970	-402.600	0.000	26290.000	26930.000	27910.000	81.096%	1.114
X		20.590	-391.000	0.000	25960.000	26600.000	27540.000	82.053%	1.182
σ		0.411	21.820	0.000	355.300	319.300	396.400	0.871%	0.126
%RSD		1.998	5.581	0.000	1.369	1.200	1.439	1.062	10.700
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:08:44	0.272	0.124	2.945	50.010	84.580	0.043	0.129	4.759
2	14:09:03	0.109	0.132	2.853	49.670	83.990	0.048	0.097	4.870
3	14:09:22	0.542	0.129	2.928	50.580	83.600	0.049	0.196	4.969
X		0.308	0.128	2.909	50.090	84.060	0.047	0.141	4.866
σ		0.219	0.004	0.049	0.461	0.493	0.003	0.051	0.105
%RSD		71.020	3.242	1.669	0.919	0.586	7.005	36.030	2.161
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:08:44	0.156	-0.284	-0.462	1.688	-0.007	6.282	0.000	491.400
2	14:09:03	0.085	-0.255	-0.515	1.544	0.100	5.675	0.000	492.100
3	14:09:22	0.029	-0.284	-0.510	1.979	0.111	6.260	0.000	495.700
X		0.090	-0.274	-0.496	1.737	0.068	6.072	0.000	493.100
σ		0.063	0.017	0.030	0.222	0.066	0.345	0.000	2.321
%RSD		70.350	6.219	5.972	12.780	96.460	5.677	0.000	0.471
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:08:44	82.482%	0.665	0.689	75.368%	-0.086	-0.085	0.019	0.012
2	14:09:03	82.780%	0.776	0.653	75.172%	-0.085	-0.094	0.020	0.002
3	14:09:22	84.513%	0.720	0.692	75.431%	-0.079	-0.085	-0.021	-0.020
X		83.258%	0.720	0.678	75.324%	-0.084	-0.088	0.006	-0.002
σ		1.097%	0.056	0.022	0.135%	0.004	0.005	0.024	0.017
%RSD		1.317	7.748	3.197	0.179	4.576	5.564	383.700	850.100
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:08:44	79.599%	-0.161	-0.047	-0.042	1.161	1.190	84.964%	85.255%
2	14:09:03	80.931%	-0.161	-0.036	-0.038	1.262	1.268	87.553%	87.980%
3	14:09:22	82.074%	-0.153	-0.037	-0.034	1.198	1.216	88.631%	89.441%
X		80.868%	-0.158	-0.040	-0.038	1.207	1.225	87.049%	87.559%
σ		1.239%	0.005	0.006	0.004	0.051	0.040	1.885%	2.125%
%RSD		1.532	3.023	15.090	10.570	4.235	3.246	2.165	2.427
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:08:44	0.003	0.004	0.078	70.585%				
2	14:09:03	0.003	0.005	0.087	68.884%				
3	14:09:22	0.007	0.004	0.090	71.991%				
X		0.004	0.004	0.085	70.487%				
σ		0.002	0.001	0.006	1.556%				
%RSD		57.930	14.960	7.147	2.207				



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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	14:12:32	107.225%	-0.049	1.207	0.763	0.000	38.770	4.723	4.865
2	14:12:51	106.412%	-0.020	0.544	0.868	0.000	27.490	2.641	2.792
3	14:13:10	102.767%	-0.028	0.901	0.816	0.000	23.770	2.523	2.270
X		105.468%	-0.032	0.884	0.816	0.000	30.010	3.296	3.309
σ		2.374%	0.015	0.332	0.052	0.000	7.808	1.237	1.372
%RSD		2.251	46.370	37.540	6.401	0.000	26.020	37.550	41.470
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:12:32	-2.271	-483.600	0.000	-1.618	-10.110	-7.330	105.082%	-0.058
2	14:12:51	-2.264	-483.600	0.000	-1.408	-9.036	-7.725	100.558%	-0.095
3	14:13:10	-2.256	-482.800	0.000	-2.998	-11.640	-9.272	101.333%	-0.086
X		-2.264	-483.300	0.000	-2.008	-10.260	-8.109	102.324%	-0.080
σ		0.007	0.486	0.000	0.864	1.309	1.026	2.419%	0.019
%RSD		0.329	0.101	0.000	43.020	12.760	12.650	2.364	24.310
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:12:32	-0.011	0.024	0.008	4.354	0.371	0.001	-0.052	-0.199
2	14:12:51	0.011	0.025	-0.009	1.502	0.025	0.002	-0.054	-0.194
3	14:13:10	0.029	0.015	-0.017	1.355	-0.790	0.002	-0.062	-0.192
X		0.010	0.021	-0.006	2.403	-0.131	0.002	-0.056	-0.195
σ		0.020	0.005	0.013	1.690	0.596	0.001	0.005	0.003
%RSD		210.300	25.390	209.700	70.340	454.400	36.390	9.574	1.745
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:12:32	-0.225	-0.898	-0.965	0.056	-0.132	0.285	0.000	0.023
2	14:12:51	-0.210	-0.977	-0.938	0.028	-0.122	0.169	0.000	0.013
3	14:13:10	-0.215	-0.931	-0.975	0.000	-0.027	0.122	0.000	0.012
X		-0.217	-0.935	-0.959	0.028	-0.093	0.192	0.000	0.016
σ		0.007	0.039	0.019	0.028	0.058	0.084	0.000	0.006
%RSD		3.461	4.221	2.002	99.430	62.140	43.660	0.000	38.060
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:12:32	101.258%	-0.011	-0.003	100.845%	-0.085	-0.084	0.021	0.011
2	14:12:51	103.288%	0.009	-0.013	101.091%	-0.086	-0.086	0.039	0.025
3	14:13:10	102.236%	0.009	-0.014	100.214%	-0.078	-0.087	0.039	0.019
X		102.261%	0.002	-0.010	100.717%	-0.083	-0.086	0.033	0.018
σ		1.015%	0.011	0.006	0.452%	0.004	0.001	0.010	0.007
%RSD		0.993	471.200	61.740	0.449	5.138	1.329	31.440	36.610
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:12:32	100.115%	-0.186	-0.055	-0.057	0.015	0.014	97.646%	97.010%
2	14:12:51	101.410%	-0.188	-0.059	-0.055	0.018	0.007	100.145%	99.804%
3	14:13:10	101.352%	-0.175	-0.065	-0.055	0.025	0.023	101.219%	101.090%
X		100.959%	-0.183	-0.060	-0.055	0.019	0.015	99.670%	99.301%
σ		0.732%	0.007	0.005	0.001	0.005	0.008	1.833%	2.086%
%RSD		0.725	3.782	7.799	2.000	27.250	52.500	1.839	2.101
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:12:32	0.005	0.003	-0.017	90.073%				
2	14:12:51	0.003	0.002	-0.014	88.879%				
3	14:13:10	0.009	0.002	-0.014	88.273%				
X		0.006	0.002	-0.015	89.075%				
σ		0.003	0.000	0.002	0.916%				
%RSD		47.830	11.550	11.770	1.028				

LCS 180-139894/2-A 5/1/2015 2:16:43 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	14:17:02	58.035%	51.020	996.900	936.600	0.000	43000.000	42930.000	44010.000
2	14:17:21	54.341%	51.210	970.100	953.900	0.000	43070.000	41930.000	42890.000
3	14:17:40	52.758%	50.130	957.300	925.900	0.000	41590.000	41430.000	42120.000
X		55.045%	50.790	974.800	938.800	0.000	42550.000	42100.000	43010.000
σ		2.708%	0.575	20.190	14.170	0.000	835.100	765.900	953.000
%RSD		4.920	1.131	2.071	1.509	0.000	1.963	1.819	2.216
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:17:02	1737.000	8241.000	0.000	48370.000	51890.000	51550.000	49.451%	1031.000
2	14:17:21	1701.000	8146.000	0.000	48810.000	52500.000	51560.000	47.595%	1051.000
3	14:17:40	1741.000	8170.000	0.000	48600.000	53210.000	52760.000	45.969%	1052.000
X		1726.000	8186.000	0.000	48590.000	52530.000	51960.000	47.672%	1045.000
σ		21.690	49.220	0.000	220.500	665.000	695.200	1.743%	12.170
%RSD		1.256	0.601	0.000	0.454	1.266	1.338	3.655	1.165
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:17:02	508.700	207.900	507.200	1049.000	1109.000	513.100	515.500	259.300
2	14:17:21	521.400	203.900	510.800	1040.000	1116.000	512.800	506.600	254.000
3	14:17:40	544.500	213.900	529.700	1061.000	1135.000	517.800	510.400	258.200
X		524.900	208.600	515.900	1050.000	1120.000	514.600	510.800	257.200
σ		18.160	5.027	12.050	10.330	13.440	2.770	4.491	2.789
%RSD		3.459	2.410	2.337	0.984	1.201	0.538	0.879	1.084
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:17:02	264.600	521.200	518.800	39.450	10.040	10.290	0.000	911.900
2	14:17:21	257.500	508.100	513.200	37.620	10.170	10.350	0.000	916.600
3	14:17:40	257.800	513.500	510.400	38.800	10.270	9.627	0.000	914.300
X		260.000	514.300	514.100	38.620	10.160	10.090	0.000	914.300
σ		4.021	6.557	4.248	0.928	0.115	0.401	0.000	2.362
%RSD		1.546	1.275	0.826	2.403	1.132	3.970	0.000	0.258
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:17:02	62.543%	1017.000	980.200	58.690%	49.300	49.700	49.290	46.300
2	14:17:21	61.305%	1013.000	992.500	57.597%	49.780	49.170	50.120	46.180
3	14:17:40	60.615%	1021.000	990.900	56.411%	48.960	48.850	50.060	47.340
X		61.488%	1017.000	987.900	57.566%	49.350	49.240	49.820	46.610
σ		0.977%	3.901	6.672	1.140%	0.408	0.428	0.463	0.634
%RSD		1.589	0.384	0.675	1.980	0.828	0.870	0.929	1.361
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:17:02	63.600%	1837.000	447.600	460.500	1796.000	1785.000	75.449%	77.027%
2	14:17:21	63.903%	1831.000	475.400	477.000	1800.000	1776.000	75.390%	77.082%
3	14:17:40	63.556%	1824.000	478.600	477.000	1826.000	1773.000	75.322%	77.292%
X		63.686%	1830.000	467.200	471.500	1807.000	1778.000	75.387%	77.134%
σ		0.189%	6.696	17.030	9.529	16.070	6.238	0.063%	0.140%
%RSD		0.297	0.366	3.646	2.021	0.889	0.351	0.084	0.181
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:17:02	53.010	53.840	22.390	64.563%				
2	14:17:21	54.370	55.450	22.920	63.766%				
3	14:17:40	54.670	55.540	22.900	63.816%				
X		54.010	54.940	22.740	64.048%				
σ		0.885	0.959	0.298	0.446%				
%RSD		1.639	1.745	1.312	0.697				

CCV 1558997 5/1/2015 2:20:39 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:20:39	102.259%	105.500	101.500	99.350	0.000	47000.000	46840.000	46880.000
2	14:20:59	95.680%	107.700	102.700	99.820	0.000	47810.000	48790.000	49820.000
3	14:21:19	93.955%	105.000	102.000	95.880	0.000	48400.000	48580.000	48100.000
X		97.298%	106.074%	102.070%	98.350%	0.000	95.471%	96.142%	96.531%
σ		4.382%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		4.504	1.318	0.582	2.188	0.000	1.473	2.221	3.067
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:20:39	470.300	4412.000	0.000	46500.000	47000.000	46990.000	99.983%	97.340
2	14:20:59	490.900	4642.000	0.000	49900.000	50060.000	49970.000	92.021%	99.590
3	14:21:19	467.600	4658.000	0.000	49550.000	49410.000	49590.000	91.643%	101.500
X		95.256%	91.407%	0.000	97.301%	97.647%	97.705%	94.549%	99.460%
σ		n/a	n/a	0.000	n/a	n/a	n/a	4.710%	n/a
%RSD		2.678	3.012	0.000	3.837	3.305	3.326	4.982	2.072
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:20:39	98.860	99.180	475.500	24320.000	24250.000	100.700	102.200	105.100
2	14:20:59	102.000	104.500	491.000	25260.000	24900.000	102.300	104.800	105.000
3	14:21:19	101.600	101.000	492.900	24890.000	24500.000	101.100	105.300	105.200
X		100.833%	101.552%	97.291%	99.288%	98.192%	101.369%	104.076%	105.108%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.710	2.670	1.964	1.890	1.343	0.803	1.619	0.106
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:20:39	103.800	100.100	101.100	100.900	105.000	104.000	0.000	99.060
2	14:20:59	106.300	104.300	104.200	102.600	107.900	106.600	0.000	102.000
3	14:21:19	105.700	104.400	104.700	103.300	107.300	106.800	0.000	101.600
X		105.297%	102.913%	103.318%	102.292%	106.724%	105.782%	0.000	100.888%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.236	2.390	1.879	1.216	1.470	1.476	0.000	1.581
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:20:39	93.961%	97.090	97.320	86.911%	99.380	99.760	98.490	98.560
2	14:20:59	92.543%	99.650	100.800	85.522%	101.200	101.600	101.300	100.600
3	14:21:19	92.634%	102.200	101.900	85.428%	101.600	101.700	103.100	102.200
X		93.046%	99.631%	100.002%	85.953%	100.718%	100.990%	100.962%	100.436%
σ		0.794%	n/a	n/a	0.830%	n/a	n/a	n/a	n/a
%RSD		0.853	2.540	2.390	0.966	1.169	1.057	2.313	1.808
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:20:39	88.436%	95.710	95.160	95.160	96.020	94.890	87.449%	87.674%
2	14:20:59	87.211%	97.210	97.530	98.660	96.830	97.610	89.101%	89.646%
3	14:21:19	86.768%	98.750	99.310	99.320	97.420	96.610	89.203%	89.934%
X		87.472%	97.225%	97.330%	97.713%	96.759%	96.369%	88.584%	89.085%
σ		0.864%	n/a	n/a	n/a	n/a	n/a	0.984%	1.230%
%RSD		0.988	1.561	2.139	2.291	0.726	1.431	1.111	1.381
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:20:39	103.800	103.200	104.600	76.931%				
2	14:20:59	106.200	105.500	107.200	78.742%				
3	14:21:19	105.800	104.800	107.400	79.425%				
X		105.253%	104.460%	106.402%	78.366%				
σ		n/a	n/a	n/a	1.289%				
%RSD		1.238	1.137	1.457	1.644				

CCB4 5/1/2015 2:27:09 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:27:29	114.961%	0.012	1.663	1.337	0.000	14.970	5.109	4.894
2	14:27:48	119.135%	-0.008	1.255	1.298	0.000	11.270	3.979	4.434
3	14:28:07	112.270%	0.041	1.446	1.087	0.000	11.360	4.099	3.232
X		115.455%	0.015	1.454	1.240	0.000	12.530	4.395	4.186
σ		3.459%	0.025	0.204	0.135	0.000	2.111	0.621	0.858
%RSD		2.996	163.000	14.030	10.850	0.000	16.850	14.120	20.500
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:27:29	1.939	-477.200	0.000	5.884	8.960	7.154	115.808%	-0.019
2	14:27:48	1.657	-477.900	0.000	5.449	10.220	6.806	113.139%	0.044
3	14:28:07	1.646	-477.700	0.000	5.535	5.628	6.127	109.039%	0.049
X		1.747	-477.600	0.000	5.623	8.269	6.696	112.662%	0.025
σ		0.166	0.367	0.000	0.231	2.373	0.522	3.410%	0.038
%RSD		9.496	0.077	0.000	4.100	28.700	7.803	3.026	154.500
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:27:29	0.047	0.017	0.216	8.303	7.259	0.020	-0.015	0.481
2	14:27:48	0.044	0.020	0.197	9.847	6.733	0.016	0.006	0.485
3	14:28:07	0.063	0.046	0.201	9.235	6.426	0.011	0.016	0.507
X		0.051	0.028	0.205	9.129	6.806	0.016	0.002	0.491
σ		0.010	0.016	0.010	0.777	0.421	0.005	0.015	0.014
%RSD		19.640	56.880	4.992	8.514	6.184	29.430	675.000	2.868
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:27:29	0.483	0.981	0.701	-0.004	0.075	-0.033	0.000	0.071
2	14:27:48	0.524	0.860	0.915	0.024	0.080	0.157	0.000	0.053
3	14:28:07	0.455	0.911	1.004	0.053	0.115	0.152	0.000	0.059
X		0.487	0.917	0.874	0.024	0.090	0.092	0.000	0.061
σ		0.035	0.061	0.156	0.029	0.022	0.108	0.000	0.009
%RSD		7.196	6.639	17.820	118.900	24.350	117.500	0.000	15.330
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:27:29	103.243%	0.499	0.498	104.247%	-0.057	-0.062	0.031	0.031
2	14:27:48	104.304%	0.470	0.423	104.650%	-0.067	-0.059	0.036	0.033
3	14:28:07	103.976%	0.362	0.375	104.093%	-0.055	-0.056	0.060	0.046
X		103.841%	0.444	0.431	104.330%	-0.059	-0.059	0.042	0.037
σ		0.543%	0.072	0.062	0.288%	0.006	0.003	0.015	0.008
%RSD		0.523	16.260	14.360	0.276	10.650	5.021	36.020	21.700
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:27:29	98.320%	0.176	0.007	0.001	0.074	0.047	93.304%	92.641%
2	14:27:48	101.323%	0.137	-0.001	-0.000	0.036	0.040	94.860%	93.550%
3	14:28:07	100.997%	0.133	-0.012	-0.004	0.043	0.039	95.628%	94.749%
X		100.214%	0.149	-0.002	-0.001	0.051	0.042	94.597%	93.647%
σ		1.648%	0.024	0.009	0.002	0.020	0.004	1.184%	1.058%
%RSD		1.644	15.880	420.100	238.200	39.660	10.220	1.252	1.129
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:27:29	0.050	0.050	0.036	86.839%				
2	14:27:48	0.045	0.047	0.035	88.005%				
3	14:28:07	0.040	0.047	0.035	87.569%				
X		0.045	0.048	0.035	87.471%				
σ		0.005	0.002	0.001	0.589%				
%RSD		11.610	3.549	1.898	0.674				

180-43402-B-2-A 5/1/2015 2:31:00 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	14:31:20	63.580%	-0.052	130.100	122.300	0.000	34760.000	20140.000	20340.000
2	14:31:39	59.570%	-0.033	131.700	126.400	0.000	35290.000	20000.000	20070.000
3	14:31:58	59.253%	-0.033	124.300	122.600	0.000	33460.000	19440.000	19600.000
X		60.801%	-0.039	128.700	123.800	0.000	34500.000	19860.000	20010.000
σ		2.412%	0.011	3.909	2.258	0.000	938.700	367.800	375.000
%RSD		3.967	27.020	3.038	1.824	0.000	2.721	1.852	1.874
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:31:20	5.180	3910.000	0.000	8275.000	123700.000	121600.000	55.679%	0.549
2	14:31:39	5.058	3752.000	0.000	8035.000	119200.000	122100.000	53.963%	0.278
3	14:31:58	4.587	3639.000	0.000	8024.000	124000.000	123700.000	51.893%	0.443
X		4.941	3767.000	0.000	8111.000	122300.000	122500.000	53.845%	0.423
σ		0.313	136.400	0.000	141.700	2699.000	1072.000	1.896%	0.137
%RSD		6.336	3.621	0.000	1.747	2.207	0.875	3.521	32.300
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:31:20	0.104	1.296	131.600	560.300	710.600	0.557	2.015	0.501
2	14:31:39	1.637	1.219	131.900	555.500	705.200	0.556	1.804	0.506
3	14:31:58	0.539	1.383	135.300	573.400	741.400	0.608	2.356	0.509
X		0.760	1.299	132.900	563.100	719.100	0.574	2.058	0.506
σ		0.790	0.082	2.064	9.253	19.520	0.030	0.279	0.004
%RSD		104.000	6.334	1.553	1.643	2.714	5.234	13.530	0.774
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:31:20	0.220	13.280	12.800	0.165	-0.103	0.205	0.000	295.200
2	14:31:39	0.239	12.970	13.370	-0.125	0.009	0.494	0.000	296.900
3	14:31:58	0.226	12.100	12.640	-0.432	-0.204	0.206	0.000	290.600
X		0.228	12.780	12.940	-0.131	-0.099	0.301	0.000	294.200
σ		0.010	0.612	0.384	0.298	0.107	0.166	0.000	3.275
%RSD		4.215	4.787	2.968	228.700	107.300	55.200	0.000	1.113
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:31:20	65.206%	0.493	0.518	62.688%	-0.085	-0.087	0.002	-0.012
2	14:31:39	63.695%	0.464	0.459	60.542%	-0.077	-0.079	-0.027	-0.029
3	14:31:58	65.274%	0.464	0.447	60.391%	-0.073	-0.080	-0.056	-0.045
X		64.725%	0.474	0.475	61.207%	-0.079	-0.082	-0.027	-0.029
σ		0.893%	0.017	0.038	1.285%	0.006	0.004	0.029	0.016
%RSD		1.379	3.609	8.096	2.099	7.926	5.442	108.600	56.270
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:31:20	66.624%	0.472	0.125	0.158	45.380	45.010	76.097%	77.414%
2	14:31:39	65.910%	0.361	0.142	0.156	45.060	44.780	77.248%	78.471%
3	14:31:58	66.024%	0.349	0.142	0.131	44.980	44.890	77.044%	78.465%
X		66.186%	0.394	0.137	0.148	45.140	44.890	76.796%	78.117%
σ		0.384%	0.068	0.010	0.015	0.210	0.115	0.614%	0.609%
%RSD		0.580	17.140	7.152	10.100	0.465	0.256	0.800	0.779
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:31:20	0.162	0.157	0.144	68.715%				
2	14:31:39	0.149	0.161	0.154	67.760%				
3	14:31:58	0.165	0.154	0.159	66.670%				
X		0.159	0.157	0.152	67.715%				
σ		0.008	0.004	0.007	1.023%				
%RSD		5.295	2.289	4.804	1.511				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:35:09	80.795%	-0.017	25.580	23.190	0.000	7004.000	4087.000	4037.000
2	14:35:28	75.078%	-0.013	22.810	21.400	0.000	6481.000	3722.000	3751.000
3	14:35:47	74.677%	-0.054	24.110	22.150	0.000	6609.000	3911.000	3982.000
X		76.850%	-0.028	24.170	22.250	0.000	6698.000	3906.000	3923.000
σ		3.422%	0.023	1.388	0.895	0.000	272.500	182.300	151.600
%RSD		4.453	80.840	5.742	4.022	0.000	4.068	4.667	3.864
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:35:09	-1.468	429.800	0.000	1614.000	23380.000	23300.000	69.782%	0.022
2	14:35:28	-1.313	376.600	0.000	1505.000	22020.000	22100.000	68.090%	0.069
3	14:35:47	-1.383	423.000	0.000	1626.000	23860.000	23720.000	64.205%	0.094
X		-1.388	409.800	0.000	1582.000	23090.000	23040.000	67.359%	0.062
σ		0.078	28.940	0.000	66.790	953.900	839.400	2.860%	0.036
%RSD		5.592	7.061	0.000	4.222	4.131	3.644	4.245	59.270
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:35:09	0.278	0.250	26.300	124.000	152.900	0.117	0.437	-0.059
2	14:35:28	-0.201	0.258	24.590	114.400	140.600	0.128	0.421	-0.048
3	14:35:47	-0.031	0.310	27.040	126.200	152.100	0.122	0.502	-0.069
X		0.015	0.273	25.980	121.600	148.500	0.122	0.453	-0.058
σ		0.243	0.033	1.255	6.266	6.895	0.006	0.043	0.011
%RSD		1586.000	12.050	4.830	5.155	4.643	4.495	9.461	18.010
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:35:09	-0.097	2.087	1.831	-0.317	-0.204	0.110	0.000	64.750
2	14:35:28	-0.098	1.816	1.594	-0.016	-0.187	-0.015	0.000	59.870
3	14:35:47	-0.116	2.010	2.194	-0.235	-0.080	0.091	0.000	64.130
X		-0.104	1.971	1.873	-0.189	-0.157	0.062	0.000	62.910
σ		0.011	0.139	0.302	0.156	0.068	0.068	0.000	2.658
%RSD		10.270	7.074	16.130	82.150	43.000	109.500	0.000	4.224
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:35:09	74.082%	0.098	0.134	74.303%	-0.085	-0.090	-0.022	-0.019
2	14:35:28	75.044%	0.103	0.120	74.801%	-0.087	-0.087	-0.042	-0.032
3	14:35:47	73.539%	0.134	0.109	72.639%	-0.079	-0.082	-0.025	-0.022
X		74.222%	0.112	0.121	73.914%	-0.084	-0.086	-0.030	-0.024
σ		0.762%	0.019	0.012	1.132%	0.004	0.004	0.011	0.007
%RSD		1.027	17.240	10.200	1.531	5.337	4.197	36.910	27.260
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:35:09	76.342%	-0.068	-0.023	-0.031	8.868	9.001	83.014%	83.382%
2	14:35:28	78.570%	0.018	-0.029	-0.015	8.555	8.321	86.260%	86.605%
3	14:35:47	77.079%	-0.066	-0.030	-0.022	8.778	8.752	83.922%	84.672%
X		77.330%	-0.039	-0.027	-0.023	8.734	8.691	84.398%	84.886%
σ		1.135%	0.049	0.004	0.008	0.162	0.344	1.675%	1.622%
%RSD		1.468	127.000	14.270	35.430	1.851	3.957	1.984	1.911
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:35:09	0.037	0.038	0.011	78.320%				
2	14:35:28	0.034	0.038	0.013	80.835%				
3	14:35:47	0.042	0.040	0.017	77.996%				
X		0.038	0.039	0.014	79.051%				
σ		0.004	0.001	0.003	1.554%				
%RSD		11.030	3.113	21.390	1.966				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:38:58	58.306%	47.480	1052.000	968.100	0.000	75720.000	61350.000	60110.000
2	14:39:17	53.265%	46.360	986.400	919.200	0.000	70910.000	57820.000	58340.000
3	14:39:37	54.105%	45.570	991.500	950.700	0.000	71970.000	57560.000	56970.000
X		55.225%	46.470	1010.000	946.000	0.000	72870.000	58910.000	58480.000
σ		2.701%	0.960	36.560	24.800	0.000	2528.000	2117.000	1574.000
%RSD		4.890	2.065	3.620	2.622	0.000	3.469	3.593	2.692
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:38:58	1600.000	11880.000	0.000	53320.000	171300.000	171800.000	49.344%	955.200
2	14:39:17	1555.000	11440.000	0.000	54910.000	174200.000	176000.000	44.894%	1021.000
3	14:39:37	1580.000	11820.000	0.000	53850.000	173900.000	173700.000	44.556%	995.000
X		1578.000	11710.000	0.000	54030.000	173100.000	173800.000	46.265%	990.400
σ		22.580	235.500	0.000	809.700	1618.000	2092.000	2.672%	33.180
%RSD		1.431	2.011	0.000	1.499	0.934	1.203	5.776	3.350
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:38:58	485.500	193.100	619.300	1585.000	1775.000	478.300	477.600	233.500
2	14:39:17	524.000	205.400	652.500	1635.000	1834.000	496.500	490.000	240.700
3	14:39:37	492.000	197.300	636.500	1569.000	1795.000	486.200	472.500	231.700
X		500.500	198.600	636.100	1596.000	1801.000	487.000	480.100	235.300
σ		20.610	6.247	16.610	34.470	30.060	9.120	9.015	4.745
%RSD		4.119	3.145	2.610	2.160	1.669	1.873	1.878	2.017
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:38:58	236.400	471.100	472.400	36.150	9.101	9.454	0.000	1234.000
2	14:39:17	241.000	479.900	480.400	36.190	9.743	10.170	0.000	1217.000
3	14:39:37	235.200	478.100	473.300	36.580	9.074	9.952	0.000	1225.000
X		237.500	476.300	475.400	36.300	9.306	9.858	0.000	1225.000
σ		3.037	4.636	4.426	0.235	0.379	0.366	0.000	8.167
%RSD		1.279	0.973	0.931	0.649	4.069	3.717	0.000	0.666
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:38:58	58.390%	1004.000	1002.000	55.727%	46.880	46.770	47.700	43.790
2	14:39:17	58.615%	1004.000	1006.000	54.090%	47.860	47.140	48.550	43.960
3	14:39:37	56.959%	1018.000	1007.000	52.956%	47.420	46.990	48.930	43.600
X		57.988%	1009.000	1005.000	54.258%	47.390	46.970	48.400	43.790
σ		0.898%	7.836	2.577	1.393%	0.492	0.185	0.631	0.183
%RSD		1.549	0.777	0.256	2.567	1.038	0.394	1.305	0.419
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:38:58	60.242%	1873.000	473.500	478.400	1878.000	1846.000	72.608%	74.413%
2	14:39:17	60.151%	1851.000	475.100	470.500	1864.000	1838.000	73.092%	74.138%
3	14:39:37	59.367%	1876.000	480.700	482.200	1888.000	1862.000	72.548%	74.048%
X		59.920%	1867.000	476.500	477.000	1877.000	1849.000	72.749%	74.200%
σ		0.481%	13.700	3.772	5.954	12.060	12.220	0.298%	0.190%
%RSD		0.803	0.734	0.792	1.248	0.642	0.661	0.410	0.256
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:38:58	53.880	54.440	22.570	60.146%				
2	14:39:17	53.960	55.150	22.750	59.982%				
3	14:39:37	55.020	56.280	23.070	59.396%				
X		54.290	55.290	22.800	59.841%				
σ		0.637	0.929	0.256	0.394%				
%RSD		1.173	1.680	1.125	0.659				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:42:48	53.659%	50.580	1092.000	1025.000	0.000	77510.000	63370.000	63520.000
2	14:43:07	53.326%	46.360	982.600	973.000	0.000	74960.000	57920.000	59970.000
3	14:43:27	50.136%	44.360	999.300	962.600	0.000	71830.000	58010.000	59340.000
x		52.374%	47.100	1025.000	986.900	0.000	74770.000	59770.000	60940.000
σ		1.945%	3.176	58.880	33.540	0.000	2849.000	3120.000	2255.000
%RSD		3.713	6.743	5.746	3.398	0.000	3.811	5.221	3.700
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:42:48	1693.000	12400.000	0.000	57700.000	182400.000	183600.000	44.586%	1007.000
2	14:43:07	1625.000	11940.000	0.000	55030.000	177400.000	179400.000	43.204%	1037.000
3	14:43:27	1598.000	11790.000	0.000	56310.000	177400.000	180300.000	43.291%	1022.000
x		1639.000	12040.000	0.000	56340.000	179100.000	181100.000	43.694%	1022.000
σ		49.250	319.400	0.000	1337.000	2905.000	2174.000	0.774%	14.810
%RSD		3.005	2.653	0.000	2.372	1.622	1.200	1.772	1.449
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:42:48	507.500	200.900	641.700	1658.000	1888.000	504.200	501.000	247.200
2	14:43:07	508.900	204.100	654.300	1671.000	1888.000	501.000	490.200	242.800
3	14:43:27	511.200	206.600	639.700	1643.000	1836.000	484.600	476.700	236.800
x		509.200	203.900	645.200	1657.000	1871.000	496.600	489.300	242.300
σ		1.884	2.854	7.880	14.090	30.230	10.550	12.180	5.255
%RSD		0.370	1.400	1.221	0.850	1.616	2.125	2.489	2.169
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:42:48	244.300	490.500	492.700	36.610	9.698	10.310	0.000	1244.000
2	14:43:07	236.600	487.300	485.700	38.600	9.599	10.760	0.000	1231.000
3	14:43:27	236.400	487.500	484.700	36.860	9.510	10.250	0.000	1246.000
x		239.100	488.400	487.700	37.360	9.602	10.440	0.000	1240.000
σ		4.500	1.804	4.361	1.084	0.094	0.275	0.000	8.344
%RSD		1.882	0.369	0.894	2.902	0.980	2.630	0.000	0.673
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:42:48	57.908%	1016.000	1017.000	53.926%	47.960	47.680	48.560	44.100
2	14:43:07	56.747%	1024.000	1022.000	52.779%	48.110	47.610	48.560	44.010
3	14:43:27	55.906%	1029.000	1028.000	51.472%	47.990	47.570	49.710	44.540
x		56.854%	1023.000	1022.000	52.726%	48.020	47.620	48.940	44.220
σ		1.005%	6.510	5.891	1.228%	0.083	0.055	0.662	0.283
%RSD		1.768	0.636	0.576	2.329	0.173	0.115	1.353	0.641
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:42:48	58.982%	1907.000	481.900	488.800	1922.000	1878.000	71.034%	73.072%
2	14:43:07	58.577%	1897.000	482.400	484.300	1912.000	1883.000	71.568%	73.283%
3	14:43:27	58.405%	1900.000	478.500	480.700	1914.000	1865.000	70.581%	73.176%
x		58.655%	1901.000	480.900	484.600	1916.000	1876.000	71.061%	73.177%
σ		0.296%	5.175	2.113	4.054	5.239	9.149	0.494%	0.106%
%RSD		0.505	0.272	0.439	0.837	0.274	0.488	0.695	0.144
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:42:48	55.410	56.650	23.600	58.066%				
2	14:43:07	55.400	57.120	23.560	58.556%				
3	14:43:27	55.830	57.450	23.720	58.992%				
x		55.550	57.070	23.630	58.538%				
σ		0.249	0.401	0.084	0.463%				
%RSD		0.449	0.702	0.357	0.791				



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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:46:38	52.038%	51.340	1123.000	1091.000	0.000	81790.000	67100.000	67390.000
2	14:46:58	55.109%	48.700	1089.000	1037.000	0.000	78080.000	65470.000	65100.000
3	14:47:17	49.279%	49.260	1004.000	1034.000	0.000	76810.000	64850.000	65740.000
X		52.142%	49.760	1072.000	1054.000	0.000	78890.000	65810.000	66080.000
σ		2.916%	1.390	61.180	31.850	0.000	2589.000	1162.000	1180.000
%RSD		5.593	2.793	5.707	3.022	0.000	3.281	1.766	1.786
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:46:38	1838.000	14080.000	0.000	60900.000	177800.000	178400.000	47.490%	1162.000
2	14:46:58	1686.000	13200.000	0.000	62070.000	178800.000	182200.000	44.710%	1169.000
3	14:47:17	1748.000	13440.000	0.000	62040.000	178500.000	179700.000	44.651%	1190.000
X		1757.000	13570.000	0.000	61670.000	178400.000	180100.000	45.617%	1174.000
σ		76.200	456.300	0.000	669.900	517.400	1948.000	1.622%	14.710
%RSD		4.336	3.362	0.000	1.086	0.290	1.081	3.557	1.254
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:46:38	529.600	207.900	644.600	1576.000	1791.000	512.700	499.800	246.700
2	14:46:58	536.100	206.800	653.900	1604.000	1809.000	505.600	499.100	245.800
3	14:47:17	541.100	211.900	636.400	1582.000	1781.000	489.600	480.400	240.000
X		535.600	208.900	644.900	1587.000	1793.000	502.600	493.100	244.100
σ		5.770	2.683	8.786	14.920	13.990	11.800	10.980	3.627
%RSD		1.077	1.285	1.362	0.940	0.780	2.348	2.227	1.486
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:46:38	243.900	502.500	505.700	38.410	9.959	10.380	0.000	1259.000
2	14:46:58	247.600	500.000	501.800	37.480	9.672	9.872	0.000	1265.000
3	14:47:17	238.000	491.500	497.600	36.150	9.495	9.561	0.000	1258.000
X		243.200	498.000	501.700	37.350	9.708	9.938	0.000	1261.000
σ		4.859	5.766	4.077	1.137	0.234	0.414	0.000	3.941
%RSD		1.998	1.158	0.813	3.044	2.411	4.163	0.000	0.313
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:46:38	57.570%	1180.000	1177.000	54.279%	44.400	44.220	50.400	45.450
2	14:46:58	56.617%	1179.000	1176.000	53.287%	44.180	44.060	50.290	45.260
3	14:47:17	56.273%	1184.000	1178.000	52.203%	44.200	44.160	50.270	45.800
X		56.820%	1181.000	1177.000	53.257%	44.260	44.150	50.320	45.500
σ		0.672%	2.960	1.251	1.038%	0.122	0.079	0.071	0.271
%RSD		1.182	0.251	0.106	1.950	0.276	0.179	0.140	0.595
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:46:38	58.529%	2180.000	520.100	526.800	1962.000	1947.000	70.626%	71.968%
2	14:46:58	58.444%	2168.000	516.600	530.500	1982.000	1943.000	71.386%	73.067%
3	14:47:17	57.947%	2171.000	513.900	532.800	1975.000	1925.000	70.774%	72.754%
X		58.307%	2173.000	516.900	530.000	1973.000	1938.000	70.929%	72.597%
σ		0.315%	6.321	3.095	2.987	9.910	11.410	0.403%	0.566%
%RSD		0.539	0.291	0.599	0.564	0.502	0.589	0.568	0.780
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:46:38	57.820	59.880	24.390	57.398%				
2	14:46:58	59.460	60.870	24.740	57.310%				
3	14:47:17	58.250	59.520	24.420	58.384%				
X		58.510	60.090	24.520	57.697%				
σ		0.854	0.701	0.194	0.597%				
%RSD		1.459	1.166	0.789	1.034				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:50:27	54.625%	-0.011	8.533	8.000	0.000	4407.000	3448.000	3632.000
2	14:50:46	54.406%	0.047	8.687	8.554	0.000	4530.000	3607.000	3557.000
3	14:51:05	46.296%	0.088	11.270	8.947	0.000	4653.000	3693.000	3823.000
X		51.776%	0.041	9.498	8.500	0.000	4530.000	3583.000	3671.000
σ		4.747%	0.050	1.539	0.476	0.000	122.900	124.000	137.400
%RSD		9.168	119.900	16.210	5.597	0.000	2.713	3.462	3.743
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:50:27	381.000	4054.000	0.000	1730.000	58640.000	59660.000	43.879%	10.610
2	14:50:46	389.800	4215.000	0.000	1804.000	60220.000	59940.000	41.906%	10.800
3	14:51:05	398.100	4288.000	0.000	1789.000	60620.000	61110.000	40.035%	10.610
X		389.600	4186.000	0.000	1774.000	59830.000	60240.000	41.940%	10.670
σ		8.518	119.800	0.000	39.240	1047.000	765.800	1.922%	0.110
%RSD		2.186	2.861	0.000	2.211	1.749	1.271	4.583	1.032
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:50:27	-0.228	4.001	49.540	1518.000	1542.000	0.750	2.527	0.900
2	14:50:46	1.707	3.830	49.230	1471.000	1525.000	0.760	2.786	0.965
3	14:51:05	1.331	4.007	50.870	1499.000	1574.000	0.696	2.141	0.808
X		0.937	3.946	49.880	1496.000	1547.000	0.735	2.485	0.891
σ		1.026	0.101	0.871	23.280	25.110	0.035	0.325	0.079
%RSD		109.500	2.551	1.746	1.556	1.623	4.731	13.070	8.859
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:50:27	0.842	6.540	6.745	0.212	-0.327	0.264	0.000	122.200
2	14:50:46	0.859	6.415	6.760	-0.506	-0.220	0.272	0.000	122.500
3	14:51:05	0.849	6.680	6.986	-0.445	-0.102	0.173	0.000	122.100
X		0.850	6.545	6.830	-0.246	-0.216	0.236	0.000	122.300
σ		0.009	0.132	0.135	0.398	0.113	0.055	0.000	0.255
%RSD		1.013	2.020	1.977	161.600	52.130	23.340	0.000	0.209
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:50:27	55.510%	4.621	4.686	54.153%	-0.074	-0.080	-0.029	-0.041
2	14:50:46	53.889%	3.714	3.574	53.144%	-0.081	-0.089	-0.071	-0.049
3	14:51:05	53.094%	3.068	2.853	52.647%	-0.073	-0.076	-0.049	-0.041
X		54.164%	3.801	3.704	53.315%	-0.076	-0.082	-0.050	-0.044
σ		1.232%	0.780	0.923	0.767%	0.004	0.006	0.021	0.005
%RSD		2.274	20.530	24.930	1.439	5.587	7.906	42.900	11.600
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:50:27	58.992%	1.959	1.128	1.220	19.720	20.150	69.038%	71.207%
2	14:50:46	57.661%	1.459	0.803	0.851	20.410	20.670	70.077%	71.784%
3	14:51:05	58.455%	1.204	0.623	0.600	20.020	19.860	70.262%	71.964%
X		58.369%	1.541	0.851	0.890	20.050	20.230	69.792%	71.652%
σ		0.669%	0.384	0.256	0.312	0.343	0.411	0.660%	0.396%
%RSD		1.147	24.930	30.100	34.990	1.710	2.030	0.945	0.552
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:50:27	0.172	0.180	0.560	64.306%				
2	14:50:46	0.176	0.167	0.565	64.933%				
3	14:51:05	0.147	0.153	0.548	65.614%				
X		0.165	0.167	0.558	64.951%				
σ		0.015	0.013	0.008	0.655%				
%RSD		9.309	7.994	1.519	1.008				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:54:15	51.581%	0.052	29.800	28.140	0.000	27400.000	11860.000	12250.000
2	14:54:34	49.805%	-0.026	29.290	29.130	0.000	26360.000	11530.000	11710.000
3	14:54:53	45.590%	0.023	32.260	28.430	0.000	27880.000	12420.000	12370.000
X		48.992%	0.016	30.450	28.570	0.000	27210.000	11940.000	12110.000
σ		3.077%	0.040	1.592	0.509	0.000	775.700	449.500	355.700
%RSD		6.282	243.700	5.227	1.780	0.000	2.851	3.766	2.937
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:54:15	79.560	4115.000	0.000	6922.000	111100.000	109800.000	43.513%	2.130
2	14:54:34	78.120	3739.000	0.000	6714.000	111300.000	112800.000	40.567%	2.407
3	14:54:53	79.970	3960.000	0.000	6915.000	114000.000	115700.000	38.910%	2.387
X		79.220	3938.000	0.000	6850.000	112100.000	112800.000	40.996%	2.308
σ		0.969	189.200	0.000	118.000	1579.000	2956.000	2.332%	0.154
%RSD		1.223	4.805	0.000	1.723	1.408	2.621	5.688	6.676
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:54:15	0.302	2.300	10.330	303.800	416.100	0.223	0.465	0.406
2	14:54:34	-0.531	2.544	10.370	326.000	448.900	0.231	0.548	0.426
3	14:54:53	1.956	2.454	10.310	319.600	428.000	0.233	0.458	0.497
X		0.576	2.433	10.330	316.500	431.000	0.229	0.490	0.443
σ		1.266	0.123	0.030	11.440	16.610	0.005	0.050	0.048
%RSD		219.900	5.058	0.287	3.615	3.855	2.325	10.250	10.790
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:54:15	0.289	11.120	10.060	-0.640	-0.272	0.199	0.000	239.000
2	14:54:34	0.353	10.970	10.880	-0.473	-0.068	0.247	0.000	238.700
3	14:54:53	0.293	11.350	10.890	-1.414	-0.361	0.193	0.000	238.400
X		0.312	11.150	10.610	-0.843	-0.234	0.213	0.000	238.700
σ		0.036	0.191	0.475	0.502	0.150	0.030	0.000	0.302
%RSD		11.440	1.717	4.481	59.560	64.320	13.920	0.000	0.126
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:54:15	53.031%	1.109	1.147	51.701%	-0.087	-0.085	-0.037	-0.030
2	14:54:34	53.399%	1.052	1.046	50.959%	-0.084	-0.086	-0.038	-0.038
3	14:54:53	52.117%	0.954	1.032	49.526%	-0.074	-0.075	-0.041	-0.037
X		52.849%	1.038	1.075	50.729%	-0.082	-0.082	-0.039	-0.035
σ		0.660%	0.079	0.063	1.106%	0.007	0.006	0.002	0.004
%RSD		1.248	7.567	5.842	2.180	8.386	7.365	5.449	11.770
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:54:15	56.790%	0.768	0.178	0.218	45.250	44.990	68.391%	70.350%
2	14:54:34	56.663%	0.742	0.174	0.185	45.810	44.560	69.467%	71.262%
3	14:54:53	56.452%	0.703	0.149	0.191	45.170	45.220	69.379%	70.919%
X		56.635%	0.737	0.167	0.198	45.410	44.920	69.079%	70.844%
σ		0.171%	0.033	0.016	0.018	0.350	0.332	0.598%	0.461%
%RSD		0.302	4.432	9.398	8.899	0.771	0.740	0.865	0.650
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:54:15	0.070	0.061	0.222	63.807%				
2	14:54:34	0.065	0.070	0.230	61.996%				
3	14:54:53	0.067	0.065	0.233	62.457%				
X		0.067	0.065	0.228	62.753%				
σ		0.003	0.005	0.006	0.941%				
%RSD		3.827	7.674	2.414	1.500				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:02	52.558%	-0.009	21.710	19.880	0.000	24890.000	9606.000	9757.000
2	14:58:21	52.216%	-0.008	18.480	19.460	0.000	23130.000	9307.000	9513.000
3	14:58:40	49.189%	0.016	18.140	19.230	0.000	23760.000	9421.000	9685.000
X		51.321%	-0.000	19.440	19.530	0.000	23930.000	9445.000	9651.000
σ		1.854%	0.014	1.967	0.328	0.000	892.600	151.200	125.100
%RSD		3.613	10800.000	10.120	1.680	0.000	3.731	1.600	1.296
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:02	111.100	4128.000	0.000	3192.000	90300.000	91350.000	42.616%	3.169
2	14:58:21	105.300	4123.000	0.000	3150.000	91920.000	92370.000	41.501%	7.061
3	14:58:40	107.600	4127.000	0.000	3216.000	90690.000	91910.000	40.300%	2.986
X		108.000	4126.000	0.000	3186.000	90970.000	91870.000	41.473%	4.405
σ		2.923	2.941	0.000	33.640	844.100	511.700	1.158%	2.302
%RSD		2.706	0.071	0.000	1.056	0.928	0.557	2.792	52.250
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:02	-1.569	3.750	13.170	318.400	413.800	0.214	0.618	0.559
2	14:58:21	1.265	3.680	13.410	293.400	403.100	0.206	0.640	0.453
3	14:58:40	1.652	3.781	13.050	310.500	397.500	0.215	0.632	0.439
X		0.449	3.737	13.210	307.400	404.800	0.212	0.630	0.484
σ		1.758	0.052	0.186	12.780	8.281	0.005	0.011	0.066
%RSD		391.300	1.387	1.404	4.156	2.046	2.344	1.807	13.610
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:02	0.330	3.270	3.636	-0.536	-0.070	0.137	0.000	170.500
2	14:58:21	0.265	3.517	3.525	0.099	0.020	0.437	0.000	168.300
3	14:58:40	0.353	3.360	3.413	0.084	-0.166	0.563	0.000	169.800
X		0.316	3.383	3.525	-0.118	-0.072	0.379	0.000	169.500
σ		0.046	0.125	0.112	0.362	0.093	0.219	0.000	1.156
%RSD		14.530	3.694	3.169	308.000	128.400	57.870	0.000	0.682
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:02	52.011%	1.993	2.026	50.952%	-0.084	-0.082	-0.021	-0.019
2	14:58:21	52.237%	1.819	2.025	51.120%	-0.085	-0.084	-0.049	-0.042
3	14:58:40	51.733%	2.065	1.913	50.566%	-0.078	-0.088	-0.054	-0.020
X		51.994%	1.959	1.988	50.879%	-0.082	-0.085	-0.041	-0.027
σ		0.252%	0.127	0.065	0.284%	0.004	0.003	0.018	0.013
%RSD		0.486	6.460	3.272	0.558	4.842	3.518	42.980	48.360
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:02	55.106%	0.230	0.092	0.105	34.970	34.050	66.648%	68.527%
2	14:58:21	55.566%	0.208	0.108	0.098	34.400	33.480	67.576%	69.547%
3	14:58:40	55.425%	0.174	0.099	0.092	34.130	33.990	67.715%	70.014%
X		55.366%	0.204	0.100	0.098	34.500	33.840	67.313%	69.363%
σ		0.236%	0.028	0.008	0.006	0.428	0.311	0.580%	0.760%
%RSD		0.426	13.930	7.974	6.379	1.241	0.919	0.861	1.096
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:58:02	0.041	0.041	0.185	65.967%				
2	14:58:21	0.052	0.049	0.203	61.829%				
3	14:58:40	0.043	0.044	0.206	63.133%				
X		0.045	0.045	0.198	63.643%				
σ		0.006	0.004	0.012	2.115%				
%RSD		12.570	8.151	5.845	3.324				

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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	15:01:49	53.644%	0.029	13.460	12.900	0.000	28490.000	16260.000	16520.000
2	15:02:09	49.489%	-0.068	15.290	14.100	0.000	33500.000	18960.000	19020.000
3	15:02:28	47.136%	0.020	15.300	14.980	0.000	32560.000	18650.000	18490.000
X		50.090%	-0.006	14.680	13.990	0.000	31520.000	17960.000	18010.000
σ		3.295%	0.054	1.059	1.043	0.000	2660.000	1480.000	1314.000
%RSD		6.579	857.000	7.213	7.452	0.000	8.441	8.242	7.295
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:01:49	21.710	4223.000	0.000	3791.000	92860.000	94090.000	43.393%	0.890
2	15:02:09	23.480	4537.000	0.000	4417.000	107400.000	105700.000	38.998%	0.850
3	15:02:28	26.870	4625.000	0.000	4254.000	107400.000	108600.000	37.690%	1.194
X		24.020	4462.000	0.000	4154.000	102600.000	102800.000	40.027%	0.978
σ		2.625	211.300	0.000	324.700	8396.000	7685.000	2.987%	0.188
%RSD		10.930	4.736	0.000	7.817	8.187	7.475	7.463	19.260
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:01:49	1.131	1.355	16.770	134.900	251.900	0.145	0.440	0.429
2	15:02:09	-0.269	1.544	19.120	161.500	286.900	0.205	0.781	0.564
3	15:02:28	0.608	1.684	19.330	155.700	271.400	0.181	0.677	0.540
X		0.490	1.528	18.400	150.700	270.100	0.177	0.633	0.511
σ		0.708	0.166	1.421	14.000	17.530	0.030	0.175	0.072
%RSD		144.500	10.830	7.721	9.294	6.492	17.130	27.620	14.140
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:01:49	0.248	9.591	9.817	-0.290	-0.564	0.248	0.000	173.300
2	15:02:09	0.431	10.700	10.790	0.306	-0.023	0.078	0.000	197.700
3	15:02:28	0.334	11.650	11.290	0.102	-0.005	0.281	0.000	198.400
X		0.338	10.650	10.630	0.039	-0.197	0.202	0.000	189.800
σ		0.092	1.033	0.750	0.303	0.318	0.108	0.000	14.280
%RSD		27.190	9.698	7.056	770.000	160.900	53.620	0.000	7.523
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:01:49	55.048%	0.154	0.190	54.003%	-0.075	-0.087	-0.019	-0.006
2	15:02:09	51.324%	0.292	0.272	50.152%	-0.077	-0.080	0.025	0.029
3	15:02:28	50.494%	0.244	0.267	49.228%	-0.072	-0.084	-0.030	-0.029
X		52.289%	0.230	0.243	51.128%	-0.075	-0.084	-0.008	-0.002
σ		2.425%	0.070	0.046	2.532%	0.003	0.004	0.029	0.029
%RSD		4.639	30.470	18.960	4.953	3.612	4.243	370.300	1588.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:01:49	58.551%	0.134	0.034	0.035	33.890	34.050	71.779%	73.622%
2	15:02:09	54.777%	0.109	0.047	0.065	38.770	37.830	67.434%	69.832%
3	15:02:28	54.766%	0.142	0.033	0.038	37.640	38.740	67.912%	70.201%
X		56.031%	0.129	0.038	0.046	36.770	36.870	69.042%	71.218%
σ		2.182%	0.018	0.008	0.017	2.554	2.487	2.383%	2.090%
%RSD		3.894	13.650	20.570	36.360	6.946	6.745	3.451	2.935
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:01:49	0.025	0.031	0.144	67.372%				
2	15:02:09	0.039	0.039	0.166	60.025%				
3	15:02:28	0.034	0.031	0.170	60.455%				
X		0.033	0.033	0.160	62.617%				
σ		0.007	0.005	0.014	4.123%				
%RSD		22.960	13.570	8.747	6.585				

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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	15:05:37	48.499%	0.060	87.860	84.570	0.000	34510.000	15910.000	16260.000
2	15:05:57	46.051%	-0.023	90.300	82.110	0.000	32840.000	14990.000	15110.000
3	15:06:16	43.868%	-0.021	81.380	82.250	0.000	33290.000	15770.000	15590.000
X		46.139%	0.005	86.520	82.980	0.000	33550.000	15560.000	15650.000
σ		2.317%	0.047	4.610	1.384	0.000	864.100	495.200	574.300
%RSD		5.021	871.500	5.328	1.667	0.000	2.576	3.183	3.669
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:05:37	87.340	3379.000	0.000	18590.000	65000.000	64870.000	40.758%	2.545
2	15:05:57	82.640	3135.000	0.000	18300.000	65150.000	65560.000	38.605%	2.129
3	15:06:16	82.740	3302.000	0.000	19110.000	66790.000	66950.000	37.613%	2.293
X		84.240	3272.000	0.000	18670.000	65650.000	65790.000	38.992%	2.322
σ		2.683	124.400	0.000	410.400	994.400	1063.000	1.607%	0.210
%RSD		3.185	3.803	0.000	2.198	1.515	1.616	4.123	9.027
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:05:37	0.783	4.268	4.539	144.400	217.500	0.316	1.966	1.640
2	15:05:57	2.589	4.327	4.766	148.100	221.100	0.314	2.376	1.706
3	15:06:16	1.897	4.303	4.542	142.700	212.300	0.303	1.899	1.561
X		1.757	4.299	4.616	145.100	216.900	0.311	2.080	1.636
σ		0.911	0.030	0.131	2.733	4.424	0.007	0.259	0.073
%RSD		51.860	0.700	2.829	1.884	2.039	2.140	12.420	4.439
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:05:37	1.451	4.265	4.061	-0.914	-0.247	0.400	0.000	388.000
2	15:05:57	1.357	3.771	3.681	0.160	-0.540	0.610	0.000	388.700
3	15:06:16	1.533	3.571	3.842	-1.006	-0.179	0.425	0.000	393.800
X		1.447	3.869	3.861	-0.587	-0.322	0.478	0.000	390.200
σ		0.088	0.357	0.191	0.648	0.192	0.115	0.000	3.208
%RSD		6.074	9.233	4.942	110.400	59.610	23.980	0.000	0.822
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:05:37	50.764%	9.718	9.834	49.753%	-0.073	-0.073	-0.015	-0.003
2	15:05:57	50.756%	10.070	10.210	49.373%	-0.079	-0.082	-0.030	-0.020
3	15:06:16	48.909%	9.658	9.877	48.060%	-0.065	-0.071	0.056	0.016
X		50.143%	9.814	9.974	49.062%	-0.072	-0.075	0.003	-0.002
σ		1.069%	0.220	0.206	0.888%	0.007	0.006	0.046	0.018
%RSD		2.132	2.239	2.067	1.810	9.972	7.571	1331.000	833.100
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:05:37	54.302%	0.158	0.612	0.614	37.490	37.640	65.926%	67.834%
2	15:05:57	54.878%	0.145	0.636	0.635	36.970	37.790	66.696%	69.056%
3	15:06:16	54.268%	0.155	0.599	0.630	37.270	37.670	66.731%	69.588%
X		54.483%	0.153	0.616	0.626	37.240	37.700	66.451%	68.826%
σ		0.343%	0.006	0.019	0.011	0.265	0.077	0.455%	0.899%
%RSD		0.630	4.224	3.006	1.810	0.711	0.203	0.684	1.307
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:05:37	0.057	0.071	0.318	62.213%				
2	15:05:57	0.070	0.071	0.335	60.753%				
3	15:06:16	0.065	0.066	0.313	62.808%				
X		0.064	0.069	0.322	61.925%				
σ		0.007	0.003	0.011	1.058%				
%RSD		10.540	4.088	3.540	1.708				

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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	15:09:15	100.527%	103.900	107.200	97.400	0.000	48030.000	46960.000	48170.000
2	15:09:34	93.017%	107.100	105.000	101.300	0.000	49720.000	49370.000	49610.000
3	15:09:54	89.074%	106.300	110.800	101.400	0.000	49950.000	49490.000	50510.000
X		94.206%	105.781%	107.659%	100.020%	0.000	98.471%	97.209%	98.865%
σ		5.818%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		6.176	1.569	2.703	2.271	0.000	2.135	2.936	2.391
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:09:15	492.100	4601.000	0.000	49670.000	48680.000	49220.000	90.046%	99.820
2	15:09:34	491.100	4737.000	0.000	49750.000	49370.000	49150.000	87.711%	104.800
3	15:09:54	510.400	4731.000	0.000	50560.000	49870.000	50760.000	86.199%	101.100
X		99.574%	93.788%	0.000	99.988%	98.609%	99.420%	87.986%	101.920%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.938%	n/a
%RSD		2.189	1.640	0.000	0.989	1.210	1.825	2.203	2.554
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:09:15	99.930	101.700	494.600	25420.000	24860.000	100.600	105.100	106.300
2	15:09:34	102.100	102.500	504.700	25950.000	25200.000	102.400	105.700	105.200
3	15:09:54	102.800	104.600	502.200	25630.000	25400.000	100.100	102.700	104.100
X		101.616%	102.950%	100.103%	102.661%	100.614%	101.044%	104.475%	105.195%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.488	1.466	1.052	1.039	1.074	1.187	1.511	1.066
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:09:15	108.100	105.200	106.000	104.700	108.100	107.800	0.000	103.300
2	15:09:34	104.400	106.000	106.400	105.900	110.200	109.600	0.000	103.800
3	15:09:54	105.300	105.300	105.300	104.800	109.100	108.000	0.000	104.200
X		105.908%	105.503%	105.904%	105.120%	109.102%	108.466%	0.000	103.770%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.819	0.424	0.502	0.609	0.962	0.891	0.000	0.420
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:09:15	84.171%	97.150	96.880	81.638%	100.900	101.600	99.660	100.700
2	15:09:34	84.496%	98.900	99.190	81.667%	101.300	102.000	101.300	101.600
3	15:09:54	84.438%	101.500	100.700	82.188%	100.800	101.700	100.900	101.600
X		84.369%	99.179%	98.911%	81.831%	100.984%	101.743%	100.605%	101.299%
σ		0.173%	n/a	n/a	0.309%	n/a	n/a	n/a	n/a
%RSD		0.205	2.202	1.930	0.378	0.237	0.208	0.845	0.495
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:09:15	80.605%	97.880	98.110	97.060	96.820	96.830	83.131%	82.820%
2	15:09:34	81.521%	98.340	97.880	97.030	98.240	97.200	84.815%	84.961%
3	15:09:54	82.224%	98.950	98.100	98.850	97.110	97.690	85.919%	86.507%
X		81.450%	98.388%	98.029%	97.646%	97.390%	97.241%	84.622%	84.763%
σ		0.812%	n/a	n/a	n/a	n/a	n/a	1.404%	1.851%
%RSD		0.997	0.546	0.134	1.066	0.774	0.445	1.659	2.184
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:09:15	100.900	100.800	101.800	77.679%				
2	15:09:34	101.800	102.000	103.300	78.757%				
3	15:09:54	102.200	101.800	103.900	80.421%				
X		101.647%	101.556%	102.982%	78.952%				
σ		n/a	n/a	n/a	1.382%				
%RSD		0.628	0.619	1.063	1.750				

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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	15:16:04	118.110%	-0.033	0.891	0.628	0.000	10.380	4.892	4.599
2	15:16:23	122.324%	-0.025	0.832	0.659	0.000	9.496	4.058	4.501
3	15:16:43	111.178%	-0.031	1.035	0.675	0.000	9.410	3.665	4.266
X		117.204%	-0.030	0.919	0.654	0.000	9.762	4.205	4.455
σ		5.628%	0.004	0.105	0.024	0.000	0.536	0.626	0.171
%RSD		4.802	13.130	11.380	3.674	0.000	5.493	14.900	3.846
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:16:04	1.337	-483.000	0.000	3.888	2.361	7.971	104.094%	0.048
2	15:16:23	1.469	-481.600	0.000	5.143	11.340	5.944	97.737%	-0.024
3	15:16:43	1.350	-479.900	0.000	4.946	6.446	7.189	96.301%	0.008
X		1.385	-481.500	0.000	4.659	6.715	7.035	99.377%	0.011
σ		0.072	1.596	0.000	0.675	4.495	1.023	4.147%	0.036
%RSD		5.224	0.332	0.000	14.490	66.940	14.540	4.173	341.900
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:16:04	0.059	0.021	0.210	6.465	6.937	0.013	0.000	0.534
2	15:16:23	0.017	0.037	0.201	6.843	6.788	0.012	0.006	0.547
3	15:16:43	0.008	0.018	0.208	7.053	6.515	0.016	-0.010	0.526
X		0.028	0.025	0.206	6.787	6.747	0.014	-0.001	0.536
σ		0.027	0.010	0.005	0.298	0.214	0.002	0.008	0.010
%RSD		95.430	40.770	2.467	4.397	3.171	15.760	748.800	1.908
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:16:04	0.480	0.956	0.996	0.018	-0.006	0.139	0.000	0.081
2	15:16:23	0.521	0.958	1.116	-0.036	-0.014	0.004	0.000	0.068
3	15:16:43	0.527	0.890	1.090	-0.023	0.139	-0.020	0.000	0.063
X		0.510	0.935	1.067	-0.013	0.040	0.041	0.000	0.071
σ		0.026	0.038	0.063	0.028	0.086	0.086	0.000	0.009
%RSD		5.019	4.115	5.925	211.700	217.500	209.400	0.000	12.790
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:16:04	94.322%	0.258	0.222	96.073%	-0.064	-0.058	0.040	0.030
2	15:16:23	94.299%	0.246	0.231	96.450%	-0.067	-0.064	0.051	0.044
3	15:16:43	93.842%	0.197	0.178	95.787%	-0.058	-0.065	0.058	0.039
X		94.154%	0.234	0.210	96.103%	-0.063	-0.062	0.050	0.038
σ		0.270%	0.032	0.028	0.332%	0.004	0.004	0.009	0.008
%RSD		0.287	13.820	13.370	0.346	7.164	6.015	17.740	20.140
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:16:04	90.576%	0.034	-0.002	0.016	0.065	0.042	87.414%	87.282%
2	15:16:23	90.680%	0.063	0.009	-0.005	0.038	0.048	88.933%	88.497%
3	15:16:43	91.141%	0.040	0.003	0.002	0.043	0.051	89.444%	88.874%
X		90.799%	0.046	0.003	0.004	0.048	0.047	88.597%	88.218%
σ		0.301%	0.016	0.005	0.011	0.014	0.005	1.056%	0.832%
%RSD		0.331	34.310	157.300	255.000	29.510	9.911	1.192	0.943
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:16:04	0.026	0.027	0.036	85.702%				
2	15:16:23	0.025	0.031	0.038	85.430%				
3	15:16:43	0.024	0.030	0.039	85.394%				
X		0.025	0.029	0.038	85.509%				
σ		0.001	0.002	0.001	0.168%				
%RSD		3.626	7.931	3.692	0.197				



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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	15:19:56	59.174%	-0.015	289.000	286.600	0.000	45850.000	14050.000	14110.000
2	15:20:15	52.378%	-0.028	295.600	283.400	0.000	45670.000	14010.000	14140.000
3	15:20:35	50.890%	-0.048	283.700	277.400	0.000	46460.000	14520.000	14480.000
X		54.147%	-0.030	289.400	282.500	0.000	45990.000	14190.000	14240.000
σ		4.417%	0.016	5.956	4.643	0.000	414.400	284.800	206.100
%RSD		8.156	53.710	2.058	1.644	0.000	0.901	2.007	1.447
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:19:56	2.505	3920.000	0.000	9355.000	127300.000	131200.000	46.818%	0.504
2	15:20:15	2.259	4084.000	0.000	9335.000	131500.000	133400.000	44.446%	0.469
3	15:20:35	3.568	4311.000	0.000	9474.000	129900.000	130600.000	44.745%	0.400
X		2.777	4105.000	0.000	9388.000	129500.000	131800.000	45.336%	0.458
σ		0.695	196.500	0.000	75.590	2132.000	1457.000	1.292%	0.053
%RSD		25.030	4.786	0.000	0.805	1.645	1.106	2.850	11.550
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:19:56	-1.754	68.050	0.527	27.850	206.300	0.704	1.509	0.356
2	15:20:15	-0.640	69.610	0.550	24.060	196.100	0.594	1.363	0.378
3	15:20:35	0.932	67.850	0.542	21.790	181.100	0.638	1.368	0.413
X		-0.487	68.500	0.540	24.570	194.500	0.645	1.413	0.382
σ		1.350	0.963	0.012	3.061	12.670	0.055	0.083	0.029
%RSD		276.900	1.405	2.204	12.460	6.515	8.559	5.865	7.548
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:19:56	0.116	1.889	1.828	0.051	-0.218	0.495	0.000	258.300
2	15:20:15	0.049	1.603	1.509	-0.236	-0.040	0.390	0.000	258.700
3	15:20:35	0.139	1.617	1.428	-0.377	-0.115	0.612	0.000	260.900
X		0.101	1.703	1.588	-0.188	-0.125	0.499	0.000	259.300
σ		0.047	0.161	0.211	0.218	0.089	0.111	0.000	1.392
%RSD		46.040	9.470	13.320	116.200	71.540	22.260	0.000	0.537
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:19:56	56.025%	0.328	0.372	54.513%	-0.073	-0.083	0.033	0.024
2	15:20:15	54.745%	0.346	0.322	53.059%	-0.083	-0.081	-0.010	-0.011
3	15:20:35	53.915%	0.301	0.340	51.591%	-0.086	-0.088	-0.008	0.006
X		54.895%	0.325	0.345	53.054%	-0.081	-0.084	0.005	0.007
σ		1.063%	0.023	0.025	1.461%	0.007	0.003	0.024	0.017
%RSD		1.937	7.051	7.357	2.754	8.510	4.147	498.800	264.600
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:19:56	58.703%	0.206	0.111	0.101	49.260	49.170	68.947%	70.172%
2	15:20:15	57.739%	0.177	0.098	0.092	49.810	48.930	69.213%	70.826%
3	15:20:35	57.593%	0.158	0.061	0.060	48.790	49.290	69.455%	70.785%
X		58.012%	0.180	0.090	0.084	49.290	49.130	69.205%	70.594%
σ		0.603%	0.024	0.026	0.021	0.510	0.184	0.254%	0.367%
%RSD		1.040	13.270	28.890	25.150	1.035	0.375	0.367	0.519
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:19:56	0.027	0.034	0.036	59.469%				
2	15:20:15	0.032	0.032	0.035	60.487%				
3	15:20:35	0.027	0.027	0.034	61.627%				
X		0.029	0.031	0.035	60.528%				
σ		0.003	0.004	0.001	1.080%				
%RSD		9.218	12.140	3.454	1.784				

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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	15:23:45	60.087%	-0.016	34.540	33.960	0.000	7209.000	22750.000	22510.000
2	15:24:04	56.609%	-0.049	35.560	36.010	0.000	7300.000	22840.000	23680.000
3	15:24:23	54.557%	-0.030	36.890	37.470	0.000	7309.000	22990.000	23340.000
X		57.084%	-0.032	35.660	35.810	0.000	7273.000	22860.000	23180.000
σ		2.795%	0.017	1.179	1.762	0.000	55.310	120.600	599.900
%RSD		4.896	53.210	3.306	4.920	0.000	0.761	0.528	2.588
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:45	1.813	4374.000	0.000	969.200	75840.000	77000.000	46.948%	0.461
2	15:24:04	1.573	4447.000	0.000	992.100	79870.000	82010.000	44.365%	0.758
3	15:24:23	2.097	4477.000	0.000	987.200	80930.000	81450.000	43.599%	0.390
X		1.827	4433.000	0.000	982.800	78880.000	80150.000	44.971%	0.536
σ		0.262	53.310	0.000	12.050	2687.000	2747.000	1.755%	0.195
%RSD		14.360	1.203	0.000	1.226	3.407	3.428	3.902	36.400
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:45	0.255	1.255	0.323	3.290	110.300	0.068	0.033	0.118
2	15:24:04	2.479	1.235	0.325	4.494	107.700	0.069	0.074	0.192
3	15:24:23	1.782	1.327	0.347	2.182	107.800	0.056	0.108	0.239
X		1.505	1.272	0.332	3.322	108.600	0.064	0.071	0.183
σ		1.137	0.048	0.013	1.156	1.470	0.007	0.037	0.061
%RSD		75.550	3.791	3.910	34.810	1.354	11.260	52.470	33.120
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:45	0.146	1.722	1.609	0.166	-0.435	0.606	0.000	65.940
2	15:24:04	0.147	1.571	1.727	-0.197	-0.332	0.346	0.000	66.290
3	15:24:23	0.126	1.402	1.444	-0.944	0.091	0.375	0.000	66.780
X		0.140	1.565	1.593	-0.325	-0.225	0.443	0.000	66.340
σ		0.012	0.160	0.142	0.566	0.279	0.142	0.000	0.422
%RSD		8.713	10.230	8.909	174.200	123.700	32.210	0.000	0.637
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:45	54.823%	0.131	0.123	54.813%	-0.081	-0.097	-0.026	-0.020
2	15:24:04	55.030%	0.107	0.118	54.193%	-0.089	-0.090	-0.029	-0.023
3	15:24:23	54.335%	0.109	0.104	53.330%	-0.079	-0.083	-0.019	-0.010
X		54.730%	0.116	0.115	54.112%	-0.083	-0.090	-0.025	-0.018
σ		0.357%	0.013	0.010	0.745%	0.005	0.007	0.005	0.007
%RSD		0.652	11.570	8.677	1.376	6.334	7.660	20.890	39.950
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:45	58.146%	0.508	0.007	0.024	46.190	46.220	68.578%	70.603%
2	15:24:04	58.215%	0.594	0.014	0.014	46.590	46.480	69.818%	71.894%
3	15:24:23	57.130%	0.494	0.003	0.015	47.310	47.590	69.755%	71.447%
X		57.830%	0.532	0.008	0.018	46.700	46.760	69.384%	71.315%
σ		0.607%	0.054	0.006	0.006	0.566	0.724	0.698%	0.656%
%RSD		1.050	10.090	67.650	31.520	1.211	1.548	1.006	0.920
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:23:45	0.016	0.018	0.013	64.798%				
2	15:24:04	0.015	0.021	0.011	64.597%				
3	15:24:23	0.015	0.022	0.015	65.616%				
X		0.015	0.021	0.013	65.003%				
σ		0.001	0.002	0.002	0.540%				
%RSD		5.057	9.854	18.540	0.830				

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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	15:27:33	54.144%	0.009	23.540	21.060	0.000	130500.000	23910.000	24110.000
2	15:27:52	48.935%	-0.047	23.620	23.590	0.000	133700.000	25310.000	25570.000
3	15:28:11	45.920%	-0.023	22.400	21.300	0.000	132400.000	24490.000	24800.000
X		49.666%	-0.020	23.190	21.980	0.000	132200.000	24570.000	24830.000
σ		4.160%	0.028	0.681	1.395	0.000	1594.000	703.000	729.500
%RSD		8.376	138.400	2.935	6.344	0.000	1.206	2.862	2.939
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:27:33	3.143	4611.000	0.000	1399.000	91970.000	95850.000	42.272%	0.498
2	15:27:52	3.200	4983.000	0.000	1427.000	94810.000	96790.000	42.329%	0.474
3	15:28:11	3.040	4775.000	0.000	1396.000	95180.000	96190.000	40.068%	0.506
X		3.128	4790.000	0.000	1407.000	93990.000	96280.000	41.556%	0.493
σ		0.081	186.600	0.000	17.180	1757.000	477.000	1.289%	0.017
%RSD		2.582	3.895	0.000	1.221	1.869	0.495	3.103	3.379
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:27:33	-1.510	89.100	1.811	451.200	570.000	0.326	8.019	2.581
2	15:27:52	-0.259	86.820	1.678	449.000	525.900	0.267	7.566	2.449
3	15:28:11	-0.262	87.280	1.724	448.000	531.900	0.243	7.304	2.371
X		-0.677	87.730	1.738	449.400	542.600	0.279	7.630	2.467
σ		0.721	1.207	0.068	1.600	23.910	0.043	0.362	0.106
%RSD		106.600	1.376	3.886	0.356	4.406	15.400	4.741	4.306
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:27:33	1.601	1.884	1.604	0.168	-0.031	0.364	0.000	105.700
2	15:27:52	1.483	1.588	1.653	-0.464	-0.155	0.078	0.000	104.600
3	15:28:11	1.603	1.542	1.425	-0.643	-0.046	0.584	0.000	105.200
X		1.562	1.671	1.561	-0.313	-0.077	0.342	0.000	105.100
σ		0.069	0.186	0.120	0.426	0.068	0.254	0.000	0.564
%RSD		4.397	11.110	7.668	136.200	87.310	74.310	0.000	0.536
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:27:33	53.837%	0.841	0.933	52.340%	-0.090	-0.086	0.005	0.008
2	15:27:52	53.476%	0.802	0.793	51.817%	-0.084	-0.087	-0.060	-0.040
3	15:28:11	52.123%	0.971	0.914	50.236%	-0.088	-0.085	-0.058	-0.043
X		53.145%	0.871	0.880	51.464%	-0.087	-0.086	-0.038	-0.025
σ		0.904%	0.088	0.076	1.095%	0.003	0.001	0.037	0.029
%RSD		1.701	10.150	8.650	2.128	3.491	1.160	96.990	113.900
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:27:33	56.008%	0.000	-0.008	0.015	144.200	143.600	66.657%	68.422%
2	15:27:52	56.063%	0.038	0.007	-0.004	144.300	144.600	68.555%	70.224%
3	15:28:11	55.933%	0.003	0.013	0.004	142.800	144.200	68.124%	70.169%
X		56.001%	0.014	0.004	0.005	143.800	144.100	67.779%	69.605%
σ		0.065%	0.021	0.011	0.010	0.830	0.480	0.995%	1.025%
%RSD		0.117	155.600	270.600	203.500	0.577	0.333	1.468	1.472
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:27:33	0.018	0.020	0.023	56.329%				
2	15:27:52	0.016	0.016	0.020	58.700%				
3	15:28:11	0.022	0.012	0.022	59.410%				
X		0.019	0.016	0.022	58.146%				
σ		0.003	0.004	0.002	1.613%				
%RSD		15.280	24.000	7.840	2.775				

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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	15:31:23	53.482%	-0.048	16.960	15.880	0.000	5696.000	25530.000	25890.000
2	15:31:43	51.774%	0.012	14.630	15.020	0.000	5382.000	23920.000	24130.000
3	15:32:02	48.926%	-0.047	14.920	15.540	0.000	5368.000	24140.000	24460.000
X		51.394%	-0.028	15.500	15.480	0.000	5482.000	24530.000	24830.000
σ		2.301%	0.035	1.268	0.432	0.000	185.400	874.900	934.900
%RSD		4.478	125.400	8.179	2.794	0.000	3.383	3.567	3.766
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:31:23	0.380	4820.000	0.000	857.200	80670.000	81910.000	42.265%	0.452
2	15:31:43	0.556	4602.000	0.000	839.800	77430.000	79560.000	41.744%	0.294
3	15:32:02	0.201	4607.000	0.000	851.200	81540.000	82360.000	38.430%	0.353
X		0.379	4676.000	0.000	849.400	79880.000	81280.000	40.813%	0.366
σ		0.177	124.600	0.000	8.803	2166.000	1503.000	2.080%	0.080
%RSD		46.820	2.664	0.000	1.036	2.712	1.850	5.097	21.740
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:31:23	1.346	1.226	0.357	28.150	132.300	0.066	0.284	0.365
2	15:31:43	0.961	1.357	0.349	26.090	126.300	0.046	0.301	0.314
3	15:32:02	0.335	1.332	0.373	27.610	125.100	0.060	0.231	0.324
X		0.880	1.305	0.359	27.280	127.900	0.057	0.272	0.335
σ		0.510	0.069	0.012	1.069	3.822	0.010	0.037	0.027
%RSD		57.950	5.312	3.362	3.918	2.988	17.720	13.430	8.119
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:31:23	0.289	5.101	4.933	0.016	-0.228	0.175	0.000	80.750
2	15:31:43	0.226	4.855	4.960	-0.547	-0.337	0.143	0.000	80.970
3	15:32:02	0.325	5.006	5.392	-0.922	-0.004	0.183	0.000	81.050
X		0.280	4.987	5.095	-0.484	-0.189	0.167	0.000	80.920
σ		0.050	0.124	0.257	0.472	0.170	0.021	0.000	0.157
%RSD		17.830	2.481	5.049	97.520	89.580	12.660	0.000	0.194
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:31:23	53.192%	0.455	0.493	53.071%	-0.081	-0.093	-0.037	-0.030
2	15:31:43	52.769%	0.486	0.448	51.719%	-0.081	-0.087	-0.065	-0.034
3	15:32:02	52.007%	0.483	0.475	50.377%	-0.077	-0.088	-0.077	-0.059
X		52.656%	0.475	0.472	51.722%	-0.080	-0.089	-0.060	-0.041
σ		0.600%	0.017	0.023	1.347%	0.003	0.004	0.021	0.016
%RSD		1.140	3.597	4.835	2.605	3.240	3.953	34.630	38.040
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:31:23	56.547%	0.028	-0.011	-0.005	74.010	74.710	67.458%	69.807%
2	15:31:43	56.913%	0.022	-0.004	0.000	74.610	74.220	68.163%	70.041%
3	15:32:02	55.229%	0.023	-0.022	-0.004	74.340	74.840	68.538%	70.597%
X		56.230%	0.025	-0.012	-0.003	74.320	74.590	68.053%	70.148%
σ		0.886%	0.003	0.009	0.003	0.305	0.329	0.548%	0.406%
%RSD		1.576	13.430	74.360	93.980	0.410	0.441	0.806	0.578
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:31:23	0.015	0.011	0.024	61.243%				
2	15:31:43	0.011	0.011	0.021	62.513%				
3	15:32:02	0.012	0.009	0.028	62.369%				
X		0.013	0.010	0.025	62.042%				
σ		0.002	0.001	0.003	0.695%				
%RSD		17.810	8.667	13.960	1.121				

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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	15:35:13	55.568%	0.026	243.600	237.300	0.000	19050.000	24020.000	24300.000
2	15:35:32	54.450%	-0.029	233.400	221.000	0.000	18160.000	22280.000	22950.000
3	15:35:51	51.324%	0.034	224.700	220.800	0.000	18790.000	24010.000	23870.000
X		53.780%	0.010	233.900	226.400	0.000	18670.000	23440.000	23710.000
σ		2.200%	0.034	9.482	9.484	0.000	455.100	1004.000	690.500
%RSD		4.091	342.700	4.054	4.189	0.000	2.438	4.283	2.913
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:13	1.599	3898.000	0.000	1713.000	84810.000	85000.000	42.590%	0.448
2	15:35:32	1.358	3787.000	0.000	1702.000	86070.000	86800.000	41.149%	0.728
3	15:35:51	1.098	3905.000	0.000	1815.000	87210.000	89530.000	39.480%	0.515
X		1.352	3863.000	0.000	1743.000	86030.000	87110.000	41.073%	0.564
σ		0.250	66.160	0.000	61.810	1205.000	2282.000	1.556%	0.146
%RSD		18.530	1.713	0.000	3.546	1.401	2.620	3.789	25.970
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:13	-2.251	0.788	101.400	135.400	248.200	0.820	1.825	0.317
2	15:35:32	-1.267	0.866	100.300	136.400	248.900	0.853	2.112	0.279
3	15:35:51	1.790	0.840	103.500	139.200	232.000	0.756	2.031	0.268
X		-0.577	0.831	101.700	137.000	243.100	0.810	1.989	0.288
σ		2.107	0.040	1.595	1.934	9.569	0.049	0.148	0.026
%RSD		365.600	4.785	1.568	1.411	3.937	6.073	7.419	8.924
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:13	0.169	2.189	2.151	-0.066	-0.586	0.200	0.000	359.500
2	15:35:32	0.192	2.167	1.894	0.146	-0.246	0.078	0.000	347.300
3	15:35:51	0.298	2.072	1.703	-0.569	-0.363	0.452	0.000	362.800
X		0.220	2.143	1.916	-0.163	-0.398	0.243	0.000	356.500
σ		0.069	0.062	0.225	0.367	0.172	0.191	0.000	8.160
%RSD		31.360	2.905	11.730	225.700	43.270	78.450	0.000	2.289
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:13	53.180%	0.889	0.785	52.070%	-0.093	-0.095	-0.007	-0.007
2	15:35:32	53.842%	0.627	0.805	50.976%	-0.086	-0.088	-0.071	-0.048
3	15:35:51	52.060%	0.737	0.743	50.932%	-0.082	-0.082	-0.044	-0.047
X		53.027%	0.751	0.778	51.326%	-0.087	-0.088	-0.040	-0.034
σ		0.901%	0.132	0.032	0.645%	0.005	0.006	0.032	0.023
%RSD		1.699	17.500	4.069	1.256	6.320	7.160	78.970	67.950
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:13	55.997%	-0.049	-0.017	-0.019	46.410	47.070	66.765%	68.843%
2	15:35:32	55.690%	-0.071	-0.013	-0.024	46.750	47.380	67.758%	69.581%
3	15:35:51	55.287%	-0.043	-0.017	-0.004	46.640	46.940	68.284%	70.319%
X		55.658%	-0.054	-0.016	-0.016	46.600	47.130	67.602%	69.581%
σ		0.356%	0.015	0.002	0.010	0.173	0.229	0.772%	0.738%
%RSD		0.640	26.900	15.890	63.570	0.370	0.486	1.141	1.061
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:35:13	0.037	0.030	0.027	62.954%				
2	15:35:32	0.032	0.034	0.021	62.420%				
3	15:35:51	0.038	0.038	0.024	62.877%				
X		0.035	0.034	0.024	62.750%				
σ		0.003	0.004	0.003	0.288%				
%RSD		8.187	12.370	12.180	0.459				

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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	15:39:02	58.074%	-0.014	228.900	223.300	0.000	19750.000	24420.000	24590.000
2	15:39:22	51.217%	-0.027	252.400	248.000	0.000	20940.000	25690.000	26260.000
3	15:39:41	48.995%	-0.004	237.600	227.300	0.000	20100.000	24430.000	24960.000
X		52.762%	-0.015	239.600	232.900	0.000	20260.000	24850.000	25270.000
σ		4.733%	0.012	11.880	13.260	0.000	614.100	728.900	876.500
%RSD		8.970	75.520	4.959	5.693	0.000	3.030	2.934	3.468
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:39:02	2.244	4098.000	0.000	1789.000	86170.000	88780.000	44.771%	0.598
2	15:39:22	2.756	4247.000	0.000	1821.000	89970.000	92740.000	42.339%	0.219
3	15:39:41	2.972	4163.000	0.000	1819.000	91840.000	93360.000	40.328%	0.260
X		2.657	4170.000	0.000	1810.000	89330.000	91620.000	42.479%	0.359
σ		0.374	74.890	0.000	18.030	2891.000	2485.000	2.225%	0.208
%RSD		14.070	1.796	0.000	0.996	3.236	2.712	5.238	57.880
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:39:02	0.210	0.826	103.500	138.000	250.600	0.795	2.192	0.408
2	15:39:22	0.019	0.822	103.300	138.400	253.200	0.780	1.869	0.293
3	15:39:41	1.216	0.814	104.600	134.700	237.700	0.729	1.910	0.366
X		0.482	0.821	103.800	137.000	247.200	0.768	1.990	0.356
σ		0.643	0.006	0.676	1.992	8.281	0.034	0.176	0.058
%RSD		133.500	0.728	0.651	1.453	3.350	4.457	8.847	16.260
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:39:02	0.156	1.618	2.137	0.033	-0.309	0.140	0.000	377.300
2	15:39:22	0.306	1.709	1.305	-0.094	-0.187	0.037	0.000	375.500
3	15:39:41	0.251	1.442	1.568	-0.469	-0.084	-0.073	0.000	381.600
X		0.238	1.590	1.670	-0.177	-0.194	0.035	0.000	378.100
σ		0.076	0.136	0.425	0.261	0.113	0.107	0.000	3.171
%RSD		31.980	8.536	25.460	147.900	58.170	307.900	0.000	0.839
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:39:02	53.073%	0.915	0.819	51.487%	-0.085	-0.095	-0.049	-0.037
2	15:39:22	52.434%	0.769	0.824	51.708%	-0.085	-0.091	-0.029	-0.019
3	15:39:41	50.750%	0.839	0.841	50.068%	-0.083	-0.086	-0.029	-0.035
X		52.086%	0.841	0.828	51.088%	-0.084	-0.090	-0.036	-0.030
σ		1.200%	0.073	0.011	0.890%	0.001	0.004	0.011	0.010
%RSD		2.305	8.662	1.362	1.742	1.419	4.720	31.710	33.260
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:39:02	55.844%	-0.015	-0.014	-0.022	48.610	47.960	67.542%	68.811%
2	15:39:22	56.222%	-0.027	-0.024	-0.011	48.130	48.500	67.871%	70.572%
3	15:39:41	55.480%	-0.022	-0.018	-0.003	48.600	48.290	67.681%	69.900%
X		55.849%	-0.021	-0.018	-0.012	48.450	48.250	67.698%	69.761%
σ		0.371%	0.006	0.005	0.009	0.273	0.271	0.165%	0.889%
%RSD		0.664	29.540	27.080	75.670	0.563	0.562	0.244	1.274
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:39:02	0.025	0.030	0.031	61.873%				
2	15:39:22	0.040	0.034	0.024	62.196%				
3	15:39:41	0.043	0.038	0.025	63.830%				
X		0.036	0.034	0.027	62.633%				
σ		0.010	0.004	0.003	1.049%				
%RSD		26.530	11.200	12.500	1.675				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:53	50.869%	-0.007	159.300	147.300	0.000	13800.000	19970.000	20400.000
2	15:43:12	51.972%	-0.008	156.300	153.300	0.000	13570.000	19760.000	20240.000
3	15:43:31	48.789%	-0.004	144.100	138.400	0.000	13360.000	19740.000	19730.000
X		50.543%	-0.006	153.300	146.300	0.000	13570.000	19820.000	20120.000
σ		1.616%	0.002	8.062	7.480	0.000	222.900	127.700	349.200
%RSD		3.198	33.020	5.261	5.111	0.000	1.642	0.644	1.736
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:53	30.990	4373.000	0.000	1180.000	66550.000	68480.000	41.359%	1.461
2	15:43:12	29.580	4363.000	0.000	1167.000	66310.000	68870.000	39.657%	1.155
3	15:43:31	28.520	4350.000	0.000	1150.000	67560.000	68740.000	37.824%	1.215
X		29.700	4362.000	0.000	1165.000	66810.000	68700.000	39.613%	1.277
σ		1.240	11.360	0.000	14.850	664.200	202.300	1.768%	0.162
%RSD		4.174	0.261	0.000	1.274	0.994	0.294	4.463	12.700
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:53	0.928	0.820	36.850	111.900	196.000	0.237	1.162	0.587
2	15:43:12	1.696	0.766	37.390	113.800	192.900	0.234	1.432	0.607
3	15:43:31	1.394	0.788	38.030	118.400	196.400	0.247	0.937	0.524
X		1.339	0.791	37.420	114.700	195.100	0.239	1.177	0.573
σ		0.387	0.027	0.591	3.313	1.938	0.007	0.248	0.043
%RSD		28.860	3.390	1.579	2.888	0.993	2.845	21.050	7.542
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:53	0.433	2.241	2.227	-0.195	-0.364	-0.046	0.000	117.100
2	15:43:12	0.520	2.461	2.467	-0.334	-0.559	0.364	0.000	117.100
3	15:43:31	0.472	2.735	2.254	-0.808	-0.540	0.170	0.000	116.800
X		0.475	2.479	2.316	-0.446	-0.488	0.163	0.000	117.000
σ		0.043	0.247	0.131	0.321	0.107	0.205	0.000	0.160
%RSD		9.141	9.978	5.676	72.100	22.010	125.900	0.000	0.137
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:53	51.680%	0.393	0.453	51.216%	-0.092	-0.087	-0.027	-0.023
2	15:43:12	51.512%	0.414	0.428	50.594%	-0.090	-0.086	-0.055	-0.043
3	15:43:31	51.197%	0.430	0.432	49.936%	-0.088	-0.084	-0.029	-0.014
X		51.463%	0.412	0.438	50.582%	-0.090	-0.086	-0.037	-0.026
σ		0.245%	0.019	0.014	0.640%	0.002	0.001	0.016	0.015
%RSD		0.476	4.535	3.093	1.266	1.970	1.689	42.950	56.850
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:53	56.030%	0.036	-0.011	-0.010	57.740	57.210	67.877%	69.451%
2	15:43:12	55.575%	0.066	-0.015	-0.008	58.440	57.680	69.052%	70.698%
3	15:43:31	55.198%	0.071	-0.007	-0.002	57.610	59.090	68.175%	70.667%
X		55.601%	0.058	-0.011	-0.007	57.930	57.990	68.368%	70.272%
σ		0.416%	0.019	0.004	0.004	0.447	0.977	0.611%	0.711%
%RSD		0.749	32.700	38.200	59.890	0.772	1.684	0.893	1.012
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:42:53	0.042	0.048	0.088	61.258%				
2	15:43:12	0.042	0.037	0.086	63.319%				
3	15:43:31	0.045	0.043	0.083	62.723%				
X		0.043	0.043	0.086	62.433%				
σ		0.001	0.005	0.002	1.060%				
%RSD		3.330	12.800	2.799	1.698				

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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	15:46:42	50.108%	-0.006	277.700	271.700	0.000	67880.000	40740.000	40480.000
2	15:47:01	47.893%	0.019	274.700	278.700	0.000	70880.000	41460.000	41840.000
3	15:47:20	45.467%	-0.045	270.600	262.400	0.000	66530.000	38920.000	39800.000
X		47.823%	-0.011	274.300	270.900	0.000	68430.000	40370.000	40710.000
σ		2.321%	0.032	3.526	8.155	0.000	2227.000	1312.000	1037.000
%RSD		4.854	300.700	1.285	3.010	0.000	3.254	3.250	2.548
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:46:42	13.650	6377.000	0.000	2308.000	125600.000	128500.000	40.596%	1.273
2	15:47:01	14.330	6395.000	0.000	2369.000	131600.000	130600.000	38.859%	1.231
3	15:47:20	15.220	6773.000	0.000	2353.000	128300.000	132500.000	40.230%	1.480
X		14.400	6515.000	0.000	2343.000	128500.000	130500.000	39.895%	1.328
σ		0.787	223.900	0.000	31.630	2997.000	1998.000	0.916%	0.133
%RSD		5.463	3.437	0.000	1.350	2.332	1.531	2.295	10.030
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:46:42	0.702	0.819	38.930	3013.000	3142.000	0.347	10.790	0.662
2	15:47:01	-2.331	0.880	39.940	3054.000	3105.000	0.310	10.870	0.627
3	15:47:20	1.069	0.839	38.930	2950.000	3002.000	0.324	10.300	0.586
X		-0.187	0.846	39.270	3006.000	3083.000	0.327	10.650	0.625
σ		1.866	0.031	0.581	52.660	72.270	0.019	0.313	0.038
%RSD		999.000	3.707	1.480	1.752	2.344	5.720	2.940	6.074
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:46:42	0.277	6.842	7.230	4.271	-0.359	1.332	0.000	576.600
2	15:47:01	0.236	7.180	7.754	5.551	-0.163	1.193	0.000	574.000
3	15:47:20	0.163	6.964	7.042	4.453	-0.494	1.427	0.000	573.100
X		0.226	6.995	7.342	4.758	-0.339	1.318	0.000	574.500
σ		0.057	0.171	0.369	0.692	0.166	0.118	0.000	1.864
%RSD		25.450	2.443	5.028	14.550	49.080	8.924	0.000	0.324
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:46:42	51.293%	0.729	0.788	49.745%	-0.085	-0.087	0.027	0.022
2	15:47:01	50.952%	0.760	0.853	49.543%	-0.086	-0.087	0.023	0.026
3	15:47:20	51.065%	0.754	0.848	48.527%	-0.081	-0.089	0.004	0.004
X		51.103%	0.748	0.830	49.272%	-0.084	-0.087	0.018	0.017
σ		0.174%	0.017	0.036	0.653%	0.002	0.001	0.012	0.012
%RSD		0.341	2.239	4.350	1.325	2.861	1.586	68.080	68.160
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:46:42	53.871%	0.057	0.014	0.021	376.600	378.300	66.490%	68.253%
2	15:47:01	54.438%	0.028	0.009	0.050	376.400	377.500	67.231%	69.158%
3	15:47:20	54.344%	0.021	0.018	0.017	376.600	378.400	67.581%	68.995%
X		54.218%	0.035	0.014	0.029	376.600	378.000	67.101%	68.802%
σ		0.304%	0.019	0.005	0.018	0.108	0.506	0.557%	0.482%
%RSD		0.560	53.220	32.590	60.290	0.029	0.134	0.830	0.701
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:46:42	0.005	0.008	0.042	59.155%				
2	15:47:01	0.005	0.004	0.050	59.320%				
3	15:47:20	0.006	0.003	0.049	59.418%				
X		0.005	0.005	0.047	59.298%				
σ		0.000	0.002	0.005	0.133%				
%RSD		8.958	43.880	9.599	0.224				



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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	15:50:29	53.675%	-0.068	23.880	24.830	0.000	61500.000	25720.000	26120.000
2	15:50:49	54.021%	-0.010	23.920	25.640	0.000	58760.000	25280.000	25900.000
3	15:51:08	53.636%	0.029	24.310	24.390	0.000	60010.000	26230.000	26200.000
X		53.777%	-0.016	24.040	24.950	0.000	60090.000	25740.000	26070.000
σ		0.212%	0.049	0.233	0.633	0.000	1371.000	477.900	153.500
%RSD		0.393	301.100	0.970	2.537	0.000	2.282	1.857	0.589
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:50:29	31.430	4320.000	0.000	1467.000	92960.000	94620.000	45.169%	1.853
2	15:50:49	28.250	3976.000	0.000	1442.000	94070.000	96860.000	42.578%	1.578
3	15:51:08	27.620	4152.000	0.000	1427.000	92080.000	93540.000	41.424%	1.859
X		29.100	4149.000	0.000	1445.000	93030.000	95010.000	43.057%	1.763
σ		2.043	171.700	0.000	20.490	997.100	1695.000	1.918%	0.161
%RSD		7.021	4.137	0.000	1.418	1.072	1.785	4.454	9.126
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:50:29	1.768	2.278	1.697	69.050	186.700	0.090	0.428	5.124
2	15:50:49	-0.525	2.130	1.716	70.380	195.400	0.099	0.359	5.378
3	15:51:08	-0.212	2.044	1.763	66.410	181.600	0.079	0.363	5.407
X		0.343	2.151	1.726	68.610	187.900	0.089	0.384	5.303
σ		1.243	0.118	0.034	2.016	6.976	0.010	0.039	0.156
%RSD		362.000	5.499	1.968	2.938	3.714	11.180	10.060	2.935
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:50:29	5.200	5.234	5.441	-0.280	0.140	0.686	0.000	109.700
2	15:50:49	5.132	5.290	4.975	-0.311	0.231	0.606	0.000	110.800
3	15:51:08	5.016	5.164	5.017	-0.363	0.080	0.648	0.000	111.200
X		5.116	5.229	5.144	-0.318	0.150	0.646	0.000	110.500
σ		0.093	0.064	0.258	0.042	0.076	0.040	0.000	0.787
%RSD		1.816	1.215	5.012	13.340	50.530	6.188	0.000	0.712
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:50:29	54.592%	0.101	0.129	53.160%	-0.084	-0.083	0.007	-0.001
2	15:50:49	53.563%	0.129	0.116	52.472%	-0.073	-0.077	-0.007	-0.010
3	15:51:08	53.809%	0.120	0.132	52.323%	-0.078	-0.075	0.058	0.036
X		53.988%	0.117	0.126	52.652%	-0.078	-0.078	0.020	0.008
σ		0.538%	0.014	0.008	0.447%	0.006	0.004	0.034	0.025
%RSD		0.996	12.440	6.414	0.848	7.161	5.318	174.600	291.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:50:29	56.463%	-0.030	-0.019	-0.011	99.810	99.510	68.570%	70.234%
2	15:50:49	57.467%	-0.055	-0.020	0.005	98.580	99.550	69.736%	71.302%
3	15:51:08	57.106%	-0.062	-0.001	-0.025	101.300	100.500	69.408%	71.904%
X		57.012%	-0.049	-0.013	-0.011	99.890	99.860	69.238%	71.147%
σ		0.508%	0.017	0.011	0.015	1.347	0.579	0.602%	0.846%
%RSD		0.891	33.750	81.270	141.000	1.348	0.580	0.869	1.189
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:50:29	0.015	0.018	0.291	60.651%				
2	15:50:49	0.027	0.019	0.296	61.027%				
3	15:51:08	0.021	0.023	0.289	61.748%				
X		0.021	0.020	0.292	61.142%				
σ		0.006	0.002	0.003	0.557%				
%RSD		30.140	11.960	1.183	0.911				

480-78913-C-10-A 5/1/2015 3:53:57 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	15:54:17	53.179%	0.030	23.380	25.260	0.000	60450.000	24810.000	26690.000
2	15:54:36	49.796%	-0.068	27.550	24.040	0.000	61230.000	25380.000	25690.000
3	15:54:55	48.016%	-0.025	24.100	24.990	0.000	55920.000	24200.000	25210.000
X		50.331%	-0.021	25.010	24.760	0.000	59200.000	24790.000	25860.000
σ		2.623%	0.049	2.226	0.640	0.000	2869.000	591.600	753.500
%RSD		5.211	234.000	8.902	2.585	0.000	4.847	2.386	2.913
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:54:17	26.570	4363.000	0.000	1453.000	94860.000	96300.000	42.550%	2.457
2	15:54:36	25.610	4064.000	0.000	1454.000	93420.000	94720.000	40.963%	2.050
3	15:54:55	25.890	4131.000	0.000	1437.000	95310.000	97000.000	39.028%	1.678
X		26.020	4186.000	0.000	1448.000	94530.000	96010.000	40.847%	2.062
σ		0.497	157.000	0.000	9.621	985.500	1170.000	1.764%	0.390
%RSD		1.910	3.752	0.000	0.664	1.043	1.219	4.318	18.900
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:54:17	-0.504	2.214	1.697	69.380	184.200	0.109	0.424	5.306
2	15:54:36	0.499	2.246	1.756	65.260	182.100	0.104	0.456	5.147
3	15:54:55	1.397	2.267	1.754	63.620	186.900	0.117	0.386	5.366
X		0.464	2.242	1.736	66.090	184.400	0.110	0.422	5.273
σ		0.951	0.026	0.033	2.966	2.398	0.006	0.035	0.113
%RSD		205.000	1.180	1.926	4.488	1.300	5.727	8.234	2.142
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:54:17	4.805	5.365	4.792	-0.707	0.006	0.724	0.000	110.300
2	15:54:36	5.253	4.773	4.847	0.682	0.005	0.572	0.000	109.500
3	15:54:55	4.988	5.254	4.445	-0.211	0.206	0.704	0.000	110.500
X		5.015	5.130	4.695	-0.079	0.073	0.667	0.000	110.100
σ		0.226	0.315	0.218	0.704	0.116	0.082	0.000	0.547
%RSD		4.496	6.136	4.636	895.800	159.400	12.350	0.000	0.497
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:54:17	52.422%	0.115	0.094	51.530%	-0.071	-0.073	-0.044	-0.012
2	15:54:36	52.414%	0.116	0.120	50.849%	-0.080	-0.082	-0.043	-0.029
3	15:54:55	50.822%	0.119	0.089	49.575%	-0.069	-0.075	-0.008	0.001
X		51.886%	0.117	0.101	50.651%	-0.073	-0.077	-0.032	-0.013
σ		0.922%	0.002	0.016	0.992%	0.006	0.005	0.020	0.015
%RSD		1.776	1.433	16.230	1.959	8.475	6.302	63.850	110.800
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:54:17	55.335%	0.011	-0.023	-0.013	100.900	100.300	66.916%	68.893%
2	15:54:36	56.241%	-0.003	-0.018	-0.009	100.200	100.100	67.361%	69.312%
3	15:54:55	54.587%	0.005	-0.007	-0.014	101.200	101.200	68.536%	70.550%
X		55.388%	0.004	-0.016	-0.012	100.800	100.500	67.604%	69.585%
σ		0.828%	0.007	0.008	0.003	0.487	0.574	0.837%	0.861%
%RSD		1.495	163.900	49.630	23.550	0.484	0.571	1.238	1.238
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:54:17	0.021	0.025	0.274	60.469%				
2	15:54:36	0.022	0.022	0.282	60.640%				
3	15:54:55	0.022	0.024	0.286	60.188%				
X		0.021	0.024	0.281	60.432%				
σ		0.001	0.001	0.006	0.228%				
%RSD		2.837	6.130	2.187	0.377				

CCV 1558997 5/1/2015 3:57:53 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:53	95.489%	110.500	106.000	100.500	0.000	47920.000	48410.000	48210.000
2	15:58:12	90.670%	111.900	104.900	101.900	0.000	49680.000	51850.000	50930.000
3	15:58:31	96.280%	103.100	97.680	95.180	0.000	47460.000	47620.000	48000.000
X		94.146%	108.522%	102.893%	99.222%	0.000	96.709%	98.585%	98.090%
σ		3.036%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		3.225	4.340	4.417	3.600	0.000	2.425	4.564	3.326
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:53	485.600	4778.000	0.000	47190.000	45930.000	46710.000	98.416%	96.090
2	15:58:12	498.200	4800.000	0.000	50380.000	49070.000	49310.000	93.424%	101.600
3	15:58:31	480.400	4622.000	0.000	48850.000	47920.000	49140.000	91.048%	101.200
X		97.615%	94.669%	0.000	97.612%	95.276%	96.768%	94.296%	99.646%
σ		n/a	n/a	0.000	n/a	n/a	n/a	3.761%	n/a
%RSD		1.867	2.048	0.000	3.265	3.332	3.001	3.988	3.099
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:53	96.860	97.840	479.500	24060.000	23830.000	98.250	99.420	100.100
2	15:58:12	100.500	97.900	486.400	25070.000	24300.000	98.660	102.300	106.700
3	15:58:31	99.860	103.400	500.600	25690.000	25100.000	102.900	105.800	105.000
X		99.085%	99.715%	97.767%	99.750%	97.643%	99.945%	102.522%	103.930%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.977	3.205	2.196	3.305	2.621	2.591	3.139	3.274
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:53	102.800	100.100	102.400	103.500	107.700	108.200	0.000	102.200
2	15:58:12	104.600	104.900	107.100	104.300	109.400	107.300	0.000	103.800
3	15:58:31	105.800	105.600	104.300	104.900	108.100	107.600	0.000	103.800
X		104.409%	103.510%	104.615%	104.242%	108.363%	107.705%	0.000	103.278%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.435	2.879	2.273	0.658	0.813	0.433	0.000	0.934
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:53	85.940%	95.380	94.900	84.183%	99.950	100.800	99.370	99.460
2	15:58:12	87.336%	96.890	97.820	84.692%	100.300	101.400	101.400	101.500
3	15:58:31	87.691%	100.200	100.700	84.527%	100.500	101.100	100.300	101.500
X		86.989%	97.493%	97.793%	84.467%	100.241%	101.113%	100.356%	100.812%
σ		0.925%	n/a	n/a	0.260%	n/a	n/a	n/a	n/a
%RSD		1.064	2.533	2.945	0.308	0.275	0.276	1.015	1.158
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:53	82.543%	96.350	97.330	96.540	96.520	96.700	84.296%	84.401%
2	15:58:12	83.256%	98.340	99.210	100.100	97.780	97.000	86.409%	86.079%
3	15:58:31	84.747%	98.060	98.220	98.960	98.410	97.140	85.161%	86.218%
X		83.515%	97.583%	98.255%	98.541%	97.570%	96.948%	85.288%	85.566%
σ		1.124%	n/a	n/a	n/a	n/a	n/a	1.062%	1.011%
%RSD		1.346	1.106	0.959	1.858	0.984	0.234	1.246	1.182
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:57:53	102.700	103.800	104.100	76.130%				
2	15:58:12	103.300	103.400	106.300	78.109%				
3	15:58:31	105.200	105.100	107.400	77.556%				
X		103.731%	104.106%	105.950%	77.265%				
σ		n/a	n/a	n/a	1.021%				
%RSD		1.232	0.844	1.611	1.321				

CCB6 5/1/2015 4:04:23 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	16:04:42	114.315%	-0.014	0.881	0.547	0.000	12.010	4.565	5.343
2	16:05:02	103.457%	-0.009	0.558	0.516	0.000	11.830	4.915	4.910
3	16:05:21	112.820%	-0.013	0.600	0.624	0.000	10.400	4.525	4.915
x		110.197%	-0.012	0.680	0.562	0.000	11.420	4.668	5.056
σ		5.885%	0.003	0.176	0.056	0.000	0.883	0.214	0.249
%RSD		5.341	23.310	25.860	9.966	0.000	7.738	4.592	4.922
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:04:42	2.009	-482.300	0.000	4.523	9.536	8.557	112.985%	0.036
2	16:05:02	1.928	-480.100	0.000	4.962	6.585	7.502	108.668%	0.032
3	16:05:21	1.693	-480.100	0.000	5.029	12.940	7.767	105.147%	0.036
x		1.877	-480.800	0.000	4.838	9.688	7.942	108.933%	0.035
σ		0.164	1.273	0.000	0.275	3.181	0.549	3.926%	0.002
%RSD		8.743	0.265	0.000	5.676	32.840	6.914	3.604	6.895
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:04:42	0.065	0.027	0.200	9.061	7.147	0.016	0.013	0.498
2	16:05:02	0.066	0.032	0.198	6.858	7.138	0.012	0.007	0.445
3	16:05:21	0.033	0.012	0.208	7.663	6.279	0.015	-0.004	0.518
x		0.055	0.024	0.202	7.861	6.855	0.014	0.005	0.487
σ		0.019	0.010	0.006	1.115	0.499	0.002	0.009	0.037
%RSD		33.860	43.580	2.792	14.190	7.274	13.910	160.800	7.673
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:04:42	0.451	0.943	0.960	-0.042	-0.094	-0.089	0.000	0.069
2	16:05:02	0.483	0.918	1.023	0.003	0.066	0.046	0.000	0.058
3	16:05:21	0.497	1.070	0.825	0.000	-0.068	0.058	0.000	0.068
x		0.477	0.977	0.936	-0.013	-0.032	0.005	0.000	0.065
σ		0.023	0.082	0.101	0.025	0.086	0.082	0.000	0.006
%RSD		4.929	8.353	10.800	198.100	266.400	1559.000	0.000	9.071
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:04:42	97.530%	0.222	0.214	99.894%	-0.063	-0.070	0.014	0.021
2	16:05:02	98.389%	0.162	0.217	100.537%	-0.061	-0.067	0.094	0.069
3	16:05:21	98.306%	0.135	0.170	100.543%	-0.053	-0.067	0.086	0.062
x		98.075%	0.173	0.200	100.325%	-0.059	-0.068	0.065	0.051
σ		0.474%	0.045	0.027	0.373%	0.005	0.002	0.044	0.026
%RSD		0.483	25.810	13.250	0.372	9.084	2.810	67.830	51.510
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:04:42	92.668%	0.039	-0.003	0.007	0.040	0.046	88.165%	87.641%
2	16:05:02	94.429%	0.034	-0.000	-0.003	0.031	0.065	89.468%	89.693%
3	16:05:21	93.993%	0.023	-0.012	-0.013	0.013	0.036	91.534%	91.446%
x		93.697%	0.032	-0.005	-0.003	0.028	0.049	89.722%	89.593%
σ		0.917%	0.008	0.006	0.010	0.014	0.015	1.699%	1.905%
%RSD		0.979	26.450	114.000	347.900	49.200	30.270	1.893	2.126
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	16:04:42	0.021	0.015	0.033	86.579%				
2	16:05:02	0.019	0.018	0.035	86.672%				
3	16:05:21	0.018	0.017	0.043	84.546%				
x		0.019	0.016	0.037	85.932%				
σ		0.002	0.001	0.005	1.202%				
%RSD		8.393	7.731	14.560	1.398				

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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	16:08:33	84.067%	-0.007	197.600	209.100	0.000	184500.000	28160.000	28620.000
2	16:08:53	79.817%	-0.042	195.700	197.300	0.000	185700.000	28530.000	28410.000
3	16:09:12	76.570%	0.039	200.500	201.800	0.000	178400.000	27160.000	27970.000
X		80.151%	-0.004	197.900	202.700	0.000	182900.000	27950.000	28330.000
σ		3.760%	0.041	2.424	5.981	0.000	3947.000	709.800	333.500
%RSD		4.691	1133.000	1.225	2.950	0.000	2.159	2.539	1.177
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:08:33	449.100	1728.000	0.000	5378.000	21730.000	22290.000	83.448%	7.066
2	16:08:53	437.500	1617.000	0.000	5508.000	22080.000	22800.000	78.771%	7.874
3	16:09:12	448.300	1663.000	0.000	5510.000	22470.000	22870.000	75.145%	7.498
X		445.000	1670.000	0.000	5465.000	22090.000	22650.000	79.121%	7.479
σ		6.464	55.820	0.000	75.390	368.100	313.900	4.162%	0.405
%RSD		1.453	3.344	0.000	1.379	1.666	1.386	5.261	5.408
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:08:33	2.591	3.694	610.400	7891.000	7797.000	2.842	2.001	2.310
2	16:08:53	2.510	3.767	620.900	8000.000	7840.000	2.931	1.946	2.282
3	16:09:12	2.272	3.762	638.300	8115.000	8062.000	2.970	1.944	2.387
X		2.458	3.741	623.200	8002.000	7900.000	2.914	1.964	2.326
σ		0.166	0.041	14.080	111.900	142.500	0.066	0.033	0.054
%RSD		6.737	1.084	2.260	1.399	1.804	2.264	1.658	2.321
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:08:33	1.060	16.390	15.940	1.734	-0.158	0.785	0.000	196.300
2	16:08:53	1.103	15.600	16.580	1.882	-0.126	0.564	0.000	196.300
3	16:09:12	1.195	16.600	16.150	1.724	-0.085	0.816	0.000	195.200
X		1.119	16.200	16.220	1.780	-0.123	0.722	0.000	195.900
σ		0.069	0.529	0.325	0.089	0.037	0.137	0.000	0.650
%RSD		6.138	3.266	2.000	4.987	29.670	19.030	0.000	0.332
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:08:33	77.980%	0.343	0.370	76.637%	-0.082	-0.083	0.051	0.045
2	16:08:53	77.904%	0.363	0.382	75.032%	-0.078	-0.087	0.056	0.030
3	16:09:12	76.122%	0.388	0.367	73.575%	-0.083	-0.082	0.028	0.022
X		77.336%	0.365	0.373	75.082%	-0.081	-0.084	0.045	0.032
σ		1.051%	0.023	0.008	1.532%	0.002	0.003	0.015	0.012
%RSD		1.360	6.209	2.082	2.040	2.818	3.338	32.670	36.720
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:08:33	74.766%	0.386	0.013	0.002	12.690	12.550	79.653%	80.629%
2	16:08:53	74.419%	0.390	0.007	0.003	12.700	12.780	81.033%	81.412%
3	16:09:12	74.872%	0.313	0.004	0.002	12.230	12.460	81.957%	82.390%
X		74.686%	0.363	0.008	0.002	12.540	12.590	80.881%	81.477%
σ		0.237%	0.043	0.004	0.000	0.268	0.163	1.160%	0.883%
%RSD		0.317	11.960	53.480	20.160	2.136	1.298	1.434	1.083
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	16:08:33	0.007	0.009	0.939	80.565%				
2	16:08:53	0.010	0.012	1.015	75.295%				
3	16:09:12	0.011	0.009	1.065	74.563%				
X		0.010	0.010	1.006	76.808%				
σ		0.002	0.002	0.064	3.274%				
%RSD		23.040	15.200	6.318	4.263				

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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	16:12:21	76.769%	-0.041	85.660	84.680	0.000	219700.000	26660.000	27450.000
2	16:12:41	76.065%	-0.041	84.920	83.330	0.000	221200.000	27090.000	27250.000
3	16:13:00	76.260%	-0.014	85.070	83.100	0.000	220500.000	26580.000	26400.000
X		76.364%	-0.032	85.220	83.700	0.000	220500.000	26770.000	27030.000
σ		0.363%	0.016	0.392	0.852	0.000	746.900	278.700	559.700
%RSD		0.476	48.130	0.460	1.017	0.000	0.339	1.041	2.070
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:12:21	0.078	360.000	0.000	7836.000	9782.000	9494.000	81.895%	0.270
2	16:12:41	-0.479	360.100	0.000	7915.000	9826.000	9548.000	79.746%	0.330
3	16:13:00	-0.312	344.100	0.000	7825.000	9956.000	9749.000	75.255%	0.380
X		-0.238	354.700	0.000	7859.000	9855.000	9597.000	78.965%	0.327
σ		0.286	9.220	0.000	49.210	90.640	134.400	3.388%	0.055
%RSD		120.100	2.599	0.000	0.626	0.920	1.401	4.291	16.850
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:12:21	0.130	0.341	12.400	549.500	561.400	0.194	0.095	1.464
2	16:12:41	0.101	0.328	12.380	544.700	540.900	0.188	0.089	1.568
3	16:13:00	-0.054	0.388	12.920	571.700	560.600	0.214	0.087	1.514
X		0.059	0.353	12.560	555.300	554.300	0.199	0.090	1.515
σ		0.099	0.031	0.308	14.360	11.610	0.014	0.004	0.052
%RSD		168.500	8.866	2.449	2.586	2.094	6.960	4.738	3.421
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:12:21	-0.163	-0.293	-0.310	0.377	-0.159	1.190	0.000	165.700
2	16:12:41	-0.143	-0.236	-0.463	0.466	-0.102	1.029	0.000	166.300
3	16:13:00	-0.142	-0.228	-0.383	0.637	0.187	1.349	0.000	166.500
X		-0.149	-0.253	-0.385	0.493	-0.025	1.190	0.000	166.100
σ		0.011	0.036	0.077	0.132	0.186	0.160	0.000	0.405
%RSD		7.664	14.080	19.900	26.810	751.700	13.450	0.000	0.244
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:12:21	79.103%	0.139	0.112	76.587%	-0.091	-0.095	-0.001	0.000
2	16:12:41	78.966%	0.149	0.143	76.449%	-0.085	-0.092	0.024	0.010
3	16:13:00	80.594%	0.148	0.131	76.774%	-0.082	-0.085	0.037	0.014
X		79.554%	0.145	0.129	76.603%	-0.086	-0.091	0.020	0.008
σ		0.903%	0.006	0.016	0.163%	0.004	0.005	0.019	0.007
%RSD		1.135	3.830	12.270	0.213	4.895	5.643	95.600	84.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:12:21	77.322%	-0.057	-0.041	-0.044	7.058	6.917	83.464%	83.944%
2	16:12:41	77.407%	-0.063	-0.051	-0.038	6.970	7.110	85.208%	87.082%
3	16:13:00	79.223%	-0.040	-0.054	-0.039	7.029	6.811	85.766%	87.096%
X		77.984%	-0.053	-0.049	-0.040	7.019	6.946	84.813%	86.041%
σ		1.074%	0.012	0.007	0.003	0.045	0.152	1.201%	1.816%
%RSD		1.377	21.900	13.570	8.559	0.638	2.185	1.416	2.110
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	16:12:21	-0.001	0.002	0.106	78.450%				
2	16:12:41	0.005	0.001	0.109	75.886%				
3	16:13:00	0.003	0.004	0.126	73.926%				
X		0.002	0.002	0.113	76.087%				
σ		0.003	0.001	0.011	2.269%				
%RSD		144.400	62.220	9.379	2.982				

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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	16:16:09	69.647%	0.008	0.967	1.300	0.000	2061.000	325.900	334.200
2	16:16:29	63.027%	-0.018	1.454	1.067	0.000	2146.000	341.200	342.900
3	16:16:48	56.764%	-0.013	1.977	1.076	0.000	2110.000	325.300	340.600
X		63.146%	-0.008	1.466	1.148	0.000	2106.000	330.800	339.200
σ		6.442%	0.014	0.505	0.132	0.000	42.900	9.016	4.477
%RSD		10.202	173.100	34.480	11.510	0.000	2.038	2.726	1.320
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:16:09	274.700	5731.000	0.000	1679.000	2621.000	2601.000	49.503%	20.630
2	16:16:29	283.400	5897.000	0.000	1657.000	2807.000	2661.000	48.686%	19.690
3	16:16:48	278.000	5863.000	0.000	1687.000	2748.000	2739.000	45.586%	21.140
X		278.700	5830.000	0.000	1674.000	2725.000	2667.000	47.925%	20.490
σ		4.366	87.880	0.000	15.300	94.750	69.260	2.066%	0.734
%RSD		1.566	1.507	0.000	0.914	3.476	2.597	4.311	3.581
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:16:09	-1.211	0.624	12.010	410.200	386.100	0.205	0.066	0.115
2	16:16:29	0.427	0.562	11.490	369.300	369.700	0.200	0.068	0.093
3	16:16:48	0.813	0.554	11.870	414.800	380.200	0.229	0.060	0.153
X		0.010	0.580	11.790	398.100	378.700	0.211	0.065	0.120
σ		1.075	0.038	0.271	25.040	8.287	0.015	0.004	0.030
%RSD		11130.000	6.601	2.301	6.291	2.188	7.235	6.501	25.120
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:16:09	0.012	2.362	2.786	-0.834	-0.477	-0.028	0.000	24.380
2	16:16:29	0.091	2.449	2.714	-0.448	-0.326	0.158	0.000	24.690
3	16:16:48	0.031	2.543	2.690	-0.277	-0.332	0.158	0.000	24.430
X		0.045	2.451	2.730	-0.519	-0.378	0.096	0.000	24.500
σ		0.042	0.090	0.050	0.285	0.086	0.107	0.000	0.165
%RSD		93.010	3.688	1.818	54.910	22.660	111.500	0.000	0.675
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:16:09	59.510%	0.069	0.072	60.300%	-0.088	-0.085	-0.040	-0.016
2	16:16:29	58.155%	0.081	0.071	58.489%	-0.086	-0.088	0.002	-0.005
3	16:16:48	58.150%	0.067	0.039	59.571%	-0.078	-0.088	0.000	0.000
X		58.605%	0.072	0.061	59.453%	-0.084	-0.087	-0.013	-0.007
σ		0.784%	0.007	0.018	0.911%	0.005	0.002	0.024	0.009
%RSD		1.337	10.280	30.570	1.533	6.363	2.083	187.700	118.800
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:16:09	62.316%	-0.014	0.167	0.170	72.780	72.590	71.481%	73.079%
2	16:16:29	62.327%	0.010	0.154	0.137	72.430	72.840	73.271%	74.787%
3	16:16:48	63.045%	-0.013	0.139	0.140	70.010	71.110	73.554%	74.909%
X		62.563%	-0.005	0.153	0.149	71.740	72.180	72.769%	74.258%
σ		0.418%	0.013	0.014	0.018	1.505	0.935	1.124%	1.023%
%RSD		0.667	246.200	9.159	12.260	2.098	1.295	1.545	1.377
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	16:16:09	0.012	0.007	0.288	67.104%				
2	16:16:29	0.009	0.009	0.286	68.814%				
3	16:16:48	0.008	0.012	0.288	69.745%				
X		0.010	0.009	0.287	68.554%				
σ		0.002	0.002	0.002	1.340%				
%RSD		21.960	25.150	0.564	1.954				

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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	16:19:59	62.336%	0.050	3.242	2.416	0.000	3268.000	479.500	504.600
2	16:20:18	57.181%	0.060	2.392	2.471	0.000	3468.000	495.800	497.900
3	16:20:37	51.344%	0.033	1.984	2.358	0.000	3342.000	529.800	522.800
X		56.954%	0.048	2.539	2.415	0.000	3359.000	501.700	508.400
σ		5.500%	0.014	0.642	0.056	0.000	100.800	25.630	12.870
%RSD		9.656	28.630	25.280	2.326	0.000	3.001	5.108	2.531
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:19:59	619.200	6355.000	0.000	1902.000	2331.000	2394.000	46.424%	28.250
2	16:20:18	625.900	6227.000	0.000	1804.000	2375.000	2380.000	42.783%	29.360
3	16:20:37	646.200	6430.000	0.000	1892.000	2452.000	2428.000	41.971%	28.660
X		630.400	6337.000	0.000	1866.000	2386.000	2401.000	43.726%	28.760
σ		14.040	103.100	0.000	53.970	61.360	24.890	2.371%	0.564
%RSD		2.227	1.626	0.000	2.892	2.571	1.037	5.423	1.960
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:19:59	0.615	0.838	12.520	786.800	799.800	0.125	0.007	0.079
2	16:20:18	-0.133	0.801	12.990	815.100	826.800	0.133	0.071	0.060
3	16:20:37	0.467	0.780	12.240	803.400	800.300	0.158	0.003	0.106
X		0.316	0.807	12.580	801.800	809.000	0.139	0.027	0.082
σ		0.396	0.029	0.377	14.220	15.440	0.017	0.038	0.023
%RSD		125.200	3.648	2.999	1.773	1.909	12.250	142.000	28.240
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:19:59	-0.011	4.838	4.954	-0.877	-0.558	0.237	0.000	37.420
2	16:20:18	0.059	5.469	4.960	-0.044	-0.384	0.046	0.000	37.670
3	16:20:37	-0.010	5.567	5.115	-0.358	-0.317	0.030	0.000	37.630
X		0.013	5.292	5.010	-0.426	-0.420	0.105	0.000	37.570
σ		0.040	0.396	0.091	0.421	0.124	0.115	0.000	0.133
%RSD		318.000	7.479	1.823	98.740	29.640	110.200	0.000	0.354
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:19:59	57.455%	-0.004	0.027	58.317%	-0.083	-0.081	-0.002	0.018
2	16:20:18	55.908%	0.011	0.011	56.309%	-0.074	-0.076	-0.036	-0.017
3	16:20:37	54.193%	0.033	0.021	54.851%	-0.070	-0.084	-0.039	-0.013
X		55.852%	0.013	0.020	56.492%	-0.076	-0.080	-0.025	-0.004
σ		1.631%	0.019	0.008	1.740%	0.007	0.004	0.020	0.019
%RSD		2.921	142.300	41.130	3.080	8.918	5.529	78.990	470.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:19:59	60.381%	-0.044	0.048	0.047	55.320	55.200	70.722%	72.385%
2	16:20:18	60.077%	-0.019	0.049	0.051	54.470	54.430	72.405%	73.542%
3	16:20:37	59.539%	-0.035	0.055	0.052	55.140	55.890	71.511%	73.783%
X		59.999%	-0.033	0.051	0.050	54.980	55.170	71.546%	73.236%
σ		0.426%	0.013	0.004	0.002	0.449	0.729	0.842%	0.747%
%RSD		0.710	39.280	7.961	4.544	0.817	1.321	1.177	1.020
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	16:19:59	0.033	0.030	1.678	66.639%				
2	16:20:18	0.033	0.030	1.707	67.721%				
3	16:20:37	0.034	0.029	1.668	68.813%				
X		0.033	0.030	1.684	67.724%				
σ		0.001	0.001	0.020	1.087%				
%RSD		2.212	2.246	1.215	1.604				



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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	16:30:37	114.345%	0.998	23.780	23.000	0.000	508.700	495.700	508.200
2	16:30:57	108.952%	1.272	25.010	23.170	0.000	502.900	502.200	517.100
3	16:31:16	114.444%	1.109	24.110	21.140	0.000	470.000	486.400	494.300
X		112.580%	112.616%	121.501%	112.169%	0.000	98.775%	98.952%	101.313%
σ		3.143%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.791	12.280	2.607	5.018	0.000	4.221	1.603	2.272
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:30:37	35.680	63.780	0.000	482.500	476.700	451.700	120.009%	4.761
2	16:30:57	36.020	77.550	0.000	489.900	458.000	455.600	116.007%	5.605
3	16:31:16	33.770	50.160	0.000	494.600	501.700	457.900	112.817%	5.952
X		117.187%	12.766%	0.000	97.805%	95.760%	91.019%	116.278%	108.782%
σ		n/a	n/a	0.000	n/a	n/a	n/a	3.604%	n/a
%RSD		3.440	21.450	0.000	1.247	4.586	0.686	3.099	11.270
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:30:37	1.176	2.036	4.767	48.830	53.780	0.504	0.957	2.128
2	16:30:57	1.131	2.075	4.934	52.300	53.390	0.544	1.058	2.198
3	16:31:16	1.186	2.167	4.982	54.290	52.930	0.532	1.005	2.168
X		116.433%	104.643%	97.885%	103.609%	106.730%	105.326%	100.658%	108.235%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.487	3.223	2.309	5.334	0.799	3.851	4.991	1.635
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:30:37	2.119	5.693	5.699	1.208	5.278	5.689	0.000	4.688
2	16:30:57	2.161	5.518	5.753	1.186	5.265	5.483	0.000	4.731
3	16:31:16	2.199	5.784	5.602	1.299	5.337	5.716	0.000	4.746
X		107.981%	113.294%	113.689%	123.104%	105.872%	112.593%	0.000	94.434%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.864	2.390	1.347	4.863	0.725	2.264	0.000	0.646
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:30:37	106.647%	4.557	4.646	97.604%	1.027	1.085	1.138	1.065
2	16:30:57	107.118%	4.593	4.740	96.993%	1.075	1.066	1.074	1.074
3	16:31:16	107.149%	4.634	4.576	97.248%	1.044	1.023	1.161	1.094
X		106.972%	91.891%	93.081%	97.282%	104.875%	105.760%	112.435%	107.797%
σ		0.281%	n/a	n/a	0.307%	n/a	n/a	n/a	n/a
%RSD		0.263	0.835	1.765	0.315	2.286	2.999	3.979	1.382
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:30:37	90.317%	4.680	1.844	1.902	10.620	10.090	86.006%	85.324%
2	16:30:57	91.073%	5.665	1.826	1.925	10.390	10.300	88.145%	87.261%
3	16:31:16	91.256%	4.696	1.907	1.865	10.340	10.160	88.634%	87.977%
X		90.882%	100.271%	92.940%	94.863%	104.509%	101.820%	87.595%	86.854%
σ		0.498%	n/a	n/a	n/a	n/a	n/a	1.397%	1.372%
%RSD		0.548	11.250	2.273	1.600	1.447	1.026	1.595	1.580
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	16:30:37	0.969	0.999	1.079	84.517%				
2	16:30:57	1.055	1.024	1.095	84.521%				
3	16:31:16	1.028	1.020	1.080	85.119%				
X		101.712%	101.423%	108.428%	84.719%				
σ		n/a	n/a	n/a	0.346%				
%RSD		4.294	1.360	0.825	0.409				

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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	16:34:28	127.650%	-0.052	0.201	0.079	0.000	-4.569	0.087	-0.079
2	16:34:47	116.972%	-0.042	0.175	0.098	0.000	-5.275	-0.216	-0.335
3	16:35:06	112.745%	-0.059	0.429	0.002	0.000	-5.319	-0.268	-0.313
X		119.123%	-0.051	0.269	0.060	0.000	-5.054	-0.133	-0.242
σ		7.682%	0.009	0.140	0.051	0.000	0.421	0.192	0.142
%RSD		6.449	16.970	52.150	85.450	0.000	8.333	144.700	58.490
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:28	3.059	-487.100	0.000	-2.739	-9.057	-10.980	115.074%	-0.097
2	16:34:47	3.065	-487.100	0.000	-3.020	-12.770	-10.580	113.046%	-0.079
3	16:35:06	3.426	-486.500	0.000	-1.598	-11.030	-10.660	107.422%	-0.096
X		3.184	-486.900	0.000	-2.452	-10.950	-10.740	111.847%	-0.091
σ		0.210	0.360	0.000	0.753	1.856	0.213	3.964%	0.010
%RSD		6.604	0.074	0.000	30.720	16.950	1.979	3.544	11.170
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:28	-0.010	-0.009	-0.003	0.500	1.310	-0.000	-0.068	-0.172
2	16:34:47	0.003	0.011	-0.012	1.813	1.125	-0.002	-0.060	-0.158
3	16:35:06	-0.005	-0.016	-0.006	2.070	1.154	-0.001	-0.062	-0.183
X		-0.004	-0.005	-0.007	1.461	1.196	-0.001	-0.063	-0.171
σ		0.006	0.014	0.004	0.842	0.100	0.001	0.004	0.012
%RSD		163.900	303.200	58.330	57.640	8.330	102.500	6.304	7.278
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:28	-0.234	-0.586	-0.728	-0.017	0.033	0.112	0.000	0.000
2	16:34:47	-0.225	-0.710	-0.753	0.020	-0.141	0.136	0.000	0.006
3	16:35:06	-0.200	-0.622	-0.695	0.029	-0.206	0.152	0.000	0.000
X		-0.220	-0.639	-0.726	0.011	-0.105	0.133	0.000	0.002
σ		0.017	0.063	0.029	0.025	0.123	0.020	0.000	0.003
%RSD		7.834	9.924	4.009	231.700	117.700	14.970	0.000	161.400
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:28	97.796%	0.015	-0.002	99.111%	-0.083	-0.087	0.063	0.043
2	16:34:47	97.654%	-0.007	-0.013	98.637%	-0.086	-0.088	0.060	0.039
3	16:35:06	98.225%	0.006	0.012	98.246%	-0.080	-0.085	0.060	0.041
X		97.892%	0.005	-0.001	98.665%	-0.083	-0.087	0.061	0.041
σ		0.297%	0.012	0.013	0.433%	0.003	0.001	0.002	0.002
%RSD		0.303	243.700	1542.000	0.439	3.241	1.583	2.802	4.452
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:28	91.863%	-0.125	-0.059	-0.059	0.706	0.782	85.500%	85.028%
2	16:34:47	92.157%	-0.116	-0.054	-0.065	0.739	0.742	87.908%	86.978%
3	16:35:06	92.823%	-0.126	-0.059	-0.068	0.688	0.813	89.043%	88.003%
X		92.281%	-0.122	-0.057	-0.064	0.711	0.779	87.484%	86.670%
σ		0.492%	0.006	0.003	0.004	0.026	0.036	1.809%	1.511%
%RSD		0.533	4.619	4.385	6.840	3.637	4.604	2.068	1.744
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	16:34:28	0.007	0.008	-0.016	84.697%				
2	16:34:47	0.003	0.006	-0.016	85.306%				
3	16:35:06	0.007	0.009	-0.013	83.625%				
X		0.006	0.008	-0.015	84.543%				
σ		0.003	0.002	0.002	0.851%				
%RSD		44.480	21.180	13.310	1.007				

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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	16:38:17	58.925%	47.960	898.000	895.600	0.000	39520.000	40570.000	43010.000
2	16:38:36	58.980%	49.400	974.600	909.000	0.000	40790.000	41860.000	41120.000
3	16:38:55	55.192%	48.990	956.500	889.200	0.000	41350.000	42310.000	44370.000
X		57.699%	48.780	943.000	897.900	0.000	40550.000	41580.000	42830.000
σ		2.171%	0.746	40.030	10.100	0.000	936.200	901.700	1635.000
%RSD		3.763	1.529	4.245	1.124	0.000	2.309	2.169	3.816
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:38:17	1695.000	8290.000	0.000	47690.000	51200.000	51920.000	48.730%	1033.000
2	16:38:36	1645.000	7900.000	0.000	47780.000	51120.000	51320.000	46.272%	1036.000
3	16:38:55	1738.000	8210.000	0.000	49690.000	51810.000	51120.000	44.096%	1007.000
X		1693.000	8133.000	0.000	48390.000	51380.000	51450.000	46.366%	1025.000
σ		46.710	205.800	0.000	1129.000	377.000	419.400	2.318%	15.990
%RSD		2.760	2.530	0.000	2.333	0.734	0.815	5.000	1.560
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:38:17	511.700	206.700	496.300	1013.000	1086.000	493.900	490.400	249.100
2	16:38:36	514.700	208.500	518.800	1064.000	1101.000	508.300	521.900	259.000
3	16:38:55	523.800	204.900	512.400	1035.000	1119.000	518.700	503.700	255.700
X		516.700	206.700	509.200	1037.000	1102.000	507.000	505.400	254.600
σ		6.265	1.806	11.560	25.480	16.330	12.450	15.820	5.042
%RSD		1.212	0.874	2.270	2.456	1.482	2.456	3.130	1.980
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:38:17	247.100	499.800	506.600	37.040	10.150	10.120	0.000	920.100
2	16:38:36	250.400	510.100	506.600	37.710	9.969	9.918	0.000	929.700
3	16:38:55	251.700	509.200	512.400	36.670	9.611	9.811	0.000	926.500
X		249.700	506.300	508.500	37.140	9.909	9.949	0.000	925.400
σ		2.356	5.714	3.329	0.529	0.273	0.156	0.000	4.874
%RSD		0.943	1.128	0.655	1.424	2.754	1.565	0.000	0.527
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:38:17	57.663%	1007.000	980.700	55.693%	49.160	49.030	49.280	45.280
2	16:38:36	56.673%	1009.000	1000.000	54.215%	49.300	48.920	50.020	45.890
3	16:38:55	57.546%	1003.000	993.700	55.206%	48.930	48.630	50.580	45.190
X		57.294%	1006.000	991.600	55.038%	49.130	48.860	49.960	45.460
σ		0.541%	3.255	10.020	0.754%	0.187	0.212	0.652	0.383
%RSD		0.945	0.324	1.010	1.369	0.381	0.433	1.306	0.841
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:38:17	58.953%	1868.000	470.400	469.900	1839.000	1816.000	70.316%	72.162%
2	16:38:36	58.979%	1857.000	480.200	479.000	1837.000	1813.000	70.142%	71.879%
3	16:38:55	58.849%	1872.000	477.800	487.000	1850.000	1813.000	70.536%	72.703%
X		58.927%	1866.000	476.100	478.600	1842.000	1814.000	70.331%	72.248%
σ		0.069%	7.862	5.124	8.525	6.624	1.842	0.197%	0.419%
%RSD		0.117	0.421	1.076	1.781	0.360	0.102	0.281	0.579
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	16:38:17	53.550	54.290	22.760	60.725%				
2	16:38:36	54.420	55.590	23.160	60.379%				
3	16:38:55	53.980	55.030	22.900	61.541%				
X		53.980	54.970	22.940	60.882%				
σ		0.436	0.652	0.206	0.596%				
%RSD		0.808	1.186	0.898	0.980				

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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	16:42:06	57.112%	0.023	70.940	74.110	0.000	136900.000	142500.000	143700.000
2	16:42:25	56.621%	0.005	70.770	68.930	0.000	142300.000	143200.000	144700.000
3	16:42:44	50.444%	0.014	72.160	73.170	0.000	141400.000	144300.000	148100.000
X		54.726%	0.014	71.290	72.070	0.000	140200.000	143300.000	145500.000
σ		3.716%	0.009	0.763	2.762	0.000	2897.000	880.000	2296.000
%RSD		6.791	62.630	1.071	3.833	0.000	2.067	0.614	1.578
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:42:06	4.897	14480.000	0.000	708.800	78410.000	81520.000	47.875%	2.173
2	16:42:25	4.337	14380.000	0.000	717.900	80020.000	81060.000	46.536%	1.753
3	16:42:44	4.579	14430.000	0.000	712.400	79440.000	81690.000	45.828%	1.867
X		4.604	14430.000	0.000	713.000	79290.000	81420.000	46.746%	1.931
σ		0.281	49.190	0.000	4.587	816.700	330.900	1.040%	0.217
%RSD		6.110	0.341	0.000	0.643	1.030	0.406	2.224	11.250
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:42:06	5.765	1.289	681.800	23.460	135.100	0.651	4.621	2.470
2	16:42:25	6.736	1.232	683.800	23.980	126.200	0.593	4.147	2.333
3	16:42:44	7.755	1.369	660.500	20.630	120.000	0.552	4.140	2.483
X		6.752	1.296	675.400	22.690	127.100	0.599	4.303	2.429
σ		0.995	0.069	12.890	1.804	7.602	0.050	0.276	0.083
%RSD		14.740	5.315	1.909	7.952	5.982	8.378	6.410	3.418
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:42:06	1.561	3.150	2.776	1.748	1.174	2.724	0.000	840.700
2	16:42:25	1.516	3.328	2.560	0.985	1.189	2.253	0.000	849.200
3	16:42:44	1.634	3.009	2.617	1.600	1.374	2.559	0.000	847.800
X		1.570	3.162	2.651	1.444	1.246	2.512	0.000	845.900
σ		0.059	0.160	0.112	0.405	0.112	0.239	0.000	4.597
%RSD		3.781	5.057	4.217	28.020	8.972	9.522	0.000	0.543
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:42:06	58.299%	8.036	8.394	55.498%	-0.084	-0.079	0.208	0.171
2	16:42:25	56.655%	7.228	7.543	53.842%	-0.075	-0.083	0.169	0.163
3	16:42:44	55.913%	6.587	7.117	53.350%	-0.078	-0.080	0.177	0.161
X		56.955%	7.284	7.684	54.230%	-0.079	-0.081	0.185	0.165
σ		1.221%	0.726	0.650	1.125%	0.005	0.002	0.021	0.005
%RSD		2.144	9.972	8.462	2.075	5.799	2.743	11.180	3.159
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:42:06	59.054%	1.048	0.075	0.117	141.700	143.200	69.599%	70.795%
2	16:42:25	58.443%	0.808	0.076	0.111	142.600	143.000	70.952%	72.391%
3	16:42:44	58.151%	0.588	0.081	0.107	142.100	141.700	70.802%	72.954%
X		58.549%	0.815	0.077	0.112	142.100	142.600	70.451%	72.047%
σ		0.461%	0.230	0.003	0.005	0.431	0.856	0.742%	1.120%
%RSD		0.787	28.270	4.105	4.814	0.303	0.600	1.053	1.555
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	16:42:06	0.216	0.215	0.106	58.549%				
2	16:42:25	0.167	0.198	0.099	59.056%				
3	16:42:44	0.157	0.175	0.101	60.638%				
X		0.180	0.196	0.102	59.414%				
σ		0.031	0.020	0.004	1.090%				
%RSD		17.480	10.120	3.560	1.834				

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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	16:45:55	76.309%	-0.028	16.940	14.900	0.000	28110.000	29420.000	29920.000
2	16:46:14	69.604%	-0.068	14.750	14.680	0.000	28970.000	29540.000	29850.000
3	16:46:34	66.422%	-0.052	16.510	15.350	0.000	29600.000	30340.000	30410.000
X		70.779%	-0.049	16.070	14.980	0.000	28890.000	29770.000	30060.000
σ		5.047%	0.020	1.156	0.342	0.000	749.500	501.500	305.700
%RSD		7.130	41.280	7.198	2.282	0.000	2.594	1.685	1.017
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:45:55	-0.912	2540.000	0.000	132.900	14890.000	14350.000	70.549%	0.316
2	16:46:14	-1.130	2584.000	0.000	141.200	15590.000	15820.000	62.216%	0.338
3	16:46:34	-1.005	2569.000	0.000	144.500	16200.000	15800.000	59.399%	0.193
X		-1.016	2564.000	0.000	139.500	15560.000	15330.000	64.055%	0.282
σ		0.109	22.440	0.000	5.988	654.700	843.000	5.798%	0.078
%RSD		10.760	0.875	0.000	4.291	4.208	5.501	9.051	27.720
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:45:55	1.401	0.308	124.100	3.925	27.370	0.122	0.828	0.334
2	16:46:14	0.999	0.343	133.300	4.355	26.090	0.127	0.951	0.368
3	16:46:34	1.450	0.358	134.500	5.102	24.900	0.100	0.798	0.387
X		1.283	0.336	130.600	4.460	26.120	0.116	0.859	0.363
σ		0.248	0.025	5.706	0.596	1.231	0.014	0.081	0.027
%RSD		19.300	7.570	4.369	13.350	4.714	12.260	9.452	7.394
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:45:55	0.099	-0.282	-0.350	0.605	-0.220	0.393	0.000	177.200
2	16:46:14	0.184	-0.255	-0.466	0.225	0.211	0.436	0.000	177.800
3	16:46:34	0.184	-0.305	-0.376	0.300	0.170	0.523	0.000	178.900
X		0.156	-0.281	-0.397	0.377	0.053	0.451	0.000	178.000
σ		0.049	0.025	0.061	0.202	0.237	0.066	0.000	0.885
%RSD		31.700	8.847	15.380	53.480	444.000	14.740	0.000	0.497
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:45:55	72.230%	1.261	1.347	72.060%	-0.086	-0.085	0.065	0.047
2	16:46:14	70.927%	1.387	1.344	69.899%	-0.082	-0.090	0.035	0.033
3	16:46:34	70.412%	1.202	1.277	69.022%	-0.083	-0.080	0.030	0.002
X		71.190%	1.284	1.322	70.327%	-0.084	-0.085	0.043	0.028
σ		0.937%	0.094	0.039	1.564%	0.002	0.005	0.019	0.023
%RSD		1.317	7.356	2.984	2.223	2.484	5.898	43.630	85.050
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:45:55	73.130%	0.000	-0.026	-0.024	28.300	27.770	81.057%	81.570%
2	16:46:14	72.476%	-0.009	-0.030	-0.026	28.140	28.380	81.536%	83.144%
3	16:46:34	72.623%	-0.037	-0.036	-0.031	28.920	27.770	81.722%	82.969%
X		72.743%	-0.015	-0.030	-0.027	28.450	27.970	81.438%	82.561%
σ		0.343%	0.020	0.005	0.004	0.412	0.354	0.343%	0.863%
%RSD		0.472	129.900	16.310	13.010	1.448	1.264	0.421	1.045
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	16:45:55	0.056	0.048	0.005	75.947%				
2	16:46:14	0.049	0.050	0.008	75.326%				
3	16:46:34	0.049	0.051	0.006	75.249%				
X		0.052	0.049	0.006	75.507%				
σ		0.004	0.002	0.002	0.382%				
%RSD		8.333	3.341	28.540	0.506				

CCV 1558997 5/1/2015 4:49:33 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	16:49:33	114.537%	103.300	98.060	93.090	0.000	46390.000	46470.000	46090.000
2	16:49:52	104.912%	105.200	98.480	97.350	0.000	47700.000	48260.000	49260.000
3	16:50:11	102.513%	105.800	99.100	96.690	0.000	47410.000	47360.000	49790.000
X		107.321%	104.766%	98.547%	95.709%	0.000	94.335%	94.728%	96.759%
σ		6.364%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		5.930	1.278	0.535	2.396	0.000	1.465	1.891	4.132
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:33	468.200	4666.000	0.000	46990.000	46270.000	46900.000	109.615%	97.100
2	16:49:52	497.700	4919.000	0.000	51030.000	49090.000	49080.000	102.094%	101.700
3	16:50:11	489.400	4727.000	0.000	50520.000	49080.000	49690.000	100.658%	105.300
X		97.018%	95.413%	0.000	99.019%	96.295%	97.118%	104.122%	101.388%
σ		n/a	n/a	0.000	n/a	n/a	n/a	4.811%	n/a
%RSD		3.130	2.765	0.000	4.446	3.375	3.023	4.620	4.064
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:33	99.380	100.300	476.500	24800.000	24220.000	101.100	105.000	105.300
2	16:49:52	100.800	101.300	491.400	25250.000	24900.000	101.700	104.700	105.300
3	16:50:11	102.400	103.300	493.500	25250.000	24880.000	102.300	103.700	105.500
X		100.851%	101.627%	97.423%	100.402%	98.669%	101.694%	104.501%	105.344%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.478	1.547	1.898	1.039	1.575	0.555	0.663	0.097
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:33	104.300	99.900	100.500	103.900	104.500	107.400	0.000	99.010
2	16:49:52	105.400	101.700	102.700	105.100	105.600	106.100	0.000	100.200
3	16:50:11	105.800	103.300	104.200	104.100	106.500	106.300	0.000	101.000
X		105.188%	101.661%	102.484%	104.393%	105.532%	106.588%	0.000	100.052%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.732	1.690	1.837	0.599	0.954	0.643	0.000	0.988
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:33	96.339%	95.460	95.370	90.943%	100.500	101.500	99.230	100.100
2	16:49:52	97.201%	97.880	98.140	90.672%	101.900	101.900	100.600	100.700
3	16:50:11	96.704%	97.970	99.850	90.576%	101.900	101.700	100.300	100.100
X		96.748%	97.107%	97.785%	90.730%	101.425%	101.693%	100.017%	100.305%
σ		0.433%	n/a	n/a	0.191%	n/a	n/a	n/a	n/a
%RSD		0.447	1.466	2.313	0.210	0.829	0.218	0.695	0.362
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:33	87.290%	96.890	96.770	96.460	96.660	98.080	86.292%	86.737%
2	16:49:52	87.928%	98.240	97.930	97.350	98.150	98.530	88.188%	87.727%
3	16:50:11	88.695%	97.260	98.160	97.940	98.530	98.630	88.630%	88.840%
X		87.971%	97.464%	97.622%	97.251%	97.781%	98.416%	87.703%	87.768%
σ		0.704%	n/a	n/a	n/a	n/a	n/a	1.242%	1.052%
%RSD		0.800	0.713	0.762	0.768	1.009	0.297	1.416	1.199
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	16:49:33	103.000	103.500	104.400	76.915%				
2	16:49:52	105.000	106.400	107.500	78.392%				
3	16:50:11	103.500	104.900	106.900	79.576%				
X		103.844%	104.953%	106.256%	78.294%				
σ		n/a	n/a	n/a	1.334%				
%RSD		0.975	1.387	1.553	1.703				

CCB7 5/1/2015 4:56:02 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	16:56:21	113.944%	-0.006	0.776	0.753	0.000	13.570	7.146	6.811
2	16:56:40	113.104%	0.040	0.755	0.733	0.000	12.770	6.278	6.636
3	16:56:59	113.308%	0.013	0.920	0.757	0.000	13.190	5.982	5.992
X		113.452%	0.016	0.817	0.748	0.000	13.180	6.469	6.480
σ		0.438%	0.023	0.090	0.013	0.000	0.397	0.605	0.431
%RSD		0.386	145.500	10.970	1.744	0.000	3.012	9.352	6.656
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:21	2.338	-480.800	0.000	6.263	12.710	7.856	122.511%	0.066
2	16:56:40	2.129	-480.800	0.000	8.716	10.170	7.789	117.303%	0.056
3	16:56:59	2.573	-478.800	0.000	7.167	18.380	10.930	117.149%	-0.029
X		2.347	-480.100	0.000	7.382	13.760	8.857	118.988%	0.031
σ		0.222	1.188	0.000	1.241	4.202	1.792	3.052%	0.052
%RSD		9.470	0.248	0.000	16.810	30.550	20.240	2.565	167.500
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:21	0.053	0.017	0.203	9.009	7.169	0.015	0.037	0.528
2	16:56:40	0.048	0.029	0.194	9.426	8.496	0.017	0.048	0.544
3	16:56:59	0.038	0.006	0.195	4.422	5.841	0.021	0.033	0.553
X		0.046	0.017	0.198	7.619	7.168	0.017	0.039	0.542
σ		0.007	0.012	0.005	2.777	1.327	0.003	0.007	0.012
%RSD		16.130	67.800	2.550	36.440	18.520	16.660	18.920	2.305
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:21	0.565	0.907	0.941	-0.003	0.149	0.106	0.000	0.066
2	16:56:40	0.456	1.077	0.881	0.041	0.105	0.190	0.000	0.070
3	16:56:59	0.538	0.998	1.027	-0.021	0.123	0.021	0.000	0.062
X		0.519	0.994	0.950	0.006	0.125	0.105	0.000	0.066
σ		0.057	0.085	0.073	0.032	0.022	0.085	0.000	0.004
%RSD		10.920	8.557	7.718	560.700	17.600	80.250	0.000	5.882
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:21	102.858%	0.294	0.291	105.215%	-0.063	-0.060	0.051	0.046
2	16:56:40	103.593%	0.233	0.245	105.834%	-0.066	-0.068	0.046	0.035
3	16:56:59	103.816%	0.236	0.240	106.279%	-0.051	-0.065	0.121	0.088
X		103.422%	0.255	0.259	105.776%	-0.060	-0.064	0.072	0.056
σ		0.501%	0.035	0.028	0.534%	0.008	0.004	0.042	0.028
%RSD		0.485	13.580	10.760	0.505	12.870	6.327	57.550	49.830
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:21	95.889%	0.058	0.000	-0.011	0.053	0.034	90.222%	89.110%
2	16:56:40	96.570%	0.045	0.000	0.008	0.066	0.051	92.573%	90.554%
3	16:56:59	97.491%	0.050	-0.005	0.005	0.056	0.045	92.886%	91.987%
X		96.650%	0.051	-0.001	0.001	0.058	0.043	91.894%	90.550%
σ		0.804%	0.007	0.003	0.010	0.007	0.009	1.456%	1.439%
%RSD		0.832	12.830	224.100	1849.000	12.080	19.730	1.584	1.589
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	16:56:21	0.029	0.029	0.037	84.807%				
2	16:56:40	0.035	0.028	0.037	84.425%				
3	16:56:59	0.034	0.032	0.033	84.868%				
X		0.033	0.030	0.036	84.700%				
σ		0.003	0.002	0.002	0.240%				
%RSD		8.897	7.301	5.577	0.284				

180-43424-D-2-B MS 5/1/2015 4:59:53 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	17:00:13	57.998%	50.200	1013.000	1000.000	0.000	199900.000	197900.000	204200.000
2	17:00:32	56.433%	49.620	1023.000	955.100	0.000	201000.000	201300.000	200700.000
3	17:00:51	52.277%	48.080	1002.000	961.500	0.000	194800.000	200500.000	198600.000
X		55.569%	49.300	1012.000	972.200	0.000	198600.000	199900.000	201200.000
σ		2.956%	1.097	10.580	24.350	0.000	3321.000	1789.000	2828.000
%RSD		5.320	2.225	1.045	2.505	0.000	1.672	0.895	1.406
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:13	1806.000	24580.000	0.000	50890.000	135700.000	138600.000	50.929%	1067.000
2	17:00:32	1749.000	24620.000	0.000	51210.000	138100.000	140100.000	47.604%	1051.000
3	17:00:51	1692.000	23520.000	0.000	50510.000	137700.000	138800.000	45.411%	1049.000
X		1749.000	24240.000	0.000	50870.000	137200.000	139200.000	47.981%	1055.000
σ		56.960	624.300	0.000	352.800	1314.000	825.400	2.778%	9.774
%RSD		3.256	2.576	0.000	0.694	0.958	0.593	5.790	0.926
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:13	539.800	209.100	1248.000	1091.000	1254.000	515.600	499.800	246.900
2	17:00:32	538.500	208.600	1225.000	1084.000	1210.000	493.100	476.700	239.500
3	17:00:51	539.800	212.500	1226.000	1086.000	1239.000	488.700	477.500	241.100
X		539.400	210.100	1233.000	1087.000	1235.000	499.100	484.700	242.500
σ		0.717	2.113	13.240	3.327	22.720	14.410	13.150	3.887
%RSD		0.133	1.006	1.074	0.306	1.840	2.888	2.713	1.603
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:13	248.900	471.500	472.700	39.240	10.970	11.830	0.000	1877.000
2	17:00:32	238.400	454.900	457.700	37.580	10.300	11.450	0.000	1814.000
3	17:00:51	237.900	461.300	459.400	37.600	10.730	12.050	0.000	1833.000
X		241.800	462.600	463.300	38.140	10.670	11.780	0.000	1841.000
σ		6.230	8.403	8.191	0.950	0.338	0.307	0.000	32.560
%RSD		2.577	1.817	1.768	2.490	3.168	2.607	0.000	1.769
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:13	59.230%	1088.000	1085.000	55.010%	49.460	49.500	50.540	44.620
2	17:00:32	59.317%	1059.000	1062.000	54.937%	47.490	47.560	48.170	43.800
3	17:00:51	57.860%	1059.000	1062.000	53.350%	48.520	48.210	49.490	43.780
X		58.802%	1068.000	1069.000	54.432%	48.490	48.420	49.400	44.070
σ		0.817%	16.750	13.570	0.938%	0.987	0.991	1.189	0.479
%RSD		1.389	1.568	1.269	1.723	2.034	2.047	2.407	1.087
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:13	58.832%	2007.000	481.000	497.700	2162.000	2126.000	69.386%	70.995%
2	17:00:32	59.814%	1934.000	492.000	490.300	2064.000	2035.000	70.596%	72.708%
3	17:00:51	58.362%	1945.000	492.200	496.000	2089.000	2046.000	71.480%	73.028%
X		59.003%	1962.000	488.400	494.700	2105.000	2069.000	70.487%	72.244%
σ		0.741%	39.650	6.400	3.904	50.890	49.600	1.051%	1.093%
%RSD		1.256	2.021	1.310	0.789	2.417	2.397	1.491	1.513
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:00:13	49.190	49.410	20.060	67.424%				
2	17:00:32	56.890	57.760	24.010	56.758%				
3	17:00:51	57.090	58.150	24.100	57.016%				
X		54.390	55.110	22.720	60.399%				
σ		4.504	4.937	2.308	6.085%				
%RSD		8.280	8.959	10.160	10.075				



180-43424-D-2-C MSD 5/1/2015 5:03:42 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	17:04:02	57.197%	47.870	987.300	951.200	0.000	181100.000	188900.000	192500.000
2	17:04:21	50.253%	49.830	1030.000	976.800	0.000	195300.000	195400.000	198400.000
3	17:04:40	48.724%	50.480	999.700	1003.000	0.000	186200.000	193200.000	191200.000
X		52.058%	49.390	1006.000	976.900	0.000	187500.000	192500.000	194000.000
σ		4.515%	1.360	22.030	25.670	0.000	7201.000	3340.000	3858.000
%RSD		8.674	2.753	2.190	2.628	0.000	3.840	1.735	1.988
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:04:02	1749.000	23100.000	0.000	49460.000	130400.000	134900.000	47.894%	1011.000
2	17:04:21	1815.000	24740.000	0.000	50350.000	134400.000	135600.000	47.224%	1041.000
3	17:04:40	1711.000	23570.000	0.000	49810.000	133300.000	135900.000	46.437%	1013.000
X		1758.000	23800.000	0.000	49870.000	132700.000	135500.000	47.185%	1022.000
σ		52.600	842.800	0.000	450.700	2079.000	516.600	0.729%	16.790
%RSD		2.991	3.541	0.000	0.904	1.567	0.381	1.545	1.643
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:04:02	522.600	204.800	1191.000	1065.000	1224.000	499.200	488.500	243.200
2	17:04:21	540.800	208.400	1177.000	1033.000	1179.000	478.200	476.100	234.600
3	17:04:40	513.000	203.500	1160.000	1016.000	1168.000	474.900	454.700	234.000
X		525.500	205.600	1176.000	1038.000	1190.000	484.100	473.100	237.200
σ		14.150	2.501	15.510	24.810	29.570	13.160	17.130	5.156
%RSD		2.692	1.216	1.319	2.390	2.484	2.718	3.621	2.173
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:04:02	245.900	458.600	459.100	37.770	10.250	11.190	0.000	1783.000
2	17:04:21	236.100	457.200	461.200	38.260	10.840	12.250	0.000	1795.000
3	17:04:40	232.200	453.600	448.400	36.830	10.950	11.250	0.000	1797.000
X		238.000	456.500	456.300	37.620	10.680	11.570	0.000	1792.000
σ		7.076	2.604	6.870	0.726	0.379	0.595	0.000	7.272
%RSD		2.973	0.570	1.506	1.931	3.546	5.144	0.000	0.406
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:04:02	58.375%	1048.000	1040.000	53.958%	47.620	47.590	48.460	43.370
2	17:04:21	57.389%	1052.000	1058.000	53.702%	47.650	47.770	47.820	44.630
3	17:04:40	56.694%	1058.000	1055.000	52.620%	47.630	47.720	48.520	43.660
X		57.486%	1053.000	1051.000	53.427%	47.630	47.700	48.260	43.880
σ		0.844%	4.649	9.774	0.710%	0.020	0.093	0.389	0.660
%RSD		1.469	0.442	0.930	1.329	0.041	0.195	0.806	1.504
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:04:02	58.729%	1913.000	479.300	477.600	2063.000	2022.000	70.635%	72.045%
2	17:04:21	57.983%	1913.000	478.900	482.100	2058.000	2031.000	70.323%	71.819%
3	17:04:40	57.744%	1923.000	475.500	476.500	2067.000	2033.000	70.426%	72.854%
X		58.152%	1916.000	477.900	478.800	2063.000	2029.000	70.461%	72.239%
σ		0.514%	5.936	2.104	2.974	4.264	5.827	0.159%	0.544%
%RSD		0.884	0.310	0.440	0.621	0.207	0.287	0.225	0.753
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:04:02	55.600	57.150	23.650	56.625%				
2	17:04:21	55.980	57.030	23.820	58.003%				
3	17:04:40	56.210	57.180	23.670	57.908%				
X		55.930	57.120	23.710	57.512%				
σ		0.308	0.079	0.095	0.770%				
%RSD		0.550	0.138	0.402	1.338				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:07:50	58.991%	0.002	72.890	73.120	0.000	132200.000	138000.000	143400.000
2	17:08:09	52.842%	0.029	74.710	76.740	0.000	145700.000	150000.000	149600.000
3	17:08:28	54.735%	-0.049	77.100	77.080	0.000	141700.000	144300.000	142700.000
X		55.523%	-0.006	74.900	75.640	0.000	139900.000	144100.000	145300.000
σ		3.150%	0.040	2.111	2.195	0.000	6902.000	6029.000	3813.000
%RSD		5.672	672.300	2.819	2.902	0.000	4.934	4.184	2.625
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:07:50	0.795	14500.000	0.000	723.500	79070.000	80590.000	50.401%	1.769
2	17:08:09	1.261	14900.000	0.000	748.300	79890.000	81220.000	49.051%	1.700
3	17:08:28	0.934	14830.000	0.000	756.900	81330.000	81210.000	46.057%	2.154
X		0.997	14750.000	0.000	742.900	80100.000	81010.000	48.503%	1.874
σ		0.239	215.200	0.000	17.320	1143.000	361.900	2.224%	0.245
%RSD		23.990	1.460	0.000	2.331	1.428	0.447	4.584	13.050
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:07:50	6.043	1.268	712.300	33.880	138.300	0.708	4.057	2.721
2	17:08:09	7.503	1.319	712.500	29.840	134.500	0.632	4.032	2.539
3	17:08:28	7.750	1.293	722.200	29.950	126.700	0.626	4.376	2.594
X		7.098	1.294	715.700	31.220	133.200	0.655	4.155	2.618
σ		0.922	0.025	5.704	2.302	5.904	0.046	0.192	0.093
%RSD		12.990	1.970	0.797	7.372	4.433	6.961	4.615	3.565
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:07:50	1.673	3.587	3.572	0.635	1.166	2.204	0.000	822.000
2	17:08:09	1.550	3.713	3.155	1.319	1.109	2.150	0.000	831.300
3	17:08:28	1.680	3.258	3.328	0.686	1.174	2.249	0.000	825.300
X		1.634	3.519	3.351	0.880	1.150	2.201	0.000	826.200
σ		0.073	0.235	0.210	0.381	0.036	0.050	0.000	4.691
%RSD		4.472	6.670	6.253	43.310	3.102	2.251	0.000	0.568
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:07:50	59.351%	8.566	8.796	56.225%	-0.087	-0.089	0.185	0.176
2	17:08:09	58.111%	7.503	8.058	55.606%	-0.082	-0.088	0.141	0.182
3	17:08:28	58.037%	7.119	7.644	54.683%	-0.082	-0.087	0.166	0.159
X		58.500%	7.730	8.166	55.505%	-0.084	-0.088	0.164	0.173
σ		0.738%	0.750	0.583	0.776%	0.003	0.001	0.022	0.012
%RSD		1.262	9.700	7.140	1.398	3.839	1.034	13.190	6.843
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:07:50	60.193%	1.493	0.117	0.142	142.300	143.800	70.597%	72.779%
2	17:08:09	59.576%	1.141	0.102	0.127	143.900	144.100	71.851%	73.785%
3	17:08:28	59.803%	0.836	0.114	0.125	144.300	144.400	72.708%	74.447%
X		59.857%	1.157	0.111	0.131	143.500	144.100	71.719%	73.670%
σ		0.312%	0.329	0.008	0.009	1.031	0.304	1.062%	0.840%
%RSD		0.522	28.440	7.407	6.764	0.718	0.211	1.480	1.140
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:07:50	0.211	0.201	0.059	63.275%				
2	17:08:09	0.202	0.192	0.065	62.896%				
3	17:08:28	0.179	0.188	0.058	62.374%				
X		0.197	0.194	0.061	62.848%				
σ		0.016	0.007	0.004	0.452%				
%RSD		8.276	3.376	6.158	0.720				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:11:38	60.930%	-0.068	29.540	25.680	0.000	11650.000	8894.000	8943.000
2	17:11:57	54.685%	0.027	26.090	26.030	0.000	11970.000	9304.000	9409.000
3	17:12:16	48.692%	-0.025	27.480	25.810	0.000	11290.000	8714.000	8905.000
X		54.769%	-0.022	27.710	25.840	0.000	11640.000	8971.000	9086.000
σ		6.120%	0.048	1.735	0.173	0.000	338.800	302.100	280.600
%RSD		11.173	216.900	6.261	0.669	0.000	2.911	3.367	3.089
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:11:38	36.850	9786.000	0.000	2455.000	73610.000	76920.000	46.512%	2.135
2	17:11:57	37.850	10300.000	0.000	2575.000	78160.000	79720.000	42.534%	1.993
3	17:12:16	36.590	9829.000	0.000	2474.000	76650.000	77210.000	41.818%	2.029
X		37.100	9973.000	0.000	2501.000	76140.000	77950.000	43.622%	2.053
σ		0.664	287.100	0.000	64.270	2316.000	1541.000	2.529%	0.073
%RSD		1.789	2.879	0.000	2.569	3.042	1.977	5.797	3.571
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:11:38	1.083	2.214	555.100	5438.000	5518.000	1.836	2.607	0.765
2	17:11:57	1.672	2.240	560.600	5464.000	5590.000	1.786	2.841	0.891
3	17:12:16	0.080	2.180	565.000	5560.000	5676.000	1.717	2.748	0.901
X		0.945	2.212	560.300	5488.000	5595.000	1.780	2.732	0.852
σ		0.805	0.030	4.966	64.480	79.170	0.060	0.118	0.076
%RSD		85.160	1.365	0.886	1.175	1.415	3.372	4.303	8.922
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:11:38	0.710	3.505	3.787	10.230	-0.017	0.788	0.000	408.300
2	17:11:57	0.845	3.859	3.464	10.040	0.024	0.302	0.000	412.400
3	17:12:16	0.689	3.485	3.062	10.220	-0.142	0.468	0.000	412.100
X		0.748	3.616	3.438	10.160	-0.045	0.520	0.000	410.900
σ		0.085	0.210	0.363	0.109	0.087	0.247	0.000	2.255
%RSD		11.340	5.818	10.560	1.072	193.200	47.580	0.000	0.549
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:11:38	56.447%	2.395	2.453	56.039%	-0.082	-0.088	-0.052	-0.024
2	17:11:57	54.310%	2.366	2.528	53.782%	-0.086	-0.094	-0.000	0.003
3	17:12:16	53.348%	2.196	2.326	52.107%	-0.080	-0.087	-0.027	-0.026
X		54.702%	2.319	2.436	53.976%	-0.083	-0.090	-0.026	-0.016
σ		1.587%	0.107	0.102	1.974%	0.003	0.004	0.026	0.016
%RSD		2.901	4.634	4.194	3.656	3.681	4.539	98.070	103.400
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:11:38	59.428%	0.394	0.466	0.521	208.600	207.500	70.173%	72.012%
2	17:11:57	58.052%	0.353	0.463	0.504	210.500	211.200	69.641%	72.103%
3	17:12:16	57.696%	0.242	0.436	0.487	208.500	208.500	70.083%	71.781%
X		58.392%	0.330	0.455	0.504	209.200	209.100	69.965%	71.965%
σ		0.915%	0.079	0.017	0.017	1.124	1.921	0.285%	0.166%
%RSD		1.567	23.950	3.659	3.369	0.537	0.919	0.407	0.230
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:11:38	0.072	0.074	0.127	65.957%				
2	17:11:57	0.078	0.075	0.130	66.051%				
3	17:12:16	0.062	0.069	0.128	66.191%				
X		0.071	0.073	0.128	66.066%				
σ		0.008	0.003	0.001	0.118%				
%RSD		11.040	4.673	1.083	0.178				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:26	51.106%	0.013	26.850	25.830	0.000	12380.000	9386.000	9455.000
2	17:15:45	47.873%	-0.025	25.680	25.150	0.000	11380.000	8581.000	9102.000
3	17:16:05	51.475%	-0.027	25.210	23.290	0.000	11290.000	8558.000	8598.000
X		50.151%	-0.013	25.920	24.760	0.000	11690.000	8842.000	9052.000
σ		1.982%	0.023	0.847	1.316	0.000	606.500	471.700	431.100
%RSD		3.952	174.900	3.267	5.316	0.000	5.190	5.335	4.763
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:26	0.159	10470.000	0.000	2542.000	75650.000	77570.000	42.780%	0.997
2	17:15:45	-0.083	9527.000	0.000	2516.000	78830.000	78560.000	39.300%	1.017
3	17:16:05	0.112	9341.000	0.000	2551.000	78320.000	78680.000	37.746%	1.114
X		0.063	9778.000	0.000	2536.000	77600.000	78270.000	39.942%	1.042
σ		0.129	603.100	0.000	18.490	1709.000	609.600	2.578%	0.063
%RSD		205.000	6.168	0.000	0.729	2.202	0.779	6.454	6.002
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:26	0.886	0.457	424.400	3803.000	3885.000	1.317	2.174	0.448
2	17:15:45	0.561	0.428	450.700	4102.000	4197.000	1.422	2.387	0.510
3	17:16:05	0.170	0.447	450.900	4111.000	4203.000	1.399	2.285	0.513
X		0.539	0.444	442.000	4005.000	4095.000	1.379	2.282	0.490
σ		0.359	0.015	15.260	175.300	181.800	0.055	0.106	0.037
%RSD		66.600	3.307	3.452	4.376	4.440	4.013	4.664	7.447
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:26	0.418	2.858	2.898	7.590	-0.186	0.474	0.000	413.600
2	17:15:45	0.400	2.818	2.841	8.733	-0.174	0.531	0.000	413.000
3	17:16:05	0.490	2.773	3.060	7.640	-0.281	0.399	0.000	414.600
X		0.436	2.817	2.933	7.988	-0.214	0.468	0.000	413.700
σ		0.048	0.043	0.114	0.646	0.059	0.066	0.000	0.798
%RSD		10.980	1.516	3.873	8.085	27.390	14.100	0.000	0.193
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:26	52.725%	1.996	1.823	52.753%	-0.090	-0.094	-0.080	-0.067
2	17:15:45	51.613%	1.993	2.049	50.451%	-0.084	-0.091	-0.071	-0.052
3	17:16:05	50.979%	1.824	2.040	50.409%	-0.089	-0.085	-0.035	-0.024
X		51.772%	1.938	1.970	51.204%	-0.088	-0.090	-0.062	-0.048
σ		0.884%	0.098	0.128	1.341%	0.003	0.005	0.024	0.022
%RSD		1.707	5.075	6.473	2.620	3.690	5.415	38.200	45.770
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:26	56.600%	0.086	0.273	0.301	199.300	200.200	68.668%	70.287%
2	17:15:45	56.198%	0.028	0.300	0.276	199.600	200.600	68.585%	70.535%
3	17:16:05	55.718%	0.073	0.324	0.298	201.900	201.900	68.150%	69.964%
X		56.172%	0.062	0.299	0.292	200.300	200.900	68.467%	70.262%
σ		0.442%	0.031	0.025	0.014	1.434	0.903	0.279%	0.286%
%RSD		0.787	49.150	8.423	4.763	0.716	0.449	0.407	0.407
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:15:26	0.037	0.040	0.007	62.780%				
2	17:15:45	0.034	0.040	0.004	63.277%				
3	17:16:05	0.036	0.037	0.006	62.419%				
X		0.036	0.039	0.006	62.825%				
σ		0.001	0.002	0.002	0.431%				
%RSD		3.370	4.968	33.730	0.686				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:19:15	54.159%	0.028	31.010	30.240	0.000	19000.000	7915.000	7917.000
2	17:19:34	51.850%	-0.028	31.860	29.700	0.000	20120.000	8189.000	8434.000
3	17:19:53	52.095%	-0.068	32.540	28.260	0.000	18490.000	7678.000	7675.000
X		52.701%	-0.022	31.800	29.400	0.000	19200.000	7927.000	8009.000
σ		1.268%	0.048	0.766	1.021	0.000	830.200	255.700	387.600
%RSD		2.407	214.100	2.409	3.473	0.000	4.323	3.225	4.840
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:19:15	0.880	9207.000	0.000	2316.000	59140.000	57870.000	43.075%	1.742
2	17:19:34	1.027	8844.000	0.000	2288.000	58960.000	59740.000	40.742%	1.941
3	17:19:53	0.659	8258.000	0.000	2187.000	57200.000	59310.000	39.367%	1.762
X		0.855	8769.000	0.000	2264.000	58440.000	58970.000	41.061%	1.815
σ		0.185	479.000	0.000	67.730	1072.000	978.100	1.875%	0.110
%RSD		21.670	5.462	0.000	2.992	1.835	1.659	4.566	6.040
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:19:15	1.624	0.285	723.900	15410.000	15450.000	0.049	0.033	0.117
2	17:19:34	1.295	0.346	750.400	16230.000	16020.000	0.066	0.144	0.145
3	17:19:53	-1.355	0.223	740.100	15840.000	15540.000	0.059	0.204	0.118
X		0.521	0.285	738.100	15820.000	15670.000	0.058	0.127	0.127
σ		1.634	0.062	13.360	411.400	309.600	0.009	0.087	0.016
%RSD		313.200	21.630	1.810	2.599	1.976	14.980	68.350	12.540
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:19:15	-0.036	1.677	2.134	-0.052	-0.281	0.231	0.000	231.400
2	17:19:34	0.015	1.968	2.329	1.088	-0.353	0.318	0.000	232.500
3	17:19:53	0.064	1.939	2.448	0.439	-0.383	0.417	0.000	230.100
X		0.015	1.861	2.304	0.491	-0.339	0.322	0.000	231.300
σ		0.050	0.160	0.159	0.572	0.052	0.093	0.000	1.218
%RSD		342.100	8.613	6.886	116.400	15.420	28.950	0.000	0.526
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:19:15	52.792%	0.454	0.477	52.467%	-0.086	-0.093	-0.021	-0.012
2	17:19:34	52.245%	0.456	0.401	52.158%	-0.093	-0.092	-0.007	0.002
3	17:19:53	51.751%	0.457	0.415	51.212%	-0.079	-0.088	-0.037	-0.027
X		52.263%	0.456	0.431	51.946%	-0.086	-0.091	-0.021	-0.012
σ		0.521%	0.001	0.040	0.654%	0.007	0.003	0.015	0.015
%RSD		0.996	0.289	9.377	1.259	8.171	2.989	70.770	118.400
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:19:15	56.680%	0.033	-0.009	-0.020	428.100	430.500	67.238%	69.185%
2	17:19:34	57.031%	0.008	-0.024	-0.012	428.600	428.700	68.486%	70.678%
3	17:19:53	56.475%	0.009	-0.016	-0.008	430.700	427.800	68.006%	70.221%
X		56.729%	0.017	-0.017	-0.013	429.100	429.000	67.910%	70.028%
σ		0.282%	0.014	0.007	0.006	1.403	1.340	0.630%	0.765%
%RSD		0.496	86.920	44.980	46.480	0.327	0.312	0.927	1.092
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:19:15	0.025	0.032	0.016	62.036%				
2	17:19:34	0.026	0.029	0.018	62.723%				
3	17:19:53	0.035	0.024	0.022	62.723%				
X		0.029	0.028	0.019	62.494%				
σ		0.005	0.004	0.003	0.396%				
%RSD		18.950	14.830	16.940	0.634				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:23:02	52.496%	-0.048	28.290	30.130	0.000	18940.000	7933.000	8187.000
2	17:23:22	48.171%	0.018	29.200	29.930	0.000	18950.000	7870.000	7816.000
3	17:23:41	49.069%	0.038	32.490	29.390	0.000	18650.000	8038.000	8182.000
X		49.912%	0.003	29.990	29.820	0.000	18850.000	7947.000	8062.000
σ		2.282%	0.045	2.210	0.386	0.000	170.500	85.080	212.700
%RSD		4.573	1663.000	7.369	1.296	0.000	0.905	1.071	2.638
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:23:02	0.871	9000.000	0.000	2263.000	57950.000	58530.000	43.727%	2.008
2	17:23:22	0.806	9045.000	0.000	2265.000	56570.000	56700.000	39.708%	1.844
3	17:23:41	1.109	8832.000	0.000	2292.000	57870.000	59170.000	38.531%	2.005
X		0.928	8959.000	0.000	2273.000	57460.000	58130.000	40.655%	1.953
σ		0.160	112.100	0.000	16.250	774.500	1282.000	2.724%	0.094
%RSD		17.190	1.251	0.000	0.715	1.348	2.206	6.701	4.792
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:23:02	0.952	0.301	712.300	15040.000	14920.000	0.038	0.145	0.102
2	17:23:22	-0.496	0.239	725.900	15230.000	15440.000	0.034	0.103	0.067
3	17:23:41	-1.490	0.300	732.800	15210.000	15590.000	0.056	0.078	0.144
X		-0.345	0.280	723.700	15160.000	15320.000	0.043	0.109	0.104
σ		1.228	0.036	10.460	101.700	350.300	0.012	0.034	0.038
%RSD		356.300	12.760	1.446	0.671	2.287	27.780	31.190	36.870
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:23:02	0.158	2.102	2.025	1.146	-0.371	0.439	0.000	226.800
2	17:23:22	0.025	2.065	2.268	0.417	-0.284	0.614	0.000	228.800
3	17:23:41	-0.054	2.250	2.269	0.167	-0.186	0.340	0.000	229.500
X		0.043	2.139	2.187	0.577	-0.281	0.464	0.000	228.400
σ		0.107	0.098	0.141	0.508	0.093	0.139	0.000	1.420
%RSD		249.300	4.583	6.437	88.120	33.010	29.880	0.000	0.622
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:23:02	52.925%	0.380	0.454	52.894%	-0.083	-0.095	0.015	0.000
2	17:23:22	52.144%	0.437	0.463	51.336%	-0.086	-0.091	-0.036	-0.033
3	17:23:41	50.888%	0.406	0.405	50.429%	-0.083	-0.086	-0.023	-0.019
X		51.986%	0.408	0.441	51.553%	-0.084	-0.091	-0.015	-0.017
σ		1.027%	0.028	0.031	1.247%	0.002	0.004	0.026	0.017
%RSD		1.976	6.904	7.047	2.418	1.887	4.806	179.200	97.330
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:23:02	56.900%	0.042	-0.040	-0.031	426.100	424.400	68.008%	69.530%
2	17:23:22	55.845%	0.003	-0.027	-0.017	430.800	432.400	68.086%	69.634%
3	17:23:41	55.475%	0.057	-0.035	-0.044	430.900	434.500	68.623%	70.984%
X		56.073%	0.034	-0.034	-0.031	429.300	430.400	68.239%	70.049%
σ		0.739%	0.028	0.007	0.013	2.744	5.348	0.335%	0.811%
%RSD		1.318	82.100	20.130	42.970	0.639	1.242	0.490	1.158
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:23:02	0.029	0.022	0.010	62.893%				
2	17:23:22	0.025	0.026	0.006	62.529%				
3	17:23:41	0.023	0.025	0.011	62.943%				
X		0.026	0.024	0.009	62.788%				
σ		0.003	0.002	0.002	0.226%				
%RSD		11.320	7.540	25.010	0.360				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:26:51	50.009%	-0.068	86.390	91.980	0.000	19560.000	14220.000	14740.000
2	17:27:10	47.086%	-0.002	88.130	83.480	0.000	19390.000	14160.000	14220.000
3	17:27:29	44.170%	-0.044	89.580	85.010	0.000	18590.000	13930.000	14280.000
X		47.088%	-0.038	88.030	86.820	0.000	19180.000	14100.000	14410.000
σ		2.920%	0.033	1.596	4.529	0.000	520.000	155.000	284.800
%RSD		6.201	87.540	1.813	5.216	0.000	2.711	1.099	1.976
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:26:51	310.800	10390.000	0.000	4194.000	73460.000	73290.000	42.511%	6.136
2	17:27:10	309.000	9861.000	0.000	4206.000	71640.000	72740.000	39.861%	6.519
3	17:27:29	308.300	9822.000	0.000	4271.000	73500.000	73550.000	37.154%	7.195
X		309.400	10020.000	0.000	4224.000	72870.000	73190.000	39.842%	6.616
σ		1.285	314.700	0.000	41.380	1062.000	413.800	2.678%	0.536
%RSD		0.415	3.140	0.000	0.980	1.458	0.565	6.722	8.104
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:26:51	1.177	1.492	371.900	8943.000	9004.000	0.835	1.606	2.094
2	17:27:10	2.169	1.615	383.500	9225.000	9107.000	0.857	1.666	1.989
3	17:27:29	1.961	1.438	389.900	9430.000	9378.000	0.821	1.722	2.074
X		1.769	1.515	381.800	9199.000	9163.000	0.837	1.665	2.053
σ		0.523	0.091	9.124	244.500	193.000	0.018	0.058	0.056
%RSD		29.580	5.980	2.390	2.658	2.106	2.178	3.488	2.720
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:26:51	2.034	15.460	15.950	10.080	0.294	0.655	0.000	485.500
2	17:27:10	1.928	15.920	15.940	9.335	0.297	0.516	0.000	488.100
3	17:27:29	2.011	15.570	16.050	10.210	0.219	0.807	0.000	492.200
X		1.991	15.650	15.980	9.876	0.270	0.659	0.000	488.600
σ		0.056	0.242	0.061	0.474	0.044	0.146	0.000	3.332
%RSD		2.793	1.546	0.381	4.798	16.440	22.100	0.000	0.682
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:26:51	51.926%	9.204	9.418	51.633%	-0.079	-0.083	0.490	0.435
2	17:27:10	50.116%	8.997	9.574	49.341%	-0.075	-0.088	0.505	0.481
3	17:27:29	50.095%	9.172	9.484	49.528%	-0.080	-0.068	0.303	0.429
X		50.712%	9.124	9.492	50.167%	-0.078	-0.080	0.433	0.448
σ		1.051%	0.111	0.078	1.273%	0.002	0.010	0.112	0.029
%RSD		2.072	1.221	0.825	2.537	2.873	12.820	25.970	6.360
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:26:51	55.304%	-0.015	0.219	0.213	323.100	324.600	67.325%	69.252%
2	17:27:10	54.777%	0.013	0.225	0.217	318.600	320.200	67.699%	69.671%
3	17:27:29	54.694%	-0.012	0.249	0.225	320.800	322.500	67.121%	69.508%
X		54.925%	-0.005	0.231	0.218	320.800	322.400	67.382%	69.477%
σ		0.331%	0.015	0.016	0.006	2.284	2.242	0.293%	0.211%
%RSD		0.602	339.500	6.765	2.820	0.712	0.696	0.435	0.304
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:26:51	0.013	0.022	0.232	65.253%				
2	17:27:10	0.023	0.019	0.243	64.746%				
3	17:27:29	0.023	0.018	0.244	64.449%				
X		0.020	0.020	0.239	64.816%				
σ		0.006	0.002	0.007	0.407%				
%RSD		28.840	11.200	2.839	0.628				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:30:39	51.415%	-0.028	89.750	83.690	0.000	18780.000	14030.000	14060.000
2	17:30:59	51.191%	-0.027	78.460	80.330	0.000	17610.000	13330.000	13860.000
3	17:31:18	49.853%	-0.047	82.650	84.720	0.000	18530.000	14080.000	14680.000
X		50.819%	-0.034	83.620	82.910	0.000	18300.000	13810.000	14200.000
σ		0.845%	0.011	5.706	2.297	0.000	616.600	415.500	430.200
%RSD		1.662	33.200	6.824	2.770	0.000	3.369	3.008	3.029
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:30:39	-0.776	9441.000	0.000	3941.000	74850.000	76000.000	43.590%	0.977
2	17:30:59	-0.939	9019.000	0.000	3825.000	75810.000	76720.000	40.756%	1.122
3	17:31:18	-0.887	9288.000	0.000	4011.000	75250.000	76600.000	39.508%	1.656
X		-0.868	9249.000	0.000	3926.000	75300.000	76440.000	41.285%	1.252
σ		0.083	213.800	0.000	94.070	482.000	385.800	2.092%	0.358
%RSD		9.576	2.312	0.000	2.396	0.640	0.505	5.066	28.580
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:30:39	2.249	0.312	473.600	10090.000	10110.000	1.037	1.630	1.064
2	17:30:59	1.365	0.305	485.300	10210.000	10310.000	1.008	1.695	0.997
3	17:31:18	1.074	0.309	471.100	10070.000	10060.000	1.064	1.744	0.957
X		1.563	0.309	476.700	10120.000	10160.000	1.036	1.690	1.006
σ		0.612	0.003	7.592	75.980	134.100	0.028	0.058	0.054
%RSD		39.150	1.015	1.593	0.750	1.320	2.729	3.403	5.389
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:30:39	0.830	8.580	8.323	11.810	0.145	0.559	0.000	507.900
2	17:30:59	0.854	7.774	8.487	11.460	0.018	0.674	0.000	501.700
3	17:31:18	0.973	7.439	8.328	10.670	0.053	0.514	0.000	503.600
X		0.886	7.931	8.379	11.310	0.072	0.583	0.000	504.400
σ		0.077	0.587	0.093	0.585	0.066	0.083	0.000	3.155
%RSD		8.643	7.398	1.115	5.173	91.100	14.190	0.000	0.626
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:30:39	52.975%	8.059	7.977	52.731%	-0.087	-0.095	0.013	0.010
2	17:30:59	52.163%	8.089	7.914	51.932%	-0.085	-0.095	-0.010	-0.005
3	17:31:18	51.677%	7.927	8.070	51.083%	-0.080	-0.091	-0.070	-0.043
X		52.272%	8.025	7.987	51.915%	-0.084	-0.094	-0.023	-0.013
σ		0.656%	0.086	0.078	0.824%	0.004	0.002	0.043	0.027
%RSD		1.255	1.077	0.979	1.588	4.286	2.160	190.000	212.100
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:30:39	56.325%	-0.110	0.148	0.137	362.200	360.900	67.663%	69.144%
2	17:30:59	56.509%	-0.086	0.131	0.164	359.300	358.700	68.555%	70.106%
3	17:31:18	55.464%	-0.076	0.140	0.157	359.400	361.000	68.875%	71.085%
X		56.100%	-0.090	0.140	0.153	360.300	360.200	68.364%	70.112%
σ		0.558%	0.017	0.009	0.014	1.669	1.303	0.628%	0.971%
%RSD		0.994	19.280	6.183	8.992	0.463	0.362	0.919	1.385
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:30:39	0.012	0.016	0.001	64.161%				
2	17:30:59	0.013	0.013	0.001	63.827%				
3	17:31:18	0.012	0.016	-0.001	63.676%				
X		0.012	0.015	0.001	63.888%				
σ		0.000	0.002	0.001	0.248%				
%RSD		3.239	11.850	238.600	0.388				



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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	17:34:29	60.576%	-0.016	9.148	9.742	0.000	8.991	3.589	4.467
2	17:34:48	51.985%	0.012	11.700	10.920	0.000	8.216	3.530	3.555
3	17:35:07	51.427%	-0.027	10.820	10.210	0.000	7.954	3.330	3.507
X		54.663%	-0.011	10.560	10.290	0.000	8.387	3.483	3.843
σ		5.129%	0.020	1.296	0.596	0.000	0.539	0.136	0.541
%RSD		9.382	191.900	12.280	5.785	0.000	6.431	3.902	14.080
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:34:29	4.423	-460.800	0.000	3.056	28.190	30.720	43.569%	0.210
2	17:34:48	4.778	-461.200	0.000	5.044	10.980	25.850	42.990%	0.351
3	17:35:07	4.065	-458.500	0.000	3.125	14.180	32.150	41.189%	0.300
X		4.422	-460.200	0.000	3.742	17.780	29.570	42.583%	0.287
σ		0.356	1.484	0.000	1.128	9.155	3.299	1.241%	0.072
%RSD		8.063	0.323	0.000	30.150	51.480	11.160	2.914	24.960
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:34:29	0.323	0.530	0.546	14.990	13.730	0.009	0.071	-0.090
2	17:34:48	0.023	0.469	0.557	10.740	12.130	-0.004	0.004	-0.111
3	17:35:07	0.136	0.598	0.538	9.237	12.150	0.006	0.074	-0.074
X		0.161	0.532	0.547	11.660	12.670	0.004	0.050	-0.092
σ		0.151	0.064	0.010	2.983	0.920	0.007	0.040	0.019
%RSD		94.220	12.050	1.759	25.590	7.259	171.300	79.340	20.660
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:34:29	-0.147	11.120	10.580	-1.008	-0.345	0.155	0.000	0.566
2	17:34:48	-0.105	10.960	10.880	-0.215	-0.226	0.109	0.000	0.511
3	17:35:07	-0.077	11.870	11.150	0.573	0.140	-0.001	0.000	0.535
X		-0.110	11.320	10.870	-0.217	-0.144	0.088	0.000	0.537
σ		0.035	0.484	0.283	0.791	0.253	0.080	0.000	0.028
%RSD		31.940	4.278	2.603	364.700	175.800	91.180	0.000	5.163
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:34:29	56.121%	0.052	0.052	58.556%	-0.088	-0.093	0.077	0.058
2	17:34:48	53.905%	0.034	0.055	56.840%	-0.085	-0.087	0.029	0.035
3	17:35:07	52.564%	0.020	0.042	54.659%	-0.089	-0.088	0.030	0.083
X		54.197%	0.035	0.050	56.685%	-0.088	-0.089	0.045	0.059
σ		1.796%	0.016	0.007	1.953%	0.002	0.003	0.027	0.024
%RSD		3.314	44.570	13.430	3.446	2.463	3.733	60.140	41.010
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:34:29	60.197%	-0.059	-0.049	-0.045	0.794	0.868	70.969%	72.165%
2	17:34:48	59.934%	-0.057	-0.056	-0.052	0.754	0.759	70.738%	72.465%
3	17:35:07	58.411%	-0.035	-0.051	-0.035	0.836	0.897	70.022%	71.703%
X		59.514%	-0.050	-0.052	-0.044	0.794	0.841	70.577%	72.111%
σ		0.965%	0.013	0.004	0.009	0.041	0.073	0.494%	0.384%
%RSD		1.621	25.960	7.238	20.110	5.144	8.685	0.699	0.532
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:34:29	0.010	0.012	0.022	68.158%				
2	17:34:48	0.008	0.014	0.024	69.023%				
3	17:35:07	0.012	0.009	0.018	70.146%				
X		0.010	0.012	0.021	69.109%				
σ		0.002	0.003	0.003	0.997%				
%RSD		17.880	22.310	11.970	1.442				

CCV 1558997 5/1/2015 5:38:06 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	17:38:06	108.036%	108.700	104.200	96.050	0.000	48960.000	48540.000	48260.000
2	17:38:25	106.287%	104.600	102.300	96.710	0.000	49460.000	48490.000	48900.000
3	17:38:45	103.238%	106.000	99.810	99.470	0.000	48260.000	48340.000	49300.000
X		105.854%	106.446%	102.087%	97.413%	0.000	97.788%	96.909%	97.641%
σ		2.428%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.294	1.958	2.152	1.863	0.000	1.235	0.219	1.074
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:38:06	481.800	4767.000	0.000	48740.000	46620.000	46780.000	101.400%	95.990
2	17:38:25	482.500	4780.000	0.000	50590.000	48560.000	49160.000	94.165%	102.600
3	17:38:45	501.600	4808.000	0.000	49130.000	48740.000	49830.000	95.897%	100.700
X		97.729%	95.702%	0.000	98.976%	95.950%	97.185%	97.154%	99.762%
σ		n/a	n/a	0.000	n/a	n/a	n/a	3.778%	n/a
%RSD		2.293	0.438	0.000	1.969	2.444	3.302	3.888	3.417
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:38:06	99.550	97.950	476.700	24310.000	23900.000	98.940	104.200	104.300
2	17:38:25	100.900	103.200	502.900	25990.000	25660.000	106.000	110.100	110.200
3	17:38:45	101.900	104.100	496.100	25580.000	25200.000	103.700	108.800	109.300
X		100.764%	101.771%	98.377%	101.173%	99.672%	102.890%	107.701%	107.929%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.160	3.284	2.765	3.467	3.662	3.497	2.895	2.977
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:38:06	104.600	101.800	103.100	104.700	107.800	106.800	0.000	102.200
2	17:38:25	109.900	107.400	107.400	108.600	110.100	109.900	0.000	103.400
3	17:38:45	108.400	106.600	105.100	107.200	109.100	110.400	0.000	102.900
X		107.628%	105.296%	105.206%	106.838%	108.986%	109.046%	0.000	102.843%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.520	2.900	2.071	1.883	1.038	1.771	0.000	0.553
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:38:06	87.362%	97.020	95.540	84.856%	100.700	100.900	97.880	98.650
2	17:38:25	87.211%	99.530	98.380	85.349%	101.500	101.800	99.990	100.700
3	17:38:45	88.616%	99.780	100.500	86.192%	100.500	101.100	99.240	99.620
X		87.730%	98.775%	98.132%	85.466%	100.920%	101.236%	99.037%	99.660%
σ		0.771%	n/a	n/a	0.676%	n/a	n/a	n/a	n/a
%RSD		0.879	1.548	2.528	0.791	0.549	0.452	1.084	1.037
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:38:06	81.899%	97.440	97.570	97.490	97.010	97.100	81.722%	81.208%
2	17:38:25	82.487%	98.110	98.760	99.680	99.120	98.560	83.725%	83.692%
3	17:38:45	84.332%	97.180	99.680	98.770	98.610	98.390	85.731%	85.257%
X		82.906%	97.578%	98.672%	98.650%	98.248%	98.017%	83.726%	83.386%
σ		1.269%	n/a	n/a	n/a	n/a	n/a	2.004%	2.042%
%RSD		1.531	0.489	1.073	1.116	1.122	0.816	2.394	2.449
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:38:06	101.000	102.300	103.400	74.294%				
2	17:38:25	103.400	104.500	105.600	75.801%				
3	17:38:45	105.500	106.100	107.600	75.661%				
X		103.310%	104.267%	105.536%	75.252%				
σ		n/a	n/a	n/a	0.833%				
%RSD		2.205	1.835	2.006	1.107				

CCB8 5/1/2015 5:44:36 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:44:55	117.447%	-0.042	0.687	0.661	0.000	12.000	7.075	6.387
2	17:45:14	108.288%	-0.012	0.694	0.552	0.000	12.040	5.963	6.257
3	17:45:33	119.404%	0.018	0.583	0.448	0.000	11.430	6.118	5.449
X		115.046%	-0.012	0.655	0.554	0.000	11.830	6.385	6.031
σ		5.934%	0.030	0.062	0.106	0.000	0.344	0.602	0.508
%RSD		5.158	252.400	9.488	19.210	0.000	2.909	9.425	8.426
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:44:55	2.322	-483.400	0.000	5.686	0.410	9.698	117.954%	-0.012
2	17:45:14	2.028	-481.500	0.000	6.452	5.429	8.519	114.854%	0.051
3	17:45:33	2.103	-483.400	0.000	6.340	2.049	6.341	111.331%	0.082
X		2.151	-482.800	0.000	6.159	2.629	8.186	114.713%	0.040
σ		0.153	1.090	0.000	0.414	2.560	1.703	3.314%	0.048
%RSD		7.108	0.226	0.000	6.716	97.340	20.800	2.889	119.100
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:44:55	0.046	-0.007	0.183	8.420	7.680	0.014	0.008	0.521
2	17:45:14	0.031	-0.002	0.215	7.726	6.937	0.021	0.019	0.535
3	17:45:33	0.055	0.027	0.235	9.024	6.249	0.017	-0.012	0.537
X		0.044	0.006	0.211	8.390	6.955	0.017	0.005	0.531
σ		0.012	0.018	0.026	0.650	0.716	0.003	0.016	0.009
%RSD		27.260	299.700	12.380	7.744	10.290	19.390	327.000	1.653
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:44:55	0.468	0.922	0.632	-0.006	-0.128	0.116	0.000	0.076
2	17:45:14	0.595	1.036	0.815	-0.006	-0.032	-0.030	0.000	0.078
3	17:45:33	0.478	1.125	1.158	0.029	0.160	0.029	0.000	0.067
X		0.514	1.028	0.868	0.006	-0.000	0.039	0.000	0.074
σ		0.071	0.102	0.267	0.020	0.146	0.073	0.000	0.006
%RSD		13.730	9.930	30.750	348.600	235900.000	190.100	0.000	7.526
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:44:55	98.643%	0.227	0.250	101.378%	-0.067	-0.072	0.051	0.035
2	17:45:14	99.760%	0.245	0.234	102.362%	-0.062	-0.060	0.069	0.057
3	17:45:33	100.415%	0.198	0.196	102.327%	-0.053	-0.056	0.072	0.059
X		99.606%	0.224	0.227	102.022%	-0.061	-0.063	0.064	0.050
σ		0.896%	0.024	0.028	0.558%	0.007	0.008	0.011	0.013
%RSD		0.899	10.690	12.190	0.547	11.470	13.200	17.860	26.250
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:44:55	92.567%	0.005	-0.005	-0.006	0.046	0.065	85.881%	85.342%
2	17:45:14	92.557%	0.021	-0.006	-0.000	0.048	0.057	87.974%	88.003%
3	17:45:33	93.591%	0.047	-0.016	0.001	0.036	0.068	89.531%	88.449%
X		92.905%	0.024	-0.009	-0.002	0.043	0.063	87.796%	87.264%
σ		0.594%	0.021	0.006	0.004	0.006	0.006	1.831%	1.680%
%RSD		0.640	88.590	68.520	179.200	14.120	9.456	2.086	1.925
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:44:55	0.024	0.022	0.036	84.044%				
2	17:45:14	0.020	0.022	0.039	85.403%				
3	17:45:33	0.025	0.021	0.038	84.834%				
X		0.023	0.022	0.038	84.760%				
σ		0.003	0.000	0.001	0.683%				
%RSD		11.060	1.907	3.549	0.805				

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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	17:48:47	76.819%	-0.068	9.373	9.789	0.000	16.770	4.598	4.677
2	17:49:06	62.867%	-0.035	11.980	10.220	0.000	16.180	4.399	4.183
3	17:49:25	62.012%	-0.068	9.989	9.137	0.000	16.560	5.145	4.062
X		67.233%	-0.057	10.450	9.717	0.000	16.500	4.714	4.307
σ		8.313%	0.019	1.360	0.547	0.000	0.295	0.387	0.326
%RSD		12.364	33.460	13.020	5.632	0.000	1.790	8.202	7.564
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:48:47	12.540	-436.100	0.000	11.450	30.360	20.320	54.673%	2.344
2	17:49:06	10.530	-426.800	0.000	9.571	13.310	24.510	51.597%	1.629
3	17:49:25	5.236	-432.200	0.000	8.585	17.530	26.270	47.426%	1.446
X		9.435	-431.700	0.000	9.867	20.400	23.700	51.232%	1.806
σ		3.773	4.667	0.000	1.453	8.881	3.055	3.637%	0.474
%RSD		39.990	1.081	0.000	14.730	43.540	12.890	7.099	26.250
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:48:47	-0.192	0.457	0.724	19.720	17.090	0.015	0.049	0.358
2	17:49:06	-0.563	0.395	0.740	16.030	17.320	0.015	0.076	0.266
3	17:49:25	-1.128	0.436	0.755	16.710	17.140	0.019	0.028	0.363
X		-0.628	0.429	0.740	17.480	17.180	0.017	0.051	0.329
σ		0.472	0.031	0.016	1.962	0.123	0.002	0.024	0.055
%RSD		75.120	7.255	2.132	11.220	0.716	12.140	46.710	16.580
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:48:47	0.297	12.940	13.000	-0.321	-0.122	0.097	0.000	0.401
2	17:49:06	0.346	12.590	12.990	-0.163	-0.165	0.127	0.000	0.400
3	17:49:25	0.361	13.320	13.260	0.146	-0.151	0.127	0.000	0.416
X		0.335	12.950	13.080	-0.113	-0.146	0.117	0.000	0.406
σ		0.033	0.368	0.156	0.238	0.022	0.017	0.000	0.009
%RSD		9.987	2.842	1.190	211.100	15.050	14.850	0.000	2.241
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:48:47	63.568%	0.170	0.146	65.827%	-0.081	-0.084	0.052	0.031
2	17:49:06	61.762%	0.092	0.102	63.881%	-0.081	-0.084	0.014	0.030
3	17:49:25	60.078%	0.091	0.113	62.306%	-0.078	-0.082	0.013	0.014
X		61.803%	0.118	0.120	64.005%	-0.080	-0.083	0.026	0.025
σ		1.745%	0.045	0.023	1.764%	0.002	0.001	0.022	0.010
%RSD		2.824	38.130	19.180	2.756	2.709	1.462	84.670	38.570
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:48:47	66.222%	0.131	0.032	0.029	0.851	0.923	74.266%	75.340%
2	17:49:06	64.423%	0.108	0.025	0.000	0.919	0.898	73.758%	75.006%
3	17:49:25	64.052%	0.105	-0.007	0.002	0.818	0.848	73.451%	74.870%
X		64.899%	0.114	0.017	0.010	0.863	0.890	73.825%	75.072%
σ		1.161%	0.014	0.020	0.017	0.052	0.038	0.412%	0.242%
%RSD		1.789	12.620	122.100	158.100	5.976	4.324	0.557	0.322
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:48:47	0.016	0.017	0.031	75.072%				
2	17:49:06	0.014	0.018	0.034	74.185%				
3	17:49:25	0.016	0.016	0.032	73.508%				
X		0.015	0.017	0.032	74.255%				
σ		0.001	0.001	0.001	0.784%				
%RSD		7.780	4.648	4.249	1.056				

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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	17:52:36	52.668%	-0.029	164.700	166.200	0.000	218600.000	6574.000	6921.000
2	17:52:55	51.769%	0.013	154.500	168.200	0.000	210500.000	6559.000	6757.000
3	17:53:14	47.435%	-0.024	158.000	159.100	0.000	209500.000	6191.000	6494.000
X		50.624%	-0.013	159.100	164.500	0.000	212800.000	6441.000	6724.000
σ		2.798%	0.023	5.180	4.791	0.000	4983.000	217.200	215.200
%RSD		5.527	168.000	3.256	2.913	0.000	2.341	3.373	3.200
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:52:36	186.000	9150.000	0.000	2672.000	66380.000	69640.000	43.058%	5.188
2	17:52:55	199.300	9101.000	0.000	2824.000	69450.000	72390.000	40.792%	6.199
3	17:53:14	191.400	9142.000	0.000	2739.000	69510.000	71260.000	40.113%	6.667
X		192.300	9131.000	0.000	2745.000	68450.000	71090.000	41.321%	6.018
σ		6.655	26.260	0.000	76.280	1788.000	1383.000	1.542%	0.756
%RSD		3.461	0.288	0.000	2.779	2.612	1.945	3.732	12.560
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:52:36	5.187	0.670	59.190	252.300	336.000	0.476	2.808	2.368
2	17:52:55	4.641	0.611	58.610	241.900	317.100	0.501	3.167	2.389
3	17:53:14	4.448	0.620	58.620	241.900	316.800	0.473	2.902	2.365
X		4.759	0.633	58.810	245.400	323.300	0.483	2.959	2.374
σ		0.384	0.032	0.333	6.033	11.010	0.016	0.186	0.013
%RSD		8.062	5.011	0.566	2.459	3.404	3.262	6.282	0.549
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:52:36	0.636	1.145	1.560	2.193	3.868	4.489	0.000	325.100
2	17:52:55	0.821	1.153	1.302	2.332	3.899	4.440	0.000	328.900
3	17:53:14	0.779	0.918	0.870	2.474	3.863	4.227	0.000	326.600
X		0.745	1.072	1.244	2.333	3.877	4.385	0.000	326.800
σ		0.097	0.134	0.349	0.141	0.019	0.139	0.000	1.902
%RSD		12.980	12.460	28.040	6.024	0.496	3.175	0.000	0.582
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:52:36	52.915%	3.396	3.334	51.467%	-0.087	-0.089	-0.023	0.002
2	17:52:55	51.333%	3.242	3.434	49.996%	-0.087	-0.089	0.033	0.016
3	17:53:14	51.616%	3.379	3.409	49.460%	-0.078	-0.092	-0.006	0.021
X		51.955%	3.339	3.392	50.307%	-0.084	-0.090	0.001	0.013
σ		0.844%	0.084	0.052	1.039%	0.005	0.002	0.029	0.010
%RSD		1.624	2.526	1.532	2.066	6.263	2.057	2036.000	78.340
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:52:36	54.867%	-0.000	6.208	6.420	75.790	75.020	66.593%	68.388%
2	17:52:55	54.710%	0.001	6.214	6.278	74.810	75.790	66.820%	69.393%
3	17:53:14	54.759%	-0.034	6.021	6.196	75.950	74.640	67.658%	69.195%
X		54.778%	-0.011	6.147	6.298	75.510	75.150	67.024%	68.992%
σ		0.080%	0.020	0.110	0.114	0.616	0.585	0.561%	0.532%
%RSD		0.147	180.500	1.786	1.806	0.815	0.779	0.837	0.772
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:52:36	0.023	0.017	0.284	57.514%				
2	17:52:55	0.021	0.024	0.285	58.537%				
3	17:53:14	0.021	0.019	0.284	60.632%				
X		0.021	0.020	0.284	58.895%				
σ		0.001	0.004	0.000	1.590%				
%RSD		5.920	19.260	0.158	2.699				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:26	50.070%	-0.006	172.400	164.500	0.000	221000.000	6685.000	6602.000
2	17:56:45	50.194%	-0.068	159.400	167.400	0.000	217400.000	6507.000	6455.000
3	17:57:05	46.160%	-0.068	156.500	152.500	0.000	201600.000	6044.000	6133.000
X		48.808%	-0.047	162.800	161.500	0.000	213400.000	6412.000	6396.000
σ		2.294%	0.036	8.487	7.919	0.000	10320.000	331.000	240.000
%RSD		4.700	75.730	5.214	4.904	0.000	4.836	5.161	3.751
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:26	2.843	8478.000	0.000	2664.000	67880.000	68930.000	42.197%	1.245
2	17:56:45	2.804	8670.000	0.000	2646.000	66260.000	68530.000	40.712%	1.221
3	17:57:05	2.819	8108.000	0.000	2595.000	66620.000	69030.000	39.783%	0.931
X		2.822	8419.000	0.000	2635.000	66920.000	68830.000	40.897%	1.132
σ		0.020	285.700	0.000	35.880	850.900	263.400	1.217%	0.175
%RSD		0.698	3.394	0.000	1.361	1.272	0.383	2.977	15.440
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:26	5.675	0.348	45.970	9.273	97.830	0.357	2.811	2.158
2	17:56:45	7.006	0.361	46.090	10.040	100.900	0.317	2.889	2.314
3	17:57:05	4.995	0.402	46.500	9.851	94.330	0.360	2.918	2.055
X		5.892	0.370	46.180	9.721	97.690	0.345	2.873	2.175
σ		1.023	0.028	0.279	0.399	3.290	0.024	0.055	0.131
%RSD		17.360	7.507	0.605	4.107	3.368	6.917	1.912	6.005
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:26	0.711	0.843	1.007	2.779	3.788	4.790	0.000	325.100
2	17:56:45	0.630	0.943	1.118	1.447	3.940	4.476	0.000	324.000
3	17:57:05	0.697	0.984	0.710	1.716	3.974	4.647	0.000	324.700
X		0.679	0.923	0.945	1.981	3.901	4.638	0.000	324.600
σ		0.043	0.073	0.211	0.704	0.099	0.157	0.000	0.569
%RSD		6.355	7.858	22.340	35.560	2.545	3.389	0.000	0.175
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:26	52.287%	3.282	3.296	50.793%	-0.089	-0.094	0.026	0.056
2	17:56:45	51.255%	3.340	3.429	50.016%	-0.074	-0.092	0.071	0.067
3	17:57:05	50.341%	3.064	3.307	48.611%	-0.080	-0.087	0.005	0.023
X		51.294%	3.229	3.344	49.807%	-0.081	-0.091	0.034	0.049
σ		0.974%	0.145	0.074	1.106%	0.008	0.004	0.034	0.023
%RSD		1.899	4.499	2.210	2.220	9.418	4.090	99.750	47.660
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:26	54.766%	-0.017	4.491	4.418	72.160	73.410	66.622%	68.657%
2	17:56:45	54.718%	0.010	4.595	4.646	73.130	73.910	66.981%	69.094%
3	17:57:05	54.452%	0.017	4.533	4.607	73.320	73.530	67.185%	68.557%
X		54.645%	0.003	4.540	4.557	72.870	73.620	66.929%	68.769%
σ		0.169%	0.018	0.052	0.122	0.622	0.261	0.285%	0.286%
%RSD		0.309	514.700	1.145	2.671	0.853	0.355	0.426	0.416
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:56:26	0.016	0.015	0.122	60.810%				
2	17:56:45	0.013	0.014	0.117	59.806%				
3	17:57:05	0.015	0.014	0.112	61.035%				
X		0.015	0.014	0.117	60.551%				
σ		0.002	0.001	0.005	0.655%				
%RSD		10.300	4.170	4.332	1.081				

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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	18:00:15	45.914%	-0.045	57.350	54.570	0.000	493300.000	56420.000	55190.000
2	18:00:34	43.873%	-0.044	57.440	52.730	0.000	514400.000	56390.000	57190.000
3	18:00:54	41.859%	-0.043	49.540	52.240	0.000	493300.000	54940.000	56040.000
X		43.882%	-0.044	54.780	53.180	0.000	500300.000	55920.000	56140.000
σ		2.028%	0.001	4.535	1.227	0.000	12200.000	850.200	1006.000
%RSD		4.621	2.301	8.280	2.307	0.000	2.438	1.520	1.792
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:00:15	1.794	8368.000	0.000	6600.000	454100.000	441200.000	41.998%	1.088
2	18:00:34	1.754	8550.000	0.000	6767.000	472000.000	454600.000	39.406%	0.965
3	18:00:54	2.160	8837.000	0.000	6630.000	460800.000	451900.000	40.669%	0.957
X		1.903	8585.000	0.000	6666.000	462300.000	449200.000	40.691%	1.003
σ		0.224	236.700	0.000	89.080	9040.000	7059.000	1.296%	0.073
%RSD		11.760	2.757	0.000	1.336	1.956	1.571	3.185	7.320
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:00:15	-0.708	0.627	656.400	453.300	1004.000	0.430	0.427	4.023
2	18:00:34	-0.905	0.701	663.600	466.700	990.700	0.440	0.093	3.871
3	18:00:54	-1.147	0.627	639.300	430.600	915.200	0.410	0.048	3.753
X		-0.920	0.652	653.100	450.200	970.000	0.426	0.189	3.882
σ		0.220	0.043	12.470	18.250	47.950	0.015	0.207	0.135
%RSD		23.910	6.531	1.910	4.054	4.944	3.589	109.300	3.486
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:00:15	0.235	6.445	6.367	3.585	-0.022	0.659	0.000	2774.000
2	18:00:34	0.304	5.989	6.529	2.159	0.046	0.779	0.000	2770.000
3	18:00:54	0.198	6.188	6.214	2.528	-0.035	0.575	0.000	2775.000
X		0.246	6.208	6.370	2.757	-0.004	0.671	0.000	2773.000
σ		0.053	0.229	0.158	0.740	0.044	0.103	0.000	2.694
%RSD		21.750	3.683	2.473	26.850	1244.000	15.280	0.000	0.097
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:00:15	51.260%	0.707	0.699	47.355%	-0.083	-0.093	-0.026	-0.029
2	18:00:34	51.060%	0.591	0.658	46.586%	-0.082	-0.092	-0.013	-0.016
3	18:00:54	50.413%	0.650	0.659	45.371%	-0.085	-0.092	-0.047	-0.039
X		50.911%	0.649	0.672	46.438%	-0.084	-0.092	-0.028	-0.028
σ		0.443%	0.058	0.023	1.001%	0.002	0.001	0.017	0.012
%RSD		0.869	8.910	3.453	2.155	1.988	0.722	60.480	41.130
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:00:15	52.990%	-0.043	0.015	0.103	209.300	209.500	62.935%	64.108%
2	18:00:34	52.263%	-0.058	0.049	0.084	212.400	210.600	63.264%	65.431%
3	18:00:54	52.136%	-0.037	0.029	0.069	210.200	210.800	63.164%	64.109%
X		52.463%	-0.046	0.031	0.085	210.700	210.300	63.121%	64.549%
σ		0.461%	0.011	0.017	0.017	1.588	0.687	0.169%	0.763%
%RSD		0.878	23.270	56.060	20.140	0.754	0.327	0.267	1.183
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:00:15	0.007	0.007	0.052	52.765%				
2	18:00:34	0.005	0.007	0.065	52.843%				
3	18:00:54	0.010	0.008	0.052	53.162%				
X		0.007	0.008	0.056	52.923%				
σ		0.002	0.001	0.007	0.210%				
%RSD		32.920	7.854	13.110	0.397				

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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	18:04:04	47.220%	-0.002	64.770	54.290	0.000	517900.000	60530.000	61170.000
2	18:04:23	43.707%	-0.021	60.120	56.410	0.000	528600.000	59630.000	58540.000
3	18:04:42	41.698%	-0.019	58.140	54.830	0.000	504600.000	58200.000	57630.000
X		44.209%	-0.014	61.010	55.170	0.000	517000.000	59450.000	59110.000
σ		2.795%	0.010	3.406	1.099	0.000	12020.000	1173.000	1837.000
%RSD		6.322	72.290	5.583	1.992	0.000	2.326	1.973	3.107
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:04:04	0.649	9029.000	0.000	6989.000	484900.000	470800.000	41.170%	1.064
2	18:04:23	0.765	9230.000	0.000	6751.000	471600.000	462700.000	40.820%	0.953
3	18:04:42	0.499	8916.000	0.000	6759.000	471700.000	461800.000	39.769%	0.783
X		0.638	9058.000	0.000	6833.000	476100.000	465100.000	40.587%	0.933
σ		0.133	159.300	0.000	135.200	7645.000	4943.000	0.729%	0.141
%RSD		20.900	1.758	0.000	1.978	1.606	1.063	1.797	15.160
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:04:04	0.041	0.685	663.700	453.400	1013.000	0.422	0.383	4.066
2	18:04:23	-0.241	0.705	646.000	424.900	964.500	0.413	0.007	3.942
3	18:04:42	0.026	0.653	650.800	437.300	975.200	0.427	0.070	4.002
X		-0.058	0.681	653.500	438.500	984.300	0.420	0.153	4.004
σ		0.158	0.026	9.144	14.280	25.590	0.007	0.201	0.062
%RSD		273.600	3.847	1.399	3.257	2.600	1.729	131.400	1.551
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:04:04	0.432	0.739	0.828	0.642	0.122	0.610	0.000	2819.000
2	18:04:23	0.419	0.923	0.622	2.802	0.059	0.901	0.000	2795.000
3	18:04:42	0.361	0.593	0.802	1.985	0.031	0.698	0.000	2801.000
X		0.404	0.752	0.750	1.810	0.071	0.736	0.000	2805.000
σ		0.037	0.165	0.112	1.090	0.046	0.149	0.000	12.400
%RSD		9.284	21.980	14.930	60.260	65.150	20.250	0.000	0.442
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:04:04	50.600%	0.745	0.748	45.939%	-0.087	-0.088	-0.042	-0.033
2	18:04:23	50.795%	0.716	0.735	45.828%	-0.085	-0.087	-0.074	-0.052
3	18:04:42	50.237%	0.642	0.721	45.372%	-0.088	-0.093	-0.049	-0.041
X		50.544%	0.701	0.735	45.713%	-0.087	-0.089	-0.055	-0.042
σ		0.284%	0.053	0.014	0.300%	0.001	0.003	0.017	0.009
%RSD		0.561	7.517	1.857	0.656	1.562	3.646	30.250	22.370
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:04:04	51.867%	-0.072	0.010	0.111	214.100	214.100	63.011%	63.845%
2	18:04:23	52.075%	-0.049	0.004	0.056	216.700	216.600	63.073%	64.406%
3	18:04:42	52.539%	-0.087	0.019	0.090	215.800	213.200	63.242%	63.930%
X		52.160%	-0.069	0.011	0.086	215.500	214.600	63.109%	64.060%
σ		0.344%	0.019	0.008	0.028	1.326	1.800	0.120%	0.302%
%RSD		0.659	27.790	69.220	32.450	0.615	0.839	0.189	0.472
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:04:04	0.007	0.005	0.011	48.836%				
2	18:04:23	0.008	0.006	0.011	49.562%				
3	18:04:42	0.005	0.010	0.011	49.702%				
X		0.007	0.007	0.011	49.366%				
σ		0.002	0.002	0.000	0.465%				
%RSD		21.870	33.790	2.658	0.942				



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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	18:07:52	47.657%	0.346	121.300	120.700	0.000	250700.000	17570.000	18140.000
2	18:08:12	43.340%	0.265	115.800	108.500	0.000	231900.000	16310.000	17010.000
3	18:08:31	41.524%	0.403	118.100	105.700	0.000	230100.000	17000.000	17240.000
X		44.174%	0.338	118.400	111.600	0.000	237600.000	16960.000	17460.000
σ		3.150%	0.069	2.782	7.979	0.000	11400.000	632.000	594.200
%RSD		7.131	20.490	2.350	7.148	0.000	4.800	3.726	3.403
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:52	7619.000	38520.000	0.000	8808.000	103000.000	102900.000	38.217%	98.480
2	18:08:12	7179.000	38290.000	0.000	8666.000	98870.000	100200.000	37.980%	95.980
3	18:08:31	7088.000	37010.000	0.000	8658.000	100200.000	102300.000	37.167%	91.290
X		7295.000	37940.000	0.000	8711.000	100700.000	101800.000	37.788%	95.250
σ		284.100	813.200	0.000	84.600	2118.000	1451.000	0.551%	3.652
%RSD		3.894	2.144	0.000	0.971	2.103	1.426	1.458	3.834
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:52	69.440	12.400	506.800	5082.000	5122.000	4.269	17.900	9.333
2	18:08:12	66.260	12.290	490.200	4807.000	4947.000	3.876	17.630	9.149
3	18:08:31	68.520	12.300	513.100	4929.000	4985.000	4.118	16.980	8.952
X		68.070	12.330	503.400	4939.000	5018.000	4.088	17.510	9.144
σ		1.637	0.062	11.800	137.700	92.080	0.198	0.472	0.190
%RSD		2.404	0.505	2.344	2.787	1.835	4.847	2.697	2.082
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:52	7.443	16.230	17.320	73.770	4.046	4.538	0.000	339.600
2	18:08:12	6.997	17.170	16.700	76.440	4.226	4.653	0.000	340.300
3	18:08:31	7.012	16.840	17.610	72.640	3.768	5.108	0.000	301.700
X		7.151	16.750	17.210	74.280	4.013	4.767	0.000	327.200
σ		0.253	0.474	0.466	1.951	0.231	0.301	0.000	22.100
%RSD		3.540	2.828	2.707	2.627	5.746	6.323	0.000	6.753
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:52	51.472%	8.944	8.953	47.993%	-0.057	-0.066	0.027	0.060
2	18:08:12	49.859%	8.629	9.072	45.503%	-0.059	-0.053	0.020	0.077
3	18:08:31	50.177%	8.443	8.713	45.294%	-0.061	-0.065	0.092	0.068
X		50.503%	8.672	8.913	46.263%	-0.059	-0.061	0.046	0.069
σ		0.854%	0.253	0.183	1.502%	0.002	0.007	0.040	0.009
%RSD		1.692	2.922	2.055	3.246	3.000	11.790	85.680	12.400
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:52	52.900%	0.147	485.500	486.700	76.610	77.650	65.475%	66.775%
2	18:08:12	52.153%	0.159	476.100	485.200	79.070	78.080	64.746%	66.551%
3	18:08:31	52.396%	0.165	479.000	483.500	77.160	77.500	64.941%	67.020%
X		52.483%	0.157	480.200	485.100	77.620	77.750	65.054%	66.782%
σ		0.381%	0.009	4.778	1.605	1.293	0.300	0.378%	0.235%
%RSD		0.726	5.776	0.995	0.331	1.666	0.386	0.581	0.351
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:07:52	0.242	0.227	3.380	55.156%				
2	18:08:12	0.246	0.253	3.429	55.336%				
3	18:08:31	0.268	0.254	3.372	56.237%				
X		0.252	0.245	3.394	55.576%				
σ		0.014	0.015	0.031	0.579%				
%RSD		5.654	6.296	0.918	1.042				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:11:41	43.273%	0.456	113.500	116.300	0.000	253800.000	17430.000	17280.000
2	18:12:00	41.031%	0.233	112.200	105.600	0.000	234300.000	16910.000	17100.000
3	18:12:19	41.007%	0.235	115.100	113.300	0.000	230500.000	16360.000	16440.000
X		41.770%	0.308	113.600	111.700	0.000	239500.000	16900.000	16940.000
σ		1.301%	0.128	1.449	5.504	0.000	12530.000	535.200	443.400
%RSD		3.114	41.510	1.276	4.926	0.000	5.229	3.167	2.617
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:11:41	2416.000	29070.000	0.000	7819.000	97580.000	99090.000	37.675%	2.939
2	18:12:00	2290.000	27690.000	0.000	7950.000	102200.000	102300.000	35.945%	3.630
3	18:12:19	2354.000	28420.000	0.000	7770.000	100600.000	102500.000	33.511%	3.514
X		2353.000	28390.000	0.000	7846.000	100100.000	101300.000	35.710%	3.361
σ		63.170	690.400	0.000	92.880	2336.000	1921.000	2.092%	0.370
%RSD		2.684	2.431	0.000	1.184	2.333	1.897	5.857	11.010
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:11:41	46.560	0.898	457.400	18.610	137.900	2.124	12.490	5.651
2	18:12:00	49.330	0.908	458.300	17.780	135.300	2.177	11.630	5.428
3	18:12:19	48.120	0.846	473.900	16.690	127.400	2.216	12.980	5.721
X		48.000	0.884	463.200	17.700	133.500	2.172	12.370	5.600
σ		1.389	0.033	9.236	0.965	5.507	0.047	0.686	0.153
%RSD		2.893	3.749	1.994	5.451	4.124	2.147	5.547	2.731
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:11:41	3.649	4.551	4.743	66.710	4.016	5.411	0.000	330.100
2	18:12:00	3.690	4.165	4.098	68.480	4.331	5.709	0.000	333.000
3	18:12:19	3.636	4.562	4.907	67.700	3.935	5.163	0.000	334.400
X		3.658	4.426	4.583	67.630	4.094	5.428	0.000	332.500
σ		0.028	0.227	0.428	0.886	0.209	0.273	0.000	2.233
%RSD		0.763	5.117	9.330	1.310	5.115	5.033	0.000	0.671
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:11:41	49.122%	8.650	8.864	46.819%	-0.088	-0.087	0.031	0.041
2	18:12:00	47.280%	8.830	9.067	44.490%	-0.084	-0.088	-0.017	0.012
3	18:12:19	46.757%	8.835	8.853	43.649%	-0.071	-0.082	-0.045	0.006
X		47.720%	8.772	8.928	44.986%	-0.081	-0.086	-0.011	0.020
σ		1.242%	0.106	0.120	1.642%	0.009	0.003	0.038	0.019
%RSD		2.603	1.207	1.347	3.650	11.340	3.532	364.700	96.310
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:11:41	51.733%	-0.068	462.600	463.000	50.600	50.460	64.957%	66.608%
2	18:12:00	50.753%	-0.028	464.600	473.600	51.460	50.340	64.308%	66.486%
3	18:12:19	51.032%	-0.067	467.400	467.100	49.730	50.930	64.972%	66.677%
X		51.173%	-0.054	464.900	467.900	50.600	50.580	64.746%	66.590%
σ		0.505%	0.023	2.398	5.336	0.865	0.310	0.379%	0.097%
%RSD		0.986	41.660	0.516	1.141	1.710	0.613	0.586	0.145
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:11:41	0.142	0.150	0.039	58.853%				
2	18:12:00	0.155	0.153	0.038	57.393%				
3	18:12:19	0.160	0.157	0.043	57.402%				
X		0.152	0.153	0.040	57.883%				
σ		0.010	0.004	0.003	0.840%				
%RSD		6.286	2.324	7.011	1.451				

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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	18:15:29	44.236%	0.189	170.600	174.300	0.000	203000.000	8063.000	8117.000
2	18:15:48	41.730%	0.081	162.200	153.900	0.000	197300.000	7771.000	7941.000
3	18:16:10	41.214%	0.259	159.500	155.300	0.000	194500.000	7401.000	7486.000
X		42.393%	0.176	164.100	161.200	0.000	198200.000	7745.000	7848.000
σ		1.617%	0.090	5.753	11.400	0.000	4344.000	331.700	326.100
%RSD		3.814	50.990	3.506	7.072	0.000	2.191	4.283	4.155
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:15:29	4333.000	20850.000	0.000	3729.000	65790.000	66670.000	38.191%	129.300
2	18:15:48	4014.000	19110.000	0.000	3702.000	65280.000	65530.000	35.689%	135.700
3	18:16:10	4005.000	18980.000	0.000	3648.000	64640.000	66860.000	34.200%	147.600
X		4117.000	19650.000	0.000	3693.000	65240.000	66350.000	36.027%	137.500
σ		186.700	1046.000	0.000	41.060	578.500	719.200	2.017%	9.280
%RSD		4.535	5.325	0.000	1.112	0.887	1.084	5.598	6.747
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:15:29	22.690	6.835	196.300	4621.000	4658.000	2.519	6.122	6.291
2	18:15:48	23.680	7.198	203.100	4807.000	4786.000	2.659	6.970	6.392
3	18:16:10	20.550	7.117	202.300	4772.000	4805.000	2.436	6.393	6.235
X		22.310	7.050	200.600	4733.000	4750.000	2.538	6.495	6.306
σ		1.600	0.191	3.754	98.710	79.850	0.113	0.433	0.079
%RSD		7.171	2.708	1.872	2.085	1.681	4.435	6.667	1.257
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:15:29	4.813	13.580	13.930	2.476	4.395	4.716	0.000	317.300
2	18:15:48	4.847	13.720	13.860	1.975	4.018	5.268	0.000	351.700
3	18:16:10	4.737	13.590	14.520	2.254	4.420	4.685	0.000	353.000
X		4.799	13.630	14.100	2.235	4.278	4.890	0.000	340.700
σ		0.056	0.080	0.362	0.251	0.225	0.328	0.000	20.230
%RSD		1.169	0.584	2.566	11.240	5.258	6.704	0.000	5.937
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:15:29	49.574%	1.808	2.125	45.937%	-0.082	-0.076	0.283	0.292
2	18:15:48	48.877%	1.843	2.054	45.181%	-0.075	-0.076	0.277	0.285
3	18:16:10	48.489%	1.772	1.985	44.430%	-0.065	-0.075	0.347	0.308
X		48.980%	1.808	2.055	45.183%	-0.074	-0.076	0.302	0.295
σ		0.550%	0.035	0.070	0.754%	0.009	0.001	0.039	0.012
%RSD		1.122	1.961	3.410	1.668	11.760	1.106	12.820	4.054
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:15:29	51.318%	0.247	0.819	0.783	94.990	94.660	64.096%	66.513%
2	18:15:48	52.049%	0.209	0.735	0.811	94.200	93.430	65.396%	67.395%
3	18:16:10	51.049%	0.226	0.832	0.832	93.450	93.340	64.730%	66.863%
X		51.472%	0.227	0.795	0.809	94.210	93.810	64.741%	66.924%
σ		0.518%	0.019	0.053	0.025	0.766	0.736	0.650%	0.444%
%RSD		1.005	8.347	6.639	3.071	0.813	0.785	1.004	0.664
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:15:29	0.103	0.110	3.226	60.287%				
2	18:15:48	0.102	0.109	3.385	57.384%				
3	18:16:10	0.124	0.114	3.373	58.006%				
X		0.110	0.111	3.328	58.559%				
σ		0.012	0.002	0.089	1.528%				
%RSD		11.280	1.998	2.664	2.610				

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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	18:19:20	46.333%	-0.023	167.600	170.800	0.000	210200.000	7212.000	7518.000
2	18:19:39	42.236%	-0.044	175.500	172.800	0.000	216000.000	7393.000	7571.000
3	18:19:59	44.232%	-0.044	160.800	154.300	0.000	192400.000	6906.000	7146.000
X		44.267%	-0.037	168.000	166.000	0.000	206200.000	7170.000	7412.000
σ		2.049%	0.012	7.365	10.120	0.000	12280.000	246.300	231.800
%RSD		4.628	32.460	4.385	6.096	0.000	5.954	3.434	3.128
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:19:20	8.559	10030.000	0.000	2636.000	64760.000	65400.000	38.274%	0.997
2	18:19:39	11.020	9758.000	0.000	2593.000	64200.000	66140.000	37.892%	1.267
3	18:19:59	8.050	9031.000	0.000	2618.000	64530.000	66300.000	36.087%	0.927
X		9.209	9608.000	0.000	2616.000	64500.000	65950.000	37.417%	1.064
σ		1.586	518.600	0.000	21.200	277.900	478.700	1.168%	0.180
%RSD		17.220	5.397	0.000	0.811	0.431	0.726	3.122	16.880
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:19:20	7.137	0.456	151.200	30.700	117.700	0.997	2.933	2.472
2	18:19:39	7.055	0.432	150.100	27.910	111.100	0.980	2.870	2.586
3	18:19:59	6.361	0.431	156.100	29.280	116.800	1.124	3.148	2.477
X		6.851	0.440	152.500	29.300	115.200	1.034	2.984	2.512
σ		0.426	0.014	3.218	1.397	3.556	0.079	0.146	0.064
%RSD		6.223	3.153	2.110	4.769	3.087	7.610	4.889	2.545
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:19:20	0.777	2.358	2.097	1.063	3.916	5.048	0.000	321.400
2	18:19:39	0.744	2.276	2.326	0.467	4.635	5.036	0.000	323.300
3	18:19:59	0.920	2.113	1.918	0.278	4.249	4.838	0.000	358.600
X		0.814	2.249	2.114	0.603	4.266	4.974	0.000	334.400
σ		0.094	0.125	0.205	0.409	0.360	0.118	0.000	20.960
%RSD		11.520	5.535	9.690	67.940	8.442	2.368	0.000	6.267
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:19:20	48.623%	1.715	1.802	46.589%	-0.092	-0.096	0.198	0.172
2	18:19:39	48.258%	1.578	1.826	45.931%	-0.081	-0.090	0.231	0.198
3	18:19:59	47.151%	1.675	1.743	45.432%	-0.084	-0.084	0.103	0.165
X		48.011%	1.656	1.790	45.984%	-0.086	-0.090	0.177	0.178
σ		0.766%	0.071	0.043	0.580%	0.006	0.006	0.067	0.017
%RSD		1.596	4.281	2.388	1.262	6.554	6.721	37.530	9.517
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:19:20	52.303%	0.089	0.372	0.383	63.250	62.990	63.837%	66.258%
2	18:19:39	51.531%	0.057	0.324	0.383	62.940	63.480	64.561%	66.740%
3	18:19:59	51.393%	0.088	0.359	0.358	61.990	62.590	64.705%	66.493%
X		51.743%	0.078	0.352	0.375	62.730	63.020	64.367%	66.497%
σ		0.490%	0.018	0.025	0.014	0.661	0.443	0.465%	0.241%
%RSD		0.948	23.380	7.029	3.800	1.053	0.703	0.723	0.363
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:19:20	0.015	0.015	0.061	59.380%				
2	18:19:39	0.011	0.016	0.060	59.376%				
3	18:19:59	0.020	0.016	0.072	58.145%				
X		0.015	0.016	0.065	58.967%				
σ		0.005	0.001	0.007	0.712%				
%RSD		30.060	3.693	10.450	1.207				

CCV 1558997 5/1/2015 6:22:57 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	18:22:57	107.723%	107.400	100.800	98.690	0.000	46310.000	45200.000	45480.000
2	18:23:17	95.815%	106.500	102.000	100.100	0.000	47770.000	47190.000	47720.000
3	18:23:36	95.469%	110.900	102.800	96.350	0.000	47080.000	48800.000	48780.000
X		99.669%	108.252%	101.858%	98.369%	0.000	94.104%	94.131%	94.659%
σ		6.977%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		7.000	2.146	0.969	1.914	0.000	1.558	3.837	3.562
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:22:57	448.900	4502.000	0.000	47920.000	47160.000	47710.000	93.304%	95.860
2	18:23:17	490.000	4838.000	0.000	49920.000	49590.000	50310.000	90.932%	104.300
3	18:23:36	492.700	4822.000	0.000	50690.000	50780.000	50390.000	89.605%	103.400
X		95.442%	94.412%	0.000	99.022%	98.357%	98.938%	91.280%	101.184%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.874%	n/a
%RSD		5.143	4.016	0.000	2.887	3.756	3.079	2.053	4.577
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:22:57	98.370	99.560	478.200	25140.000	24500.000	103.400	107.200	108.100
2	18:23:17	103.700	106.100	494.300	25380.000	25130.000	103.700	106.200	108.500
3	18:23:36	103.900	103.600	497.700	25840.000	25310.000	103.400	107.100	107.300
X		101.971%	103.084%	98.016%	101.807%	99.915%	103.505%	106.837%	107.986%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		3.065	3.201	2.128	1.404	1.713	0.172	0.520	0.535
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:22:57	109.800	103.000	103.700	106.300	106.800	108.700	0.000	102.200
2	18:23:17	108.100	105.300	104.800	106.600	109.900	110.900	0.000	103.700
3	18:23:36	109.900	106.200	106.700	109.900	111.200	108.100	0.000	104.800
X		109.256%	104.837%	105.024%	107.607%	109.305%	109.243%	0.000	103.552%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.946	1.567	1.447	1.825	2.070	1.349	0.000	1.264
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:22:57	85.973%	96.280	95.200	82.875%	101.000	100.900	98.540	99.740
2	18:23:17	86.420%	99.950	100.500	82.831%	102.100	102.400	100.700	101.200
3	18:23:36	86.905%	102.000	101.100	84.114%	101.900	102.100	100.400	101.000
X		86.433%	99.403%	98.940%	83.273%	101.689%	101.779%	99.867%	100.653%
σ		0.466%	n/a	n/a	0.728%	n/a	n/a	n/a	n/a
%RSD		0.539	2.908	3.283	0.874	0.596	0.808	1.163	0.788
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:22:57	80.697%	96.120	96.720	97.690	97.370	97.560	81.169%	82.060%
2	18:23:17	81.398%	98.560	97.940	98.150	99.220	100.700	83.462%	83.907%
3	18:23:36	83.829%	97.400	98.920	98.510	97.450	98.400	87.023%	86.406%
X		81.975%	97.360%	97.858%	98.116%	98.012%	98.897%	83.885%	84.124%
σ		1.644%	n/a	n/a	n/a	n/a	n/a	2.950%	2.181%
%RSD		2.005	1.251	1.125	0.422	1.066	1.660	3.517	2.593
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:22:57	104.000	104.100	105.200	74.072%				
2	18:23:17	104.100	103.600	107.000	76.567%				
3	18:23:36	106.700	106.000	108.500	76.905%				
X		104.915%	104.554%	106.872%	75.848%				
σ		n/a	n/a	n/a	1.548%				
%RSD		1.436	1.226	1.548	2.040				

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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	18:29:48	118.095%	-0.016	1.106	0.806	0.000	18.410	6.631	6.117
2	18:30:07	113.678%	-0.023	0.726	0.544	0.000	15.770	5.367	6.165
3	18:30:26	120.603%	-0.017	0.579	0.526	0.000	14.080	5.823	5.826
X		117.459%	-0.018	0.803	0.625	0.000	16.090	5.940	6.036
σ		3.506%	0.004	0.272	0.157	0.000	2.183	0.640	0.184
%RSD		2.985	20.540	33.820	25.090	0.000	13.570	10.780	3.042
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:48	2.458	-481.300	0.000	5.574	8.706	9.854	113.096%	0.080
2	18:30:07	2.271	-481.500	0.000	6.261	4.307	8.705	107.363%	0.024
3	18:30:26	2.163	-482.300	0.000	5.953	15.530	9.141	107.363%	-0.031
X		2.297	-481.700	0.000	5.930	9.513	9.233	109.274%	0.024
σ		0.149	0.536	0.000	0.344	5.652	0.580	3.310%	0.056
%RSD		6.508	0.111	0.000	5.806	59.420	6.283	3.029	227.300
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:48	0.036	0.030	0.210	8.177	7.062	0.013	-0.004	0.576
2	18:30:07	0.064	0.029	0.221	9.672	6.032	0.015	0.003	0.525
3	18:30:26	0.028	0.042	0.203	7.723	5.583	0.017	0.019	0.468
X		0.043	0.033	0.211	8.524	6.226	0.015	0.006	0.523
σ		0.019	0.008	0.009	1.020	0.758	0.002	0.012	0.054
%RSD		43.730	22.880	4.228	11.970	12.180	13.960	200.800	10.320
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:48	0.499	1.100	0.926	-0.041	-0.000	-0.004	0.000	0.091
2	18:30:07	0.499	1.045	1.014	0.010	0.163	0.105	0.000	0.077
3	18:30:26	0.475	0.900	0.974	0.005	0.301	0.089	0.000	0.079
X		0.491	1.015	0.971	-0.008	0.155	0.063	0.000	0.082
σ		0.014	0.103	0.044	0.028	0.151	0.059	0.000	0.007
%RSD		2.764	10.190	4.577	328.200	97.400	93.540	0.000	8.984
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:48	96.176%	0.153	0.197	97.397%	-0.055	-0.065	0.074	0.054
2	18:30:07	97.195%	0.198	0.142	98.584%	-0.060	-0.071	0.076	0.046
3	18:30:26	97.514%	0.118	0.138	98.152%	-0.059	-0.065	0.056	0.030
X		96.962%	0.156	0.159	98.044%	-0.058	-0.067	0.069	0.043
σ		0.699%	0.040	0.033	0.600%	0.003	0.004	0.011	0.012
%RSD		0.721	25.790	20.960	0.612	4.503	5.511	15.810	28.660
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:48	89.590%	0.012	-0.006	-0.010	0.050	0.035	86.006%	85.265%
2	18:30:07	91.389%	0.039	0.002	-0.005	0.056	0.083	88.070%	87.924%
3	18:30:26	91.652%	0.016	-0.003	0.000	0.046	0.044	88.009%	87.623%
X		90.877%	0.022	-0.002	-0.005	0.051	0.054	87.362%	86.937%
σ		1.123%	0.014	0.004	0.005	0.005	0.026	1.174%	1.456%
%RSD		1.235	65.090	179.800	98.570	10.370	47.320	1.344	1.675
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:29:48	0.012	0.010	0.036	83.806%				
2	18:30:07	0.015	0.016	0.036	83.273%				
3	18:30:26	0.017	0.018	0.037	83.241%				
X		0.015	0.015	0.036	83.440%				
σ		0.003	0.004	0.000	0.317%				
%RSD		20.220	26.880	0.677	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	18:33:39	51.957%	-0.028	52.950	53.070	0.000	499000.000	56370.000	55790.000
2	18:33:58	48.597%	-0.026	51.600	50.560	0.000	490900.000	53810.000	54160.000
3	18:34:17	46.583%	-0.024	53.090	53.170	0.000	502400.000	55400.000	57460.000
X		49.046%	-0.026	52.550	52.270	0.000	497400.000	55190.000	55800.000
$\sigma$		2.715%	0.002	0.828	1.482	0.000	5871.000	1293.000	1649.000
%RSD		5.535	8.947	1.575	2.835	0.000	1.180	2.342	2.954
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:33:39	-0.696	8934.000	0.000	6662.000	456700.000	446500.000	45.062%	1.118
2	18:33:58	-0.609	8993.000	0.000	6768.000	455900.000	455000.000	43.650%	0.751
3	18:34:17	-0.568	8751.000	0.000	6590.000	460100.000	459300.000	40.208%	0.919
X		-0.624	8892.000	0.000	6673.000	457600.000	453600.000	42.974%	0.929
$\sigma$		0.065	126.500	0.000	89.620	2193.000	6485.000	2.497%	0.184
%RSD		10.460	1.423	0.000	1.343	0.479	1.430	5.810	19.780
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:33:39	0.767	0.604	653.800	434.400	1011.000	0.373	0.267	3.923
2	18:33:58	-0.626	0.659	645.200	433.300	974.700	0.389	0.178	3.880
3	18:34:17	-1.333	0.623	649.100	428.800	1018.000	0.451	0.161	4.215
X		-0.397	0.629	649.400	432.200	1001.000	0.404	0.202	4.006
$\sigma$		1.069	0.028	4.303	2.956	23.200	0.041	0.057	0.183
%RSD		269.100	4.480	0.663	0.684	2.318	10.180	27.980	4.560
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:33:39	0.249	0.874	0.322	1.753	-0.217	1.164	0.000	2756.000
2	18:33:58	0.396	0.883	0.541	1.999	0.057	0.811	0.000	2790.000
3	18:34:17	0.368	0.984	0.288	3.282	0.010	0.586	0.000	2760.000
X		0.338	0.914	0.384	2.345	-0.050	0.854	0.000	2769.000
$\sigma$		0.078	0.061	0.137	0.821	0.147	0.291	0.000	18.600
%RSD		23.070	6.669	35.780	35.030	293.300	34.150	0.000	0.672
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:33:39	52.799%	0.756	0.841	49.010%	-0.087	-0.083	-0.061	-0.048
2	18:33:58	52.449%	0.713	0.730	47.604%	-0.085	-0.093	-0.015	-0.018
3	18:34:17	51.996%	0.746	0.760	46.943%	-0.083	-0.082	-0.050	-0.042
X		52.415%	0.739	0.777	47.852%	-0.085	-0.086	-0.042	-0.036
$\sigma$		0.402%	0.023	0.057	1.055%	0.002	0.006	0.024	0.016
%RSD		0.768	3.056	7.347	2.206	2.358	6.977	58.050	44.650
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:33:39	53.474%	0.158	0.074	0.190	215.400	213.200	62.976%	64.096%
2	18:33:58	52.585%	0.041	0.069	0.183	215.900	216.400	63.219%	64.206%
3	18:34:17	52.776%	0.039	0.076	0.144	216.900	214.100	63.245%	64.700%
X		52.945%	0.079	0.073	0.172	216.000	214.500	63.147%	64.334%
$\sigma$		0.468%	0.068	0.003	0.025	0.773	1.664	0.148%	0.322%
%RSD		0.884	85.930	4.729	14.540	0.358	0.775	0.235	0.500
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:33:39	0.015	0.016	-0.000	49.964%				
2	18:33:58	0.013	0.015	-0.002	51.609%				
3	18:34:17	0.013	0.013	0.001	50.220%				
X		0.014	0.015	-0.000	50.598%				
$\sigma$		0.001	0.002	0.002	0.885%				
%RSD		9.963	10.580	642.500	1.749				

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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	18:37:28	47.179%	-0.003	60.610	57.130	0.000	500800.000	57430.000	57340.000
2	18:37:47	43.014%	0.003	57.260	55.120	0.000	513400.000	56580.000	57290.000
3	18:38:07	43.062%	-0.044	48.310	51.440	0.000	498400.000	54740.000	55500.000
X		44.418%	-0.014	55.390	54.560	0.000	504200.000	56250.000	56710.000
σ		2.391%	0.026	6.355	2.883	0.000	8045.000	1379.000	1051.000
%RSD		5.383	179.800	11.470	5.284	0.000	1.596	2.451	1.854
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:28	1.219	8770.000	0.000	6602.000	468900.000	455600.000	42.502%	1.305
2	18:37:47	1.572	8992.000	0.000	6860.000	473500.000	459400.000	41.466%	1.340
3	18:38:07	1.350	8630.000	0.000	6573.000	448200.000	447400.000	40.529%	1.204
X		1.380	8797.000	0.000	6678.000	463500.000	454100.000	41.499%	1.283
σ		0.179	182.500	0.000	158.100	13460.000	6164.000	0.987%	0.071
%RSD		12.940	2.075	0.000	2.367	2.904	1.357	2.378	5.530
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:28	0.764	0.794	650.200	441.900	1053.000	0.434	0.504	4.110
2	18:37:47	1.989	0.759	657.500	469.100	1019.000	0.408	0.349	3.853
3	18:38:07	-0.133	0.762	641.000	447.100	965.000	0.426	0.172	3.972
X		0.874	0.771	649.600	452.700	1013.000	0.423	0.342	3.978
σ		1.065	0.020	8.302	14.410	44.560	0.013	0.166	0.128
%RSD		121.900	2.529	1.278	3.184	4.400	3.071	48.720	3.222
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:28	0.363	2.139	2.547	1.798	0.011	0.798	0.000	2760.000
2	18:37:47	0.233	1.906	1.782	1.982	-0.091	1.001	0.000	2762.000
3	18:38:07	0.351	2.035	1.673	1.191	0.144	0.819	0.000	2746.000
X		0.316	2.026	2.000	1.657	0.021	0.873	0.000	2756.000
σ		0.072	0.117	0.476	0.414	0.117	0.112	0.000	8.614
%RSD		22.860	5.756	23.800	24.980	553.900	12.770	0.000	0.313
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:28	51.640%	0.674	0.730	46.742%	-0.089	-0.089	-0.003	-0.017
2	18:37:47	50.528%	0.654	0.711	46.093%	-0.073	-0.089	-0.023	-0.016
3	18:38:07	49.694%	0.770	0.721	44.958%	-0.076	-0.082	-0.036	-0.033
X		50.621%	0.700	0.720	45.931%	-0.079	-0.087	-0.021	-0.022
σ		0.977%	0.062	0.009	0.903%	0.009	0.004	0.016	0.009
%RSD		1.929	8.877	1.286	1.966	10.930	5.027	79.040	41.930
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:28	52.217%	-0.037	0.049	0.136	211.600	214.500	61.673%	63.028%
2	18:37:47	51.781%	0.006	0.049	0.153	212.200	212.500	62.380%	63.717%
3	18:38:07	52.007%	-0.021	0.038	0.143	213.100	213.000	61.655%	63.705%
X		52.001%	-0.017	0.045	0.144	212.300	213.400	61.903%	63.483%
σ		0.218%	0.022	0.006	0.008	0.771	1.005	0.414%	0.394%
%RSD		0.420	126.600	14.210	5.836	0.363	0.471	0.669	0.621
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:37:28	0.010	0.009	0.087	52.218%				
2	18:37:47	0.009	0.010	0.100	50.132%				
3	18:38:07	0.009	0.009	0.089	50.768%				
X		0.009	0.009	0.092	51.039%				
σ		0.001	0.001	0.007	1.069%				
%RSD		9.501	8.319	7.560	2.094				



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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	18:41:18	73.793%	0.044	1.651	1.666	0.000	1137.000	15690.000	15860.000
2	18:41:37	71.743%	0.148	1.929	1.394	0.000	1120.000	15300.000	15540.000
3	18:41:56	69.509%	0.022	1.787	1.667	0.000	1071.000	14920.000	15040.000
X		71.682%	0.071	1.789	1.576	0.000	1109.000	15300.000	15480.000
σ		2.142%	0.068	0.139	0.157	0.000	33.990	383.200	413.300
%RSD		2.989	94.750	7.772	9.988	0.000	3.064	2.504	2.670
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:18	13.880	647.600	0.000	3488.000	33270.000	32490.000	63.359%	0.018
2	18:41:37	13.760	619.000	0.000	3570.000	33610.000	33240.000	59.705%	0.091
3	18:41:56	13.520	571.800	0.000	3536.000	33590.000	33420.000	55.845%	-0.018
X		13.720	612.800	0.000	3531.000	33490.000	33050.000	59.637%	0.030
σ		0.180	38.300	0.000	41.260	193.300	493.200	3.758%	0.056
%RSD		1.316	6.250	0.000	1.168	0.577	1.492	6.301	182.900
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:18	0.088	0.017	3342.000	31920.000	30890.000	26.250	5.760	19.920
2	18:41:37	0.160	-0.060	3403.000	32530.000	31240.000	26.310	5.373	19.900
3	18:41:56	-0.014	0.053	3509.000	34470.000	33200.000	27.140	5.579	21.270
X		0.078	0.003	3418.000	32970.000	31780.000	26.570	5.571	20.360
σ		0.087	0.058	84.470	1332.000	1243.000	0.500	0.194	0.784
%RSD		111.500	1780.000	2.472	4.041	3.913	1.883	3.477	3.849
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:18	19.550	589.000	582.400	-0.102	-0.591	0.150	0.000	123.200
2	18:41:37	19.580	596.200	591.900	-0.150	-0.600	0.039	0.000	121.200
3	18:41:56	21.080	600.300	601.800	-0.043	-0.526	0.041	0.000	122.300
X		20.070	595.200	592.100	-0.098	-0.572	0.077	0.000	122.200
σ		0.876	5.730	9.670	0.054	0.040	0.064	0.000	1.028
%RSD		4.364	0.963	1.633	54.570	7.068	82.840	0.000	0.841
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:18	86.825%	-0.016	-0.016	67.303%	-0.076	-0.069	0.470	0.420
2	18:41:37	87.477%	-0.012	-0.023	67.673%	-0.063	-0.063	0.461	0.424
3	18:41:56	87.785%	0.008	-0.008	66.997%	-0.065	-0.075	0.436	0.401
X		87.362%	-0.007	-0.016	67.324%	-0.068	-0.069	0.456	0.415
σ		0.490%	0.013	0.007	0.338%	0.007	0.006	0.018	0.012
%RSD		0.561	188.500	47.320	0.502	10.460	8.308	3.884	2.978
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:18	67.997%	-0.190	-0.048	-0.050	4.135	3.978	75.208%	76.107%
2	18:41:37	69.425%	-0.179	-0.037	-0.041	3.993	3.703	77.568%	79.134%
3	18:41:56	69.381%	-0.205	-0.046	-0.042	3.732	3.855	78.228%	79.834%
X		68.934%	-0.192	-0.044	-0.044	3.954	3.845	77.001%	78.359%
σ		0.812%	0.013	0.006	0.005	0.204	0.138	1.588%	1.981%
%RSD		1.178	6.774	13.110	10.320	5.171	3.584	2.062	2.528
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:41:18	0.011	0.013	0.011	73.843%				
2	18:41:37	0.015	0.011	0.014	70.366%				
3	18:41:56	0.018	0.015	0.021	69.441%				
X		0.015	0.013	0.015	71.217%				
σ		0.004	0.002	0.005	2.321%				
%RSD		23.850	16.710	35.690	3.259				

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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	18:45:07	107.730%	-0.039	0.369	0.427	0.000	224.000	2952.000	2954.000	
2	18:45:26	99.967%	-0.037	0.299	0.410	0.000	225.800	3051.000	3049.000	
3	18:45:45	93.418%	-0.013	0.543	0.400	0.000	227.200	3131.000	3194.000	
X		100.372%	-0.030	0.404	0.413	0.000	225.700	3045.000	3066.000	
		$\sigma$	7.164%	0.015	0.126	0.014	0.000	1.576	89.610	120.800
		%RSD	7.138	49.340	31.100	3.306	0.000	0.699	2.943	3.941
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	18:45:07	3.020	-276.300	0.000	650.700	6149.000	5929.000	86.924%	-0.048	
2	18:45:26	2.779	-268.300	0.000	653.700	6221.000	6069.000	85.030%	-0.094	
3	18:45:45	3.055	-263.100	0.000	693.100	6261.000	6210.000	82.145%	0.015	
X		2.951	-269.200	0.000	665.800	6210.000	6069.000	84.700%	-0.042	
		$\sigma$	0.150	6.645	0.000	23.680	56.550	140.600	2.407%	0.055
		%RSD	5.090	2.468	0.000	3.556	0.910	2.316	2.842	128.800
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	18:45:07	-0.039	-0.018	632.000	6306.000	6547.000	5.444	1.207	4.425	
2	18:45:26	-0.016	-0.011	655.600	6492.000	6561.000	5.539	1.051	4.364	
3	18:45:45	0.098	0.012	658.700	6442.000	6575.000	5.464	1.198	4.421	
X		0.014	-0.005	648.800	6413.000	6561.000	5.482	1.152	4.403	
		$\sigma$	0.073	0.016	14.580	96.280	13.810	0.050	0.088	0.034
		%RSD	526.100	288.800	2.247	1.501	0.210	0.914	7.627	0.770
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	18:45:07	4.309	122.000	124.000	0.034	-0.220	0.157	0.000	27.990	
2	18:45:26	4.335	124.200	124.600	-0.021	-0.002	0.085	0.000	28.000	
3	18:45:45	4.367	124.200	126.700	-0.015	0.015	0.133	0.000	28.200	
X		4.337	123.500	125.100	-0.001	-0.069	0.125	0.000	28.060	
		$\sigma$	0.029	1.302	1.384	0.030	0.131	0.037	0.000	0.118
		%RSD	0.660	1.054	1.106	3195.000	190.000	29.410	0.000	0.420
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	18:45:07	89.082%	-0.028	-0.020	85.037%	-0.069	-0.074	0.168	0.151	
2	18:45:26	89.854%	-0.039	-0.035	85.567%	-0.066	-0.074	0.116	0.115	
3	18:45:45	87.464%	-0.003	-0.025	84.027%	-0.064	-0.063	0.108	0.092	
X		88.800%	-0.023	-0.026	84.877%	-0.066	-0.070	0.131	0.119	
		$\sigma$	1.220%	0.018	0.007	0.782%	0.003	0.006	0.033	0.030
		%RSD	1.374	78.910	28.150	0.922	4.071	9.077	24.870	24.770
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	18:45:07	81.867%	-0.195	-0.054	-0.054	0.772	0.817	82.603%	82.266%	
2	18:45:26	81.883%	-0.181	-0.052	-0.059	0.702	0.840	85.177%	84.323%	
3	18:45:45	82.205%	-0.188	-0.055	-0.060	0.864	0.758	85.971%	85.946%	
X		81.985%	-0.188	-0.054	-0.058	0.779	0.805	84.583%	84.178%	
		$\sigma$	0.191%	0.007	0.002	0.003	0.081	0.042	1.761%	1.844%
		%RSD	0.233	3.608	3.500	5.272	10.410	5.265	2.082	2.191
Run	Time	203Tl	205Tl	208Pb	209Bi					
		ppb	ppb	ppb	ppb					
1	18:45:07	0.002	0.002	-0.000	79.404%					
2	18:45:26	0.003	0.001	0.005	78.263%					
3	18:45:45	0.002	0.003	0.006	79.251%					
X		0.002	0.002	0.003	78.972%					
		$\sigma$	0.001	0.001	0.003	0.619%				
		%RSD	36.380	42.660	97.190	0.784				

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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	18:48:57	95.077%	5.128	91.040	84.260	0.000	5307.000	18220.000	18490.000
2	18:49:16	78.626%	5.758	100.500	92.400	0.000	5584.000	19280.000	19560.000
3	18:49:36	79.662%	4.472	97.120	93.980	0.000	5486.000	19220.000	19760.000
X		84.455%	5.120	96.230	90.210	0.000	5459.000	18910.000	19270.000
σ		9.213%	0.643	4.803	5.218	0.000	140.400	594.000	680.200
%RSD		10.909	12.560	4.991	5.784	0.000	2.572	3.141	3.530
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:48:57	186.900	1417.000	0.000	7936.000	34550.000	35100.000	73.276%	100.700
2	18:49:16	192.500	1519.000	0.000	8478.000	36590.000	36190.000	71.185%	102.200
3	18:49:36	194.900	1537.000	0.000	8390.000	36350.000	35800.000	67.224%	101.600
X		191.400	1491.000	0.000	8268.000	35830.000	35690.000	70.562%	101.500
σ		4.108	64.610	0.000	290.900	1115.000	550.900	3.074%	0.740
%RSD		2.146	4.332	0.000	3.519	3.113	1.543	4.356	0.729
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:48:57	51.490	20.480	3196.000	31020.000	30130.000	76.590	58.410	46.270
2	18:49:16	51.290	20.760	3206.000	30660.000	29350.000	72.250	56.090	44.470
3	18:49:36	50.140	20.510	3236.000	30810.000	30150.000	74.620	56.090	44.880
X		50.970	20.580	3213.000	30830.000	29880.000	74.490	56.870	45.210
σ		0.731	0.150	21.130	180.000	456.400	2.172	1.336	0.944
%RSD		1.434	0.730	0.658	0.584	1.528	2.916	2.350	2.087
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:48:57	46.730	607.700	596.600	3.587	0.458	0.870	0.000	179.000
2	18:49:16	43.730	592.500	593.400	3.176	0.495	1.146	0.000	180.500
3	18:49:36	44.160	605.800	597.900	3.481	0.529	1.064	0.000	180.900
X		44.880	602.000	595.900	3.415	0.494	1.027	0.000	180.100
σ		1.623	8.289	2.306	0.213	0.036	0.142	0.000	0.993
%RSD		3.616	1.377	0.387	6.245	7.274	13.840	0.000	0.551
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:48:57	96.883%	87.640	93.020	75.171%	4.923	5.098	5.462	4.898
2	18:49:16	95.523%	88.990	93.830	73.816%	5.139	5.119	5.464	4.858
3	18:49:36	94.918%	89.170	94.270	73.966%	4.968	5.124	5.429	5.101
X		95.775%	88.600	93.710	74.318%	5.010	5.114	5.452	4.952
σ		1.006%	0.839	0.631	0.743%	0.114	0.014	0.019	0.130
%RSD		1.051	0.947	0.673	1.000	2.271	0.266	0.356	2.632
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:48:57	74.979%	197.200	48.150	48.920	195.400	198.500	80.572%	80.935%
2	18:49:16	74.490%	196.800	48.570	49.650	195.700	197.600	81.989%	83.149%
3	18:49:36	74.974%	198.100	48.920	48.980	197.900	197.900	82.787%	83.559%
X		74.814%	197.400	48.550	49.180	196.300	198.000	81.782%	82.547%
σ		0.281%	0.682	0.381	0.406	1.378	0.446	1.122%	1.412%
%RSD		0.376	0.345	0.785	0.826	0.702	0.225	1.371	1.710
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:48:57	4.829	4.867	2.082	78.131%				
2	18:49:16	5.157	5.183	2.197	75.479%				
3	18:49:36	5.235	5.252	2.209	76.064%				
X		5.074	5.101	2.163	76.558%				
σ		0.215	0.205	0.070	1.393%				
%RSD		4.245	4.024	3.235	1.820				

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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	18:52:47	78.187%	5.683	101.200	91.980	0.000	5666.000	19230.000	19100.000
2	18:53:06	77.410%	5.295	90.680	88.440	0.000	5345.000	18090.000	18880.000
3	18:53:25	72.411%	5.001	96.080	87.070	0.000	5441.000	19150.000	19340.000
X		76.003%	5.326	95.980	89.160	0.000	5484.000	18830.000	19110.000
σ		3.134%	0.342	5.242	2.534	0.000	165.000	636.900	229.900
%RSD		4.124	6.427	5.462	2.842	0.000	3.009	3.383	1.203
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:47	193.800	1477.000	0.000	8255.000	35480.000	35610.000	73.138%	100.200
2	18:53:06	195.700	1477.000	0.000	8141.000	36010.000	36270.000	69.714%	103.200
3	18:53:25	194.600	1448.000	0.000	8342.000	37550.000	37520.000	64.784%	103.400
X		194.700	1468.000	0.000	8246.000	36350.000	36470.000	69.212%	102.300
σ		0.972	16.540	0.000	100.600	1074.000	968.200	4.199%	1.831
%RSD		0.499	1.127	0.000	1.220	2.956	2.655	6.067	1.791
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:47	50.240	20.650	3255.000	30930.000	29180.000	73.220	55.970	44.140
2	18:53:06	51.600	20.590	3325.000	31390.000	30530.000	75.270	55.930	44.400
3	18:53:25	53.180	21.320	3329.000	31880.000	30760.000	76.210	57.590	45.700
X		51.670	20.850	3303.000	31400.000	30160.000	74.900	56.500	44.750
σ		1.470	0.407	41.990	476.000	854.700	1.526	0.948	0.838
%RSD		2.844	1.951	1.271	1.516	2.834	2.038	1.678	1.872
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:47	43.030	586.200	588.000	3.234	0.487	0.929	0.000	181.300
2	18:53:06	43.530	590.900	588.600	3.647	0.503	1.254	0.000	180.700
3	18:53:25	45.260	611.900	604.100	3.535	0.550	0.905	0.000	181.500
X		43.940	596.400	593.500	3.472	0.513	1.030	0.000	181.100
σ		1.171	13.680	9.111	0.213	0.033	0.195	0.000	0.405
%RSD		2.665	2.294	1.535	6.146	6.402	18.940	0.000	0.223
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:47	95.311%	87.440	93.460	74.736%	5.185	5.084	5.417	4.888
2	18:53:06	94.985%	87.970	94.100	73.696%	4.937	5.034	5.296	4.829
3	18:53:25	94.090%	88.600	94.120	73.583%	4.979	5.026	5.559	5.043
X		94.795%	88.000	93.890	74.005%	5.033	5.048	5.424	4.920
σ		0.632%	0.577	0.376	0.635%	0.133	0.031	0.132	0.110
%RSD		0.667	0.656	0.400	0.859	2.634	0.616	2.427	2.244
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:47	74.882%	195.200	48.070	48.720	195.300	196.200	80.620%	81.517%
2	18:53:06	74.585%	196.100	48.400	48.320	196.000	196.900	81.670%	82.809%
3	18:53:25	74.363%	196.100	48.130	48.500	193.300	195.100	82.699%	83.227%
X		74.610%	195.800	48.200	48.510	194.900	196.100	81.663%	82.518%
σ		0.260%	0.505	0.174	0.205	1.414	0.884	1.039%	0.891%
%RSD		0.349	0.258	0.360	0.422	0.725	0.451	1.273	1.080
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:52:47	4.707	4.763	2.023	81.463%				
2	18:53:06	5.042	5.045	2.108	78.516%				
3	18:53:25	5.164	5.188	2.191	77.010%				
X		4.971	4.998	2.107	78.997%				
σ		0.237	0.217	0.084	2.265%				
%RSD		4.758	4.331	3.991	2.867				

CCV 1558997 5/1/2015 6:56:25 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	18:56:25	107.652%	101.400	98.930	95.130	0.000	44990.000	45810.000	46090.000
2	18:56:44	108.674%	104.700	101.200	98.040	0.000	47140.000	47450.000	48360.000
3	18:57:04	103.713%	107.000	100.600	100.200	0.000	50140.000	48810.000	49560.000
X		106.680%	104.389%	100.266%	97.799%	0.000	94.851%	94.715%	96.006%
σ		2.619%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.455	2.681	1.188	2.620	0.000	5.452	3.169	3.677
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:25	463.800	4542.000	0.000	47490.000	45920.000	46520.000	102.326%	99.010
2	18:56:44	490.400	4744.000	0.000	49400.000	48260.000	49630.000	97.595%	101.900
3	18:57:04	508.200	5003.000	0.000	51920.000	49820.000	50000.000	93.267%	105.500
X		97.494%	95.262%	0.000	99.210%	96.001%	97.432%	97.729%	102.123%
σ		n/a	n/a	0.000	n/a	n/a	n/a	4.531%	n/a
%RSD		4.586	4.853	0.000	4.480	4.097	3.928	4.637	3.163
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:25	99.740	102.500	473.700	24650.000	24010.000	100.600	104.500	106.300
2	18:56:44	103.200	101.900	481.200	25370.000	24660.000	102.900	109.300	108.500
3	18:57:04	105.000	105.100	497.100	25270.000	25200.000	105.800	109.400	110.800
X		102.651%	103.165%	96.800%	100.385%	98.502%	103.101%	107.767%	108.559%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.607	1.676	2.465	1.547	2.429	2.501	2.603	2.071
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:25	106.500	100.600	100.500	106.200	109.000	108.400	0.000	101.300
2	18:56:44	109.000	103.800	103.800	107.300	109.500	109.100	0.000	103.100
3	18:57:04	111.500	106.700	107.100	108.400	111.000	111.300	0.000	103.800
X		109.000%	103.684%	103.783%	107.272%	109.830%	109.614%	0.000	102.713%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.286	2.943	3.159	1.042	0.948	1.349	0.000	1.252
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:25	87.346%	97.610	97.860	85.618%	100.100	101.200	97.160	98.090
2	18:56:44	88.008%	101.600	100.800	85.880%	101.200	101.700	98.790	100.400
3	18:57:04	86.532%	104.000	103.000	84.624%	102.900	103.300	101.500	101.000
X		87.296%	101.049%	100.535%	85.374%	101.386%	102.076%	99.143%	99.833%
σ		0.740%	n/a	n/a	0.663%	n/a	n/a	n/a	n/a
%RSD		0.847	3.177	2.546	0.776	1.350	1.064	2.205	1.539
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:25	82.519%	96.500	93.310	94.350	96.750	97.640	82.756%	82.487%
2	18:56:44	83.170%	98.940	96.560	98.770	98.490	98.600	83.353%	82.816%
3	18:57:04	81.290%	99.390	99.620	98.430	99.340	99.710	83.727%	83.797%
X		82.326%	98.277%	96.498%	97.183%	98.194%	98.652%	83.279%	83.033%
σ		0.954%	n/a	n/a	n/a	n/a	n/a	0.489%	0.681%
%RSD		1.159	1.579	3.267	2.527	1.345	1.050	0.588	0.821
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:56:25	101.500	101.400	102.900	76.057%				
2	18:56:44	103.700	102.900	105.800	76.172%				
3	18:57:04	104.400	104.500	106.500	76.985%				
X		103.226%	102.925%	105.068%	76.405%				
σ		n/a	n/a	n/a	0.506%				
%RSD		1.493	1.528	1.819	0.662				

CCB10 5/1/2015 7:02:55 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	19:03:14	113.287%	-0.013	0.531	0.565	0.000	18.710	6.664	6.488	
2	19:03:34	117.783%	-0.024	0.308	0.466	0.000	14.980	5.568	5.826	
3	19:03:53	114.984%	0.031	0.358	0.363	0.000	14.090	6.029	5.476	
X		115.351%	-0.002	0.399	0.465	0.000	15.930	6.087	5.930	
		σ	2.270%	0.029	0.117	0.101	0.000	2.447	0.550	0.514
		%RSD	1.968	1346.000	29.330	21.690	0.000	15.360	9.043	8.670
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	19:03:14	2.171	-485.300	0.000	7.096	15.340	14.180	102.403%	0.089	
2	19:03:34	2.278	-486.000	0.000	5.838	6.036	10.990	102.273%	0.021	
3	19:03:53	1.837	-485.900	0.000	7.239	10.760	7.578	96.801%	0.049	
X		2.095	-485.800	0.000	6.724	10.710	10.920	100.492%	0.053	
		σ	0.230	0.379	0.000	0.771	4.652	3.302	3.198%	0.034
		%RSD	10.990	0.078	0.000	11.470	43.430	30.250	3.182	64.630
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	19:03:14	0.030	0.012	0.220	10.820	7.709	0.027	-0.006	0.551	
2	19:03:34	0.050	0.027	0.213	11.210	8.054	0.017	0.029	0.568	
3	19:03:53	0.040	0.007	0.237	10.540	6.346	0.014	0.050	0.495	
X		0.040	0.015	0.224	10.860	7.370	0.019	0.024	0.538	
		σ	0.010	0.010	0.012	0.338	0.903	0.007	0.029	0.038
		%RSD	25.060	69.620	5.499	3.109	12.250	36.110	118.100	7.109
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	19:03:14	0.521	0.992	1.063	0.030	-0.082	0.068	0.000	0.087	
2	19:03:34	0.483	1.110	1.004	0.052	0.197	0.180	0.000	0.085	
3	19:03:53	0.464	1.026	1.207	0.021	0.339	0.150	0.000	0.075	
X		0.489	1.043	1.091	0.035	0.151	0.133	0.000	0.082	
		σ	0.029	0.061	0.105	0.016	0.214	0.058	0.000	0.006
		%RSD	5.985	5.829	9.584	46.020	141.600	43.690	0.000	7.504
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	19:03:14	91.727%	0.305	0.245	94.844%	-0.069	-0.069	0.074	0.056	
2	19:03:34	93.128%	0.231	0.262	95.220%	-0.066	-0.069	0.085	0.058	
3	19:03:53	92.483%	0.238	0.194	94.638%	-0.061	-0.067	0.038	0.034	
X		92.446%	0.258	0.233	94.901%	-0.066	-0.068	0.065	0.049	
		σ	0.701%	0.041	0.035	0.295%	0.004	0.001	0.025	0.013
		%RSD	0.758	15.960	15.200	0.311	6.272	1.347	37.770	27.150
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	19:03:14	86.271%	0.133	-0.005	-0.003	0.059	0.043	83.416%	82.520%	
2	19:03:34	86.841%	0.157	-0.014	0.007	0.044	0.066	85.275%	84.990%	
3	19:03:53	88.558%	0.146	-0.005	-0.007	0.048	0.073	86.230%	85.474%	
X		87.223%	0.145	-0.008	-0.001	0.050	0.060	84.974%	84.328%	
		σ	1.190%	0.012	0.005	0.007	0.008	0.016	1.431%	1.585%
		%RSD	1.365	8.155	66.270	759.600	15.270	26.390	1.684	1.879
Run	Time	203Tl	205Tl	208Pb	209Bi					
		ppb	ppb	ppb	ppb					
1	19:03:14	0.020	0.025	0.031	82.377%					
2	19:03:34	0.024	0.024	0.036	81.836%					
3	19:03:53	0.025	0.023	0.038	81.105%					
X		0.023	0.024	0.035	81.772%					
		σ	0.003	0.001	0.003	0.638%				
		%RSD	12.370	2.896	9.640	0.780				

## Performance Report

### Sample details

Sample name : ITUNE

Acquired at : 5/1/2015 9:24:56 AM

Report name : EPA ILMO5.2/6020A 2.1 [3/15/2013 11:49:53 AM]

### Mass Calibration verification

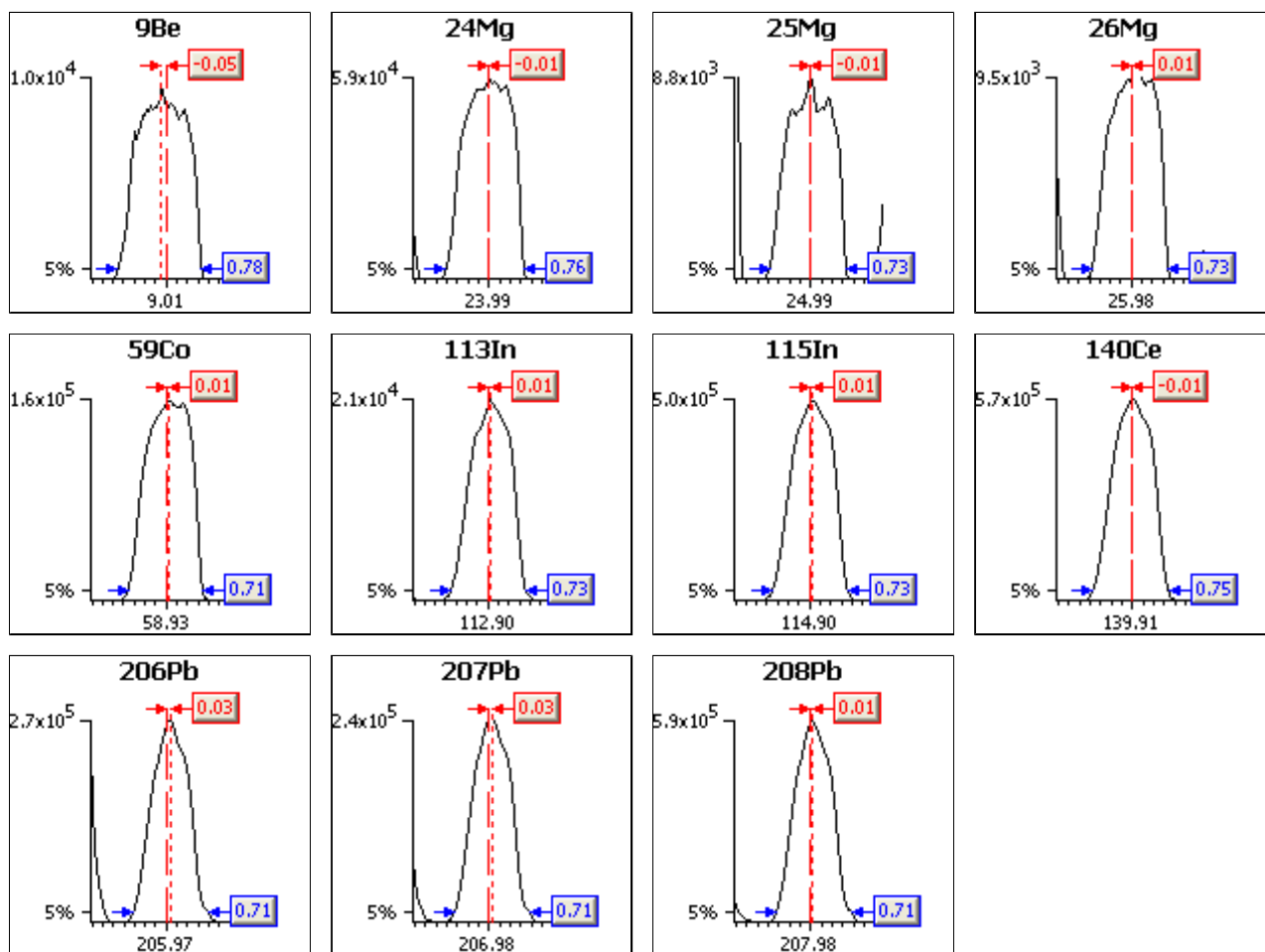
#### Acquisition parameters

Sweeps : 25

Dwell : 2.0 mSecs

Point spacing : 0.02 amu

Peak width measured at 5% of the peak maximum



Analyte	Limits			Results	
	Max. width	Min. width	Max. error	Peak width	Peak error
<b>9Be</b>	0.90	0.45	0.10	0.78	-0.05
<b>24Mg</b>	0.90	0.45	0.10	0.76	-0.01
<b>25Mg</b>	0.90	0.45	0.10	0.73	-0.01
<b>26Mg</b>	0.90	0.45	0.10	0.73	0.01
<b>59Co</b>	0.90	0.45	0.10	0.71	0.01
<b>113In</b>	0.90	0.45	0.10	0.73	0.01
<b>115In</b>	0.90	0.45	0.10	0.73	0.01
<b>140Ce</b>	0.90	0.45	0.10	0.75	-0.01
<b>206Pb</b>	0.90	0.45	0.10	0.71	0.03
<b>207Pb</b>	0.90	0.45	0.10	0.71	0.03
<b>208Pb</b>	0.90	0.45	0.10	0.71	0.01

**Sample details**

Sample name : ITUNE

Acquired at : 5/1/2015 9:24:56 AM

Report name : EPA ILM05.2/6020A 2.1 [3/15/2013 11:49:53 AM]

**Tune conditions**

Major		Minor		Global		Add. Gases	
Extraction	-137	Lens 2	-26.7	Standard resolution	n/a	He/H2	0.00
Lens 1	3.8	Lens 3	-171.8	High resolution	n/a	He/NH3	0.00
Focus	27.8	Forward power	1404	Analogue Detector	n/a		
D1	-37.6	Horizontal	61	PC Detector	n/a		
Pole Bias	3.0	Vertical	471				
Hexapole Bias	-3.0	D2	-160				
Nebuliser	0.89	DA	-80.0				
Sampling Depth	200	Cool	13.0				
		Auxiliary	0.90				

**Sensitivity and stability results****Acquisition parameters**

Sweeps : 150

Run	Time	5Bkg	9Be	24Mg	25Mg	26Mg	56Ar O	59Co	137Ba++
Dwell (mSecs)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Limits	%RSD	-	5.0%	5.0%	5.0%	5.0%	-	5.0%	-
	Countrate	-	>500	>500	>500	>500	-	>5000	-
1	9:25:44 AM	0	8694	56266	7376	8918	369277	150752	5
2	9:27:09 AM	0	8663	55755	7614	9013	365966	150921	4
3	9:28:35 AM	0	8731	57029	7700	9055	372067	152925	5
4	9:30:00 AM	0	8566	55599	7408	9015	369066	153295	6
5	9:31:25 AM	0	8570	56548	7679	9141	371382	153063	4
x		0	8645	56240	7555	9028	369551	152191	5
σ		0.05	74.31	584.07	152.98	80.76	2389.88	1245.03	0.89
%RSD		70.711	0.860	1.039	2.025	0.895	0.647	0.818	18.130

Run	Time	138Ba++	101Bkg	113In	115In	138Ba	140Ce	156Ce O	206Pb
Dwell (mSecs)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Limits	%RSD	-	-	5.0%	5.0%	-	5.0%	-	5.0%
	Countrate	-	-	>200	>5000	-	>10000	-	>500
1	9:25:44 AM	37	0	20842	490438	4179	572635	6739	268018
2	9:27:09 AM	33	0	20938	493357	4312	577812	6761	268622
3	9:28:35 AM	43	0	21196	497405	4203	577829	6818	268261
4	9:30:00 AM	36	0	21132	496449	4341	578626	6802	267527
5	9:31:25 AM	32	0	21334	495800	4267	577765	6872	266855
x		36	0	21088	494690	4260	576933	6798	267857
σ		4.12	0.07	197.99	2808.77	69.29	2429.50	51.96	686.99
%RSD		11.325	100.000	0.939	0.568	1.626	0.421	0.764	0.256

Run	Time	207Pb	208Pb	220Bkg
Dwell (mSecs)		0.0	0.0	0.0
Limits	%RSD	5.0%	5.0%	-
	Countrate	>500	>500	<2500
1	9:25:44 AM	244463	589372	0
2	9:27:09 AM	244978	588393	0
3	9:28:35 AM	244193	585342	0
4	9:30:00 AM	242835	584907	0
5	9:31:25 AM	244098	585960	0
x		244113	586795	0
σ		792.30	1972.64	0.06
%RSD		0.325	0.336	104.583

**Ratio results**

Run	Time	156Ce O/140Ce
Ratio limits		<0.0500
1	9:25:44 AM	0
2	9:27:09 AM	0



3	9:28:35 AM	0
4	9:30:00 AM	0
5	9:31:25 AM	0
$\bar{x}$		0.0118
$\sigma$		0.00
%RSD		0.6054

Result : The performance report passed.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Batch Number: 139894 Batch Start Date: 04/28/15 13:15 Batch Analyst: Baikadi, Ashwin

Batch Method: 3005A Batch End Date: 04/28/15 17:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAPITTCPPMS 00020	MTAPITTMGA 00023	MTAPITTMSC 00029	
MB 180-139894/1		3005A, 6020A		50 mL	50 mL				
LCS 180-139894/2		3005A, 6020A		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
180-43409-D-1	PW-DE01	3005A, 6020A	R	50 mL	50 mL				
180-43409-D-2	PW-F05	3005A, 6020A	R	50 mL	50 mL				

Batch Notes	
Batch Comment	Metals D4
First End time	17:15
Lot # of hydrochloric acid	2.5 ml 1533280
Lot # of Nitric Acid	1.0 ml 1513887
Hot Block ID number	#3
Oven, Bath or Block Temperature 1	95
Pipette ID	L1201611U
Person who witnessed spiking	AB
First Start time	13:15
ID number of the thermometer	IP2-14 CF=0.0 D1
Digestion Tube/Cup Lot #	1408268
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.

# GENERAL CHEMISTRY

COVER PAGE  
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-43409-1

SDG No.: \_\_\_\_\_

Project: Sparrows Point Trust Offshore Investigat

Client Sample ID	Lab Sample ID
<u>PW-DE01</u>	<u>180-43409-1</u>
<u>PW-F05</u>	<u>180-43409-2</u>

Comments:

---

1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY

Client Sample ID: PW-DE01

Lab Sample ID: 180-43409-1

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG ID.: \_\_\_\_\_

Matrix: Water

Date Sampled: 04/23/2015 12:30

Reporting Basis: WET

Date Received: 04/24/2015 08:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	2.5	10	2.5	ug/L	J		1	9014
	Hardness as calcium carbonate	1800	50	15	mg/L			1	SM 2340C

1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PW-DE01

Lab Sample ID: 180-43409-1

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG ID.: \_\_\_\_\_

Matrix: Water

Date Sampled: 04/23/2015 12:30

Reporting Basis: WET

Date Received: 04/24/2015 08:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Duplicate	2.8	1.0	0.14	mg/L			1	SM 5310C

1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY

Client Sample ID: PW-F05

Lab Sample ID: 180-43409-2

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG ID.: \_\_\_\_\_

Matrix: Water

Date Sampled: 04/23/2015 15:00

Reporting Basis: WET

Date Received: 04/24/2015 08:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	24	10	2.5	ug/L			1	9014
	Hardness as calcium carbonate	1400	50	15	mg/L			1	SM 2340C

1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PW-F05

Lab Sample ID: 180-43409-2

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG ID.: \_\_\_\_\_

Matrix: Water

Date Sampled: 04/23/2015 15:00

Reporting Basis: WET

Date Received: 04/24/2015 08:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Duplicate	6.7	1.0	0.14	mg/L			1	SM 5310C



2-IN  
CALIBRATION QUALITY CONTROL  
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1  
SDG No.: \_\_\_\_\_  
Analyst: PGJ Batch Start Date: 05/06/2015  
Reporting Units: ug/L Analytical Batch No.: 140787

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
9	ICV	15:05	Cyanide, Total	202	200	101	90-110		WCN0.2ICV_00330
10	ICB	15:07	Cyanide, Total	ND					
11	CCV	15:09	Cyanide, Total	102	100	102	90-110		WCN0.1L3_00045
12	CCB	15:11	Cyanide, Total	ND					
23	CCV	15:35	Cyanide, Total	98.6	100	99	90-110		WCN0.1L3_00045
24	CCB	15:37	Cyanide, Total	ND					
35	CCV	16:01	Cyanide, Total	103	100	103	90-110		WCN0.1L3_00045
36	CCB	16:03	Cyanide, Total	ND					

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

2-IN  
CALIBRATION QUALITY CONTROL  
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1  
SDG No.: \_\_\_\_\_  
Analyst: CAK Batch Start Date: 05/02/2015  
Reporting Units: mg/L Analytical Batch No.: 140330

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
13	CCV	08:07	Hardness as calcium carbonate	50.0	50.0	100	90-110		WHdCaCO3P_00006
14	CCB	08:10	Hardness as calcium carbonate	ND					
16	CCV	08:15	Hardness as calcium carbonate	50.0	50.0	100	90-110		WHdCaCO3P_00006
17	CCB	08:17	Hardness as calcium carbonate	ND					

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

2-IN  
 CALIBRATION QUALITY CONTROL  
 GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1  
 SDG No.: \_\_\_\_\_  
 Analyst: CLL Batch Start Date: 05/06/2015  
 Reporting Units: mg/L Analytical Batch No.: 140690

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
2	ICV	05:52	Dissolved Organic Carbon - Duplicate	40.1	40.0	100	90-110		ICV 40 PPM_00624
3	ICB	06:06	Dissolved Organic Carbon - Duplicate	ND					
12	CCV	08:05	Dissolved Organic Carbon - Duplicate	10.2	10.0	102	90-110		10 PPM TOC/CC_00491
13	CCB	08:18	Dissolved Organic Carbon - Duplicate	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.: 180-43409-1

SDG No.: \_\_\_\_\_

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 140787 Date: 05/06/2015 15:20 Prep Batch: 140701 Date: 05/06/2015 13:00							
9014	MB 180-140701/4-A	Cyanide, Total	ND		ug/L	10	1
Batch ID: 140330 Date: 05/02/2015 07:41							
SM 2340C	MB 180-140330/2	Hardness as calcium carbonate	ND		mg/L	5.0	1
Batch ID: 140690 Date: 05/06/2015 06:45							
SM 5310C	MB 180-140690/6	Dissolved Organic Carbon - Duplicate	ND		mg/L	1.0	1

7A-IN  
LAB CONTROL SAMPLE  
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 140787 Date: 05/06/2015 15:18 Prep Batch: 140701 Date: 05/06/2015 13:00											
LCS Source: WCNLCS_00018											
9014	LCS 180-140701/3-A	Cyanide, Total	186		ug/L	200	93	85-115			
Batch ID: 140330 Date: 05/02/2015 07:39											
LCS Source: WHdCaCO3P_00006											
SM 2340C	LCS 180-140330/1	Hardness as calcium carbonate	50.0		mg/L	50.0	100	90-110			
Batch ID: 140690 Date: 05/06/2015 06:19											
LCS Source: LCS 20 PPM_00620											
SM 5310C	LCS 180-140690/4	Dissolved Organic Carbon - Duplicate	20.1		mg/L	20.0	100	80-120	2	20	

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

7A-IN  
 LAB CONTROL SAMPLE DUPLICATE  
 GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 140690 Date: 05/06/2015 06:32											
						LCSD Source: LCS 20 PPM_00620					
SM 5310C	LCSD 180-140690/5	Dissolved Organic Carbon - Duplicate	19.6		mg/L	20.0	98	80-120	2	20	

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.: 180-43409-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 140787 Date: 05/06/2015 15:14			Prep Batch: 140701 Date: 05/06/2015 13:00			LCS Source: WCN0.5L1_00495					
9014	LLCS 180-140701/1- A	Cyanide, Total	52.6		ug/L	50.0	105	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.: 180-43409-1  
SDG No.: \_\_\_\_\_  
Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 140787 Date: 05/06/2015 15:16			Prep Batch: 140701 Date: 05/06/2015 13:00			LCS Source: WCN10Pi_00486					
9014	HLCS 180-140701/2- A	Cyanide, Total	245		ug/L	250	98	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: 180-43409-1

SDG Number: \_\_\_\_\_

Matrix: Water

Instrument ID: SEAL2

Method: 9014

MDL Date: 10/15/2014 12:58

Prep Method: 9010C

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Cyanide, Total		10	2.5

9-IN  
CALIBRATION BLANK DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-43409-1  
SDG Number: \_\_\_\_\_  
Matrix: Water Instrument ID: SEAL2  
Method: 9014 XMDL Date: 10/15/2014 12:59

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Cyanide, Total		10	2.5

9-IN  
DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh

Job Number: 180-43409-1

SDG Number: \_\_\_\_\_

Matrix: Water

Instrument ID: NOEQUIP

Method: SM 2340C

MDL Date: 01/27/2011 15:46

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Hardness as calcium carbonate		5	1.5336

9-IN  
CALIBRATION BLANK DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-43409-1  
SDG Number: \_\_\_\_\_  
Matrix: Water Instrument ID: NOEQUIP  
Method: SM 2340C XMDL Date: 01/27/2011 15:46

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Hardness as calcium carbonate		5	1.5336

9-IN  
DETECTION LIMITS  
GENERAL CHEMISTRY - DISSOLVED

Lab Name: TestAmerica Pittsburgh

Job Number: 180-43409-1

SDG Number: \_\_\_\_\_

Matrix: Water

Instrument ID: TOC1030

Method: SM 5310C

MDL Date: 01/31/2010 13:17

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Dissolved Organic Carbon - Duplicate		1	0.1401

9-IN  
CALIBRATION BLANK DETECTION LIMITS  
GENERAL CHEMISTRY - DISSOLVED

Lab Name: TestAmerica Pittsburgh Job Number: 180-43409-1  
SDG Number: \_\_\_\_\_  
Matrix: Water Instrument ID: TOC1030  
Method: SM 5310C XMDL Date: 01/31/2010 13:17

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Dissolved Organic Carbon - Duplicate		1	0.1401

12-IN  
PREPARATION LOG  
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Prep Method: 9010C

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LLCS 180-140701/1-A	05/06/2015 13:00	140701		50	50
HLCS 180-140701/2-A	05/06/2015 13:00	140701		50	50
LCS 180-140701/3-A	05/06/2015 13:00	140701		50	50
MB 180-140701/4-A	05/06/2015 13:00	140701		50	50
180-43409-1	05/06/2015 13:00	140701		50	50
180-43409-2	05/06/2015 13:00	140701		50	50

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Instrument ID: SEAL2 Analysis Method: 9014

Start Date: 05/06/2015 14:48 End Date: 05/06/2015 16:20

Lab Sample Id	D/F	Type	Time	Analytes																											
				C	N																										
ZZZZZZ			14:48																												
ZZZZZZ			14:50																												
ZZZZZZ			14:52																												
ZZZZZZ			14:54																												
ZZZZZZ			14:56																												
ZZZZZZ			14:59																												
ZZZZZZ			15:01																												
ZZZZZZ			15:03																												
ICV 180-140787/9	1		15:05	X																											
ICB 180-140787/10	1		15:07	X																											
CCV 180-140787/11	1		15:09	X																											
CCB 180-140787/12	1		15:11	X																											
LLCS 180-140701/1-A	1	T	15:14	X																											
HLCS 180-140701/2-A	1	T	15:16	X																											
LCS 180-140701/3-A	1	T	15:18	X																											
MB 180-140701/4-A	1	T	15:20	X																											
ZZZZZZ			15:22																												
ZZZZZZ			15:24																												
ZZZZZZ			15:27																												
ZZZZZZ			15:29																												
ZZZZZZ			15:31																												
ZZZZZZ			15:33																												
CCV 180-140787/23	1		15:35	X																											
CCB 180-140787/24	1		15:37	X																											
ZZZZZZ			15:39																												
ZZZZZZ			15:42																												
ZZZZZZ			15:44																												
ZZZZZZ			15:46																												
ZZZZZZ			15:48																												
ZZZZZZ			15:50																												
ZZZZZZ			15:52																												
180-43409-1	1	T	15:54	X																											
180-43409-2	1	T	15:57	X																											
ZZZZZZ			15:59																												
CCV 180-140787/35	1		16:01	X																											
CCB 180-140787/36	1		16:03	X																											
ZZZZZZ			16:05																												
ZZZZZZ			16:07																												
ZZZZZZ			16:09																												
ZZZZZZ			16:11																												
ZZZZZZ			16:13																												
ZZZZZZ			16:15																												



13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Instrument ID: SEAL2 Analysis Method: 9014

Start Date: 05/06/2015 14:48 End Date: 05/06/2015 16:20

Lab Sample Id	D/F	Type	Time	Analytes																											
				C	N																										
ZZZZZZ			16:16																												
CCV 180-140787/44			16:18																												
CCB 180-140787/45			16:20																												

Prep Types: \_\_\_\_\_  
T = Total/NA

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Instrument ID: NOEQUIP Analysis Method: SM 2340C

Start Date: 05/02/2015 07:39 End Date: 05/02/2015 08:17

Lab Sample Id	D/F	T y p e	Time	H a r d C C	Analytes																			
ICS 180-140330/1	1	T	07:39	X																				
MB 180-140330/2	1	T	07:41	X																				
ZZZZZZ			07:43																					
ZZZZZZ			07:46																					
ZZZZZZ			07:48																					
ZZZZZZ			07:51																					
ZZZZZZ			07:53																					
ZZZZZZ			07:55																					
ZZZZZZ			07:58																					
ZZZZZZ			08:00																					
ZZZZZZ			08:03																					
180-43409-1	1	T	08:05	X																				
CCV 180-140330/13	1		08:07	X																				
CCB 180-140330/14	1		08:10	X																				
180-43409-2	1	T	08:12	X																				
CCV 180-140330/16	1		08:15	X																				
CCB 180-140330/17	1		08:17	X																				

Prep Types: \_\_\_\_\_  
T = Total/NA





# AQ2 Report

**Serial Number:** SEAL 2  
**Report Requested By:** Test America  
**Date & Time:** 05/06/2015 16:27:35  
**Tray Number:** 1  
**Tray Name:** 15.05.06 (12-02)

*A. Johnson 5.6.15*

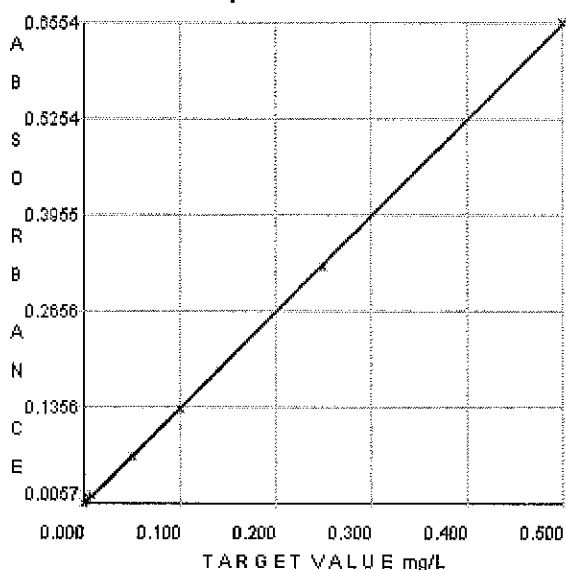
## CYANIDE

### Calibration Chart

Type	Observed	Calculated	Target	% Error
S1	0.0057	0.0007	0.0000	
S90	0.0136	0.0068	0.0050	36.0755
S91	0.0178	0.0101	0.0100	0.6848
S92	0.0679	0.0487	0.0500	-2.6731
S93	0.1345	0.0999	0.1000	-0.0528
S94	0.3258	0.2474	0.2500	-1.0456
S95	0.6554	0.5014	0.5000	0.2864
S0	0.0056	0.0006	0.0000	

**Polynomial Order:** 1  
**Correlation Coefficient:** 1.0000  
**Carryover:** -0.0  
**Date & Time:** 05/06/2015 15:03:21

### Calibration Graph



### Reagents

Name	Batch	Prepared By	Expiry Date
CN - Phos Buff	1390860	Test America	11/03/2015 21:00:00
CN - Chl-T	1555251	Test America	05/07/2015 22:00:00
CN - PyrBrbA	1428101	Test America	06/04/2015 22:00:00

Cup Type	ID	Result	Units	Raw Data	Test Dil.	Cup Dil.	User	Time/Date
S1	STANDARD 1	0.0057		0.005692				05/06/2015 14:48:18
S90	STANDARD 90	0.0136		0.013612				05/06/2015 14:50:28
S91	STANDARD 91	0.0178		0.017847				05/06/2015 14:52:36
S92	STANDARD 92	0.0679		0.067922				05/06/2015 14:54:44
S93	STANDARD 93	0.1345		0.134460				05/06/2015 14:56:54
S94	STANDARD 94	0.3258		0.325752				05/06/2015 14:59:06
S95	STANDARD 95	0.6554		0.655361				05/06/2015 15:01:13
S0	STANDARD 0	0.0056		0.005567				05/06/2015 15:03:21
1	C15	ICV	0.2021 mg/L	0.267024				05/06/2015 15:05:29
2	C17	ICB	0.0015 mg/L	0.006777				05/06/2015 15:07:37
	C11	C C V	0.1024 mg/L	0.137631				05/06/2015 15:09:46
	C12	C C B	0.0008 mg/L	0.005861				05/06/2015 15:11:55
3	U1	LLCS 180-1407011-A	0.0526 mg/L	0.073051				05/06/2015 15:14:03
4	U2	HLCS 180-1407012-A	0.2450 mg/L	0.322689				05/06/2015 15:16:12
5	U3	LCS 180-1407013-A	0.1864 mg/L	0.246562				05/06/2015 15:18:21

6	U4	MB 180-1407014-A	0.0021	mg/L	0.007508	05/06/2015 15:20:30
7	U5	180-43379-F-1-A	0.0069	mg/L	0.013700	05/06/2015 15:22:40
8	U6	180-43407-G-1-A	0.0020	mg/L	0.007322	05/06/2015 15:24:51
9	U7	180-43407-G-2-A	0.0026	mg/L	0.008146	05/06/2015 15:27:00
10	U8	180-43407-G-3-A	0.0341	mg/L	0.049034	05/06/2015 15:29:09
11	U9	180-43407-G-4-A	0.0259	mg/L	0.038366	05/06/2015 15:31:18
12	U10	180-43407-G-5-A	0.0309	mg/L	0.044820	05/06/2015 15:33:27
	C11	C C V	0.0986	mg/L	0.132736	05/06/2015 15:35:36
	C12	C C B	0.0004	mg/L	0.005306	05/06/2015 15:37:45
13	U11	180-43407-G-6-A	0.0303	mg/L	0.044123	05/06/2015 15:39:53
14	U12	180-43407-G-6-B DU	0.0282	mg/L	0.041310	05/06/2015 15:42:02
15	U13	180-43407-G-6-C MS	0.1349	mg/L	0.179781	05/06/2015 15:44:10
16	U14	180-43407-G-6-D MSD	0.1362	mg/L	0.181482	05/06/2015 15:46:18
17	U15	180-43407-G-7-A	0.0257	mg/L	0.038082	05/06/2015 15:48:28
18	U16	180-43407-G-8-A	0.0264	mg/L	0.039008	05/06/2015 15:50:39
19	U17	180-43407-G-9-A	0.0334	mg/L	0.048178	05/06/2015 15:52:47
20	U18	180-43409-C-1-A	0.0025	mg/L	0.008023	05/06/2015 15:54:55
21	U19	180-43409-C-2-A	0.0242	mg/L	0.036129	05/06/2015 15:57:03
22	U20	180-43448-H-1-A	0.0394	mg/L	0.055947	05/06/2015 15:59:11
	C11	C C V	0.1029	mg/L	0.138277	05/06/2015 16:01:18
	C12	C C B	0.0008	mg/L	0.005829	05/06/2015 16:03:27
23	U21	180-43448-H-2-A	0.0427	mg/L	0.060195	05/06/2015 16:05:35
24	U22	180-43448-H-3-A	0.0535	mg/L	0.074221	05/06/2015 16:07:45
25	U23	180-43448-H-4-A	0.0553	mg/L	0.076566	05/06/2015 16:09:56
26	U24	180-43448-H-5-A	0.0492	mg/L	0.068598	05/06/2015 16:11:43
27	U25	180-43458-M-13-A	0.0017	mg/L	0.006989	05/06/2015 16:13:31
28	U26	180-43512-C-1-A	0.0104	mg/L	0.018244	05/06/2015 16:15:11
29	U27	180-43514-A-1-A	0.0028	mg/L	0.008465	05/06/2015 16:16:51
	C11	C C V	0.1024	mg/L	0.137627	05/06/2015 16:18:30
	C12	C C B	0.0009	mg/L	0.005943	05/06/2015 16:20:10





OI Corporation  
 151 Graham Rd  
 College Station, TX  
 77845  
 USA

Date Prepared: 05/06/2015  
 Date Approved:  
 By:

*46#050615 Dae*

*SMS310C Dae*

*6#140690*

Sample Results Summary

Spl #	Vial #	Sample ID	Num Rep	Act Rep	Method	Type	Dil	Cust ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	1	BLANK	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Sample	1:1	00000000	TOC	2,519	0.169	0.071	92	3.64	Pass
2	2	ICV 40 PPM	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Chk	1:1	00000000	TOC	265,109	96.216	40.089	103362	1.27	Fail
3	3	ICB	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Chk	1:1	00000000	TOC	1,843	0.000	0.000	70	3.80	Fail
4	4	LCS 20 PPM	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Chk	1:1	00000000	TOC	134,484	48.184	20.076	103656	0.34	Fail
5	5	LCSD 20 PPM	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Chk	1:1	00000000	TOC	131,663	47.147	19.645	103440	1.09	Fail
6	6	MB	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Chk	1:1	00000000	TOC	1,319	0.000	0.000	5	0.37	Fail
7	7	180-43220-b-1-a	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Sample	1:1	00000000	TOC	15,856	5.074	2.114	808	5.10	Pass
8	8	180-43220-b-2-a	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Sample	1:1	00000000	TOC	13,958	4.376	1.823	371	2.66	Pass
9	9	180-43220-b-3-a	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Sample	1:1	00000000	TOC	13,376	4.162	1.734	295	2.21	Pass
10	10	180-43409-b-1-a	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Sample	1:1	00000000	TOC	20,160	6.656	2.773	605	3.00	Pass
11	11	180-43409-b-2-a	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Sample	1:1	00000000	TOC	46,058	16.179	6.741	2,560	5.56	Pass
12	12	CCV 10 PPM	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Chk	1:1	00000000	TOC	70,070	24.498	10.208	10675	2.39	Fail
13	13	CCB	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Chk	1:1	00000000	TOC	3,769	0.118	0.049	290	6.11	Fail

Instrument ID: E717730273 (Wet Chemical) Page 1 of 8  
 Report ID: TOC1030-R01305 (Report generated by OI Analytical's TOC Reporter V1.4.2) Date Printed: 5/6/2015 By Sample Report  
 Denotes Excluded Replicates  
 Denotes First Failed Samples



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USA

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Date Approved: 77845 By:

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Sample Results

Spl #: 1 Sample ID: BLANK Type: Sample Date: 05/06/2015 Status: Pass  
Vial #: 1 Method: TOC JULY 2013 - Jul 18, 2013 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:39 am	-	-	-	2,454	0.146	0.061
2	5:45 am	-	-	-	2,584	0.193	0.081
Avg.		-	-	-	2,519	0.169	0.071
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	3.64	-	-

Spl #: 2 Sample ID: ICB 40 PPM Type: Chk Standard Date: 05/06/2015 Status: Fail  
Vial #: 2 Method: TOC JULY 2013 - Jul 18, 2013 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:52 am	-	-	-	267,487	97.091	40.454
2	5:59 am	-	-	-	262,732	95.342	39.725
Avg.		-	-	-	265,109	96.216	40.089
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	1.27	-	-

Spl #: 3 Sample ID: ICB Type: Chk Standard Date: 05/06/2015 Status: Fail  
Vial #: 3 Method: TOC JULY 2013 - Jul 18, 2013 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:06 am	-	-	-	1,793	0.000	0.000
2	6:12 am	-	-	-	1,893	0.000	0.000
Avg.		-	-	-	1,843	0.000	0.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	3.80	-	-





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Spl #: 4 Sample ID: LCS 20 PPM Type: Chk Standard Date: 05/06/2015 Status: Fail  
Vial #: 4 Method: TOC JULY 2013 - Jul 18, 2013 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:19 am	-	-	-	134,161	48,065	20,027
2	6:26 am	-	-	-	134,806	48,302	20,125

Avg. 134,484 48,184 20,076  
Std.Dev.  
% RSD. 0.34

Spl #: 5 Sample ID: LCSD 20 PPM Type: Chk Standard Date: 05/06/2015 Status: Fail  
Vial #: 5 Method: TOC JULY 2013 - Jul 18, 2013 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:32 am	-	-	-	132,681	47,521	19,800
2	6:39 am	-	-	-	130,646	46,772	19,489

Avg. 131,663 47,147 19,645  
Std.Dev.  
% RSD. 1.09

Spl #: 6 Sample ID: MB Type: Chk Standard Date: 05/06/2015 Status: Fail  
Vial #: 6 Method: TOC JULY 2013 - Jul 18, 2013 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:45 am	-	-	-	1,322	0.000	0.000
2	6:51 am	-	-	-	1,315	0.000	0.000

Avg. 1,319 0.000 0.000  
Std.Dev.  
% RSD. 0.37



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Spl #: 7 Sample ID: 180-43220-b-1-a Type: Sample Date: 05/06/2015 Status: Pass  
 Vial #: 7 Method: TOC JULY 2013 - Jul 18, 2013 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:59 am	-	-	-	15,284	4.863	2.026
2	7:05 am	-	-	-	16,427	5,284	2.202
Avg.		-	-	-	15,856	5.074	2.114
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	5.10	-	-

Spl #: 8 Sample ID: 180-43220-b-2-a Type: Sample Date: 05/06/2015 Status: Pass  
 Vial #: 8 Method: TOC JULY 2013 - Jul 18, 2013 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:12 am	-	-	-	13,696	4.279	1.783
2	7:18 am	-	-	-	14,220	4.472	1.863
Avg.		-	-	-	13,958	4.376	1.823
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	2.66	-	-

Spl #: 9 Sample ID: 180-43220-b-3-a Type: Sample Date: 05/06/2015 Status: Pass  
 Vial #: 9 Method: TOC JULY 2013 - Jul 18, 2013 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:25 am	-	-	-	13,167	4.085	1.702
2	7:31 am	-	-	-	13,585	4.239	1.766
Avg.		-	-	-	13,376	4.162	1.734
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	2.21	-	-



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Date Approved: By:

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Spl #: 10 Sample ID: 180-43409-b-1-a Type: Sample Date: 05/06/2015 Status: Pass  
 Vial #: 10 Method: TOC JULY 2013 - Jul 18, 2013 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:39 am	-	-	-	19,732	6,499	2,707
2	7:45 am	-	-	-	20,588	6,814	2,839
Avg.		-	-	-	20,160	6,656	2,773
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	3.00	-	-

Spl #: 11 Sample ID: 180-43409-b-2-a Type: Sample Date: 05/06/2015 Status: Pass  
 Vial #: 11 Method: TOC JULY 2013 - Jul 18, 2013 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:52 am	-	-	-	44,248	15,514	6,464
2	7:58 am	-	-	-	47,868	16,845	7,019
Avg.		-	-	-	46,058	16,179	6,741
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	5.56	-	-

Spl #: 12 Sample ID: CCV 10 PPM Type: Chk Standard Date: 05/06/2015 Status: Fail  
 Vial #: 12 Method: TOC JULY 2013 - Jul 18, 2013 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:05 am	-	-	-	71,254	24,933	10,389
2	8:11 am	-	-	-	68,885	24,063	10,026
Avg.		-	-	-	70,070	24,498	10,208
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	2.39	-	-



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 Date Approved: By:

Spl #: 13 Sample ID: CCB Type: Chk Standard Date: 05/06/2015 Status: Fail  
 Vial #: 13 Method: TOC JULY 2013 - Jul 18, 2013 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:18 am	-	-	-	3,932	0.178	0.074
2	8:24 am	-	-	-	3,606	0.059	0.024
Avg.		-	-	-	3,769	0.118	0.049
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	6.11	-	-

TOC



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Date Prepared: 05/06/2015 By:  
 Date Approved: By:

**Calibration Details**

Calibration Mode: TOC  
 Date Calibrated: 05/03/2015  
 Time Calibrated: 1:03 pm  
 Calibrated By: toc  
 RF (ugC/k-cis): 0.3677  
 R2: 0.9998  
 R: 0.9999  
 QC Blank(cis): 3.643  
 Offset (cis): 3451  
 Offset (ugC): -1.269  
 Reagent Blank (cis): 2.058  
 Units of Measure: PPM->mg/L C

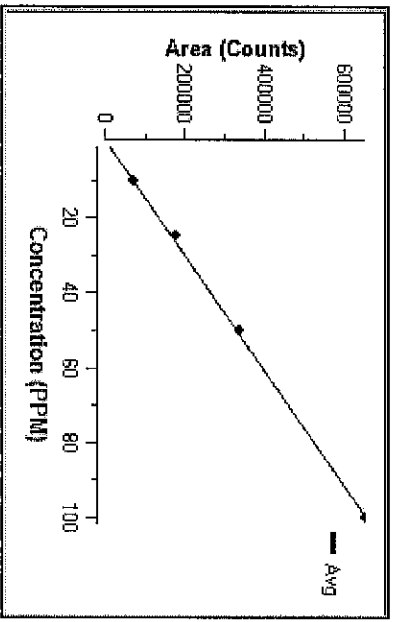
**Calibration Settings**

Stock Conc. For Dilutions: (PPM) 1,000.000  
 # of Reagent Blanks: 3  
 EFC Enabled: No  
 Total Flowrate w/EFC: 100 ml/min  
 Check Standards: Subtract RW  
 Samples: Subtract RB  
 Regression type: Weighted Linear  
 weighting factor => 1 / mass

**Calculations:**

$$\text{Concentration} = \frac{RF \times \text{Area}}{\text{volume}}$$

Samples:  $\text{Area} = \text{Area}_{\text{Peak}} - \text{Area}_{\text{Offset}}$  or  $\text{Area} = \text{Area}_{\text{Peak}} - \text{Area}_{\text{RB}}$   
 CHK Stds:  $\text{Area} = \text{Area}_{\text{Peak}} - \text{Area}_{\text{Offset}}$  or  $\text{Area} = \text{Area}_{\text{Peak}} - \text{Area}_{\text{RW}}$   
 QIC Samples:  $\text{Area} = \text{Area}_{\text{Peak}} - \text{Area}_{\text{QCBlank}}$

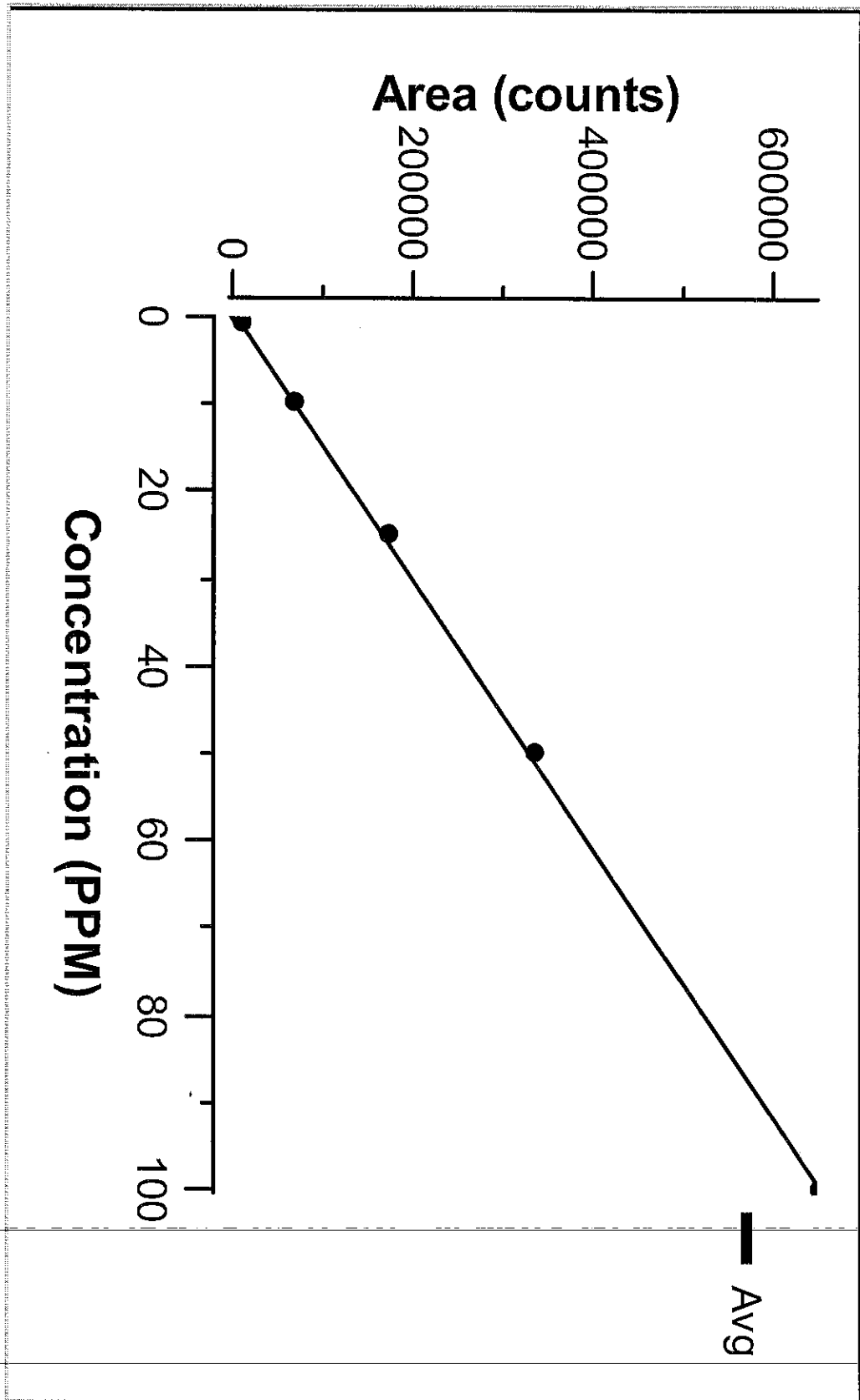


$$y \Rightarrow \text{Area}$$

$$y = m \times x + b$$

$$m \Rightarrow \frac{10000}{RF \times \text{volume}}$$

$$b \Rightarrow 0$$



Std #	Conc (PPM)	Volume (mL)	# Reps	Area	Std. Dev	%RSD	Date Analysed
RW	0.000	2.400	2	3,448	59	1.71	2015-05-03; 11:33AM
1	1.000	2.400	2	9,950	199	2.00	2015-05-03; 11:51AM
2	10.000	2.400	2	68,703	150	0.22	2015-05-03; 12:04PM
3	25.000	2.400	2	171,189	863	0.50	2015-05-03; 12:18PM
4	50.000	2.400	2	331,515	646	0.19	2015-05-03; 12:31PM
5	100.000	2.400	2	650,148	931	0.14	2015-05-03; 12:45PM

RF(ugC/k-ent): 0.3677  
 R2: 0.9998  
 Reagent Blank(cts): 2,058  
 Offset Area(cts): 3,451  
 Offset Mass(ugC): -1.27

Revision: 40-TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM  
 Modified By: toC  
 Date Created: 2013/07/18; 11:10 AM  
 Last Modified: 2015/05/03; 12:51 PM  
 Last Calibrated: 2015/05/03; 12:51 PM

**Calibration - Quick View -TOC**

User ID: toC	Name: Total Organic Carbon
Title: Mr	Dept: OIC-TOC





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Date Prepared: 05/04/2015 By:  
 Date Approved: 77845 By:

TOC

Sample Results Summary

Spl Vial #	Sample ID	Num Act	Rep Rep	Method	Type	Dil	Cust ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	BLANK	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Sample	1 : 1	000000000	TOC	6,431	0.000	0.000	176	2.73	Pass
2	TOC-RW	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Std	1 : 1	000000000	TOC	3,448	0.000	0.000	59	1.71	
3	TOC-Std#1-1,000 PPM	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Std	1 : 1	000000000	TOC	9,950	2.400	1,000	199	2.00	
4	TOC-Std#2-10,000 PPM	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Std	1 : 1	000000000	TOC	68,703	24.000	10,000	150	0.22	
5	TOC-Std#3-25,000 PPM	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Std	1 : 1	000000000	TOC	171,189	60.000	25,000	863	0.50	
6	TOC-Std#4-50,000 PPM	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Std	1 : 1	000000000	TOC	331,515	120.000	50,000	646	0.19	
7	TOC-Std#5-100,000 PPM	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Std	1 : 1	000000000	TOC	650,148	240.000	100,000	931	0.14	

050315 TOC CELL



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Date Approved: 77845

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Sample Results

Spl #: 1 Sample ID: BLANK Type: Sample Date: 05/03/2015 Status: Pass  
Vial #: 1 Method: TOC JULY 2013 - Jul 18, 2013 Dilution 1 : 1 Customer ID: 000000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:44 am	-	-	-	6,555	0.000	0.000
2	10:51 am	-	-	-	6,307	0.000	0.000

Avg. 6.431 0.000 0.000  
Std.Dev. - - -  
% RSD. 2.73

Spl #: 3 Sample ID: TOC-RW Type: Std Date: 05/03/2015 Status:  
Vial #: 2 Method: TOC JULY 2013 - Jul 18, 2013 Dilution 1 : 1 Customer ID: 000000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:33 am	-	-	-	3,406	0.000	0.000
2	11:40 am	-	-	-	3,489	0.000	0.000

Avg. 3.448 0.000 0.000  
Std.Dev. - - -  
% RSD. 1.71

Spl #: 4 Sample ID: TOC-Std#1-1.000 PPM Type: Std Date: 05/03/2015 Status:  
Vial #: 3 Method: TOC JULY 2013 - Jul 18, 2013 Dilution 1 : 1 Customer ID: 000000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:51 am	-	-	-	10,090	2.400	1.000
2	11:57 am	-	-	-	9,809	2.400	1.000

Avg. 9.950 2.400 1.000  
Std.Dev. - - -  
% RSD. 2.00

Denotes Excluded Replicates  
Denotes First Failed Samples

Spl #: 5 Sample ID: TOC-Std#2-10.000 PPM Type: Std Date: 05/03/2015 Status:  
 Vial #: 4 Method: TOC JULY 2013 - Jul 18, 2013 Dilution 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:04 pm	-	-	-	68,597	24,000	10,000
2	12:11 pm	-	-	-	68,809	24,000	10,000
Avg.		-	-	-	68,703	24,000	10,000
Std.Dev.		0.22					

Spl #: 6 Sample ID: TOC-Std#3-25.000 PPM Type: Std Date: 05/03/2015 Status:  
 Vial #: 5 Method: TOC JULY 2013 - Jul 18, 2013 Dilution 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:18 pm	-	-	-	170,579	60,000	25,000
2	12:24 pm	-	-	-	171,799	60,000	25,000
Avg.		-	-	-	171,189	60,000	25,000
Std.Dev.		0.50					

Spl #: 7 Sample ID: TOC-Std#4-50.000 PPM Type: Std Date: 05/03/2015 Status:  
 Vial #: 6 Method: TOC JULY 2013 - Jul 18, 2013 Dilution 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:31 pm	-	-	-	331,972	120,000	50,000
2	12:37 pm	-	-	-	331,058	120,000	50,000
Avg.		-	-	-	331,515	120,000	50,000
Std.Dev.		0.19					



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Spl #: 8 Sample ID: TOC-Std#5-100.000 PPM Type: Std Date: 05/03/2015 Status:  
 Vial #: 7 Method: TOC JULY 2013 - Jul 18, 2013 Dilution 1:1 Customer ID: 000000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:45 pm	-	-	-	649,489	240.000	100.000
2	12:51 pm	-	-	-	650,806	240.000	100.000

Avg. 650,148 240.000 100.000  
 Std.Dev. 0.14  
 % RSD.

**Method Summary**

**Method Details**

Method Name: TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM  
Date Created: 07/18/2013  
Time Created: 11:10  
Created By: toc

**Pre-Processing**

Sample Dilution: Disabled  
Dilution Mode: Automatic  
Dilution Factor: 1 : 1

**Times**

React 01:30 Detect 03:00  
TOC 01:30 TOC 03:00

**Temp**

React 70 Detect 70  
98 98

**Analysis Mode:**

Sparging Mode: Internal  
Pre-Acid Volume (mL): 1.000  
Spurge Time (mm:ss): 02:00

**Outlier Removal Criteria**

Enabled: No  
Additional Replicates: 1  
Max. % RSD: 10.00

**Volumes**

Sample Volume (mL): 2.400  
Acid Volume (mL): 1.000  
Persulfate Volume(mL): 1.500

**Rinses**

Rinse Volume (mL): 10.000  
Rinses Per Sample: 1  
Rinses Per Replicate: 0

**Other**

SysPressure: 20.00

Max. Std. Dev. 100

Use Modified Oxidant: No

**Calibration Summary**

**Calibration Generation**

Generation Mode: Manual  
# of Stds: 5  
Dilution Factor: 10 : 1  
Dilution Volume (mL): 1.000  
Add Zero as Std #1: No

**Calibration Pass/Fail Criteria**

Parameter	Enabled	Low	High	Failure
RP (ugC/K-cts)	Yes	0.1000	0.3000	Continue
Offset (area) (cts)	Yes	0.995	1.000	Continue
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

**Calibration Mode**

Primary Mode: TOC  
User for ALL Modes: Enabled

**Checks, QC's and Actions**

Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
CK Std	n/a	10.00	Continue	Continue
QC #1	40.000	10.00	Continue	Continue
QC #2	20.000	20.00	Continue	Continue
QC #3	25.000	10.00	Continue	Continue
QC #4	0.000	10.00	Continue	Continue
SST	0.000	15.00	Continue	Continue



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Date Prepared: 05/04/2015 By:  
 Date Approved: By:

TOC

**Calibration Details**

Calibration Mode: TOC  
 Date Calibrated: 05/02/2015  
 Time Calibrated: 2:46 pm  
 Calibrated By: toc  
 RF (ugC/L-cs): 0.3720  
 R2: 0.9993  
 R: 0.9997  
 QC Blank(cts): 11,040  
 Offset (cts): 15758  
 Offset (ugC): -5.863  
 Reagent Blank (cts): 10,448  
 Units of Measure: PPM->mg/L C

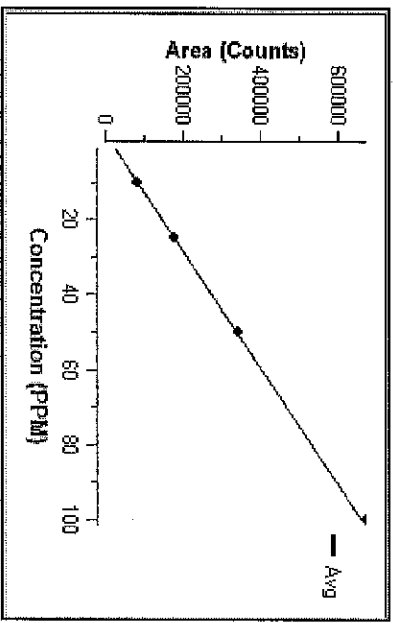
**Calibration Settings**

Stock Conc. For Dilutions: (PPM) 1,000,000  
 # of Reagent Blanks: 3  
 EFC Enabled: No  
 Total Flowrate w/EFC: 100 ml/min  
 Check Standards: Subtract RW  
 Samples: Subtract RB  
 Regression type: Weighted Linear  
 weighting factor => 1 / mass

**Calculations:**

$$\text{Concentration} = \frac{RF \times \text{Area}}{\text{Volume}}$$

Samples: Area = Area<sub>peak</sub> - Area<sub>Offset</sub> or Area = Area<sub>peak</sub> - Area<sub>avg</sub>  
 CHK Stds: Area = Area<sub>peak</sub> - Area<sub>Offset</sub> or Area = Area<sub>peak</sub> - Area<sub>RW</sub>  
 QC Samples: Area = Area<sub>peak</sub> - Area<sub>QCBlank</sub>



$$y = m \times x + b$$

y => Area

$$m \Rightarrow \frac{10000}{RF \times \text{volume}}$$

b => 0

**Calibration Details**

Calibration Mode: TOC  
Date Calibrated: 05/03/2015  
Time Calibrated: 12:51 pm  
Calibrated By: toc  
RF (ugC/k-cs): 0.3677  
R2: 0.9998  
R: 0.9999  
QC Blank(c/s): 0  
Offset (c/s): 3451  
Offset (ugC): -1.269  
Reagent Blank (c/s): 2.058  
Units of Measure: PPM->mg/L C

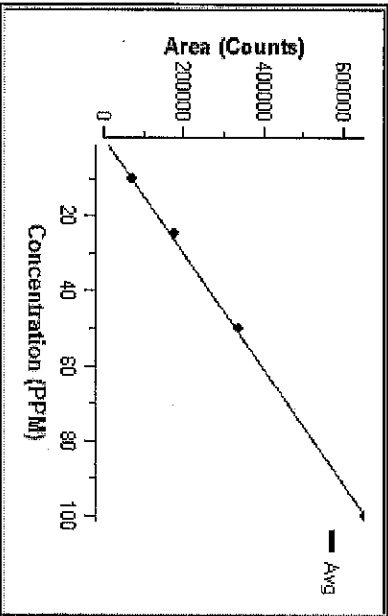
**Calibration Settings**

Stock Conc. For Dilutions: (PPM) 1,000,000  
# of Reagent Blanks: 3  
EFC Enabled: No  
Total Flowrate w/EFC: 100 ml/min  
Check Standards: Subtract RW  
Samples: Subtract RB  
Regression type: Weighted Linear  
weighting factor => 1 / mass

**Calculations:**

$$\text{Concentration} = \frac{RF \times \text{Area}}{\text{Volume}}$$

Samples:  $\text{Area} = \text{Area}_{\text{Peak}} - \text{Area}_{\text{Offset}}$  or  $\text{Area} = \text{Area}_{\text{Peak}} - \text{Area}_{\text{RB}}$   
 CHK Stds:  $\text{Area} = \text{Area}_{\text{Peak}} - \text{Area}_{\text{Offset}}$  or  $\text{Area} = \text{Area}_{\text{Peak}} - \text{Area}_{\text{RW}}$   
 QC Samples:  $\text{Area} = \text{Area}_{\text{Peak}} - \text{Area}_{\text{QCBlank}}$

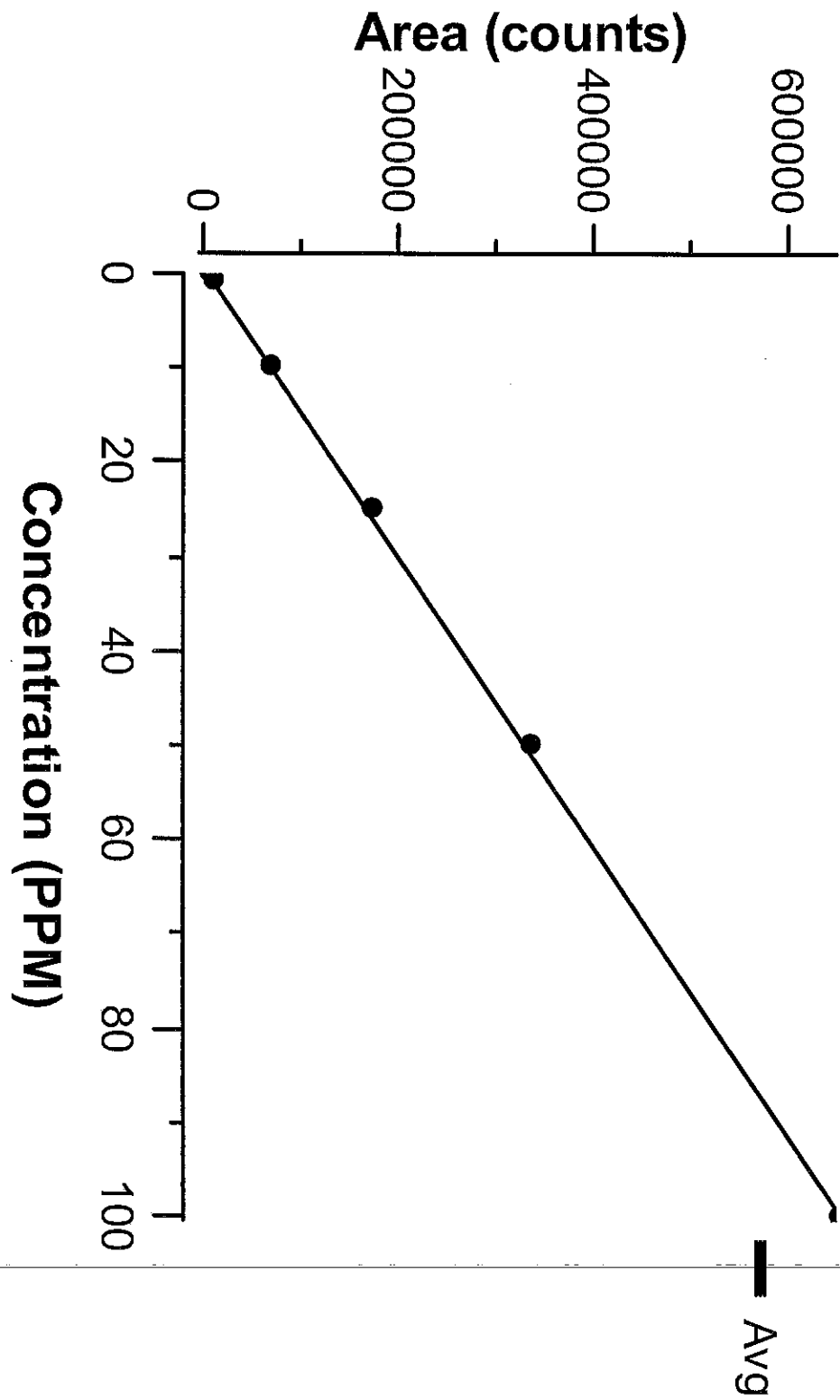


$$y = m \times x + b$$

$y \Rightarrow \text{Area}$

$$m \Rightarrow \frac{10000}{RF \times \text{volume}}$$

$b \Rightarrow 0$





Std #	Conc (PPM)	Volume (mL)	# Reps	Area	Std. Dev	%RSD	Date Analysed
RW	0.000	2.400	2	3,448	59	1.71	2015-05-03; 11:33AM
1	1.000	2.400	2	9,950	199	2.00	2015-05-03; 11:51AM
2	10.000	2.400	2	68,703	150	0.22	2015-05-03; 12:04PM
3	25.000	2.400	2	171,189	863	0.50	2015-05-03; 12:18PM
4	50.000	2.400	2	331,515	646	0.19	2015-05-03; 12:31PM
5	100.000	2.400	2	650,148	931	0.14	2015-05-03; 12:45PM

RF(ugC/k-ent): 0.3677  
 R2: 0.9998  
 Reagent Blank(cts): 2.058  
 Offset Area(cts): 3.451  
 Offset Mass(ugC): -1.27

Revision: 40-TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM  
 Modified By: toc  
 Date Created: 2013/07/18; 11:10 AM  
 Last Modified: 2015/05/03; 12:51 PM  
 Last Calibrated: 2015/05/03; 12:51 PM

**Calibration - Quick View - TOC**

User ID: toc	Title: Mr
Name: Total Organic Carbon	Dept: OIC-TOC

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Batch Number: 140701 Batch Start Date: 05/06/15 11:10 Batch Analyst: Johnson, Paul

Batch Method: 9010C Batch End Date: 05/06/15 12:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	SulfideCheck	ChlorineCheck	WCN0.5Ll 00495	WCN10Pi 00486
LLCS 180-140701/1		9010C, 9014		50 mL	50 mL			5 mL	
HLCS 180-140701/2		9010C, 9014		50 mL	50 mL				1.25 mL
LCS 180-140701/3		9010C, 9014		50 mL	50 mL				
MB 180-140701/4		9010C, 9014		50 mL	50 mL				
180-43409-C-1	PW-DE01	9010C, 9014	T	50 mL	50 mL	N	N		
180-43409-C-2	PW-F05	9010C, 9014	T	50 mL	50 mL	N	N		

Lab Sample ID	Client Sample ID	Method Chain	Basis	WCNLCS 00018					
LLCS 180-140701/1		9010C, 9014							
HLCS 180-140701/2		9010C, 9014							
LCS 180-140701/3		9010C, 9014		1 mL					
MB 180-140701/4		9010C, 9014							
180-43409-C-1	PW-DE01	9010C, 9014	T						
180-43409-C-2	PW-F05	9010C, 9014	T						

Batch Notes	
Distillation Temperature	150 Degrees C
KI-Starch Paper Lot #	1276531
Lead Acetate Lot #	1276537
Magnesium Chloride Dispenser ID	42145
Magnesium Chloride Lot Number	1508124
NaOH Dispenser ID	10J62292
Sodium Hydroxide Reagent ID Number	1427994
Pipette ID	D1203165U
Sulfamic Acid Reagent ID Number	955307
Sulfuric Acid Dispenser ID	21014
Sulfuric Acid Reagent ID Number	1549387

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.: 180-43409-1

SDG No.: \_\_\_\_\_

Batch Number: 140701 Batch Start Date: 05/06/15 11:10 Batch Analyst: Johnson, Paul

Batch Method: 9010C Batch End Date: 05/06/15 12:40

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.: 180-43409-1

SDG No.: \_\_\_\_\_

Batch Number: 140787 Batch Start Date: 05/06/15 14:48 Batch Analyst: Johnson, Paul

Batch Method: 9014 Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	WCN0.1L3 00045	WCN0.2ICV 00330			
ICV 180-140787/9		9014		1 mL		1 mL			
CCV 180-140787/11		9014		1 mL	1 mL				
CCV 180-140787/23		9014		1 mL	1 mL				
CCV 180-140787/35		9014		1 mL	1 mL				

Batch Notes	
Buffer Reagent ID Number	1390860
Chloramine-T Reagent ID Number	1555251
NaOH Lot #	1427994
Pipette ID	D1203165U
Pyridine-Barbituric Acid Reagent ID	1428101

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43409-1

SDG No.: \_\_\_\_\_

Batch Number: 140330 Batch Start Date: 05/02/15 07:39 Batch Analyst: Kieda, Chuck

Batch Method: SM 2340C Batch End Date: 05/02/15 08:20

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	AdjustedpH	BuretStart1	BuretStop1
LCS 180-140330/1		SM 2340C		50 mL	50 mL	N/A SU	10-11	0.0 mL	2.5 mL
MB 180-140330/2		SM 2340C		50 mL	50 mL	N/A SU	10-11	0.0 mL	0.0 mL
180-43409-D-1	PW-DE01	SM 2340C	T	5 mL	50 mL	<2 SU	10-11	0.0 mL	8.8 mL
CCV 180-140330/13		SM 2340C		50 mL	50 mL	N/A SU	10-11	0.0 mL	2.5 mL
CCB 180-140330/14		SM 2340C		50 mL	50 mL	N/A SU	10-11	0.0 mL	0.0 mL
180-43409-D-2	PW-F05	SM 2340C	T	5 mL	50 mL	<2 SU	10-11	0.0 mL	7.1 mL
CCV 180-140330/16		SM 2340C		50 mL	50 mL	N/A SU	10-11	0.0 mL	2.5 mL
CCB 180-140330/17		SM 2340C		50 mL	50 mL	N/A SU	10-11	0.0 mL	0.0 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	TitrantVolume1	CalcMsg	WHdCaCO3P 00006			
LCS 180-140330/1		SM 2340C		2.5 mL	OK	2.5 mL			
MB 180-140330/2		SM 2340C		0 mL	OK				
180-43409-D-1	PW-DE01	SM 2340C	T	8.8 mL	OK				
CCV 180-140330/13		SM 2340C		2.5 mL	OK	2.5 mL			
CCB 180-140330/14		SM 2340C		0 mL	OK				
180-43409-D-2	PW-F05	SM 2340C	T	7.1 mL	OK				
CCV 180-140330/16		SM 2340C		2.5 mL	OK	2.5 mL			
CCB 180-140330/17		SM 2340C		0 mL	OK				

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.: 180-43409-1

SDG No.: \_\_\_\_\_

Batch Number: 140330 Batch Start Date: 05/02/15 07:39 Batch Analyst: Kieda, Chuck

Batch Method: SM 2340C Batch End Date: 05/02/15 08:20

Batch Notes	
Buffer Lot #	1335684
EDTA Lot Number	1553362
Indicator Lot	1440692
Ammonium Hydroxide Lot #	1376295
Nominal Amount Used	50 mL
Pipette ID	D1203165U, 08G08043
Perform Calculation (0=No, 1=Yes)	1
Normality of first Titrant	0.02 N
Titration Standardization Date	4/29/15

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.: 180-43409-1

SDG No.: \_\_\_\_\_

Batch Number: 140690 Batch Start Date: 05/06/15 05:39 Batch Analyst: Loheyde, Cheryl

Batch Method: SM 5310C Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	10 PPM TOC/CC 00491	ICV 40 PPM 00624	LCS 20 PPM 00620
ICV 180-140690/2		SM 5310C		40 mL	40 mL			40 mL	
LCS 180-140690/4		SM 5310C		40 mL	40 mL				40 mL
LCSD 180-140690/5		SM 5310C		40 mL	40 mL				40 mL
180-43409-B-1-A	PW-DE01	SM 5310C	D			<2 SU			
180-43409-B-2-A	PW-F05	SM 5310C	D			<2 SU			
CCV 180-140690/12		SM 5310C		40 mL	40 mL		40 mL		

Batch Notes	
Batch Comment	PH STRIPS LOT# HC004149
Lot # of Phosphoric Acid	1559513
Sodium Persulfate Reagent ID Number	1559518

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# Shipping and Receiving Documents

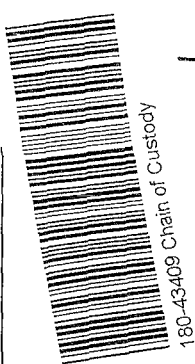


Client: EA Engineering Science, and Technology, Inc.  
 225 Schilling Circle, Suite 400  
 Hunt Valley, MD 21031  
 Project Manager: Frank Barranco  
 Phone: 410-329-5137  
 Field Contact: John Morris  
 Phone: (401) 439-1031  
 TestAmerica Quote #: 18013274  
 Project Name: Sparrows Point  
 Project#: 15131.01

Chain of Custody Record  
 Laboratory: TestAmerica - Pittsburgh  
 301 Alpha Drive  
 Pittsburgh, PA 15238  
 phone: 412.963.2428  
 fax: 412.963.2468  
 ATTN: Carrie Gamber

Tests/Method Numbers for Analysis  
 No. of Containers  
 PPL SVOCs/PAHs (SW846 8270C)  
 PPL Metals (SW846 6020A)  
 Mercury (SW846 7471B)  
 Cyanide (SW846 9014)  
 Hardness (SW846 6010C/SM 2340B)  
 Dissolved Organic Carbon (SM 5310C)

Date	Time	Water	Sediment	Sample Identification	Site Water	Remarks
4/23/15	12:30	✓		PW-DE01		SEE PROJECT SPECIFIC ANALYTE LIST
		✓		PW-DE01		SVOCs (bis(2-ethylhexyl)phthalate only)
		✓		PW-DE01		
		✓		PW-DE01		
	15:00	✓		PW-F05		
		✓		PW-F05		
		✓		PW-F05		
		✓		PW-F05		



Sampled by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	POREWATER
John T. Morris	4/23/15 15:00	John T. Morris	4/23/15 8:30	SPARROW'S POINT
John T. Morris	4/23/15 17:00			

**FedEx** Tracking Number **8070 6983 0140**

Express

1 From 4/23/15

Date 4/23/15

Sender's Name John T. ...

Company ...

Address 225 South ...

City Hart Valley State ... ZIP ...

Phone ...

Drop Off from Signature

2 Your Internal Billing Reference

3 To Recipient's Name ... Phone 413 333 3333

Company ...

Address ...

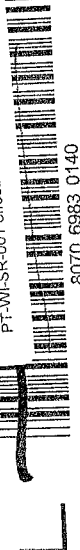
We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address ... Use this line for the HOLD location address or for continuation of your shipping address.

City ... Uncorrected temp Thermometer ID

CF 0 Initials DW

PT-WI-SR-001 effective 7/26/13



8070 6983 0140

Form ID No. **0200**

4 Express Package Service \*To most locations

NOTE: Service order has changed. Please select carefully.

2-4 Business Days

FedEx 2Day A.M.

FedEx First Overnight

FedEx Standard

FedEx Priority

FedEx Signature

FedEx Signature

FedEx Signature

FedEx Signature

FedEx Signature

FedEx Signature

FedEx Signature

FedEx Signature

FedEx Signature

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FedEx Signature

FedEx Signature

FedEx Signature

FedEx Signature

FedEx Signature

FedEx Signature

FedEx Signature

FedEx Signature

FedEx Signature

FedEx Signature

FedEx Signature

5 Packages

180-43409 Waybill

FedEx Box

FedEx Tube

Other

Special Handling and Delivery Signature Options

SATURDAY Delivery

Direct Signature

No Signature Required

Does this shipment contain dangerous goods?

Yes

No

Payment Bill to:

Sender

Recipient

Third Party

Credit Card

Cash/Check

Total Packages

Total Weight

544

By a shipper's authorized representative, I hereby certify that the information provided on this form is true and correct.

Printed Name (Last, First, Middle Initial)

Signature

Date

City

State

ZIP

Phone

Company

Address

City

State

ZIP

Phone

Company

Address

City

State

ZIP

Phone

Company

Address

City

State

ZIP

Phone

Company

Address

City

State

ZIP

Phone

Company

Address

City

State

ZIP

Phone

# Login Sample Receipt Checklist

Client: EA Engineering, Science, and Technology

Job Number: 180-43409-1

**Login Number: 43409**  
**List Number: 1**  
**Creator: Watson, Debbie**

**List Source: TestAmerica Pittsburgh**

<b>Question</b>	<b>Answer</b>	<b>Comment</b>
Radioactivity wasn't checked or is $\leq$ 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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	