

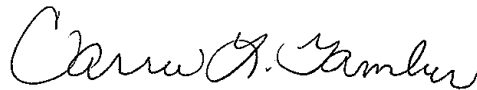
ANALYTICAL REPORT

Job Number: 180-42982-1

Job Description: Sparrows Point Trust Offshore Investigat

For:

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



Approved for release.
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Senior Project Manager
4/30/2015 1:45 PM

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04/30/2015

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Table of Contents

Cover Title Page	1
Data Summaries	5
Definitions	5
Case Narrative	6
Detection Summary	7
Client Sample Results	8
Default Detection Limits	21
Surrogate Summary	22
QC Sample Results	23
QC Association	26
Chronicle	28
Certification Summary	30
Method Summary	31
Sample Summary	32
Manual Integration Summary	33
Reagent Traceability	35
COAs	98
Organic Sample Data	206
GC/MS Semi VOA	206
Method 8270D Low Level	206
Method 8270D Low Level QC Summary	207
Method 8270D Low Level Sample Data	214
Standards Data	227
Method 8270D Low Level ICAL Data	227
Method 8270D Low Level CCAL Data	291
Raw QC Data	298

Table of Contents

Method 8270D Low Level Tune Data	298
Method 8270D Low Level Blank Data	314
Method 8270D Low Level LCS/LCSD Data	321
Method 8270D Low Level Run Logs	326
Method 8270D Low Level Prep Data	328
Inorganic Sample Data	329
Metals Data	329
Met Cover Page	330
Met Sample Data	331
Met QC Data	335
Met ICV/CCV	335
Met CRQL	339
Met Blanks	341
Met ICSA/ICSAB	347
Met LCS/LCSD	349
Met MDL	351
Met Linear Ranges	355
Met Preparation Log	356
Met Analysis Run Log	358
Met ICP/MS Int Stds	366
Met Raw Data	368
Met Prep Data	494
General Chemistry Data	497
Gen Chem Cover Page	498
Gen Chem Sample Data	499
Gen Chem QC Data	505

Table of Contents

Gen Chem ICV/CCV	505
Gen Chem Blanks	507
Gen Chem LCS/LCSD	508
Gen Chem MDL	510
Gen Chem Analysis Run Log	514
Gen Chem Raw Data	516
Gen Chem Prep Data	535
Shipping and Receiving Documents	538
Client Chain of Custody	539
Sample Receipt Checklist	541

Definitions/Glossary

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

TestAmerica Job ID: 180-42982-1

Qualifiers

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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: 180-42982-1

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 04/11/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.7 C.

SEMIVOLATILES

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

METALS

The following samples were diluted due to the nature of the sample matrix: PW-C01 (180-42982-1), PW-B01 (180-42982-2) and PW-A01 (180-42982-3). Elevated reporting limits (RLs) are provided.

GENERAL CHEMISTRY

The following samples were diluted to bring the concentration of target analytes within the calibration range: PW-C01 (180-42982-1), PW-B01 (180-42982-2) and PW-A01 (180-42982-3). Elevated reporting limits (RLs) are provided.

Batch# 140019 Method SM5310C DOC Insufficient sample to analyze TIC for this batch:PW-C01 (180-42982-1), PW-B01 (180-42982-2) and PW-A01 (180-42982-3)

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Detection Summary

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

TestAmerica Job ID: 180-42982-1

Client Sample ID: PW-C01

Lab Sample ID: 180-42982-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	0.73	J	1.9	0.42	ug/L	1		8270D LL	Total/NA
Arsenic	6.8	J	10	2.9	ug/L	10		6020A	Total Recoverable
Thallium	0.26	J	10	0.15	ug/L	10		6020A	Total Recoverable
Antimony	0.66	J	20	0.19	ug/L	10		6020A	Total Recoverable
Nickel	2.1	J	10	1.7	ug/L	10		6020A	Total Recoverable
Zinc	12	J	50	9.6	ug/L	10		6020A	Total Recoverable
Hardness as calcium carbonate	1300		25	7.7	mg/L	1		SM 2340C	Total/NA
Dissolved Organic Carbon - Duplicate	1.2		1.0	0.14	mg/L	1		SM 5310C	Dissolved

Client Sample ID: PW-B01

Lab Sample ID: 180-42982-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.2	J	10	2.9	ug/L	10		6020A	Total Recoverable
Thallium	0.17	J	10	0.15	ug/L	10		6020A	Total Recoverable
Nickel	2.0	J	10	1.7	ug/L	10		6020A	Total Recoverable
Hardness as calcium carbonate	2100		130	38	mg/L	1		SM 2340C	Total/NA
Dissolved Organic Carbon - Duplicate	1.0		1.0	0.14	mg/L	1		SM 5310C	Dissolved

Client Sample ID: PW-A01

Lab Sample ID: 180-42982-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.4	J	10	2.9	ug/L	10		6020A	Total Recoverable
Lead	0.19	J	10	0.19	ug/L	10		6020A	Total Recoverable
Thallium	0.17	J	10	0.15	ug/L	10		6020A	Total Recoverable
Nickel	2.9	J	10	1.7	ug/L	10		6020A	Total Recoverable
Hardness as calcium carbonate	1700		50	15	mg/L	1		SM 2340C	Total/NA
Dissolved Organic Carbon - Duplicate	0.96	J	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: 180-42982-1

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

Client Sample ID: PW-C01
Date Collected: 04/10/15 15:54
Date Received: 04/11/15 09:30

Lab Sample ID: 180-42982-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		0.19	0.018	ug/L		04/13/15 09:07	04/14/15 18:39	1
Benzo[a]anthracene	ND		0.19	0.035	ug/L		04/13/15 09:07	04/14/15 18:39	1
Benzo[b]fluoranthene	ND		0.19	0.047	ug/L		04/13/15 09:07	04/14/15 18:39	1
Benzo[k]fluoranthene	ND		0.19	0.029	ug/L		04/13/15 09:07	04/14/15 18:39	1
Benzo[g,h,i]perylene	ND		0.19	0.028	ug/L		04/13/15 09:07	04/14/15 18:39	1
Benzo[a]pyrene	ND		0.19	0.027	ug/L		04/13/15 09:07	04/14/15 18:39	1
Chrysene	ND		0.19	0.030	ug/L		04/13/15 09:07	04/14/15 18:39	1
Dibenz(a,h)anthracene	ND		0.19	0.026	ug/L		04/13/15 09:07	04/14/15 18:39	1
Fluoranthene	ND		0.19	0.020	ug/L		04/13/15 09:07	04/14/15 18:39	1
Fluorene	ND		0.19	0.023	ug/L		04/13/15 09:07	04/14/15 18:39	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.042	ug/L		04/13/15 09:07	04/14/15 18:39	1
Phenanthrene	ND		0.19	0.040	ug/L		04/13/15 09:07	04/14/15 18:39	1
Pyrene	ND		0.19	0.022	ug/L		04/13/15 09:07	04/14/15 18:39	1
Acenaphthene	ND		0.19	0.028	ug/L		04/13/15 09:07	04/14/15 18:39	1
Acenaphthylene	ND		0.19	0.021	ug/L		04/13/15 09:07	04/14/15 18:39	1
Naphthalene	ND		0.19	0.022	ug/L		04/13/15 09:07	04/14/15 18:39	1
Bis(2-ethylhexyl) phthalate	0.73	J	1.9	0.42	ug/L		04/13/15 09:07	04/14/15 18:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	41		27 - 114				04/13/15 09:07	04/14/15 18:39	1
2-Fluorobiphenyl	41		28 - 109				04/13/15 09:07	04/14/15 18:39	1
Terphenyl-d14 (Surr)	45		20 - 118				04/13/15 09:07	04/14/15 18:39	1
2-Fluorophenol (Surr)	37		20 - 105				04/13/15 09:07	04/14/15 18:39	1
2,4,6-Tribromophenol (Surr)	45		30 - 118				04/13/15 09:07	04/14/15 18:39	1
Phenol-d5 (Surr)	43		25 - 105				04/13/15 09:07	04/14/15 18:39	1

Client Sample Results

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

TestAmerica Job ID: 180-42982-1

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

Client Sample ID: PW-B01
Date Collected: 04/10/15 14:20
Date Received: 04/11/15 09:30

Lab Sample ID: 180-42982-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		0.19	0.018	ug/L		04/13/15 09:07	04/14/15 19:06	1
Benzo[a]anthracene	ND		0.19	0.035	ug/L		04/13/15 09:07	04/14/15 19:06	1
Benzo[b]fluoranthene	ND		0.19	0.047	ug/L		04/13/15 09:07	04/14/15 19:06	1
Benzo[k]fluoranthene	ND		0.19	0.029	ug/L		04/13/15 09:07	04/14/15 19:06	1
Benzo[g,h,i]perylene	ND		0.19	0.028	ug/L		04/13/15 09:07	04/14/15 19:06	1
Benzo[a]pyrene	ND		0.19	0.027	ug/L		04/13/15 09:07	04/14/15 19:06	1
Chrysene	ND		0.19	0.030	ug/L		04/13/15 09:07	04/14/15 19:06	1
Dibenz[a,h]anthracene	ND		0.19	0.026	ug/L		04/13/15 09:07	04/14/15 19:06	1
Fluoranthene	ND		0.19	0.020	ug/L		04/13/15 09:07	04/14/15 19:06	1
Fluorene	ND		0.19	0.023	ug/L		04/13/15 09:07	04/14/15 19:06	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.042	ug/L		04/13/15 09:07	04/14/15 19:06	1
Phenanthrene	ND		0.19	0.040	ug/L		04/13/15 09:07	04/14/15 19:06	1
Pyrene	ND		0.19	0.022	ug/L		04/13/15 09:07	04/14/15 19:06	1
Acenaphthene	ND		0.19	0.028	ug/L		04/13/15 09:07	04/14/15 19:06	1
Acenaphthylene	ND		0.19	0.021	ug/L		04/13/15 09:07	04/14/15 19:06	1
Naphthalene	ND		0.19	0.022	ug/L		04/13/15 09:07	04/14/15 19:06	1
Bis(2-ethylhexyl) phthalate	ND		1.9	0.42	ug/L		04/13/15 09:07	04/14/15 19:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	40		27 - 114				04/13/15 09:07	04/14/15 19:06	1
2-Fluorobiphenyl	39		28 - 109				04/13/15 09:07	04/14/15 19:06	1
Terphenyl-d14 (Surr)	41		20 - 118				04/13/15 09:07	04/14/15 19:06	1
2-Fluorophenol (Surr)	37		20 - 105				04/13/15 09:07	04/14/15 19:06	1
2,4,6-Tribromophenol (Surr)	45		30 - 118				04/13/15 09:07	04/14/15 19:06	1
Phenol-d5 (Surr)	43		25 - 105				04/13/15 09:07	04/14/15 19:06	1

Client Sample Results

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

TestAmerica Job ID: 180-42982-1

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

Client Sample ID: PW-A01
Date Collected: 04/10/15 12:45
Date Received: 04/11/15 09:30

Lab Sample ID: 180-42982-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		0.20	0.019	ug/L		04/13/15 09:07	04/14/15 19:33	1
Benzo[a]anthracene	ND		0.20	0.037	ug/L		04/13/15 09:07	04/14/15 19:33	1
Benzo[b]fluoranthene	ND		0.20	0.049	ug/L		04/13/15 09:07	04/14/15 19:33	1
Benzo[k]fluoranthene	ND		0.20	0.030	ug/L		04/13/15 09:07	04/14/15 19:33	1
Benzo[g,h,i]perylene	ND		0.20	0.029	ug/L		04/13/15 09:07	04/14/15 19:33	1
Benzo[a]pyrene	ND		0.20	0.028	ug/L		04/13/15 09:07	04/14/15 19:33	1
Chrysene	ND		0.20	0.031	ug/L		04/13/15 09:07	04/14/15 19:33	1
Dibenz(a,h)anthracene	ND		0.20	0.027	ug/L		04/13/15 09:07	04/14/15 19:33	1
Fluoranthene	ND		0.20	0.021	ug/L		04/13/15 09:07	04/14/15 19:33	1
Fluorene	ND		0.20	0.024	ug/L		04/13/15 09:07	04/14/15 19:33	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		04/13/15 09:07	04/14/15 19:33	1
Phenanthrene	ND		0.20	0.042	ug/L		04/13/15 09:07	04/14/15 19:33	1
Pyrene	ND		0.20	0.023	ug/L		04/13/15 09:07	04/14/15 19:33	1
Acenaphthene	ND		0.20	0.029	ug/L		04/13/15 09:07	04/14/15 19:33	1
Acenaphthylene	ND		0.20	0.022	ug/L		04/13/15 09:07	04/14/15 19:33	1
Naphthalene	ND		0.20	0.023	ug/L		04/13/15 09:07	04/14/15 19:33	1
Bis(2-ethylhexyl) phthalate	ND		2.0	0.44	ug/L		04/13/15 09:07	04/14/15 19:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	36		27 - 114	04/13/15 09:07	04/14/15 19:33	1
2-Fluorobiphenyl	35		28 - 109	04/13/15 09:07	04/14/15 19:33	1
Terphenyl-d14 (Surr)	45		20 - 118	04/13/15 09:07	04/14/15 19:33	1
2-Fluorophenol (Surr)	34		20 - 105	04/13/15 09:07	04/14/15 19:33	1
2,4,6-Tribromophenol (Surr)	48		30 - 118	04/13/15 09:07	04/14/15 19:33	1
Phenol-d5 (Surr)	38		25 - 105	04/13/15 09:07	04/14/15 19:33	1

Client Sample Results

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

TestAmerica Job ID: 180-42982-1

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

Client Sample ID: PW-C01
Date Collected: 04/10/15 15:54
Date Received: 04/11/15 09:30

Lab Sample ID: 180-42982-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.8	J	10	2.9	ug/L		04/27/15 11:43	04/28/15 00:32	10
Cadmium	ND		10	1.1	ug/L		04/27/15 11:43	04/28/15 00:32	10
Chromium	ND		20	5.4	ug/L		04/27/15 11:43	04/28/15 00:32	10
Lead	ND		10	0.19	ug/L		04/27/15 11:43	04/28/15 00:32	10
Selenium	ND		50	4.2	ug/L		04/27/15 11:43	04/28/15 00:32	10
Silver	ND		10	0.36	ug/L		04/27/15 11:43	04/28/15 00:32	10
Beryllium	ND		10	0.37	ug/L		04/27/15 11:43	04/28/15 00:32	10
Thallium	0.26	J	10	0.15	ug/L		04/27/15 11:43	04/28/15 00:32	10
Antimony	0.66	J	20	0.19	ug/L		04/27/15 11:43	04/28/15 00:32	10
Nickel	2.1	J	10	1.7	ug/L		04/27/15 11:43	04/28/15 00:32	10
Zinc	12	J	50	9.6	ug/L		04/27/15 11:43	04/28/15 00:32	10
Copper	ND		20	2.4	ug/L		04/27/15 11:43	04/28/15 00:32	10

Client Sample Results

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

TestAmerica Job ID: 180-42982-1

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

Client Sample ID: PW-B01
Date Collected: 04/10/15 14:20
Date Received: 04/11/15 09:30

Lab Sample ID: 180-42982-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.2	J	10	2.9	ug/L		04/27/15 11:43	04/28/15 00:36	10
Cadmium	ND		10	1.1	ug/L		04/27/15 11:43	04/28/15 00:36	10
Chromium	ND		20	5.4	ug/L		04/27/15 11:43	04/28/15 00:36	10
Lead	ND		10	0.19	ug/L		04/27/15 11:43	04/28/15 00:36	10
Selenium	ND		50	4.2	ug/L		04/27/15 11:43	04/28/15 00:36	10
Silver	ND		10	0.36	ug/L		04/27/15 11:43	04/28/15 00:36	10
Beryllium	ND		10	0.37	ug/L		04/27/15 11:43	04/28/15 00:36	10
Thallium	0.17	J	10	0.15	ug/L		04/27/15 11:43	04/28/15 00:36	10
Antimony	ND		20	0.19	ug/L		04/27/15 11:43	04/28/15 00:36	10
Nickel	2.0	J	10	1.7	ug/L		04/27/15 11:43	04/28/15 00:36	10
Zinc	ND		50	9.6	ug/L		04/27/15 11:43	04/28/15 00:36	10
Copper	ND		20	2.4	ug/L		04/27/15 11:43	04/28/15 00:36	10

Client Sample Results

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

TestAmerica Job ID: 180-42982-1

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

Client Sample ID: PW-A01
Date Collected: 04/10/15 12:45
Date Received: 04/11/15 09:30

Lab Sample ID: 180-42982-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.4	J	10	2.9	ug/L		04/27/15 11:43	04/28/15 00:40	10
Cadmium	ND		10	1.1	ug/L		04/27/15 11:43	04/28/15 00:40	10
Chromium	ND		20	5.4	ug/L		04/27/15 11:43	04/28/15 00:40	10
Lead	0.19	J	10	0.19	ug/L		04/27/15 11:43	04/28/15 00:40	10
Selenium	ND		50	4.2	ug/L		04/27/15 11:43	04/28/15 00:40	10
Silver	ND		10	0.36	ug/L		04/27/15 11:43	04/28/15 00:40	10
Beryllium	ND		10	0.37	ug/L		04/27/15 11:43	04/28/15 00:40	10
Thallium	0.17	J	10	0.15	ug/L		04/27/15 11:43	04/28/15 00:40	10
Antimony	ND		20	0.19	ug/L		04/27/15 11:43	04/28/15 00:40	10
Nickel	2.9	J	10	1.7	ug/L		04/27/15 11:43	04/28/15 00:40	10
Zinc	ND		50	9.6	ug/L		04/27/15 11:43	04/28/15 00:40	10
Copper	ND		20	2.4	ug/L		04/27/15 11:43	04/28/15 00:40	10

Client Sample Results

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

TestAmerica Job ID: 180-42982-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: PW-C01
Date Collected: 04/10/15 15:54
Date Received: 04/11/15 09:30

Lab Sample ID: 180-42982-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.078	ug/L		04/27/15 09:38	04/27/15 18:29	1

Client Sample Results

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

TestAmerica Job ID: 180-42982-1

General Chemistry

Client Sample ID: PW-C01
Date Collected: 04/10/15 15:54
Date Received: 04/11/15 09:30

Lab Sample ID: 180-42982-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	1300		25	7.7	mg/L			04/29/15 13:35	1

Client Sample Results

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

TestAmerica Job ID: 180-42982-1

General Chemistry

Client Sample ID: PW-B01
Date Collected: 04/10/15 14:20
Date Received: 04/11/15 09:30

Lab Sample ID: 180-42982-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	2100		130	38	mg/L			04/29/15 13:38	1

Client Sample Results

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

TestAmerica Job ID: 180-42982-1

General Chemistry

Client Sample ID: PW-A01
Date Collected: 04/10/15 12:45
Date Received: 04/11/15 09:30

Lab Sample ID: 180-42982-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	1700		50	15	mg/L			04/29/15 13:42	1

Client Sample Results

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

TestAmerica Job ID: 180-42982-1

General Chemistry - Dissolved

Client Sample ID: PW-C01
Date Collected: 04/10/15 15:54
Date Received: 04/11/15 09:30

Lab Sample ID: 180-42982-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Duplicate	1.2		1.0	0.14	mg/L			04/29/15 08:01	1

Client Sample Results

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

TestAmerica Job ID: 180-42982-1

General Chemistry - Dissolved

Client Sample ID: PW-B01
Date Collected: 04/10/15 14:20
Date Received: 04/11/15 09:30

Lab Sample ID: 180-42982-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Duplicate	1.0		1.0	0.14	mg/L			04/29/15 08:20	1

Client Sample Results

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

TestAmerica Job ID: 180-42982-1

General Chemistry - Dissolved

Client Sample ID: PW-A01
Date Collected: 04/10/15 12:45
Date Received: 04/11/15 09:30

Lab Sample ID: 180-42982-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Duplicate	0.96	J	1.0	0.14	mg/L			04/29/15 08:38	1

Default Detection Limits

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

TestAmerica Job ID: 180-42982-1

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
Antimony	2.0	0.019	ug/L	6020A
Arsenic	1.0	0.29	ug/L	6020A
Beryllium	1.0	0.037	ug/L	6020A
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
Selenium	5.0	0.42	ug/L	6020A
Silver	1.0	0.036	ug/L	6020A
Thallium	1.0	0.015	ug/L	6020A
Zinc	5.0	0.96	ug/L	6020A

Method: 7470A - Mercury (CVAA)

Analyte	RL	MDL	Units	Method
Mercury	0.20	0.078	ug/L	7470A

General Chemistry

Analyte	RL	MDL	Units	Method
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: 180-42982-1

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)
180-42982-1	PW-C01	41	41	45	37	45	43
180-42982-2	PW-B01	40	39	41	37	45	43
180-42982-3	PW-A01	36	35	45	34	48	38
LCS 180-138290/2-A	Lab Control Sample	57	55	60	57	63	61
MB 180-138290/1-A	Method Blank	58	53	58	57	55	60

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: 180-42982-1

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

Lab Sample ID: MB 180-138290/1-A
Matrix: Water
Analysis Batch: 138398

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 138290

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Anthracene	ND		0.20	0.019	ug/L		04/13/15 09:07	04/14/15 10:54	1
Benzo[a]anthracene	ND		0.20	0.037	ug/L		04/13/15 09:07	04/14/15 10:54	1
Benzo[b]fluoranthene	ND		0.20	0.049	ug/L		04/13/15 09:07	04/14/15 10:54	1
Benzo[k]fluoranthene	ND		0.20	0.030	ug/L		04/13/15 09:07	04/14/15 10:54	1
Benzo[g,h,i]perylene	ND		0.20	0.029	ug/L		04/13/15 09:07	04/14/15 10:54	1
Benzo[a]pyrene	ND		0.20	0.028	ug/L		04/13/15 09:07	04/14/15 10:54	1
Chrysene	ND		0.20	0.031	ug/L		04/13/15 09:07	04/14/15 10:54	1
Dibenz(a,h)anthracene	ND		0.20	0.027	ug/L		04/13/15 09:07	04/14/15 10:54	1
Fluoranthene	ND		0.20	0.021	ug/L		04/13/15 09:07	04/14/15 10:54	1
Fluorene	ND		0.20	0.024	ug/L		04/13/15 09:07	04/14/15 10:54	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		04/13/15 09:07	04/14/15 10:54	1
Phenanthrene	ND		0.20	0.042	ug/L		04/13/15 09:07	04/14/15 10:54	1
Pyrene	ND		0.20	0.023	ug/L		04/13/15 09:07	04/14/15 10:54	1
Acenaphthene	ND		0.20	0.029	ug/L		04/13/15 09:07	04/14/15 10:54	1
Acenaphthylene	ND		0.20	0.022	ug/L		04/13/15 09:07	04/14/15 10:54	1
Naphthalene	ND		0.20	0.023	ug/L		04/13/15 09:07	04/14/15 10:54	1
Bis(2-ethylhexyl) phthalate	ND		2.0	0.44	ug/L		04/13/15 09:07	04/14/15 10:54	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Nitrobenzene-d5 (Surr)	58		27 - 114	04/13/15 09:07	04/14/15 10:54	1
2-Fluorobiphenyl	53		28 - 109	04/13/15 09:07	04/14/15 10:54	1
Terphenyl-d14 (Surr)	58		20 - 118	04/13/15 09:07	04/14/15 10:54	1
2-Fluorophenol (Surr)	57		20 - 105	04/13/15 09:07	04/14/15 10:54	1
2,4,6-Tribromophenol (Surr)	55		30 - 118	04/13/15 09:07	04/14/15 10:54	1
Phenol-d5 (Surr)	60		25 - 105	04/13/15 09:07	04/14/15 10:54	1

Lab Sample ID: LCS 180-138290/2-A
Matrix: Water
Analysis Batch: 138398

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 138290

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	20.0	12.5		ug/L		62	50 - 100
Benzo[b]fluoranthene	20.0	12.7		ug/L		64	43 - 100
Benzo[k]fluoranthene	20.0	12.6		ug/L		63	47 - 100
Benzo[g,h,i]perylene	20.0	13.5		ug/L		67	48 - 100
Benzo[a]pyrene	20.0	13.1		ug/L		66	47 - 100
Chrysene	20.0	12.5		ug/L		63	49 - 100
Dibenz(a,h)anthracene	20.0	13.5		ug/L		68	48 - 100
Fluoranthene	20.0	12.0		ug/L		60	48 - 100
Fluorene	20.0	12.3		ug/L		62	48 - 100
Indeno[1,2,3-cd]pyrene	20.0	13.6		ug/L		68	47 - 100
Phenanthrene	20.0	12.5		ug/L		63	48 - 100
Pyrene	20.0	13.6		ug/L		68	44 - 100
Acenaphthene	20.0	11.3		ug/L		57	47 - 100
Acenaphthylene	20.0	11.9		ug/L		60	47 - 100
Naphthalene	20.0	11.7		ug/L		59	44 - 100
Bis(2-ethylhexyl) phthalate	20.0	13.1		ug/L		66	35 - 118

TestAmerica Pittsburgh

QC Sample Results

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

TestAmerica Job ID: 180-42982-1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 180-138290/2-A
Matrix: Water
Analysis Batch: 138398

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 138290

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Nitrobenzene-d5 (Surr)	57		27 - 114
2-Fluorobiphenyl	55		28 - 109
Terphenyl-d14 (Surr)	60		20 - 118
2-Fluorophenol (Surr)	57		20 - 105
2,4,6-Tribromophenol (Surr)	63		30 - 118
Phenol-d5 (Surr)	61		25 - 105

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 180-139759/1-A
Matrix: Water
Analysis Batch: 139939

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 139759

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	ND		1.0	0.29	ug/L		04/27/15 11:43	04/27/15 22:52	1
Cadmium	ND		1.0	0.11	ug/L		04/27/15 11:43	04/27/15 22:52	1
Chromium	ND		2.0	0.54	ug/L		04/27/15 11:43	04/27/15 22:52	1
Lead	ND		1.0	0.019	ug/L		04/27/15 11:43	04/27/15 22:52	1
Selenium	ND		5.0	0.42	ug/L		04/27/15 11:43	04/27/15 22:52	1
Silver	ND		1.0	0.036	ug/L		04/27/15 11:43	04/27/15 22:52	1
Beryllium	ND		1.0	0.037	ug/L		04/27/15 11:43	04/27/15 22:52	1
Thallium	ND		1.0	0.015	ug/L		04/27/15 11:43	04/27/15 22:52	1
Antimony	ND		2.0	0.019	ug/L		04/27/15 11:43	04/27/15 22:52	1
Nickel	ND		1.0	0.17	ug/L		04/27/15 11:43	04/27/15 22:52	1
Zinc	ND		5.0	0.96	ug/L		04/27/15 11:43	04/27/15 22:52	1
Copper	ND		2.0	0.24	ug/L		04/27/15 11:43	04/27/15 22:52	1

Lab Sample ID: LCS 180-139759/2-A
Matrix: Water
Analysis Batch: 139939

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 139759

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec.	Limits
		Result	Qualifier					
Arsenic	40.0	37.5		ug/L		94		80 - 120
Cadmium	50.0	51.3		ug/L		103		80 - 120
Chromium	200	196		ug/L		98		80 - 120
Lead	20.0	21.4		ug/L		107		80 - 120
Selenium	10.0	9.81		ug/L		98		80 - 120
Silver	50.0	50.0		ug/L		100		80 - 120
Beryllium	50.0	47.5		ug/L		95		80 - 120
Thallium	50.0	52.2		ug/L		104		80 - 120
Antimony	500	518		ug/L		104		80 - 120
Nickel	500	472		ug/L		94		80 - 120
Zinc	500	492		ug/L		98		80 - 120
Copper	250	236		ug/L		94		80 - 120

QC Sample Results

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

TestAmerica Job ID: 180-42982-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-139732/1-A
Matrix: Water
Analysis Batch: 139819

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 139732

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.20	0.078	ug/L		04/27/15 09:38	04/27/15 17:38	1

Lab Sample ID: LCS 180-139732/2-A
Matrix: Water
Analysis Batch: 139819

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 139732

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

Method: SM 2340C - Hardness, Total (mg/l as CaCO3)

Lab Sample ID: MB 180-140054/2
Matrix: Water
Analysis Batch: 140054

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Hardness as calcium carbonate	ND		5.0	1.5	mg/L			04/29/15 13:15	1

Lab Sample ID: LCS 180-140054/1
Matrix: Water
Analysis Batch: 140054

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

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

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

Lab Sample ID: MB 180-140019/6
Matrix: Water
Analysis Batch: 140019

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Dissolved Organic Carbon - Duplicate	ND		1.0	0.14	mg/L			04/29/15 07:43	1

Lab Sample ID: LCS 180-140019/4
Matrix: Water
Analysis Batch: 140019

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

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

Lab Sample ID: LCSD 180-140019/5
Matrix: Water
Analysis Batch: 140019

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

TestAmerica Pittsburgh

QC Association Summary

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

TestAmerica Job ID: 180-42982-1

GC/MS Semi VOA

Prep Batch: 138290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42982-1	PW-C01	Total/NA	Water	3520C	
180-42982-2	PW-B01	Total/NA	Water	3520C	
180-42982-3	PW-A01	Total/NA	Water	3520C	
LCS 180-138290/2-A	Lab Control Sample	Total/NA	Water	3520C	
MB 180-138290/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 138398

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42982-1	PW-C01	Total/NA	Water	8270D LL	138290
180-42982-2	PW-B01	Total/NA	Water	8270D LL	138290
180-42982-3	PW-A01	Total/NA	Water	8270D LL	138290
LCS 180-138290/2-A	Lab Control Sample	Total/NA	Water	8270D LL	138290
MB 180-138290/1-A	Method Blank	Total/NA	Water	8270D LL	138290

Metals

Prep Batch: 139732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42982-1	PW-C01	Total/NA	Water	7470A	
LCS 180-139732/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 180-139732/1-A	Method Blank	Total/NA	Water	7470A	

Prep Batch: 139759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42982-1	PW-C01	Total Recoverable	Water	3005A	
180-42982-2	PW-B01	Total Recoverable	Water	3005A	
180-42982-3	PW-A01	Total Recoverable	Water	3005A	
LCS 180-139759/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 180-139759/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 139774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
CRA 180-139774/9-A	DL		Water	7470A	

Analysis Batch: 139819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42982-1	PW-C01	Total/NA	Water	7470A	139732
CRA 180-139774/9-A	DL		Water	7470A	139774
LCS 180-139732/2-A	Lab Control Sample	Total/NA	Water	7470A	139732
MB 180-139732/1-A	Method Blank	Total/NA	Water	7470A	139732

Analysis Batch: 139939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42982-1	PW-C01	Total Recoverable	Water	6020A	139759
180-42982-2	PW-B01	Total Recoverable	Water	6020A	139759
180-42982-3	PW-A01	Total Recoverable	Water	6020A	139759
CRI 180-139939/113	DL		Water	6020A	
CRI 180-139939/7	DL		Water	6020A	
ICSA 180-139939/8	ICS		Water	6020A	
ICSAB 180-139939/9	ICS		Water	6020A	

QC Association Summary

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

TestAmerica Job ID: 180-42982-1

Metals (Continued)

Analysis Batch: 139939 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-139759/2-A	Lab Control Sample	Total Recoverable	Water	6020A	139759
MB 180-139759/1-A	Method Blank	Total Recoverable	Water	6020A	139759

General Chemistry

Filtration Batch: 139876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42982-1	PW-C01	Dissolved	Water	FILTRATION	
180-42982-2	PW-B01	Dissolved	Water	FILTRATION	
180-42982-3	PW-A01	Dissolved	Water	FILTRATION	

Analysis Batch: 140019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42982-1	PW-C01	Dissolved	Water	SM 5310C	139876
180-42982-2	PW-B01	Dissolved	Water	SM 5310C	139876
180-42982-3	PW-A01	Dissolved	Water	SM 5310C	139876
LCS 180-140019/4	Lab Control Sample	Dissolved	Water	SM 5310C	
LCSD 180-140019/5	Lab Control Sample Dup	Dissolved	Water	SM 5310C	
MB 180-140019/6	Method Blank	Dissolved	Water	SM 5310C	

Analysis Batch: 140054

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42982-1	PW-C01	Total/NA	Water	SM 2340C	
180-42982-2	PW-B01	Total/NA	Water	SM 2340C	
180-42982-3	PW-A01	Total/NA	Water	SM 2340C	
LCS 180-140054/1	Lab Control Sample	Total/NA	Water	SM 2340C	
MB 180-140054/2	Method Blank	Total/NA	Water	SM 2340C	

Lab Chronicle

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

TestAmerica Job ID: 180-42982-1

Client Sample ID: PW-C01

Lab Sample ID: 180-42982-1

Date Collected: 04/10/15 15:54

Matrix: Water

Date Received: 04/11/15 09:30

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	138290	04/13/15 09:07	BJT	TAL PIT
Total/NA	Analysis	8270D LL		1	260 mL	0.25 mL	138398	04/14/15 18:39	VVP	TAL PIT
Instrument ID: CH732										
Total Recoverable	Prep	3005A			50 mL	50 mL	139759	04/27/15 11:43	AB1	TAL PIT
Total Recoverable	Analysis	6020A		10	50 mL	50 mL	139939	04/28/15 00:32	WTR	TAL PIT
Instrument ID: M										
Total/NA	Prep	7470A			50 mL	50 mL	139732	04/27/15 09:38	MLF	TAL PIT
Total/NA	Analysis	7470A		1	50 mL	50 mL	139819	04/27/15 18:29	RJR	TAL PIT
Instrument ID: K										
Total/NA	Analysis	SM 2340C		1	10 mL	50 mL	140054	04/29/15 13:35	CAK	TAL PIT
Instrument ID: NOEQUIP										
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	139876	04/28/15 10:20	SLM	TAL PIT
Dissolved	Analysis	SM 5310C		1			140019	04/29/15 08:01	CLL	TAL PIT
Instrument ID: TOC1030										

Client Sample ID: PW-B01

Lab Sample ID: 180-42982-2

Date Collected: 04/10/15 14:20

Matrix: Water

Date Received: 04/11/15 09:30

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	138290	04/13/15 09:07	BJT	TAL PIT
Total/NA	Analysis	8270D LL		1	260 mL	0.25 mL	138398	04/14/15 19:06	VVP	TAL PIT
Instrument ID: CH732										
Total Recoverable	Prep	3005A			50 mL	50 mL	139759	04/27/15 11:43	AB1	TAL PIT
Total Recoverable	Analysis	6020A		10	50 mL	50 mL	139939	04/28/15 00:36	WTR	TAL PIT
Instrument ID: M										
Total/NA	Analysis	SM 2340C		1	2 mL	50 mL	140054	04/29/15 13:38	CAK	TAL PIT
Instrument ID: NOEQUIP										
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	139876	04/28/15 10:20	SLM	TAL PIT
Dissolved	Analysis	SM 5310C		1			140019	04/29/15 08:20	CLL	TAL PIT
Instrument ID: TOC1030										

Client Sample ID: PW-A01

Lab Sample ID: 180-42982-3

Date Collected: 04/10/15 12:45

Matrix: Water

Date Received: 04/11/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	0.25 mL	138290	04/13/15 09:07	BJT	TAL PIT
Total/NA	Analysis	8270D LL		1	250 mL	0.25 mL	138398	04/14/15 19:33	VVP	TAL PIT
Instrument ID: CH732										
Total Recoverable	Prep	3005A			50 mL	50 mL	139759	04/27/15 11:43	AB1	TAL PIT
Total Recoverable	Analysis	6020A		10	50 mL	50 mL	139939	04/28/15 00:40	WTR	TAL PIT
Instrument ID: M										

Lab Chronicle

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

TestAmerica Job ID: 180-42982-1

Client Sample ID: PW-A01
Date Collected: 04/10/15 12:45
Date Received: 04/11/15 09:30

Lab Sample ID: 180-42982-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2340C		1	5 mL	50 mL	140054	04/29/15 13:42	CAK	TAL PIT
Instrument ID: NOEQUIP										
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	139876	04/28/15 10:20	SLM	TAL PIT
Dissolved	Analysis	SM 5310C		1			140019	04/29/15 08:38	CLL	TAL PIT
Instrument ID: TOC1030										

Laboratory References:

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

Analyst References:

Lab: TAL PIT

Batch Type: Filtration

SLM = Sarah McCann

Batch Type: Prep

AB1 = Ashwin Baikadi

BJT = Bill Trout

MLF = Michele Freeman

Batch Type: Analysis

CAK = Chuck Kieda

CLL = Cheryl Loheyde

RJR = Ron Rosenbaum

VVP = Vincent Piccolino

WTR = Bill Reinheimer

Certification Summary

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

TestAmerica Job ID: 180-42982-1

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	04-30-15 *
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	04-30-15 *
South Carolina	State Program	4	89014	04-30-15 *
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: 180-42982-1

Method	Method Description	Protocol	Laboratory
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PIT
6020A	Metals (ICP/MS)	SW846	TAL PIT
7470A	Mercury (CVAA)	SW846	TAL PIT
SM 2340C	Hardness, Total (mg/l as CaCO3)	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: 180-42982-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-42982-1	PW-C01	Water	04/10/15 15:54	04/11/15 09:30
180-42982-2	PW-B01	Water	04/10/15 14:20	04/11/15 09:30
180-42982-3	PW-A01	Water	04/10/15 12:45	04/11/15 09:30

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

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.: 180-42982-1

SDG No.: _____

Instrument ID: CH732 Analysis Batch Number: 132436

Lab 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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
10 PPM TOC/CC_00485	04/30/15	04/29/15	DI Water, Lot DI WATER	200 mg/L	WTOC1000SP_00011	2 mL	Dissolved Organic Carbon - Duplicate	10 mg/L
							DOC Result 1	10 mg/L
							DOC Result 2	10 mg/L
.WTOC1000SP_00011	12/31/15		Ricca Chemical Co, Lot 2412908		(Purchased Reagent)		Dissolved Organic Carbon - Duplicate	1000 mg/L
							DOC Result 1	1000 mg/L
							DOC Result 2	1000 mg/L
ICV 40 PPM_00618	04/30/15	04/29/15	DI Water, Lot DIWATER	100 mg/L	WTOC1000SP_00011	4 mL	Dissolved Organic Carbon - Duplicate	40 mg/L
							DOC Result 1	40 mg/L
							DOC Result 2	40 mg/L
.WTOC1000SP_00011	12/31/15		Ricca Chemical Co, Lot 2412908		(Purchased Reagent)		Dissolved Organic Carbon - Duplicate	1000 mg/L
							DOC Result 1	1000 mg/L
							DOC Result 2	1000 mg/L
LCS 20 PPM_00614	04/30/15	04/29/15	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
MCCV1X_00074	05/01/15	04/14/15	2% Nitric Acid, Lot 1241747	500 mL	MCALSPECAREV_00005	10 mL	Arsenic	0.1 ppm
							Beryllium	0.1 ppm
							Cadmium	0.1 ppm
							Chromium	0.1 ppm
							Copper	0.1 ppm
							Lead	0.1 ppm
							Nickel	0.1 ppm
							Selenium	0.1 ppm
							Silver	0.1 ppm
							Thallium	0.1 ppm
							Zinc	0.1 ppm
					MCALSPECB_00007	10 mL	Antimony	0.1 ppm
.MCALSPECAREV_00005	05/01/15		Inorganic Ventures, Lot F2-MEB524026		(Purchased Reagent)		Arsenic	5 ppm
							Beryllium	5 ppm
							Cadmium	5 ppm
							Chromium	5 ppm
							Copper	5 ppm
							Lead	5 ppm
							Nickel	5 ppm
							Selenium	5 ppm
							Silver	5 ppm
							Thallium	5 ppm
							Zinc	5 ppm
.MCALSPECB_00007	05/01/15		Inorganic Ventures, Lot F2-MEB524027		(Purchased Reagent)		Antimony	5 ppm
MCRIX_00065	05/07/15	04/07/15	HNO3, Lot 1191081	250 mL	MMSCRI-1B_00005	1 mL	Arsenic	0.001 ppm
							Beryllium	0.001 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cadmium	0.001 ppm
							Chromium	0.002 ppm
							Copper	0.002 ppm
							Lead	0.001 ppm
							Nickel	0.001 ppm
							Selenium	0.005 ppm
							Silver	0.001 ppm
							Thallium	0.001 ppm
							Zinc	0.005 ppm
					MMSCRI-2_00007	1 mL	Antimony	0.002 ppm
.MMSCRI-1B_00005	04/01/16		Inorganic Ventures, Lot J2-MEB572092		(Purchased Reagent)		Arsenic	0.25 ppm
							Beryllium	0.25 ppm
							Cadmium	0.25 ppm
							Chromium	0.5 ppm
							Copper	0.5 ppm
							Lead	0.25 ppm
							Nickel	0.25 ppm
							Selenium	1.25 ppm
							Silver	0.25 ppm
							Thallium	0.25 ppm
							Zinc	1.25 ppm
.MMSCRI-2_00007	04/01/16		Inorganic Ventures, Lot J2-MEB572093		(Purchased Reagent)		Antimony	0.5 ppm
MHgworkingCal_01031	04/28/15	04/27/15	2% Nitric Acid, Lot 0000102057	100 mL	MHgIntcal_00110	1 mL	Mercury	100 ppb
.MHgIntcal_00110	04/28/15	04/27/15	2% Nitric Acid, Lot 0000102057	100 mL	MCGHG1-1_00009	1 mL	Mercury	10 ppm
.MCGHG1-1_00009	02/01/16		inorganic ventures, Lot H2-HG02128		(Purchased Reagent)		Mercury	1000 ppm
MHgWorkingicv_01002	04/28/15	04/27/15	2% Nitric Acid, Lot 0000102057	100 mL	MHgIntICV_00090	1 mL	Mercury	100 ppb
.MHgIntICV_00090	04/28/15	04/27/15	2% Nitric Acid, Lot 0000102057	100 mL	MHGICV-1_00005	1 mL	Mercury	10 ppm
.MHGICV-1_00005	07/31/15		ULTRA SCIENTIFIC, Lot T00602		(Purchased Reagent)		Mercury	1000 ppm
MICSABX_00069	05/01/15	04/14/15	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	Arsenic	0.02 ppm
							Cadmium	0.02 ppm
							Chromium	0.02 ppm
							Co	0.02 ppm
							Copper	0.02 ppm
							Mn	0.0225 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration	
					Reagent ID	Volume Added			
					MMSICSAB-1_00007	0.2 mL	Nickel	0.02 ppm	
							Silver	0.02 ppm	
							Zinc	0.025 ppm	
							Ba	0.02 ppm	
							Beryllium	0.02 ppm	
							Lead	0.02 ppm	
							Sr	0.025 ppm	
					MMSICSAB-2_00006	0.2 mL	Thallium	0.02 ppm	
							V	0.02 ppm	
							Antimony	0.02 ppm	
							B	0.05 ppm	
							Selenium	0.05 ppm	
							Si	0.5 ppm	
							Sn	0.1 ppm	
.M6020ICS-0A_00005	09/01/15		Inorganic Ventures, Lot G2-MEB476152MCA				(Purchased Reagent)	Al	1000 ppm
							Ca	1000 ppm	
							Fe	1000 ppm	
							K	1000 ppm	
							Mg	1000 ppm	
							Mo	20 ppm	
							Na	1000 ppm	
							Ti	20 ppm	
.M6020ICS-0B_00006	09/01/15		Inorganic Ventures, Lot G2-MEB463151				(Purchased Reagent)	Arsenic	2 ppm
							Cadmium	2 ppm	
							Chromium	2 ppm	
							Co	2 ppm	
							Copper	2 ppm	
							Mn	2.25 ppm	
							Nickel	2 ppm	
							Silver	2 ppm	
Zinc	2.5 ppm								
.MMSICSAB-1_00007	05/01/15		Inorganic Ventures, Lot F2-MEB524028				(Purchased Reagent)	Ba	10 ppm
							Beryllium	10 ppm	
							Lead	10 ppm	
							Sr	12.5 ppm	
							Thallium	10 ppm	
.MMSICSAB-2_00006	05/01/15		Inorganic Ventures, Lot G2-MEB467043				(Purchased Reagent)	V	10 ppm
							Antimony	10 ppm	
							B	25 ppm	
							Selenium	25 ppm	
							Si	250 ppm	
MICSAX_00065	05/14/15	04/14/15	DI Water, Lot J38N82	100 mL	M6020ICS-0A_00005	10 mL	(Purchased Reagent)	Sn	50 ppm
							Al	100 ppm	
							Ca	100 ppm	
							Fe	100 ppm	
							K	100 ppm	
Mg	100 ppm								

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.M6020ICS-0A_00005	09/01/15		Inorganic Ventures, Lot G2-MEB476152MCA		(Purchased Reagent)		Mo	2 ppm
							Na	100 ppm
							Ti	2 ppm
							Al	1000 ppm
							Ca	1000 ppm
							Fe	1000 ppm
							K	1000 ppm
							Mg	1000 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	Antimony	0.08 mg/L
							Arsenic	0.08 mg/L
							Beryllium	0.08 mg/L
							Cadmium	0.08 mg/L
							Chromium	0.08 mg/L
							Copper	0.08 mg/L
							Lead	0.08 mg/L
							Nickel	0.08 mg/L
							Selenium	0.08 mg/L
							Silver	0.08 mg/L
							Thallium	0.08 mg/L
							Zinc	0.08 mg/L
							.MICPMSICV_00018	11/30/15
Arsenic	2 ppm							
Beryllium	2 ppm							
Cadmium	2 ppm							
Chromium	2 ppm							
Copper	2 ppm							
Lead	2 ppm							
Nickel	2 ppm							
Selenium	2 ppm							
Silver	2 ppm							
Thallium	2 ppm							
Zinc	2 ppm							
MSTD2X_00043	05/01/15	04/14/15	DI Water, Lot 1241717	250 mL	MCALSPECAREV_00005	10 mg/L		
							Beryllium	0.2 ppm
							Cadmium	0.2 ppm
							Chromium	0.2 ppm
							Copper	0.2 ppm
							Lead	0.2 ppm
							Nickel	0.2 ppm
							Selenium	0.2 ppm
							Silver	0.2 ppm
							Thallium	0.2 ppm
							Zinc	0.2 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MCALSPECAREV_00005	05/01/15		Inorganic Ventures, Lot F2-MEB524026			(Purchased Reagent)	Arsenic	5 ppm
							Beryllium	5 ppm
							Cadmium	5 ppm
							Chromium	5 ppm
							Copper	5 ppm
							Lead	5 ppm
							Nickel	5 ppm
							Selenium	5 ppm
							Silver	5 ppm
							Thallium	5 ppm
Zinc	5 ppm							
MSTD3X_00044	05/01/15	04/14/15	2% Nitric Acid, Lot 1241747	250 mL	MCALSPECB_00007	10 mg/L	Antimony	0.2 ppm
.MCALSPECB_00007	05/01/15		Inorganic Ventures, Lot F2-MEB524027			(Purchased Reagent)	Antimony	5 ppm
MTAPITTICPMS_00020	07/01/15		INORGANIC VENTURES, Lot H2-MEB532047			(Purchased Reagent)	Al	200 ug/mL
							Arsenic	4 ug/mL
							B	100 ug/mL
							Ba	200 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Chromium	20 ug/mL
							Co	50 ug/mL
							Copper	25 ug/mL
							Fe	100 ug/mL
							Lead	2 ug/mL
							Mn	50 ug/mL
							Nickel	50 ug/mL
							Selenium	1 ug/mL
							Silver	5 ug/mL
							Sr	100 ug/mL
Thallium	5 ug/mL							
V	50 ug/mL							
Zinc	50 ug/mL							
MTAPITMSA_00023	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
MTAPITMSC_00029	12/01/15		Inorganic Ventures, Lot H2-MEB532046			(Purchased Reagent)	Antimony	50 ug/mL
							Mo	100 ug/mL
							Si	1000 ug/mL
							SiO2	2140 ug/mL
							Sn	200 ug/mL
							Ti	100 ug/mL
OPLVISPKMIX1i_00037	09/10/15	03/10/15	Methanol, Lot 0000082533	100 mL	SVLVstd1_00030	20 mL	1,1'-Biphenyl	200 ug/mL
							1,2,4,5-Tetrachlorobenzene	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-ethylhexyl) phthalate	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
							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	
						Benzydine	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.: _____

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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
							Benzidine	2000 ug/mL
OPQL8270SURI_00028	08/26/15	02/26/15	Methanol, Lot b#0000049909	500 mL	SVLVSURRSPK_00006	20 mL	2,4,6-Tribromophenol (Surr)	200 ug/mL
							2-Fluorobiphenyl	200 ug/mL
							2-Fluorophenol (Surr)	200 ug/mL
							Nitrobenzene-d5 (Surr)	200 ug/mL
							Phenol-d5 (Surr)	200 ug/mL
							Terphenyl-d14 (Surr)	200 ug/mL
.SVLVSURRSPK_00006	02/28/18		Restek, Lot A093638			(Purchased Reagent)	2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
SVTAPSTD0.4i_00007	02/21/15	07/21/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
					SVTAPITSTCKi_00004	5 uL	Phenanthrene-d10	4 ug/mL
							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
							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							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.: _____

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							N-Nitrosopyrrolidine	0.2 ug/mL
.SVTAPITINTRNi_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00007	02/28/18		Restek, Lot A093676			(Purchased Reagent)	1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre_00001	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVstd1_00026	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	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.: 180-42982-1

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.: 180-42982-1

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.: 180-42982-1

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.: 180-42982-1

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
SVTAPSTD10i_00088	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

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	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

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
					SVLVstdl_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.: 180-42982-1

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.: 180-42982-1

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
..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
							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.: 180-42982-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis (2-chloroethoxy)methane	1000 ug/mL
							Bis (2-chloroethyl) ether	1000 ug/mL
							Bis (2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz (a,h) anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd2_00012	07/31/15		Restek, Lot A0100824		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd5(7)_00001	02/28/17		Restek, Lot A0101573		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd8_00003	05/31/15		Restek, Lot A0103145		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SVNNITROPYROS 00015	06/05/17		absolute, Lot 060514			(Purchased Reagent)	N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD10i_00097	04/17/15	04/10/15	MeCl2, Lot 1417620	1 mL	SVTAPITSTCKi_00005	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
							Phenol-d5 (Surr)	5 ug/mL
							Terphenyl-d14 (Surr)	5 ug/mL
.SVTAPITSTCKi_00005	04/30/15	02/17/15	MeCl2, Lot 1417620	20 mL	SVLVstdi_00026	800 uL	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
					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.: 180-42982-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration		
					Reagent ID	Volume Added				
..SVLVstd1_00026	08/31/15		Restek, Lot A0101615		(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		
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL		
							2-Fluorobiphenyl	5000 ug/mL		
							2-Fluorophenol (Surr)	5000 ug/mL		
							Nitrobenzene-d5 (Surr)	5000 ug/mL		
							Phenol-d5 (Surr)	5000 ug/mL		
							Terphenyl-d14 (Surr)	5000 ug/mL		
SVTAPSTD2.0i_00005	02/21/15	07/21/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL		
							Acenaphthene-d10	4 ug/mL		
							Chrysene-d12	4 ug/mL		
							Naphthalene-d8	4 ug/mL		
							Perylene-d12	4 ug/mL		
							Phenanthrene-d10	4 ug/mL		
							SVTAPITSTCKi_00004	25 uL	Benzo[e]pyrene	1 ug/mL
									2-Naphthylamine	1 ug/mL
									2,3,5,6-Tetrachlorophenol	1 ug/mL
									2,6-Dichlorophenol	1 ug/mL
					7,12-Dimethylbenz(a)anthracene	1 ug/mL				
					Methyl methanesulfonate	1 ug/mL				
					1,1'-Biphenyl	1 ug/mL				
					1,2,4,5-Tetrachlorobenzene	1 ug/mL				
					1,2,4-Trichlorobenzene	1 ug/mL				
					1,2-Dichlorobenzene	1 ug/mL				
					1,2-Diphenylhydrazine	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				

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,5-Trichlorophenol	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.: _____

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							7,12-Dimethylbenz (a)anthracene	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
							Bis(2-chloroethoxy)methane	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration	
					Reagent ID	Volume Added			
							Bis (2-chloroethyl) ether	40 ug/mL	
							Bis (2-ethylhexyl) phthalate	40 ug/mL	
							Butyl benzyl phthalate	40 ug/mL	
							Carbazole	40 ug/mL	
							Chrysene	40 ug/mL	
							Di-n-butyl phthalate	40 ug/mL	
							Di-n-octyl phthalate	40 ug/mL	
							Dibenz (a, h) anthracene	40 ug/mL	
							Dibenzofuran	40 ug/mL	
							Diethyl phthalate	40 ug/mL	
							Dimethyl phthalate	40 ug/mL	
							Fluoranthene	40 ug/mL	
							Fluorene	40 ug/mL	
							Hexachlorobenzene	40 ug/mL	
							Hexachlorobutadiene	40 ug/mL	
							Hexachlorocyclopentadiene	40 ug/mL	
							Hexachloroethane	40 ug/mL	
							Hexadecane	40 ug/mL	
							Indeno [1, 2, 3-cd] pyrene	40 ug/mL	
							Isophorone	40 ug/mL	
							n-Decane	40 ug/mL	
							N-Nitrosodi-n-propylamine	40 ug/mL	
							N-Nitrosodimethylamine	40 ug/mL	
							n-Octadecane	40 ug/mL	
							Naphthalene	40 ug/mL	
							Nitrobenzene	40 ug/mL	
							Pentachlorophenol	80 ug/mL	
							Phenanthrene	40 ug/mL	
							Phenol	40 ug/mL	
							Pyrene	40 ug/mL	
							Pyridine	40 ug/mL	
					SVLVstd2_00012	400 uL	3,3'-Dichlorobenzidine	40 ug/mL	
							Atrazine	40 ug/mL	
							Benzidine	40 ug/mL	
							Caprolactam	40 ug/mL	
					SVLVstd5(7)_00001	400 uL	N-Nitrosodiphenylamine	40 ug/mL	
					SVLVstd8_00003	400 uL	Benzaldehyde	40 ug/mL	
							Benzoic acid	40 ug/mL	
							Indene	40 ug/mL	
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL	
							2-Fluorobiphenyl	40 ug/mL	
							2-Fluorophenol (Surr)	40 ug/mL	
							Nitrobenzene-d5 (Surr)	40 ug/mL	
							Phenol-d5 (Surr)	40 ug/mL	
							Terphenyl-d14 (Surr)	40 ug/mL	
					SVNNITROPYROs_00015	800 uL	N-Nitrosopyrrolidine	40 ug/mL	
..sv benzoepyre 00001	10/03/18		Absolute, Lot 100313				(Purchased Reagent)	Benzo[e]pyrene	1000 ug/mL
..SV2NAPAMINES_00002	06/30/17		Ultra Scientific, Lot Ck-1617				(Purchased Reagent)	2-Naphthylamine	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SVLVlist12_00002	04/30/15		Restek, Lot A0102912			(Purchased Reagent)	2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
..SVLVstd1_00026	08/31/15		Restek, Lot A0101615			(Purchased Reagent)	1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
Benzo[g,h,i]perylene	1000 ug/mL							
Benzo[k]fluoranthene	1000 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.: _____

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
SVTAPSTD20i_00005	02/21/15	07/21/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
					SVTAPITSTCKi_00004	250 uL	Phenanthrene-d10	4 ug/mL
							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
							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							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetophenone	10 ug/mL
							Aniline	10 ug/mL
							Anthracene	10 ug/mL
							Benzo[a]anthracene	10 ug/mL
							Benzo[a]pyrene	10 ug/mL
							Benzo[b]fluoranthene	10 ug/mL
							Benzo[g,h,i]perylene	10 ug/mL
							Benzo[k]fluoranthene	10 ug/mL
							Benzyl alcohol	10 ug/mL
							Bis(2-chloroethoxy)methane	10 ug/mL
							Bis(2-chloroethyl)ether	10 ug/mL
							Bis(2-ethylhexyl) phthalate	10 ug/mL
							Butyl benzyl phthalate	10 ug/mL
							Carbazole	10 ug/mL
							Chrysene	10 ug/mL
							Di-n-butyl phthalate	10 ug/mL
							Di-n-octyl phthalate	10 ug/mL
							Dibenz(a,h)anthracene	10 ug/mL
							Dibenzofuran	10 ug/mL
							Diethyl phthalate	10 ug/mL
							Dimethyl phthalate	10 ug/mL
							Fluoranthene	10 ug/mL
							Fluorene	10 ug/mL
							Hexachlorobenzene	10 ug/mL
							Hexachlorobutadiene	10 ug/mL
							Hexachlorocyclopentadiene	10 ug/mL
							Hexachloroethane	10 ug/mL
							Hexadecane	10 ug/mL
							Indeno[1,2,3-cd]pyrene	10 ug/mL
							Isophorone	10 ug/mL
							n-Decane	10 ug/mL
							N-Nitrosodi-n-propylamine	10 ug/mL
							N-Nitrosodimethylamine	10 ug/mL
							n-Octadecane	10 ug/mL
							Naphthalene	10 ug/mL
							Nitrobenzene	10 ug/mL
							Pentachlorophenol	20 ug/mL
							Phenanthrene	10 ug/mL
							Phenol	10 ug/mL
							Pyrene	10 ug/mL
							Pyridine	10 ug/mL
							3,3'-Dichlorobenzidine	10 ug/mL
							Atrazine	10 ug/mL
							Benidine	10 ug/mL
							Caprolactam	10 ug/mL
							N-Nitrosodiphenylamine	10 ug/mL
							Benzaldehyde	10 ug/mL
							Benzoic acid	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Indene	10 ug/mL
							2,4,6-Tribromophenol (Surr)	10 ug/mL
							2-Fluorobiphenyl	10 ug/mL
							2-Fluorophenol (Surr)	10 ug/mL
							Nitrobenzene-d5 (Surr)	10 ug/mL
							Phenol-d5 (Surr)	10 ug/mL
							Terphenyl-d14 (Surr)	10 ug/mL
							N-Nitrosopyrrolidine	10 ug/mL
.SVTAPITINTRNi_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00007	02/28/18		Restek, Lot A093676			(Purchased Reagent)	1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre_00001	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVstd1_00026	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	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.: 180-42982-1

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.: 180-42982-1

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.: 180-42982-1

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.: 180-42982-1

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
							Benzdine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd5(7)_00001	02/28/17		Restek, Lot A0101573		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd8_00003	05/31/15		Restek, Lot A0103145		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..SVNNITROPYROS_00015	06/05/17		absolute, Lot 060514		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD4.0i_00006	02/21/15	07/21/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00004	50 uL	Benzo[e]pyrene	2 ug/mL
							2-Naphthylamine	2 ug/mL
							2,3,5,6-Tetrachlorophenol	2 ug/mL
							2,6-Dichlorophenol	2 ug/mL
							7,12-Dimethylbenz(a)anthracene	2 ug/mL
							Methyl methanesulfonate	2 ug/mL
							1,1'-Biphenyl	2 ug/mL
							1,2,4,5-Tetrachlorobenzene	2 ug/mL
							1,2,4-Trichlorobenzene	2 ug/mL
							1,2-Dichlorobenzene	2 ug/mL
							1,2-Diphenylhydrazine	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorobenzene	2 ug/mL
							Hexachlorobutadiene	2 ug/mL
							Hexachlorocyclopentadiene	2 ug/mL
							Hexachloroethane	2 ug/mL
							Hexadecane	2 ug/mL
							Indeno[1,2,3-cd]pyrene	2 ug/mL
							Isophorone	2 ug/mL
							n-Decane	2 ug/mL
							N-Nitrosodi-n-propylamine	2 ug/mL
							N-Nitrosodimethylamine	2 ug/mL
							n-Octadecane	2 ug/mL
							Naphthalene	2 ug/mL
							Nitrobenzene	2 ug/mL
							Pentachlorophenol	4 ug/mL
							Phenanthrene	2 ug/mL
							Phenol	2 ug/mL
							Pyrene	2 ug/mL
							Pyridine	2 ug/mL
							3,3'-Dichlorobenzidine	2 ug/mL
							Atrazine	2 ug/mL
							Benzidine	2 ug/mL
							Caprolactam	2 ug/mL
							N-Nitrosodiphenylamine	2 ug/mL
							Benzaldehyde	2 ug/mL
							Benzoic acid	2 ug/mL
							Indene	2 ug/mL
							2,4,6-Tribromophenol (Surr)	2 ug/mL
							2-Fluorobiphenyl	2 ug/mL
							2-Fluorophenol (Surr)	2 ug/mL
							Nitrobenzene-d5 (Surr)	2 ug/mL
							Phenol-d5 (Surr)	2 ug/mL
							Terphenyl-d14 (Surr)	2 ug/mL
							N-Nitrosopyrrolidine	2 ug/mL
.SVTAPITINTRni_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00007	02/28/18		Restek, Lot A093676		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							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.: 180-42982-1

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
					SVLVstdl_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.: 180-42982-1

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	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					

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

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
..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
							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.: 180-42982-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis (2-chloroethoxy)methane	1000 ug/mL
							Bis (2-chloroethyl) ether	1000 ug/mL
							Bis (2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz (a,h) anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd2_00012	07/31/15		Restek, Lot A0100824			(Purchased Reagent)	3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd5(7)_00001	02/28/17		Restek, Lot A0101573			(Purchased Reagent)	N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd8_00003	05/31/15		Restek, Lot A0103145			(Purchased Reagent)	Benzaldehyde	2000 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638			(Purchased Reagent)	2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

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
SVTAPSTD40i_00005	02/21/15	07/21/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
					Phenanthrene-d10	4 ug/mL		
					SVTAPITSTCKi_00004	500 uL	Benzo[e]pyrene	20 ug/mL
							2-Naphthylamine	20 ug/mL
							2,3,5,6-Tetrachlorophenol	20 ug/mL
							2,6-Dichlorophenol	20 ug/mL
							7,12-Dimethylbenz(a)anthracene	20 ug/mL
							Methyl methanesulfonate	20 ug/mL
							1,1'-Biphenyl	20 ug/mL
							1,2,4,5-Tetrachlorobenzene	20 ug/mL
							1,2,4-Trichlorobenzene	20 ug/mL
							1,2-Dichlorobenzene	20 ug/mL
							1,2-Diphenylhydrazine	20 ug/mL
							1,3-Dichlorobenzene	20 ug/mL
							1,3-Dinitrobenzene	20 ug/mL
							1,4-Dichlorobenzene	20 ug/mL
							1,4-Dioxane	20 ug/mL
							1-Methylnaphthalene	20 ug/mL
							2,2'-oxybis[1-chloropropane]	20 ug/mL
							2,3,4,6-Tetrachlorophenol	20 ug/mL
							2,4,5-Trichlorophenol	20 ug/mL
							2,4,6-Trichlorophenol	20 ug/mL
							2,4-Dichlorophenol	20 ug/mL
							2,4-Dimethylphenol	20 ug/mL
							2,4-Dinitrophenol	40 ug/mL
							2,4-Dinitrotoluene	20 ug/mL
							2,6-Dinitrotoluene	20 ug/mL
							2-Chloronaphthalene	20 ug/mL
							2-Chlorophenol	20 ug/mL
2-Methylnaphthalene	20 ug/mL							
2-Methylphenol	20 ug/mL							
2-Nitroaniline	20 ug/mL							
2-Nitrophenol	20 ug/mL							
3-Nitroaniline	20 ug/mL							
4,6-Dinitro-2-methylphenol	40 ug/mL							
4-Bromophenyl phenyl ether	20 ug/mL							
4-Chloro-3-methylphenol	20 ug/mL							
4-Chloroaniline	20 ug/mL							
4-Chlorophenyl phenyl ether	20 ug/mL							
4-Methylphenol	20 ug/mL							
4-Nitroaniline	20 ug/mL							
4-Nitrophenol	40 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Acetophenone	20 ug/mL
							Aniline	20 ug/mL
							Anthracene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Benzyl alcohol	20 ug/mL
							Bis (2-chloroethoxy)methane	20 ug/mL
							Bis (2-chloroethyl) ether	20 ug/mL
							Bis (2-ethylhexyl) phthalate	20 ug/mL
							Butyl benzyl phthalate	20 ug/mL
							Carbazole	20 ug/mL
							Chrysene	20 ug/mL
							Di-n-butyl phthalate	20 ug/mL
							Di-n-octyl phthalate	20 ug/mL
							Dibenz (a,h) anthracene	20 ug/mL
							Dibenzofuran	20 ug/mL
							Diethyl phthalate	20 ug/mL
							Dimethyl phthalate	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Hexachlorobenzene	20 ug/mL
							Hexachlorobutadiene	20 ug/mL
							Hexachlorocyclopentadiene	20 ug/mL
							Hexachloroethane	20 ug/mL
							Hexadecane	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Isophorone	20 ug/mL
							n-Decane	20 ug/mL
							N-Nitrosodi-n-propylamine	20 ug/mL
							N-Nitrosodimethylamine	20 ug/mL
							n-Octadecane	20 ug/mL
							Naphthalene	20 ug/mL
							Nitrobenzene	20 ug/mL
							Pentachlorophenol	40 ug/mL
							Phenanthrene	20 ug/mL
							Phenol	20 ug/mL
							Pyrene	20 ug/mL
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzaldehyde	20 ug/mL
							Benzoic acid	20 ug/mL
							Indene	20 ug/mL
							2,4,6-Tribromophenol (Surr)	20 ug/mL
							2-Fluorobiphenyl	20 ug/mL
							2-Fluorophenol (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20 ug/mL
							Phenol-d5 (Surr)	20 ug/mL
							Terphenyl-d14 (Surr)	20 ug/mL
							N-Nitrosopyrrolidine	20 ug/mL
.SVTAPITINTRNi_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00007	02/28/18		Restek, Lot A093676			(Purchased Reagent)	1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre_00001	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVstd1_00026	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	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.: 180-42982-1

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.: 180-42982-1

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.: 180-42982-1

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.: 180-42982-1

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
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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1-Methylnaphthalene	30 ug/mL
							2,2'-oxybis[1-chloropropane]	30 ug/mL
							2,3,4,6-Tetrachlorophenol	30 ug/mL
							2,4,5-Trichlorophenol	30 ug/mL
							2,4,6-Trichlorophenol	30 ug/mL
							2,4-Dichlorophenol	30 ug/mL
							2,4-Dimethylphenol	30 ug/mL
							2,4-Dinitrophenol	60 ug/mL
							2,4-Dinitrotoluene	30 ug/mL
							2,6-Dinitrotoluene	30 ug/mL
							2-Chloronaphthalene	30 ug/mL
							2-Chlorophenol	30 ug/mL
							2-Methylnaphthalene	30 ug/mL
							2-Methylphenol	30 ug/mL
							2-Nitroaniline	30 ug/mL
							2-Nitrophenol	30 ug/mL
							3-Nitroaniline	30 ug/mL
							4,6-Dinitro-2-methylphenol	60 ug/mL
							4-Bromophenyl phenyl ether	30 ug/mL
							4-Chloro-3-methylphenol	30 ug/mL
							4-Chloroaniline	30 ug/mL
							4-Chlorophenyl phenyl ether	30 ug/mL
							4-Methylphenol	30 ug/mL
							4-Nitroaniline	30 ug/mL
							4-Nitrophenol	60 ug/mL
							Acenaphthene	30 ug/mL
							Acenaphthylene	30 ug/mL
							Acetophenone	30 ug/mL
							Aniline	30 ug/mL
							Anthracene	30 ug/mL
							Benzo[a]anthracene	30 ug/mL
							Benzo[a]pyrene	30 ug/mL
							Benzo[b]fluoranthene	30 ug/mL
							Benzo[g,h,i]perylene	30 ug/mL
							Benzo[k]fluoranthene	30 ug/mL
							Benzyl alcohol	30 ug/mL
							Bis(2-chloroethoxy)methane	30 ug/mL
							Bis(2-chloroethyl)ether	30 ug/mL
							Bis(2-ethylhexyl) phthalate	30 ug/mL
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluoranthene	30 ug/mL
							Fluorene	30 ug/mL
							Hexachlorobenzene	30 ug/mL
							Hexachlorobutadiene	30 ug/mL
							Hexachlorocyclopentadiene	30 ug/mL
							Hexachloroethane	30 ug/mL
							Hexadecane	30 ug/mL
							Indeno[1,2,3-cd]pyrene	30 ug/mL
							Isophorone	30 ug/mL
							n-Decane	30 ug/mL
							N-Nitrosodi-n-propylamine	30 ug/mL
							N-Nitrosodimethylamine	30 ug/mL
							n-Octadecane	30 ug/mL
							Naphthalene	30 ug/mL
							Nitrobenzene	30 ug/mL
							Pentachlorophenol	60 ug/mL
							Phenanthrene	30 ug/mL
							Phenol	30 ug/mL
							Pyrene	30 ug/mL
							Pyridine	30 ug/mL
							3,3'-Dichlorobenzidine	30 ug/mL
							Atrazine	30 ug/mL
							Benzidine	30 ug/mL
							Caprolactam	30 ug/mL
							N-Nitrosodiphenylamine	30 ug/mL
							Benzaldehyde	30 ug/mL
							Benzoic acid	30 ug/mL
							Indene	30 ug/mL
							2,4,6-Tribromophenol (Surr)	30 ug/mL
							2-Fluorobiphenyl	30 ug/mL
							2-Fluorophenol (Surr)	30 ug/mL
							Nitrobenzene-d5 (Surr)	30 ug/mL
							Phenol-d5 (Surr)	30 ug/mL
							Terphenyl-d14 (Surr)	30 ug/mL
							N-Nitrosopyrrolidine	30 ug/mL
.SVTAPITINRni_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.: 180-42982-1

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	
					SVLVstdl_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.: 180-42982-1

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
							Benzydine	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.: 180-42982-1

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
..SVLVstd1_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.: 180-42982-1

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.: 180-42982-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..SVNNITROPYROS 00015	06/05/17		absolute, Lot 060514		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD80i_00005	02/21/15	07/21/14	MeCl2, Lot 1053215	1 mL	SVTAPITINTRNi_00005	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00004	1000 uL	Benzo[e]pyrene	40 ug/mL
							2-Naphthylamine	40 ug/mL
							2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
							1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	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							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.: _____

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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Caprolactam	40 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
							2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
							N-Nitrosopyrrolidine	40 ug/mL
.SVTAPITINTRni_00005	05/07/15	05/07/14	MeCl2, Lot 1000447	25 mL	SVLVIntstd_00007	5000 uL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00007	02/28/18		Restek, Lot A093676			(Purchased Reagent)	1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00004	02/21/15	07/21/14	MeCl2, Lot 1053215	20 mL	sv benzoepyre_00001	800 uL	Benzo[e]pyrene	40 ug/mL
					SV2NAPAMINEs_00002	800 uL	2-Naphthylamine	40 ug/mL
					SVLVlist12_00002	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVstd1_00026	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	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.: 180-42982-1

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.: 180-42982-1

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 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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

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.: 180-42982-1

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
WHdCaCO3P_00006	05/08/16		LabChem Inc., Lot D126-06			(Purchased Reagent)	Hardness as calcium carbonate	1000 mg/L

Reagent

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% HNO₃(v/v)

10,000 µg/mL ea:

Chloride,

2,000 µg/mL ea:

C,

1,000 µg/mL ea:

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

20 µg/mL ea:

Mo, Ti

3.0 CERTIFIED VALUES AND UNCERTAINTIES

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

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

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

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

(\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.

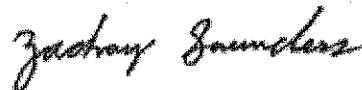
11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: July 12, 2013

Expiration Date: **EXPIRES**
01st 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

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% HNO₃(v/v)

2 µg/mL ea:

Ag, As, Cd, Co, Cr₃, Cu, Mn, Ni, Zn

3.0 CERTIFIED VALUES AND UNCERTAINTIES

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

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

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

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

(\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.

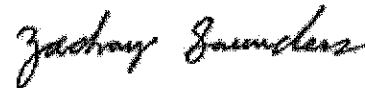
11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: March 25, 2013

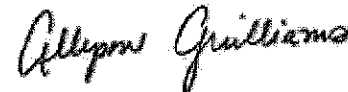
Expiration Date: **EXPIRES**
01st 2015

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

MCALSPECAREV_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 Custom Solution
Catalog No.: TAPITT-CAL-SPECA-REV
Lot Number: H2-MEB524026
Matrix: 3% HNO₃(v/v)

2,500 µg/mL ea:

Ca, K, Mg, Na,

1,250 µg/mL ea:

Fe,

25 µg/mL ea:

Al, Mn,

5 µg/mL ea:

Ag, As, Ba, Be, Cd, Co, Cr₃, Cu, Ni,
Pb, Se, Sr, Tl, V, Zn

3.0 CERTIFIED VALUES AND UNCERTAINTIES

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

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

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

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

(\bar{x}) = mean

x_i = individual results

n = number of measurements

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

2 = the coverage factor.

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

4.0 TRACEABILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

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

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

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

4.1 ASSAY INFORMATION

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

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

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

(\bar{x}) = mean

x_i = individual results

n = number of measurements

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

2 = the coverage factor.

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

4.0 TRACEABILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

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

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

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

- 4.2 **BALANCE CALIBRATION** - All analytical balances are calibrated yearly by an accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).
- 4.3 **THERMOMETER CALIBRATION** - All thermometers are NIST traceable through thermometers that are calibrated by an A2LA accredited calibration laboratory.
- 4.4 **GLASSWARE CALIBRATION** - An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM's.

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

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep Tightly sealed when not in use. Store and use at $20 \pm 4^\circ\text{C}$. Do Not pipette from the container. Do Not return portions removed from pipetting to container.

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

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

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

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

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

10.0 QUALITY STANDARD DOCUMENTATION

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

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

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

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

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

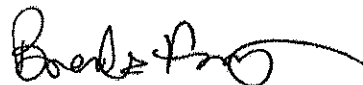
Certification Date: April 04, 2014

Expiration Date:

EXPIRES
01st 2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Brenda Francis
Product Documentation Technician



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



Certifying Officer: Paul Gaines
PhD., Senior Technical Director



Reagent

MCALSPECB_00007

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



2.0 DESCRIPTION OF CRM **Custom Solution**

Catalog No.: TAPITT-CAL-SPECB

Lot Number: H2-MEB524027

Matrix: 3% HNO₃(v/v),
tr. HF

250 µg/mL ea:

Si,

5 µg/mL ea:

B, Mo, Sb, Sn, Ti

3.0 CERTIFIED VALUES AND UNCERTAINTIES

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

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

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

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

(\bar{x}) = mean

x_i = individual results

n = number of measurements

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

2 = the coverage factor.

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

4.0 TRACEABILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

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

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

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

4.1 ASSAY INFORMATION

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

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

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

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

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

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

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

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

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

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

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

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

10.0 QUALITY STANDARD DOCUMENTATION

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

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

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

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

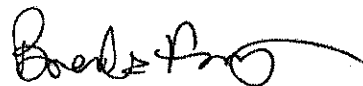
11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: April 04, 2014

Expiration Date: **EXPIRES**
01~~4~~2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Brenda Francis
Product Documentation Technician



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



Certifying Officer: Paul Gaines
PhD., Senior Technical Director



Reagent

MCGHG1-1_00009

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: Single Analyte Custom Grade Solution
Catalog Number: CGHG1
Lot Number: H2-HG02128
Matrix: 5% (v/v) HNO₃
Value / Analyte(s): 1 000 µg/mL ea:
Hg
Starting Material: Hg Metal
Starting Material Lot#: 1780
Starting Material Purity: 99.9997%

*Rec'd 1/8/15
RJR*

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1 007 ± 3 µg/mL - weighted mean
Certified Density: 1.026 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1 1 004 ± 5 µg/mL
ICP Assay NIST SRM 3133 Lot Number: 061204
Assay Method #2 1 009 ± 3 µg/mL
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

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 $k = 2$.

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$$

X_a = mean of Assay Method A with standard uncertainty $u_{char a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$$w_a = (1/u_{char a})^2 / ((1/u_{char a})^2 + (1/u_{char b})^2)$$

$$w_b = (1/u_{char b})^2 / ((1/u_{char a})^2 + (1/u_{char b})^2)$$

$$CRM/RM \text{ Expanded Uncertainty } (t) = U_{CRM/RM} = k (u_{char a \& b}^2 + u_{bb}^2 + u_{lts}^2 + u_{sts}^2)^{1/2}$$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char a \& b} = [(w_a)^2 (u_{char a})^2 + (w_b)^2 (u_{char b})^2]^{1/2}$ where $u_{char a}$ and $u_{char b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

No correction has been applied for transpiration that will occur after the CRM/RM bottle has been removed from the sealed aluminized bag. See Sec. 7.0 (Instructions for the Correct Use of this Reference Material) for more information.

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = \text{mean of Assay Method A with standard uncertainty } u_{char a}$$

$$CRM/RM \text{ Expanded Uncertainty } (t) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{sts}^2)^{1/2}$$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

CRM/RM bottle has been removed from the

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)

CRM/RMs 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.

M Ag < 0.003050	M Er < 0.000203	O Mn < 0.000161	O S < 0.005380	O V < 0.000538
O Al < 0.000753	M Eu < 0.000203	M Mo < 0.002033	M Sb < 0.002033	M W < 0.001017
M As < 0.001017	O Fe < 0.001614	O Na 0.000787	O Sc < 0.000430	M Y < 0.000203
M Au < 0.002033	M Ga < 0.000203	M Nb < 0.000610	M Se < 0.014233	M Yb < 0.000203
M B < 0.004067	M Gd < 0.000203	M Nd < 0.000203	O Si 0.000899	O Zn 0.000146
M Ba < 0.000610	M Ge < 0.001627	O Ni < 0.001614	M Sm < 0.000203	O Zr < 0.001614
O Be < 0.000108	M Hf < 0.000610	n Os <	M Sn < 0.000203	
M Bi < 0.002033	s Hg <	O P < 0.010760	O Sr < 0.000215	
O Ca 0.001068	M Ho < 0.000203	M Pb < 0.000610	M Ta < 0.000610	
M Cd < 0.000203	M In < 0.000407	M Pd < 0.003050	M Tb < 0.000203	
M Ce < 0.000203	M Ir < 0.000203	M Pr < 0.000203	M Te < 0.004067	
M Co < 0.000407	O K 0.000562	M Pt < 0.000203	M Th < 0.000407	
O Cr < 0.000538	M La < 0.000203	M Rb < 0.000203	O Ti < 0.000646	
M Cs < 0.004067	O Li < 0.000215	M Re < 0.000203	O Tl < 0.005380	
O Cu < 0.002152	M Lu < 0.000203	M Rh < 0.000203	M Tm < 0.000203	
M Dy < 0.000203	O Mg 0.000169	M Ru < 0.000203	M U < 0.004067	

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

- Store between approximately 4° - 30°C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT.

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59 +2 4

Hg(OH)(aq) 1+

Chemical Compatibility - Stable in HNO₃. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.

Stability - 2-100 ppb levels not stable in 1% HNO₃ / LDPE container, stable in 10% HNO₃ packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO₃ packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO₃ / LDPE container.

Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO₃); Oxide (Soluble in HNO₃); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th, Rh, Fe, U

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, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

- August 28, 2014

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec. 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Period of Validity

- Sealed TCT Bag Open Date: 2/2/2015

- This CRM/RM should not be used longer than one year from the date of opening the sealed TCT bag or after the date given in Sec. 11.3, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

11.3 Lot Expiration Date

- August 28, 2017

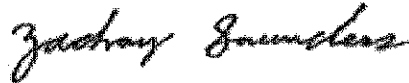
- The date after which this CRM/RM should not be used (See Sec. 11.2).

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

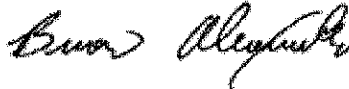
Certificate Prepared By:

Zach Saunders
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

MHGICV-1_00005

Material Safety Data Sheet

ULTRA Scientific · 250 Smith Street · North Kingstown, RI, USA 02852 · 401-294-9400

Product #: ICP-080

Last Update: 4/7/2014

Section I Product Identification

Name: Mercury Standard

Matrix : water with dilute nitric acid

Section II Composition / Information on Ingredients

Component	CAS#	% by Wt.	LD50	OSHA PEL	ACGIH TLV	RTECS #	Codes
water	007732-18-5	97.9	>90 mL/kg oral rat	N/A	N/A	ZC0110000	
nitric acid	007697-37-2	2	N/A	5 mg/m3	5.2 mg/m3	QU5775000	G
mercury, inorganic compounds as Hg	007439-97-6	0.1	26 mg/kg oral rat	0.1 mg/m3	.025 mg/m3	OV4550000	

Codes: A-OSHA regulated carcinogen; B-IARC Group 1 carcinogen; C-IARC Group 2A carcinogen; D-IARC Group 2B carcinogen; E-NTP Group 1 carcinogen; F-NTP Group 2 carcinogen; G-SARA Title III compound; H-California Proposition 65 compound.

Section III Hazards Identification

Irritant

All chemicals should be considered hazardous - direct physical contact should be avoided.

Section IV First Aid Measures

Inhalation: If inhaled, remove to fresh air. Give oxygen, if necessary. Contact a physician.

Skin: In case of skin contact, flush with copious amounts of water. Remove contaminated clothing.

Contact: Contact a physician.

Eye Contact: In case of eye contact, flush with copious amounts of water, lifting eyelids occasionally. Contact a physician.

Ingestion: If ingested, contact poison center immediately for recommended procedure. Contact a physician.

Section V Fire Fighting Measures

Fire and Explosion Hazard Data for Matrix

Fire Hazard: non-combustible

Extinguishing Media: Carbon dioxide, dry chemical powder, or water spray.

Section VI Accidental Release Measures

Ventilate area of the leak or spill. Wear appropriate personal protective equipment as specified in Section VIII. A leaking bottle, vial, or ampule may be placed in a plastic bag, and normal disposal procedures followed. Take up spilled material with sand or other non-combustible absorbant material, and place in an appropriate container for later disposal. Flush spill area with water.

Section VII Handling and Storage

Store at Room Temperature (18-25°C)

Keep in a tightly closed container, and store in a corrosion proof area.

This product should only be used by persons trained in the safe handling of hazardous chemicals.

Section VIII Exposure Controls / Personal Protection

Ensure that there is adequate ventilation to prevent airborne levels from exceeding recommended exposure limits (see Section II). Use appropriate MSHA/NIOSH approved safety equipment. Wear chemical goggles, face shield, gloves, and chemical resistant clothing, such as a laboratory coat and/or a rubber apron, to prevent contact with eyes, skin, and clothing.

Section IX Physical and Chemical Properties

Physical Data for Matrix

Melting Pt.: 0°C

Boiling Pt.: 100°C
Page 124 of 541

Density: 1

Vapor Pressure: N/A

Vapor Density: N/A

Water Solubility: soluble

Appearance: colorless liquid

Odor: none

Flash Point: none

Auto-Ignition Temperature: N/A

LEL: N/A

UEL: N/A

Section X Stability and Reactivity

Reactivity Data for Matrix

Stability: stable

Incompatibilities:

organic materials

str. reducing agents

alkalies

antimony salts

Hazardous Decomposition Products: NO₂, NO₃

Hazardous Effects of Polymerization: none

Section XI Toxicological Information

See Section II for specific toxicological information for the ingredients of this product.

Section XII Ecological Information

No information is available.

Section XIII Disposal Considerations

Recycle, if possible. Any material which cannot be saved for recovery or recycling should be disposed of at an appropriate and approved waste disposal facility. Processing, use, and/or contamination of this product may change waste management requirements. Observe all applicable federal, state, and local environmental regulations concerning disposal.

Section XIV Transport Information

Shipment Type: Corrosive liquid, acidic, inorganic, n.o.s. (nitric acid)

UN Number: UN3264

Shipping Class: 8

Packing Group: III

Section XV Regulatory Information

EU Directives Classification

R: 34

Risk Statements: Causes burns.

S: 23-26-36-45

Safety Statements: Do not breathe gas/fumes/vapour/spray. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Section XVI Other Information

The above information is believed to be correct, but does not purport to be all-inclusive. This data should be used only as a guide in handling this material. ULTRA Scientific, Inc., shall not be held liable for any damage resulting from handling or from contact with the above product.

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Reagent

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% HNO₃ / Tr. Tart. Acid / Tr. HF

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

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

Instrumental Analysis by ICP Spectrometer:

Analyte	Labeled	Uncertainty	SRM	Analyte	Labeled	Uncertainty	SRM
Ca	1000 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: *Larry Hinfey*

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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 Principles for Certification
- Guide To The Expression Of Uncertainty In Measurement 1997
- EURACHEM/CITAC Guide: Quantifying Uncertainty in Analytical Measurement – Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference materials producers
- ISO/REMCO N280

Material Source:

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

Instructions for Use:

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

Method of Preparation:

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

Homogeneity:

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

Statistical Estimator and Confidence Limits:

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

- $X = x \pm U$ where X = certified value, U = expanded uncertainty, x = property value
- $U = k u_c$ 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.

Legal Notice:

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

SPEX CertiPrep 

Your Science is Our Passion.®

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www.spexcertiprep.com • E-mail: crmsales@spexcsp.com
Page 128 of 541
Phone: 1-800-LAB-SPEX • Fax: 732-603-9647



Reagent

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 ₃			
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 ₃ ,	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^R2016

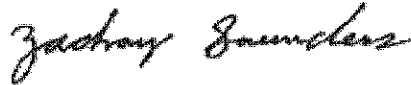
11.3 Period of Validity

- 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

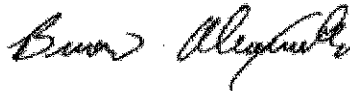
Certificate Prepared By:

Zach Saunders
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

MMSCRI-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-MSCRI-2-REV1

Lot Number: J2-MEB572093

Matrix: 5% (v/v) HNO₃
tr. HF

Value / Analyte(s): 125 µg/mL ea:
Si,
5 µg/mL ea:
B,
1.25 µg/mL ea:
Mo, Sn, Ti,
0.5 µg/mL ea:
Sb

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	0.5004 ± 0.0037 µg/mL	Boron, B	4.998 ± 0.032 µg/mL
Molybdenum, Mo	1.250 ± 0.011 µg/mL	Silicon, Si	125.0 ± 1.0 µg/mL
Tin, Sn	1.250 ± 0.010 µg/mL	Titanium, Ti	1.250 ± 0.010 µg/mL

Certified Density: 1.023 g/mL (measured at 20 ± 1 °C)

Assay Information:

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

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

March 20, 2015

11.2 Expiration Date

EXPIRES
01/2016

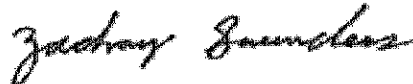
11.3 Period of Validity

- 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

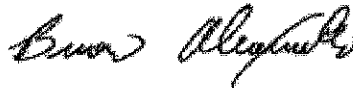
Certificate Prepared By:

Zach Saunders
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

MMSICSAB-1_00007

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



2.0 **DESCRIPTION OF CRM** **Custom Solution**
 Catalog No.: TAPITT-MSICSAB-1
 Lot Number: **H2-MEB524028**
 Matrix: 3% HNO₃(v/v)

10 µg/mL ea:

Ba, Be, Pb, Sr, Tl, V

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Barium, Ba	9.99 ± 0.06 µg/mL	Beryllium, Be	10.00 ± 0.06 µg/mL	Lead, Pb	10.01 ± 0.05 µg/mL
Strontium, Sr	10.00 ± 0.06 µg/mL	Thallium, Tl	10.00 ± 0.06 µg/mL	Vanadium, V	9.99 ± 0.06 µg/mL

Certified Density: 1.022 g/mL (measured at 20 ± 1° C)

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

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

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

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

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

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

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

4.1 ASSAY INFORMATION

ELEMENT	METHOD	NIST SRM#	SRM LOT#
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	090514
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Tl	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012
V	ICP Assay	3165	992706
V	EDTA	928	928

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

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

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

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

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep **Tightly** sealed when not in use. Store and use at $20 \pm 4^\circ\text{C}$. **Do Not** pipette from the container. **Do Not** return portions removed from pipetting to container.

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

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

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

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

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

- Chemical Testing - Accredited A2LA Certificate Number 883.01

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

- Reference Materials Production - Accredited A2LA Certificate Number 883.02

10.4 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.5 10CFR21 - Nuclear Regulatory Commission

- Reporting Defects and Non-Compliance

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

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

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

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

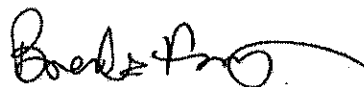
Certification Date: April 04, 2014

Expiration Date:

EXPIRES
01/2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Brenda Francis
Product Documentation Technician



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



Certifying Officer: Paul Gaines
PhD., Senior Technical Director



Reagent

MMSICSAB-2_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** **Custom Solution**
 Catalog No.: TAPITT-MSICSAB-2
 Lot Number: G2-MEB467043
 Matrix: 3% HNO₃(v/v),
 tr. HF

250 µg/mL ea:

Si,

50 µg/mL ea:

Sn,

25 µg/mL ea:

B, Se,

10 µg/mL ea:

Sb

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Antimony, Sb	10.00 ± 0.06 µg/mL	Boron, B	24.98 ± 0.17 µg/mL	Selenium, Se	25.01 ± 0.21 µg/mL
Silicon, Si	249.9 ± 1.6 µg/mL	Tin, Sn	50.04 ± 0.36 µg/mL		

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

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

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

(\bar{x}) = mean

x_i = individual results

n = number of measurements

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

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/CRM. See section 4.2 for balance traceability.

4.1 ASSAY INFORMATION

ELEMENT	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	070514
Sb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	992106
Si	Calculated		See Sec. 4.2
Si	ICP Assay	3150	071204
Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330

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

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

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

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

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

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

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

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

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

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

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

10.0 QUALITY STANDARD DOCUMENTATION

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

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

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

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


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

Certification Date: March 08, 2013

Expiration Date: **EXPIRES**
01/2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Donna Senn
Product Documentation Technician



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



Certifying Officer: Paul Gaines
PhD., Senior Technical Director



Reagent

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) HNO₃

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: Cr₃,
- 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 ₃	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

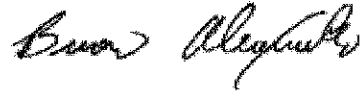
Certificate Prepared By:

Donna Senn
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

MTAPITTMSA_00023

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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) HNO₃
 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~~2~~2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

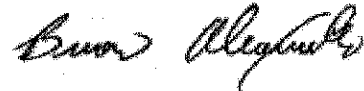
Certificate Prepared By:

Donna Senn
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

MTAPIITMSC_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
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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

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:

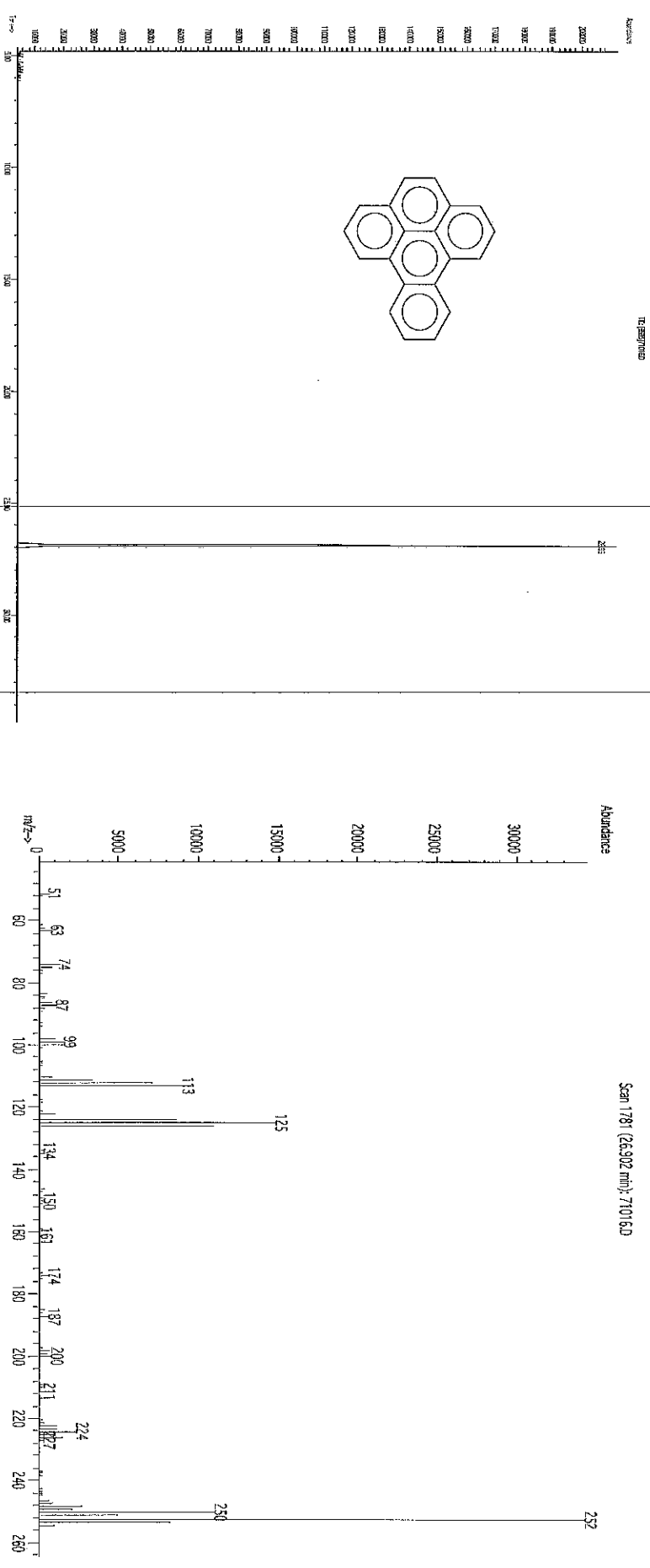
100.0 0.003 SE-05 Balance Uncertainty
 1000 Fask Uncertainty

MSDS Information

(Solvent Safety Info. On Attached pg.)

Compound	RM#	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. 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

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)

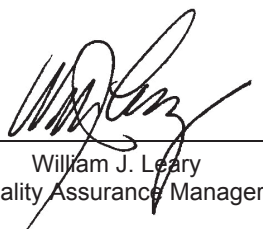
ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



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



William J. Leary
Quality Assurance Manager

Reagent

SVLVIntstd_00007

SV/VintStd/A A093676



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 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)

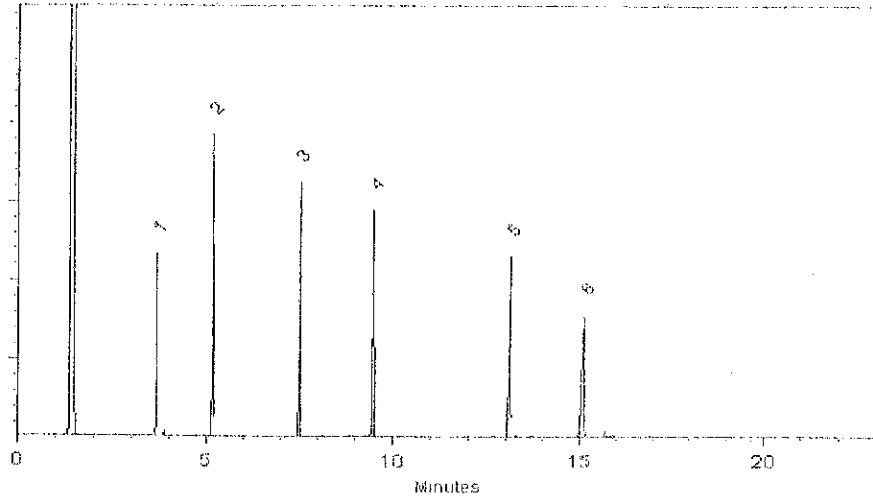
Carrier Gas:
Hydrogen-constant pressure 10 psi.

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

SVLVlist12_00002



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. : 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)

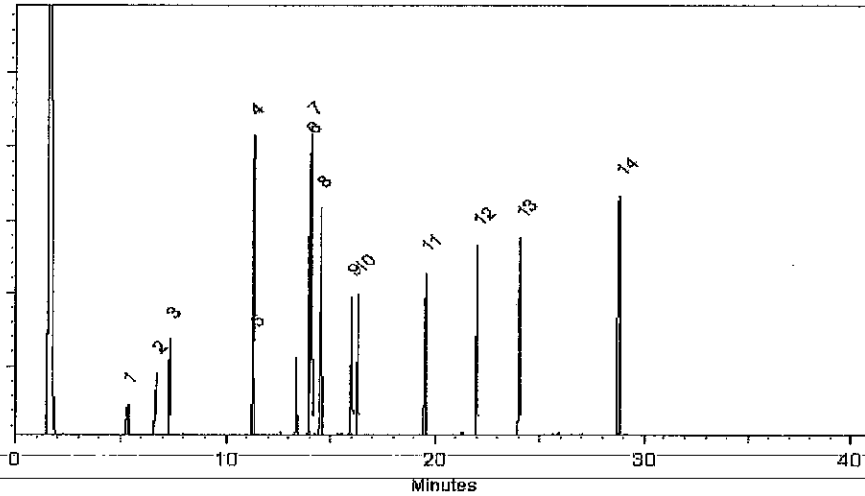
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

SVLVstd1_00026



CERTIFIED REFERENCE MATERIAL

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



Certificate of Analysis



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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)

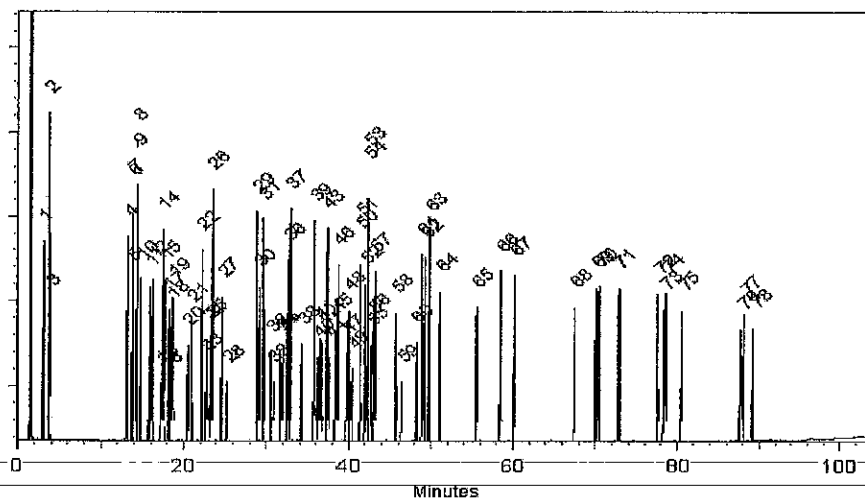
Carrier Gas:
hydrogen-constant pressure 10 psi

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

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
FID



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

Rebecca 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

SVLVstd1_00030

SVW 8070 New ASTM #1 Mega Mix 0010399

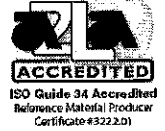


CERTIFIED REFERENCE MATERIAL

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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	n-Dodecane 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	µg/mL	Gravimetric
				+/-	10.9991	µg/mL	Unstressed
				+/-	18.6562	µg/mL	Stressed
41	Acenaphthylene CAS # 208-96-8 Purity 99%	(Lot ER030707-01)	1,000.0 µg/mL	+/-	5.8141	µg/mL	Gravimetric
				+/-	10.9487	µg/mL	Unstressed
				+/-	18.5708	µg/mL	Stressed
42	1,3-Dinitrobenzene CAS # 99-65-0 Purity 99%	(Lot BCBB1436V)	1,006.4 µg/mL	+/-	5.8513	µg/mL	Gravimetric
				+/-	11.0188	µg/mL	Unstressed
				+/-	18.6896	µg/mL	Stressed
43	Dimethylphthalate CAS # 131-11-3 Purity 99%	(Lot 10117699)	1,001.0 µg/mL	+/-	5.8199	µg/mL	Gravimetric
				+/-	10.9596	µg/mL	Unstressed
				+/-	18.5894	µg/mL	Stressed
44	2,6-Dinitrotoluene CAS # 606-20-2 Purity 99%	(Lot 1437483V)	1,001.6 µg/mL	+/-	5.8234	µg/mL	Gravimetric
				+/-	10.9662	µg/mL	Unstressed
				+/-	18.6005	µg/mL	Stressed
45	Acenaphthene CAS # 83-32-9 Purity 99%	(Lot MKBP0384V)	1,001.8 µg/mL	+/-	5.8246	µg/mL	Gravimetric
				+/-	10.9684	µg/mL	Unstressed
				+/-	18.6042	µg/mL	Stressed
46	2,4-Dinitrophenol CAS # 51-28-5 Purity 99%	(Lot MKBP5833V)	2,008.7 µg/mL	+/-	11.6788	µg/mL	Gravimetric
				+/-	21.9927	µg/mL	Unstressed
				+/-	37.3031	µg/mL	Stressed
47	Dibenzofuran CAS # 132-64-9 Purity 99%	(Lot MKBK2375V)	1,001.8 µg/mL	+/-	5.8246	µg/mL	Gravimetric
				+/-	10.9684	µg/mL	Unstressed
				+/-	18.6042	µg/mL	Stressed
48	3-Nitroaniline CAS # 99-09-2 Purity 99%	(Lot MKBH5131V)	1,001.3 µg/mL	+/-	5.8216	µg/mL	Gravimetric
				+/-	10.9629	µg/mL	Unstressed
				+/-	18.5949	µg/mL	Stressed
49	2,4-Dinitrotoluene CAS # 121-14-2 Purity 99%	(Lot MKAA0690V)	1,001.7 µg/mL	+/-	5.8240	µg/mL	Gravimetric
				+/-	10.9673	µg/mL	Unstressed
				+/-	18.6024	µg/mL	Stressed
50	4-Nitrophenol CAS # 100-02-7 Purity 99%	(Lot MKBK1842V)	2,001.0 µg/mL	+/-	11.6340	µg/mL	Gravimetric
				+/-	21.9083	µg/mL	Unstressed
				+/-	37.1601	µg/mL	Stressed
51	2,3,4,6-Tetrachlorophenol CAS # 58-90-2 Purity 99%	(Lot FN10221307)	1,002.1 µg/mL	+/-	5.8263	µg/mL	Gravimetric
				+/-	10.9717	µg/mL	Unstressed
				+/-	18.6098	µg/mL	Stressed
52	Fluorene CAS # 86-73-7 Purity 98%	(Lot 10174662)	1,000.5 µg/mL	+/-	5.8169	µg/mL	Gravimetric
				+/-	10.9540	µg/mL	Unstressed
				+/-	18.5797	µg/mL	Stressed
53	4-Chlorophenyl phenyl ether CAS # 7005-72-3 Purity 99%	(Lot MKBL1347V)	1,000.4 µg/mL	+/-	5.8164	µg/mL	Gravimetric
				+/-	10.9531	µg/mL	Unstressed
				+/-	18.5782	µg/mL	Stressed
54	n-Hexadecane (C16) CAS # 544-76-3 Purity 99%	(Lot SHBD4570V)	1,002.2 µg/mL	+/-	5.8269	µg/mL	Gravimetric
				+/-	10.9728	µg/mL	Unstressed
				+/-	18.6116	µg/mL	Stressed
55	Diethylphthalate CAS # 84-66-2 Purity 99%	(Lot MKBJ3578V)	1,001.1 µg/mL	+/-	5.8205	µg/mL	Gravimetric
				+/-	10.9607	µg/mL	Unstressed
				+/-	18.5912	µg/mL	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
Solvent:	Methylene Chloride CAS # 75-09-2 Purity 99%						

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

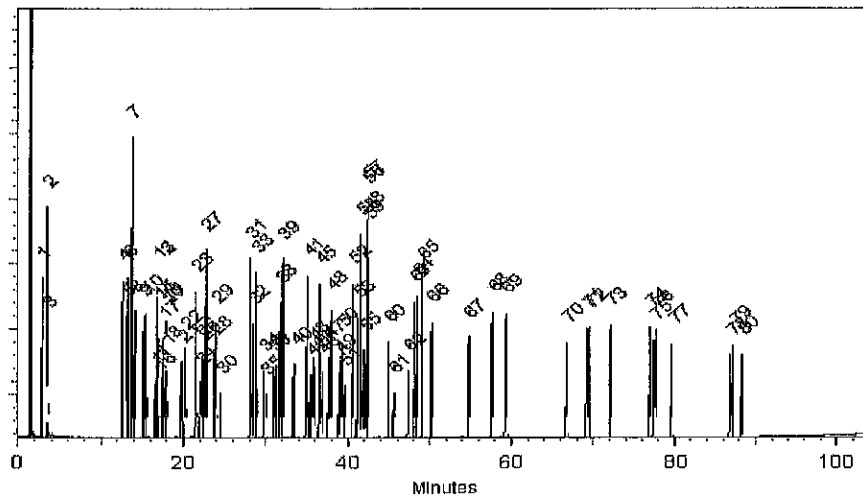
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
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

SVLVstd10_00001



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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. : 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

SVLVstd11_00001



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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

SVLVstd2_00012



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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

SVLVstd5 (7) _00001



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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

SVLVstd8_00003



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

Catalog No. : 568724 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

SVLVstd9_00001



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

Catalog No. : 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

SVLVSURRSPK_00003



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708035



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:

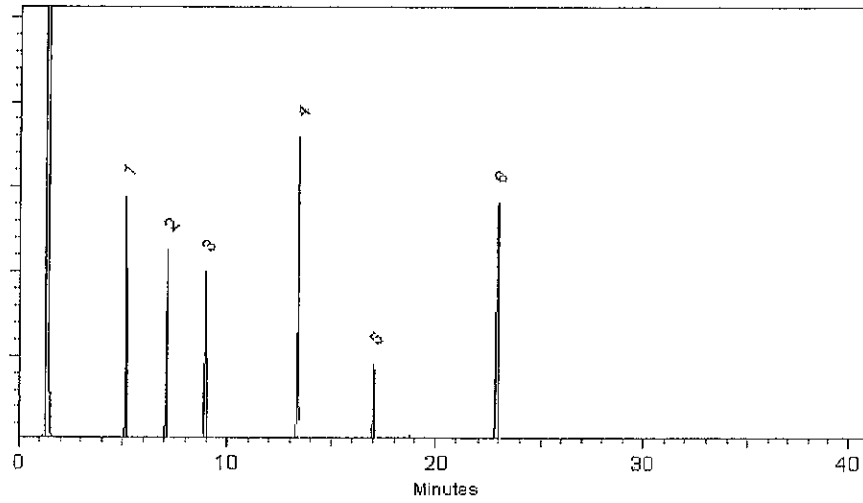
250°C

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

SVLVSURRSPK_00006



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 MSDS PRIOR TO USE.

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

Catalog No. : 567685 **Lot No.:** A093638
Description : 8270 Surrogate Standard
8270 Surrogate Standard 5,000 ug/ml, Methylene Chloride, 5 ml/ampul
Container Size : 5 mL **Pkg Amt:** > 5 mL
Expiration Date : February 2018 **Storage:** 10°C or colder
Handling: Sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	2-Fluorophenol	5,000.0 µg/mL	+/-	29.0689	µg/mL	Gravimetric
	CAS # 367-12-4		+/-	132.9492	µg/mL	Unstressed
	Purity 99%		+/-	163.4029	µg/mL	Stressed
2	Phenol-d5	5,000.0 µg/mL	+/-	29.0689	µg/mL	Gravimetric
	CAS # 4165-62-2		+/-	132.9492	µg/mL	Unstressed
	Purity 99%		+/-	163.4029	µg/mL	Stressed
3	Nitrobenzene-d5	5,000.0 µg/mL	+/-	29.0689	µg/mL	Gravimetric
	CAS # 4165-60-0		+/-	132.9492	µg/mL	Unstressed
	Purity 99%		+/-	163.4029	µg/mL	Stressed
4	2-Fluorobiphenyl	5,000.0 µg/mL	+/-	29.0689	µg/mL	Gravimetric
	CAS # 321-60-8		+/-	132.9492	µg/mL	Unstressed
	Purity 99%		+/-	163.4029	µg/mL	Stressed
5	2,4,6-Tribromophenol	5,000.0 µg/mL	+/-	29.0689	µg/mL	Gravimetric
	CAS # 118-79-6		+/-	132.9492	µg/mL	Unstressed
	Purity 99%		+/-	163.4029	µg/mL	Stressed
6	p-Terphenyl-d14	5,000.0 µg/mL	+/-	29.0689	µg/mL	Gravimetric
	CAS # 1718-51-0		+/-	132.9492	µg/mL	Unstressed
	Purity 99%		+/-	163.4029	µg/mL	Stressed
Solvent:	Methylene Chloride					
	CAS # 75-09-2					
	Purity 99%					

Tech Tips:

Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

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

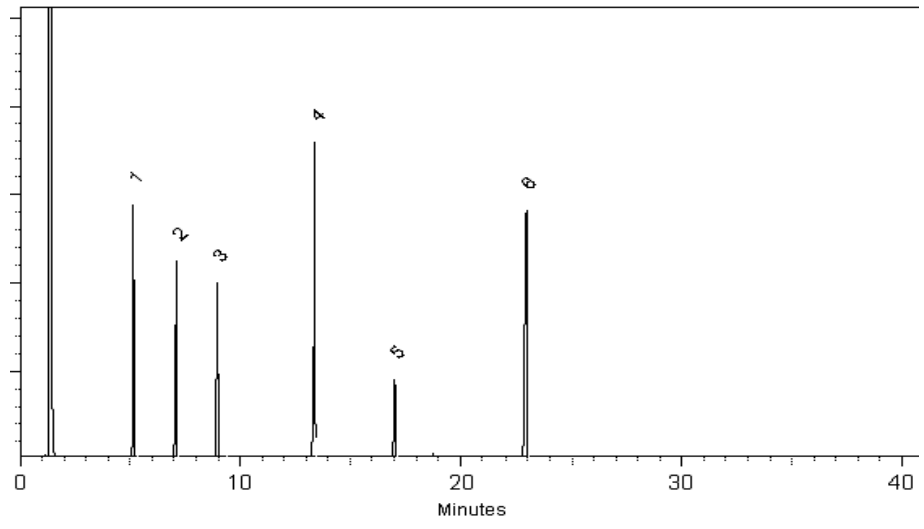
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Diane Shaffer
Diane Shaffer - QA Analyst

Date Passed: 22-Feb-2013 Balance: 1128342313

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date of the unopened ampul stored at the recommended storage condition is the last day of the month listed in the expiration date field.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

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

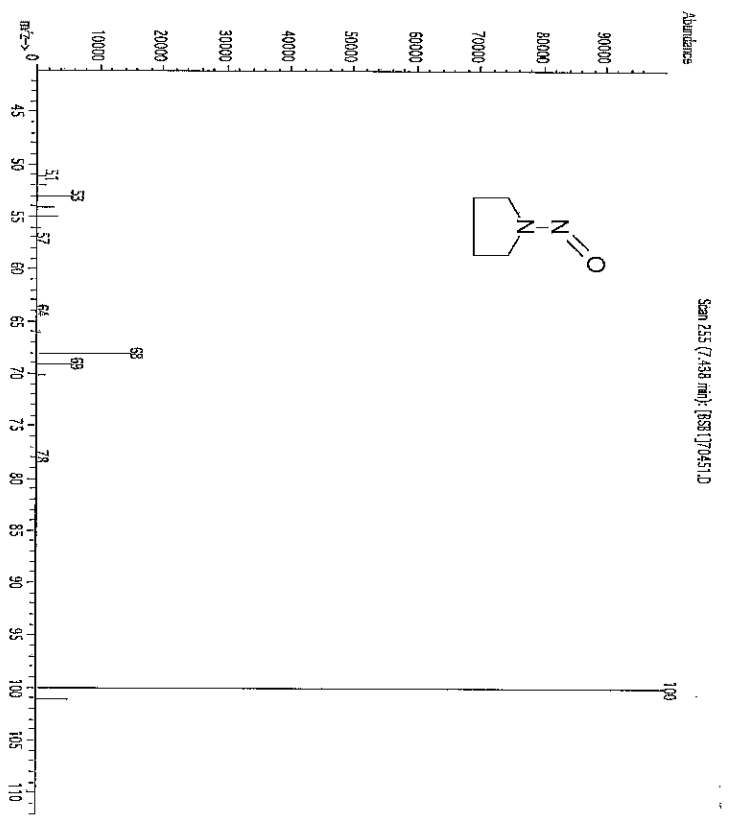
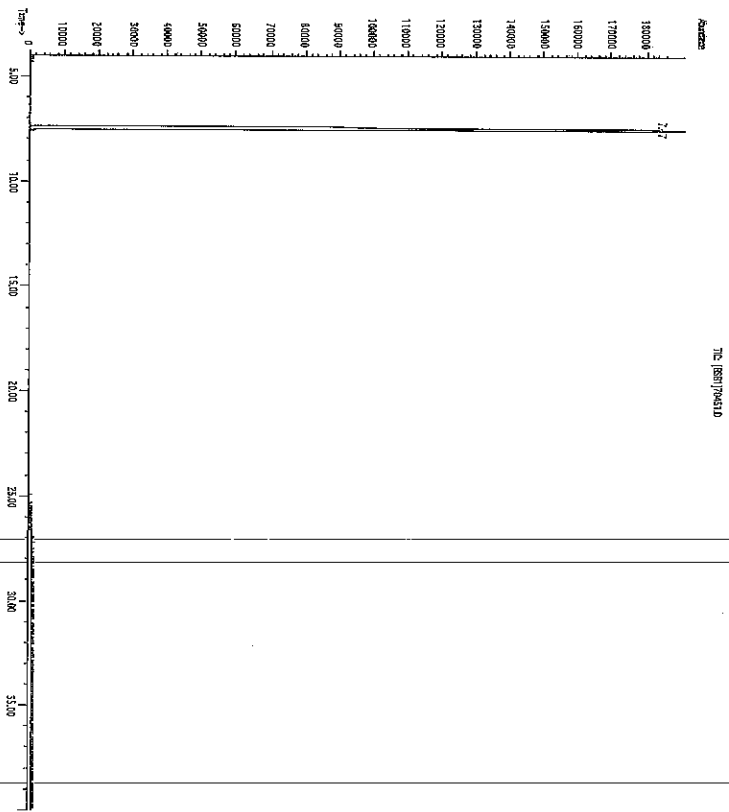
Solvent(s): Methylene chloride
Lot #: 62418

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

MSDS Information

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)	LDSO	
1. N-Nitrosopyrrolidine	451	04025BM	1000	99	0.2	0.02524	0.02530	1002.2	0.00565	00990-55-2	N/A	or-cat 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

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	7732-18-8	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

LaNelle Ohlhausen
 Quality Assurance

*MLD 1-8-15
 CU*

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

Method 8270D Low Level

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

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

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-C01	180-42982-1	37	43	41	41	45	45
PW-B01	180-42982-2	37	43	40	39	45	41
PW-A01	180-42982-3	34	38	36	35	48	45
	MB 180-138290/1-A	57	60	58	53	55	58
	LCS 180-138290/2-A	57	61	57	55	63	60

	<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.: 180-42982-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: D0414009.D

Lab ID: LCS 180-138290/2-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Anthracene	20.0	12.4	62	49-100	
Benzo[a]anthracene	20.0	12.5	62	50-100	
Benzo[b]fluoranthene	20.0	12.7	64	43-100	
Benzo[k]fluoranthene	20.0	12.6	63	47-100	
Benzo[g,h,i]perylene	20.0	13.5	67	48-100	
Benzo[a]pyrene	20.0	13.1	66	47-100	
Chrysene	20.0	12.5	63	49-100	
Dibenz(a,h)anthracene	20.0	13.5	68	48-100	
Fluoranthene	20.0	12.0	60	48-100	
Fluorene	20.0	12.3	62	48-100	
Indeno[1,2,3-cd]pyrene	20.0	13.6	68	47-100	
Phenanthrene	20.0	12.5	63	48-100	
Pyrene	20.0	13.6	68	44-100	
Acenaphthene	20.0	11.3	57	47-100	
Acenaphthylene	20.0	11.9	60	47-100	
Naphthalene	20.0	11.7	59	44-100	
Bis(2-ethylhexyl) phthalate	20.0	13.1	66	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.: 180-42982-1
 SDG No.: _____
 Lab File ID: D0414005.D Lab Sample ID: MB 180-138290/1-A
 Matrix: Water Date Extracted: 04/13/2015 09:07
 Instrument ID: CH732 Date Analyzed: 04/14/2015 10:54
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-138290/2-A	D0414009.D	04/14/2015 12:43
PW-C01	180-42982-1	D0414022.D	04/14/2015 18:39
PW-B01	180-42982-2	D0414023.D	04/14/2015 19:06
PW-A01	180-42982-3	D0414024.D	04/14/2015 19:33

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1
 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.: 180-42982-1
 SDG No.: _____
 Lab File ID: D0414002.D DFTPP Injection Date: 04/14/2015
 Instrument ID: CH732 DFTPP Injection Time: 09:44
 Analysis Batch No.: 138398

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0 % of mass 198	50.7
68	Less than 2.0 % of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	41.8
70	Less than 2.0 % of mass 69	0.2 (0.6)1
127	40.0 - 60.0 % of mass 198	54.9
197	Less than 1.0 % of mass 198	0.0
198	Base Peak, 100 % relative abundance	100.0
199	5.0- 9.0 % of mass 198	6.6
275	10.0 - 30.0 % of mass 198	22.1
365	Greater than 1.0 % of mass 198	3.0
441	Present but less than mass 443	9.2 (82.5)3
442	Greater than 40.0 % of mass 198	56.4
443	17.0 - 23.0 % of mass 442	11.2 (19.8)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-138398/3	D0414003.D	04/14/2015	10:00
	MB 180-138290/1-A	D0414005.D	04/14/2015	10:54
	LCS 180-138290/2-A	D0414009.D	04/14/2015	12:43
PW-C01	180-42982-1	D0414022.D	04/14/2015	18:39
PW-B01	180-42982-2	D0414023.D	04/14/2015	19:06
PW-A01	180-42982-3	D0414024.D	04/14/2015	19:33

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1
 SDG No.: _____
 Sample No.: CCVIS 180-138398/3 Date Analyzed: 04/14/2015 10:00
 Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32 (mm)
 Lab File ID (Standard): D0414003.D Heated Purge: (Y/N) N
 Calibration ID: 21642

	DCB		NPT		ANT			
	AREA #	RT #	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	156653	6.15	741876	7.45	486741	9.16		
UPPER LIMIT	313306	6.65	1483752	7.95	973482	9.66		
LOWER LIMIT	78327	5.65	370938	6.95	243371	8.66		
LAB SAMPLE ID	CLIENT SAMPLE ID							
MB 180-138290/1-A			181936	6.14	892531	7.44	635405	9.16
LCS 180-138290/2-A			158476	6.14	753979	7.44	514496	9.16
180-42982-1	PW-C01		157572	6.15	739049	7.45	496238	9.17
180-42982-2	PW-B01		155683	6.15	750583	7.45	502808	9.17
180-42982-3	PW-A01		162983	6.15	791891	7.45	534349	9.17

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.: 180-42982-1
 SDG No.: _____
 Sample No.: CCVIS 180-138398/3 Date Analyzed: 04/14/2015 10:00
 Instrument ID: CH732 GC Column: Rxi-5SilMS ID: 0.32 (mm)
 Lab File ID (Standard): D0414003.D Heated Purge: (Y/N) N
 Calibration ID: 21642

	PHN		CRY		PRY			
	AREA #	RT #	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	852083	10.61	708247	14.38	567190	17.27		
UPPER LIMIT	1704166	11.11	1416494	14.88	1134380	17.77		
LOWER LIMIT	426042	10.11	354124	13.88	283595	16.77		
LAB SAMPLE ID	CLIENT SAMPLE ID							
MB 180-138290/1-A			1189597	10.61	912834	14.37	725510	17.27
LCS 180-138290/2-A			880447	10.61	735586	14.38	602368	17.27
180-42982-1	PW-C01		839416	10.63	677271	14.40	669000	17.30
180-42982-2	PW-B01		886364	10.63	727184	14.40	690432	17.31
180-42982-3	PW-A01		899997	10.63	730646	14.40	697772	17.31

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.: 180-42982-1
 SDG No.: _____
 Client Sample ID: PW-C01 Lab Sample ID: 180-42982-1
 Matrix: Water Lab File ID: D0414022.D
 Analysis Method: 8270D LL Date Collected: 04/10/2015 15:54
 Extract. Method: 3520C Date Extracted: 04/13/2015 09:07
 Sample wt/vol: 260 (mL) Date Analyzed: 04/14/2015 18:39
 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.: 138398 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	0.73	J	1.9	0.42

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	41		27-114
321-60-8	2-Fluorobiphenyl	41		28-109
1718-51-0	Terphenyl-d14 (Surr)	45		20-118
367-12-4	2-Fluorophenol (Surr)	37		20-105
118-79-6	2,4,6-Tribromophenol (Surr)	45		30-118
4165-62-2	Phenol-d5 (Surr)	43		25-105

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150414-6452.b\D0414022.D
 Lims ID: 180-42982-A-1-A Lab Sample ID: 180-42982-1
 Client ID: PW-C01
 Sample Type: Client
 Inject. Date: 14-Apr-2015 18:39:30 ALS Bottle#: 21 Worklist Smp#: 22
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006452-022
 Operator ID: 003200 Instrument ID: CH732
 Method: \\PITCHROM\ChromData\CH732\20150414-6452.b\BNA_CH732.m
 Limit Group: BNA 8270D ICAL
 Last Update: 15-Apr-2015 07:16:02 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: XAWRK013

First Level Reviewer: piccolinov

Date: 15-Apr-2015 07:14:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.148	6.153	-0.005	96	157572	8.00	
* 2 Naphthalene-d8	136	7.446	7.446	0.000	100	739049	8.00	
* 3 Acenaphthene-d10	164	9.166	9.161	0.005	91	496238	8.00	
* 4 Phenanthrene-d10	188	10.625	10.614	0.011	97	839416	8.00	
* 5 Chrysene-d12	240	14.402	14.380	0.022	97	677271	8.00	
* 6 Perylene-d12	264	17.303	17.270	0.033	96	669000	8.00	
\$ 7 2-Fluorophenol	112	4.663	4.673	-0.010	90	305732	15.0	
\$ 8 Phenol-d5	99	5.758	5.763	-0.005	85	478179	17.4	
\$ 9 Nitrobenzene-d5	82	6.714	6.714	0.000	93	514735	16.6	
\$ 10 2-Fluorobiphenyl	172	8.499	8.493	0.006	99	1329471	16.3	
\$ 11 2,4,6-Tribromophenol	330	9.930	9.925	0.005	90	166234	18.0	
\$ 12 Terphenyl-d14	244	12.564	12.548	0.016	99	1329106	18.0	
58 Naphthalene	128		7.467				ND	
85 Acenaphthylene	152		9.027				ND	
88 Acenaphthene	153		9.193				ND	
103 Fluorene	166		9.690				ND	
121 Phenanthrene	178		10.641				ND	
122 Anthracene	178		10.694				ND	
131 Fluoranthene	202		12.046				ND	
133 Pyrene	202		12.372				ND	
145 Bis(2-ethylhexyl) phthalat	149	14.364	14.343	0.021	95	103989	1.51	
146 Benzo[a]anthracene	228		14.364				ND	
147 Chrysene	228		14.428				ND	
152 Benzo[b]fluoranthene	252		16.496				ND	
153 Benzo[k]fluoranthene	252		16.555				ND	
154 Benzo[a]pyrene	252		17.158				ND	
157 Indeno[1,2,3-cd]pyrene	276		19.637				ND	
158 Dibenz(a,h)anthracene	278		19.680				ND	
159 Benzo[g,h,i]perylene	276		20.326				ND	

Reagents:

SVTAPITINTRNi_00007

Amount Added: 1.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150414-6452.b\D0414022.D

Injection Date: 14-Apr-2015 18:39:30

Instrument ID: CH732

Operator ID: 003200

Lims ID: 180-42982-A-1-A

Lab Sample ID: 180-42982-1

Worklist Smp#: 22

Client ID: PW-C01

Injection Vol: 2.0 ul

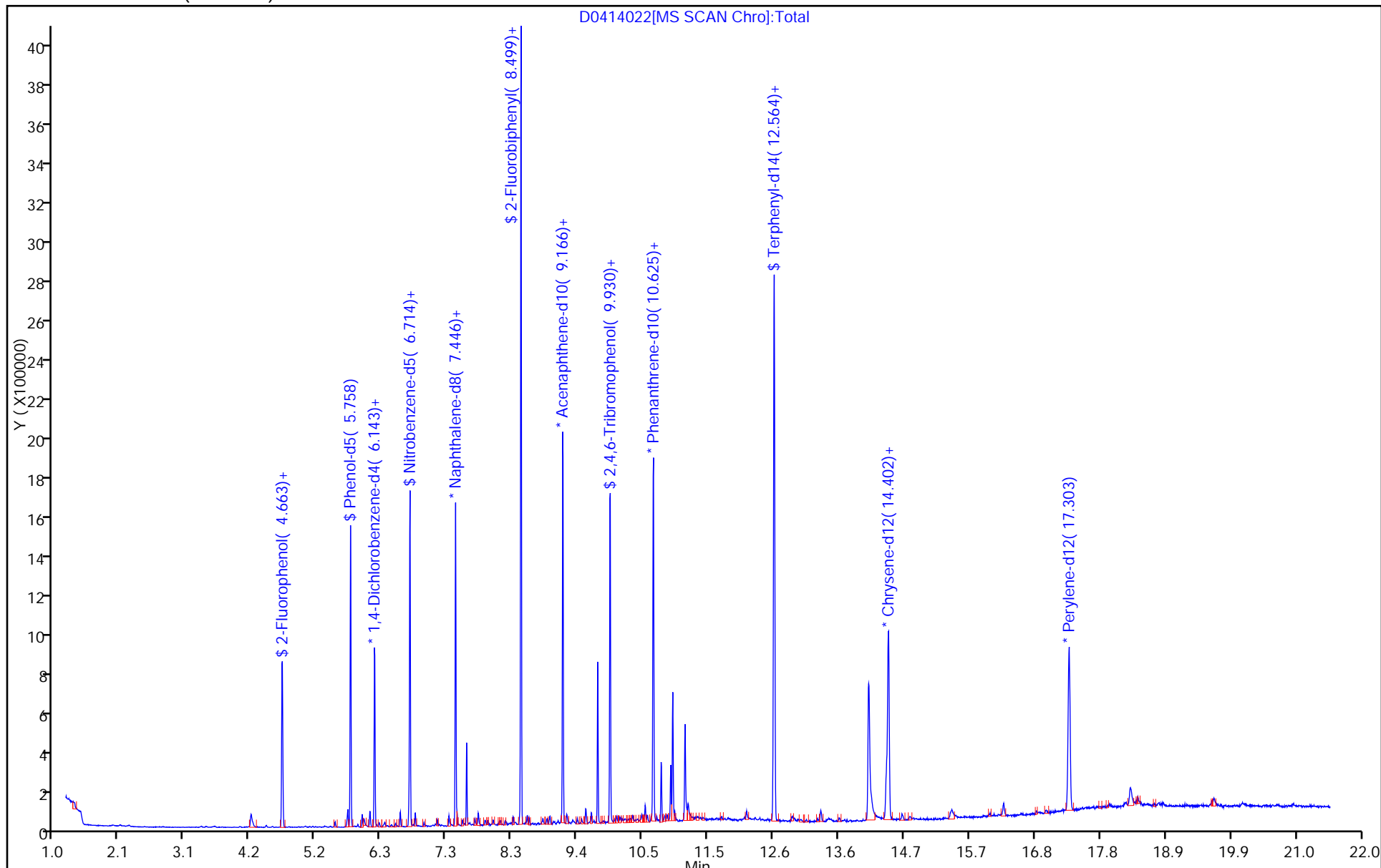
Dil. Factor: 1.0000

ALS Bottle#: 21

Method: BNA_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150414-6452.b\D0414022.D

Injection Date: 14-Apr-2015 18:39:30

Instrument ID: CH732

Lims ID: 180-42982-A-1-A

Lab Sample ID: 180-42982-1

Client ID: PW-C01

Operator ID: 003200

ALS Bottle#: 21

Worklist Smp#: 22

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

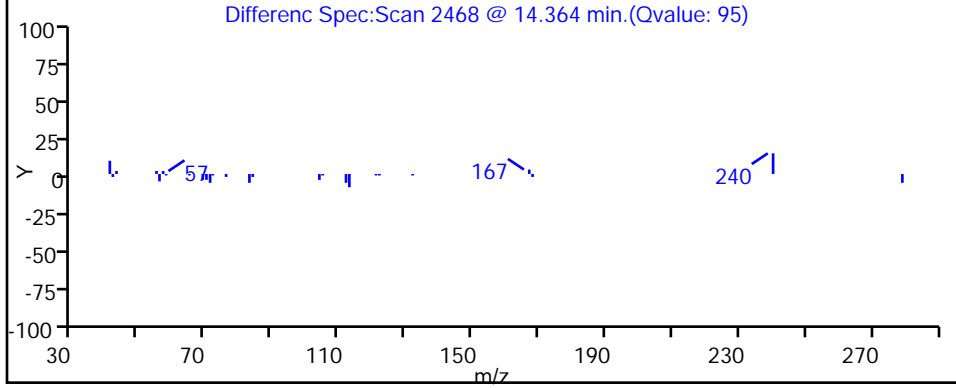
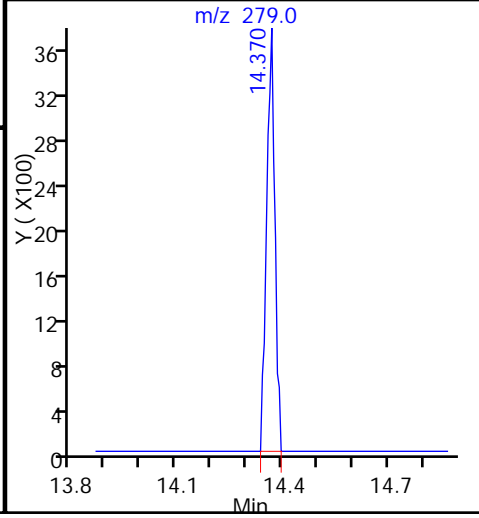
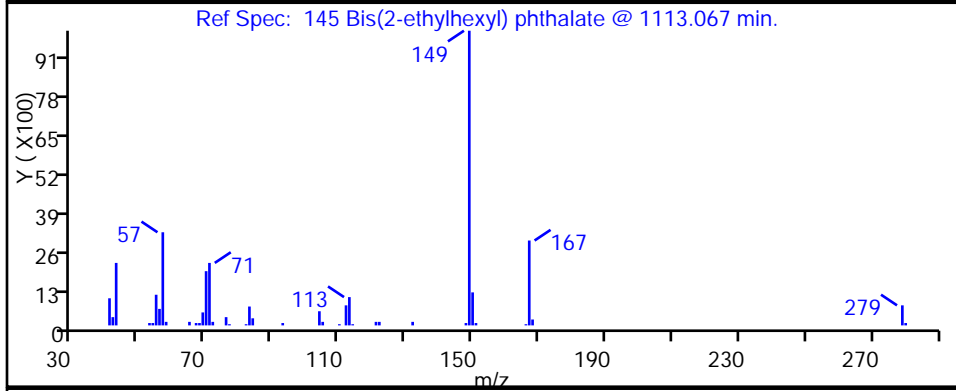
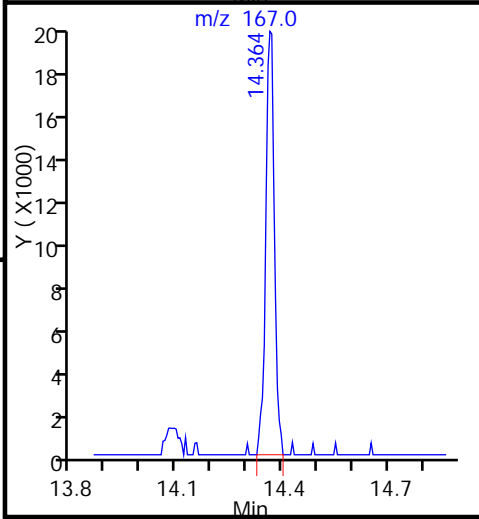
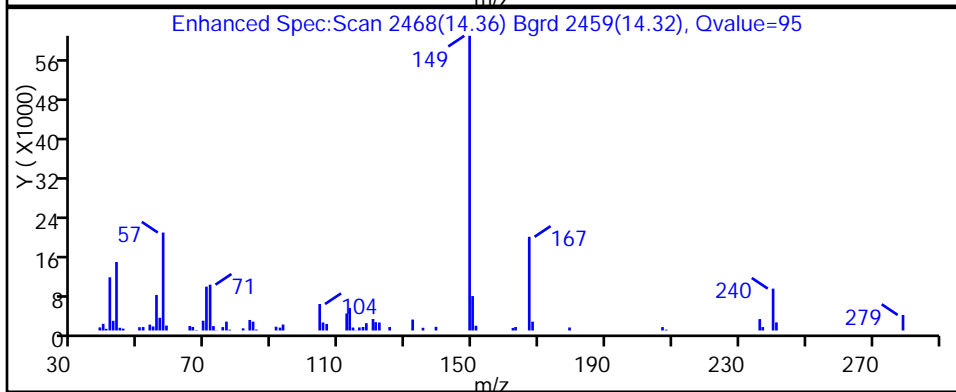
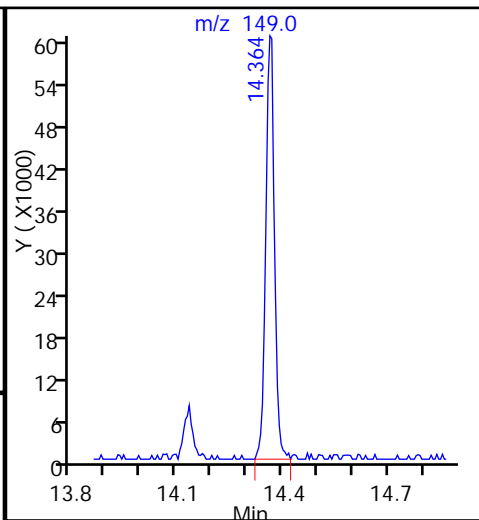
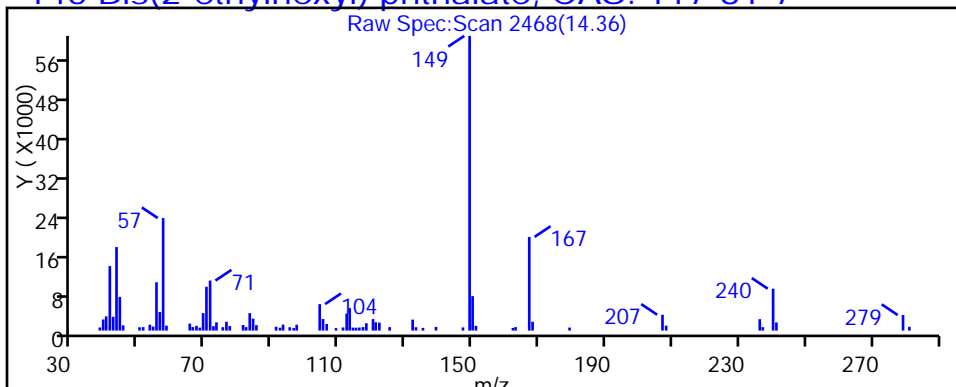
Method: BNA_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

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



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1
 SDG No.: _____
 Client Sample ID: PW-B01 Lab Sample ID: 180-42982-2
 Matrix: Water Lab File ID: D0414023.D
 Analysis Method: 8270D LL Date Collected: 04/10/2015 14:20
 Extract. Method: 3520C Date Extracted: 04/13/2015 09:07
 Sample wt/vol: 260 (mL) Date Analyzed: 04/14/2015 19:06
 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.: 138398 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	ND		1.9	0.42

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	40		27-114
321-60-8	2-Fluorobiphenyl	39		28-109
1718-51-0	Terphenyl-d14 (Surr)	41		20-118
367-12-4	2-Fluorophenol (Surr)	37		20-105
118-79-6	2,4,6-Tribromophenol (Surr)	45		30-118
4165-62-2	Phenol-d5 (Surr)	43		25-105

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150414-6452.b\D0414023.D
 Lims ID: 180-42982-A-2-A Lab Sample ID: 180-42982-2
 Client ID: PW-B01
 Sample Type: Client
 Inject. Date: 14-Apr-2015 19:06:30 ALS Bottle#: 22 Worklist Smp#: 23
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006452-023
 Operator ID: 003200 Instrument ID: CH732
 Method: \\PITCHROM\ChromData\CH732\20150414-6452.b\BNA_CH732.m
 Limit Group: BNA 8270D ICAL
 Last Update: 15-Apr-2015 07:16:02 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: XAWRK013

First Level Reviewer: piccolinov

Date: 15-Apr-2015 05:58:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.148	6.153	-0.005	97	155683	8.00	
* 2 Naphthalene-d8	136	7.446	7.446	0.000	100	750583	8.00	
* 3 Acenaphthene-d10	164	9.172	9.161	0.011	92	502808	8.00	
* 4 Phenanthrene-d10	188	10.625	10.614	0.011	97	886364	8.00	
* 5 Chrysene-d12	240	14.402	14.380	0.022	97	727184	8.00	
* 6 Perylene-d12	264	17.308	17.270	0.038	96	690432	8.00	
\$ 7 2-Fluorophenol	112	4.668	4.673	-0.005	92	300278	14.9	
\$ 8 Phenol-d5	99	5.763	5.763	0.000	95	467509	17.2	
\$ 9 Nitrobenzene-d5	82	6.714	6.714	0.000	93	510102	16.2	
\$ 10 2-Fluorobiphenyl	172	8.499	8.493	0.006	99	1279179	15.5	
\$ 11 2,4,6-Tribromophenol	330	9.930	9.925	0.005	88	175259	18.0	
\$ 12 Terphenyl-d14	244	12.569	12.548	0.021	99	1303469	16.5	
58 Naphthalene	128		7.467				ND	
85 Acenaphthylene	152		9.027				ND	
88 Acenaphthene	153		9.193				ND	
103 Fluorene	166		9.690				ND	
121 Phenanthrene	178		10.641				ND	
122 Anthracene	178		10.694				ND	
131 Fluoranthene	202		12.046				ND	
133 Pyrene	202		12.372				ND	
145 Bis(2-ethylhexyl) phthalat	149	14.370	14.343	0.027	96	29391	0.3982	
146 Benzo[a]anthracene	228		14.364				ND	
147 Chrysene	228		14.428				ND	
152 Benzo[b]fluoranthene	252		16.496				ND	
153 Benzo[k]fluoranthene	252		16.555				ND	
154 Benzo[a]pyrene	252		17.158				ND	
157 Indeno[1,2,3-cd]pyrene	276		19.637				ND	
158 Dibenz(a,h)anthracene	278		19.680				ND	
159 Benzo[g,h,i]perylene	276		20.326				ND	

Reagents:

SVTAPITINTRNi_00007

Amount Added: 1.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150414-6452.b\D0414023.D

Injection Date: 14-Apr-2015 19:06:30

Instrument ID: CH732

Operator ID: 003200

Lims ID: 180-42982-A-2-A

Lab Sample ID: 180-42982-2

Worklist Smp#: 23

Client ID: PW-B01

Injection Vol: 2.0 ul

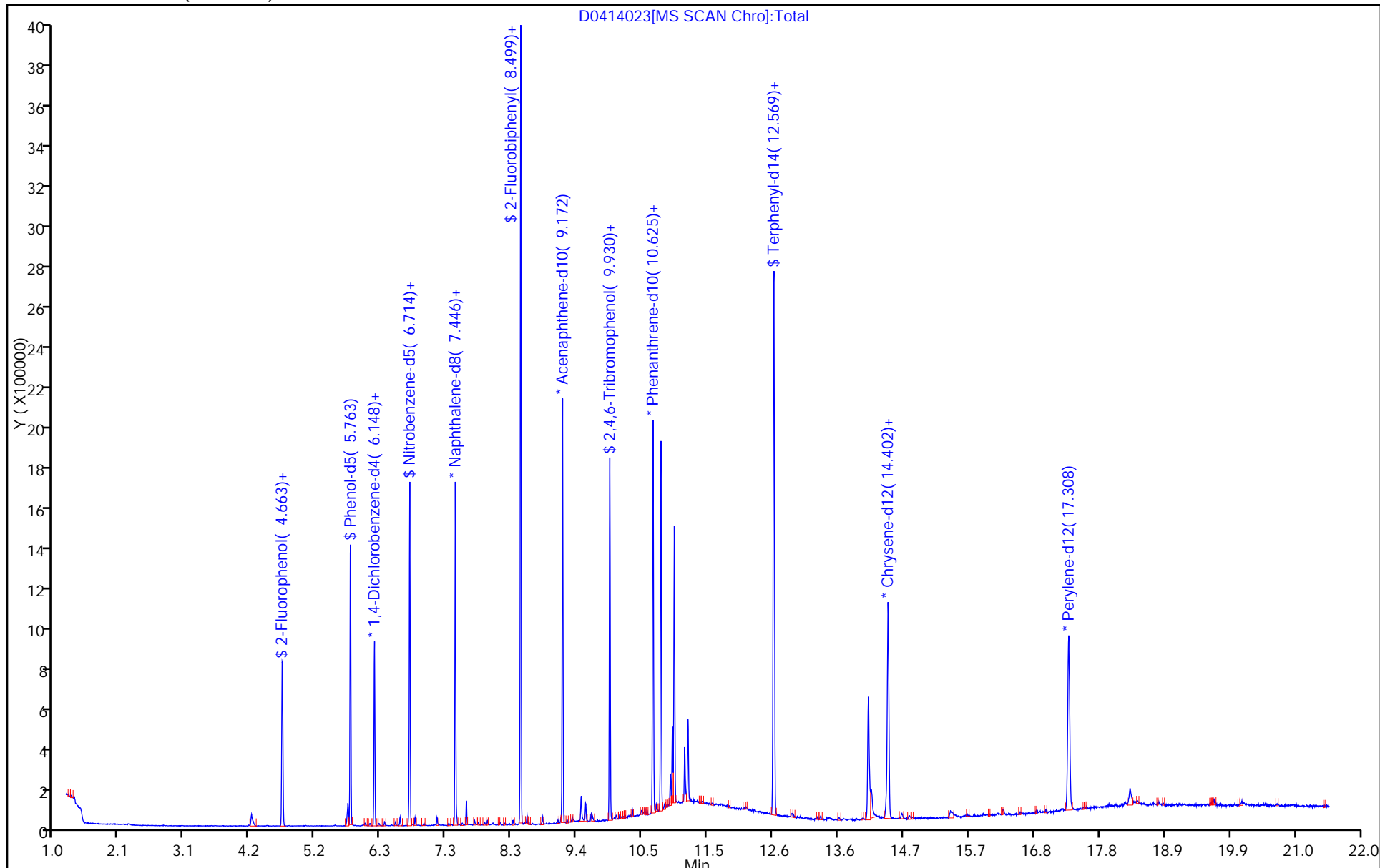
Dil. Factor: 1.0000

ALS Bottle#: 22

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.: 180-42982-1
 SDG No.: _____
 Client Sample ID: PW-A01 Lab Sample ID: 180-42982-3
 Matrix: Water Lab File ID: D0414024.D
 Analysis Method: 8270D LL Date Collected: 04/10/2015 12:45
 Extract. Method: 3520C Date Extracted: 04/13/2015 09:07
 Sample wt/vol: 250 (mL) Date Analyzed: 04/14/2015 19:33
 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.: 138398 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)	36		27-114
321-60-8	2-Fluorobiphenyl	35		28-109
1718-51-0	Terphenyl-d14 (Surr)	45		20-118
367-12-4	2-Fluorophenol (Surr)	34		20-105
118-79-6	2,4,6-Tribromophenol (Surr)	48		30-118
4165-62-2	Phenol-d5 (Surr)	38		25-105

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150414-6452.b\D0414024.D
 Lims ID: 180-42982-A-3-A Lab Sample ID: 180-42982-3
 Client ID: PW-A01
 Sample Type: Client
 Inject. Date: 14-Apr-2015 19:33:30 ALS Bottle#: 23 Worklist Smp#: 24
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006452-024
 Operator ID: 003200 Instrument ID: CH732
 Method: \\PITCHROM\ChromData\CH732\20150414-6452.b\BNA_CH732.m
 Limit Group: BNA 8270D ICAL
 Last Update: 15-Apr-2015 07:16:02 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: XAWRK013

First Level Reviewer: piccolinov

Date: 15-Apr-2015 05:58:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.148	6.153	-0.005	97	162983	8.00	
* 2 Naphthalene-d8	136	7.446	7.446	0.000	100	791891	8.00	
* 3 Acenaphthene-d10	164	9.172	9.161	0.011	91	534349	8.00	
* 4 Phenanthrene-d10	188	10.625	10.614	0.011	97	899997	8.00	
* 5 Chrysene-d12	240	14.402	14.380	0.022	97	730646	8.00	
* 6 Perylene-d12	264	17.308	17.270	0.038	96	697772	8.00	
\$ 7 2-Fluorophenol	112	4.663	4.673	-0.010	91	286036	13.5	
\$ 8 Phenol-d5	99	5.763	5.763	0.000	92	436641	15.3	
\$ 9 Nitrobenzene-d5	82	6.714	6.714	0.000	93	475976	14.3	
\$ 10 2-Fluorobiphenyl	172	8.498	8.493	0.005	99	1229378	14.0	
\$ 11 2,4,6-Tribromophenol	330	9.930	9.925	0.005	87	190197	19.2	
\$ 12 Terphenyl-d14	244	12.564	12.548	0.016	99	1420073	17.9	
58 Naphthalene	128		7.467				ND	
85 Acenaphthylene	152		9.027				ND	
88 Acenaphthene	153		9.193				ND	
103 Fluorene	166		9.690				ND	
121 Phenanthrene	178		10.641				ND	
122 Anthracene	178		10.694				ND	
131 Fluoranthene	202		12.046				ND	
133 Pyrene	202		12.372				ND	
145 Bis(2-ethylhexyl) phthalat	149	14.370	14.343	0.027	89	26044	0.3512	
146 Benzo[a]anthracene	228		14.364				ND	
147 Chrysene	228		14.428				ND	
152 Benzo[b]fluoranthene	252		16.496				ND	
153 Benzo[k]fluoranthene	252		16.555				ND	
154 Benzo[a]pyrene	252		17.158				ND	
157 Indeno[1,2,3-cd]pyrene	276		19.637				ND	
158 Dibenz(a,h)anthracene	278		19.680				ND	
159 Benzo[g,h,i]perylene	276		20.326				ND	

Reagents:

SVTAPITINTRNi_00007

Amount Added: 1.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150414-6452.b\D0414024.D

Injection Date: 14-Apr-2015 19:33:30

Instrument ID: CH732

Operator ID: 003200

Lims ID: 180-42982-A-3-A

Lab Sample ID: 180-42982-3

Worklist Smp#: 24

Client ID: PW-A01

Injection Vol: 2.0 ul

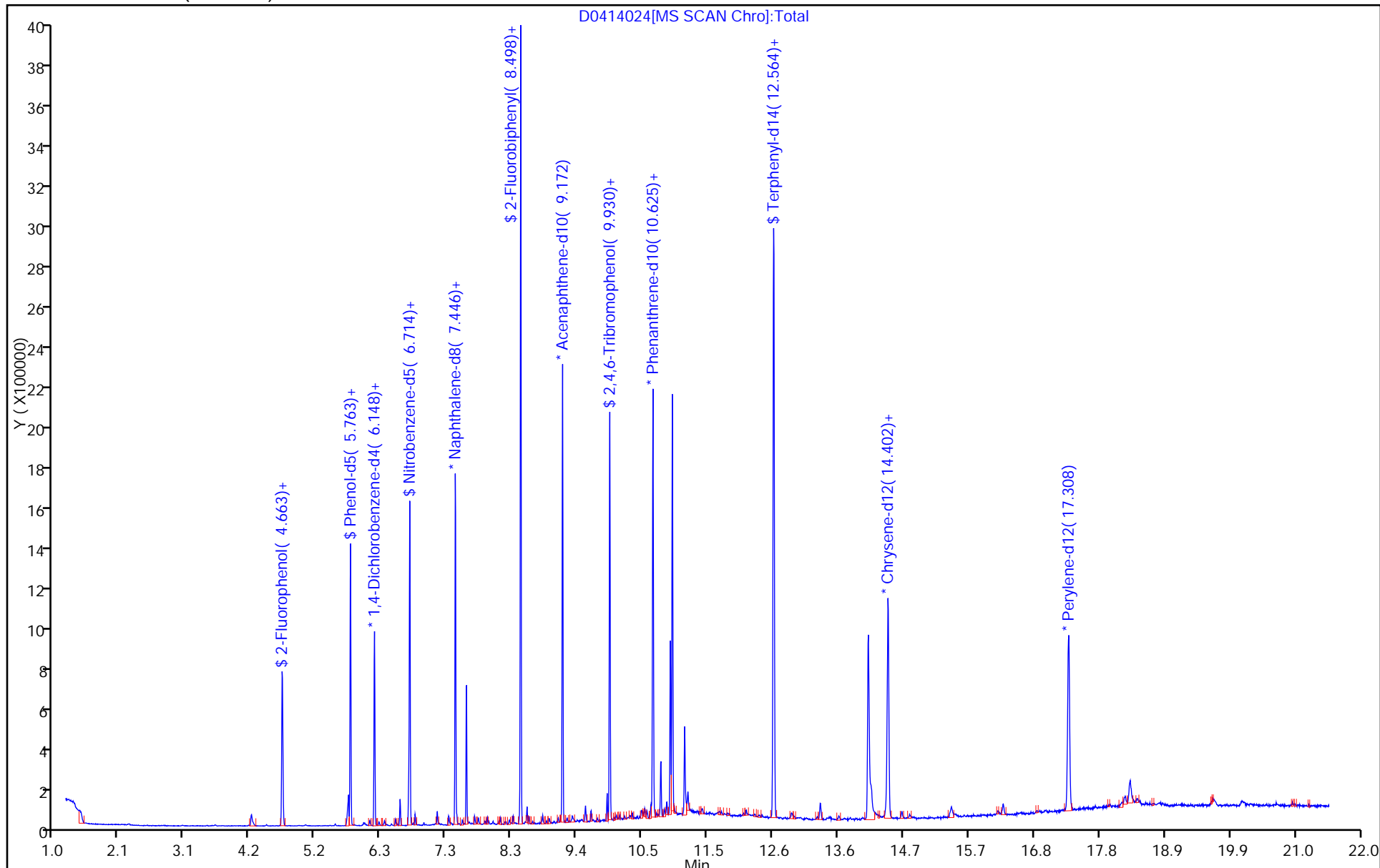
Dil. Factor: 1.0000

ALS Bottle#: 23

Method: BNA_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1 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.: 180-42982-1 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.

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Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1 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	LVL 5													
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				

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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				

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SDG No.: _____

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

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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				

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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														
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				

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1 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	11737	23830	55464	109242	0.400	2.00	4.00	10.0	20.0
			209470	302556	408930			40.0	60.0	80.0		
N-Nitrosodimethylamine	DCB	Ave	2670	15503	30743	74663	147321	0.400	2.00	4.00	10.0	20.0
			284868	415506	570621			40.0	60.0	80.0		
Pyridine	DCB	Ave	4214	26410	55290	131501	264484	0.400	2.00	4.00	10.0	20.0
			507054	740621	993662			40.0	60.0	80.0		
Methyl methanesulfonate	DCB	Ave	3907	22793	46560	105679	203934	0.400	2.00	4.00	10.0	20.0
			385315	562394	750302			40.0	60.0	80.0		
Benzaldehyde	DCB	Ave	4208	21743	45208	107077	258918	0.400	2.00	4.00	10.0	20.0
			517593	682953	827212			40.0	60.0	80.0		
Phenol	DCB	Ave	11070	60095	120902	270314	537943	0.400	2.00	4.00	10.0	20.0
			1005636	1423572	1910430			40.0	60.0	80.0		
Aniline	DCB	Ave	11813	64483	132805	301857	596247	0.400	2.00	4.00	10.0	20.0
			1146158	1627756	2127696			40.0	60.0	80.0		
Bis(2-chloroethyl)ether	DCB	Ave	8179	41584	84668	190003	372868	0.400	2.00	4.00	10.0	20.0
			701627	1010724	1360669			40.0	60.0	80.0		
2-Chlorophenol	DCB	Ave	8829	48891	102500	233051	458905	0.400	2.00	4.00	10.0	20.0
			887214	1264905	1719757			40.0	60.0	80.0		
n-Decane	DCB	Ave	11924	61014	122092	273969	543602	0.400	2.00	4.00	10.0	20.0
			996855	1358551	1778933			40.0	60.0	80.0		
1,3-Dichlorobenzene	DCB	Ave	10209	58818	117189	274959	534786	0.400	2.00	4.00	10.0	20.0
			1034697	1463480	1969048			40.0	60.0	80.0		
1,4-Dichlorobenzene	DCB	Ave	11017	58452	124324	272903	544982	0.400	2.00	4.00	10.0	20.0
			1041084	1517829	2013954			40.0	60.0	80.0		
Benzyl alcohol	DCB	Ave	5381	31167	67422	148867	285603	0.400	2.00	4.00	10.0	20.0
			548480	798172	1052255			40.0	60.0	80.0		
1,2-Dichlorobenzene	DCB	Ave	11014	58062	117889	267807	530899	0.400	2.00	4.00	10.0	20.0
			1006967	1438910	1943533			40.0	60.0	80.0		
2-Methylphenol	DCB	Ave	8430	45068	94232	207591	398202	0.400	2.00	4.00	10.0	20.0
			763283	1091611	1418095			40.0	60.0	80.0		

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1 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.: 180-42982-1 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.: 180-42982-1 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.: 180-42982-1 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 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8			LVL 6	LVL 7	LVL 8		
Butyl benzyl phthalate	CRY	Ave	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	34973 3924029	185265 5987889	382318 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.: 180-42982-1 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

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 ether	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

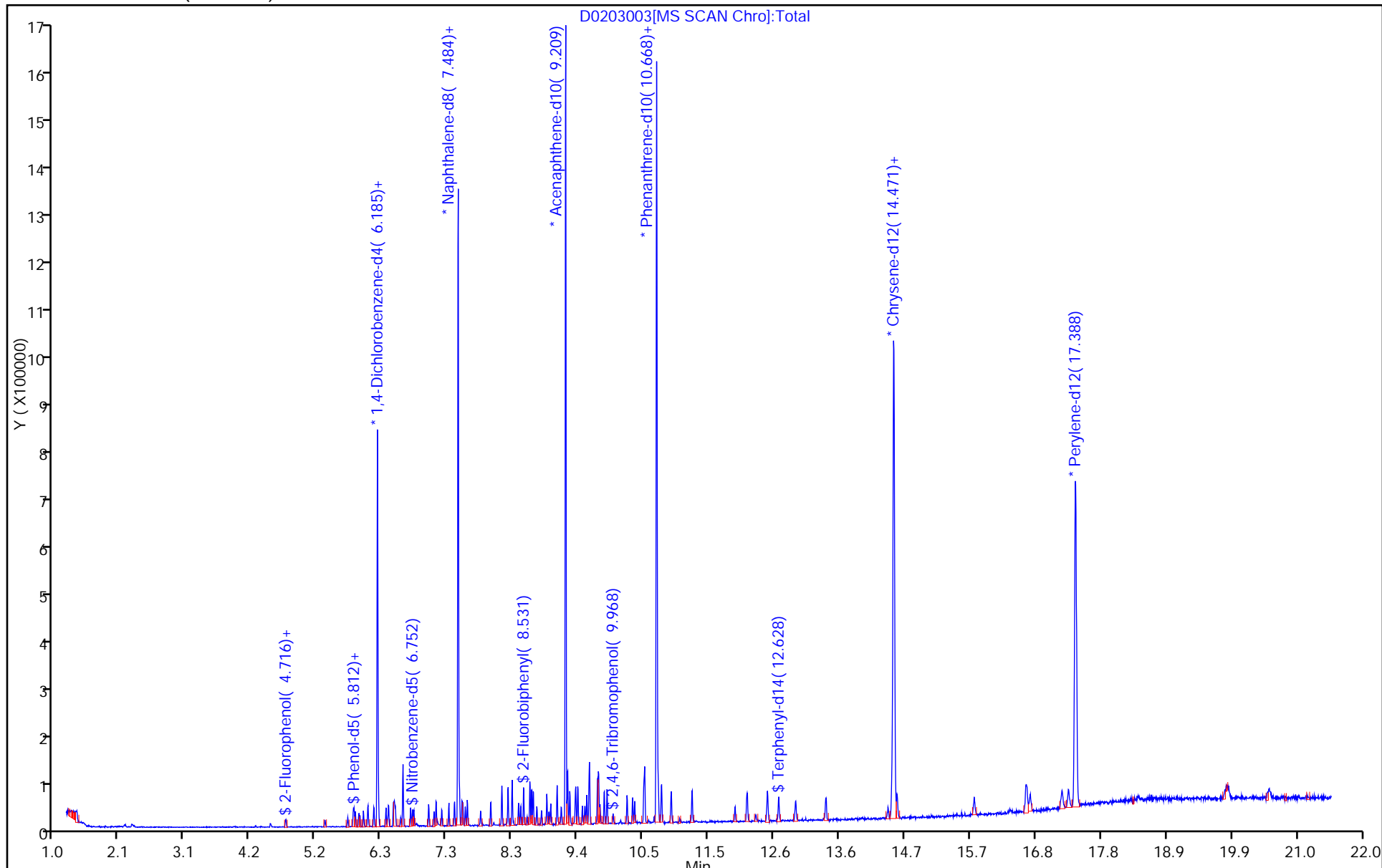
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: BNA_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



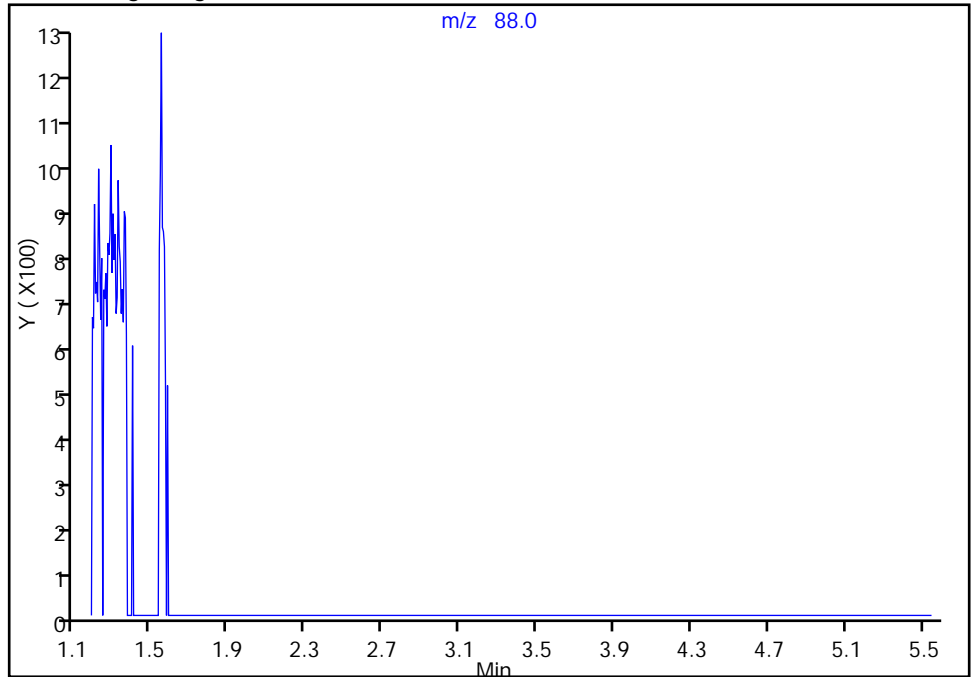
TestAmerica Pittsburgh

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

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

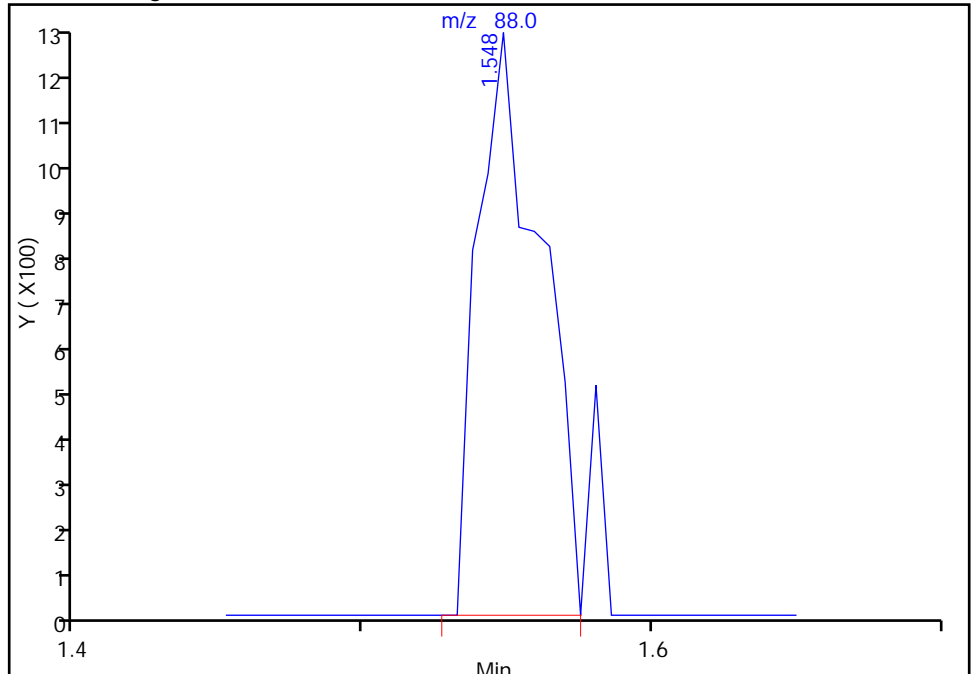
Not Detected
Expected RT: 1.55

Processing Integration Results



RT: 1.55
Area: 1934
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

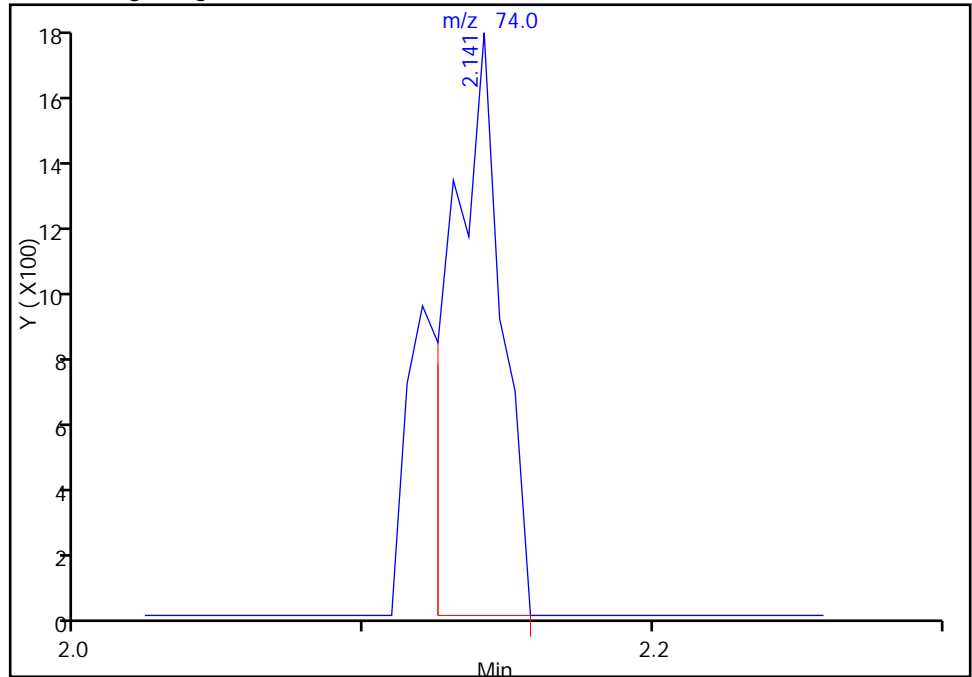
TestAmerica Pittsburgh

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-5SilMS (0.32 mm) Detector: MS SCAN

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

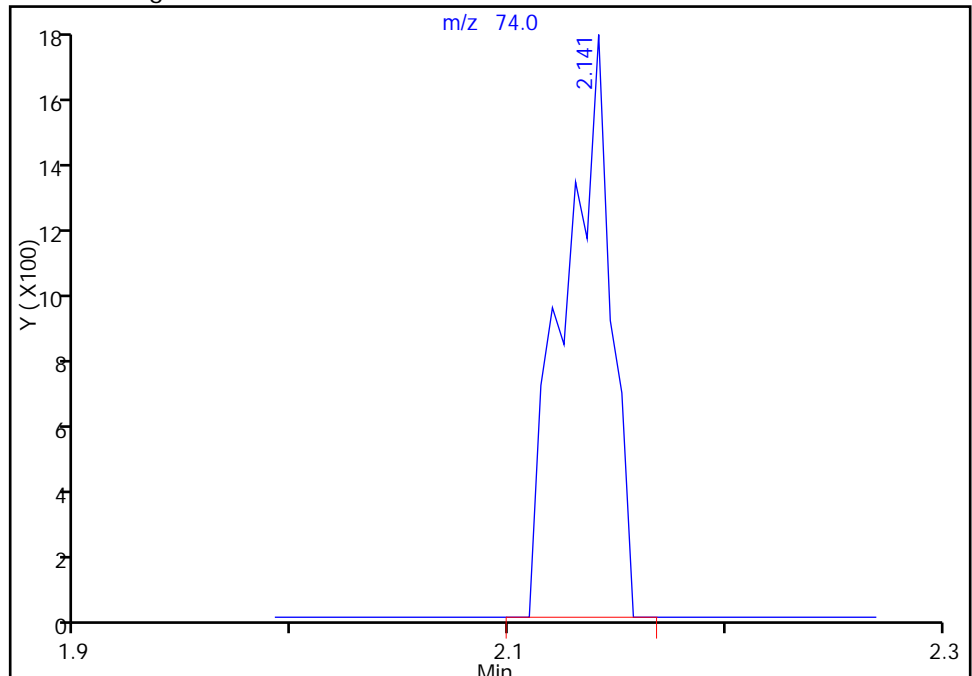
RT: 2.14
Area: 2141
Amount: 0.309072
Amount Units: ng

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

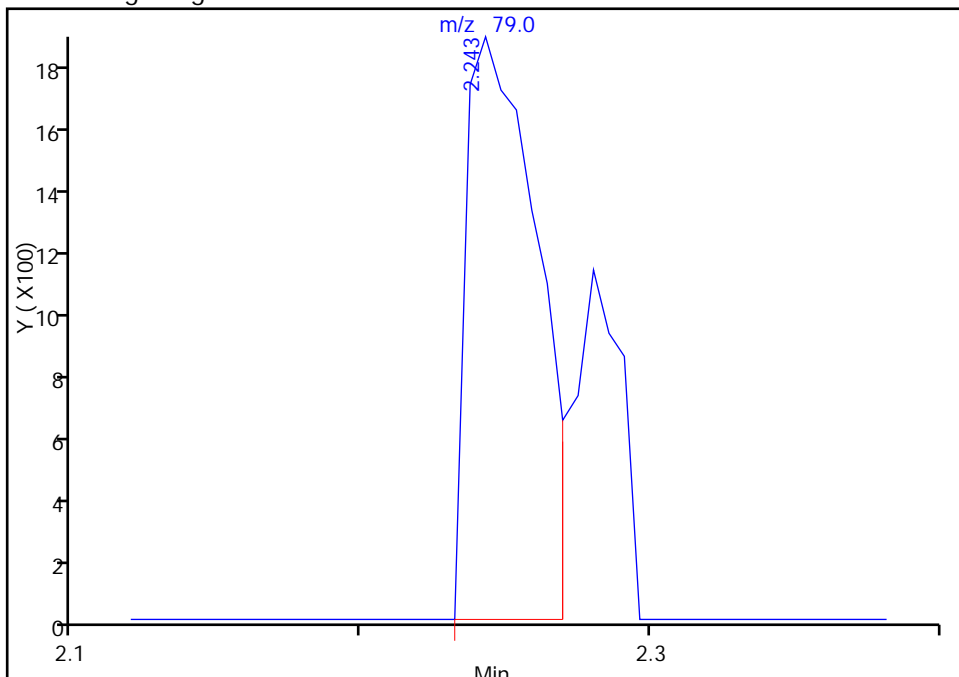
TestAmerica Pittsburgh

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

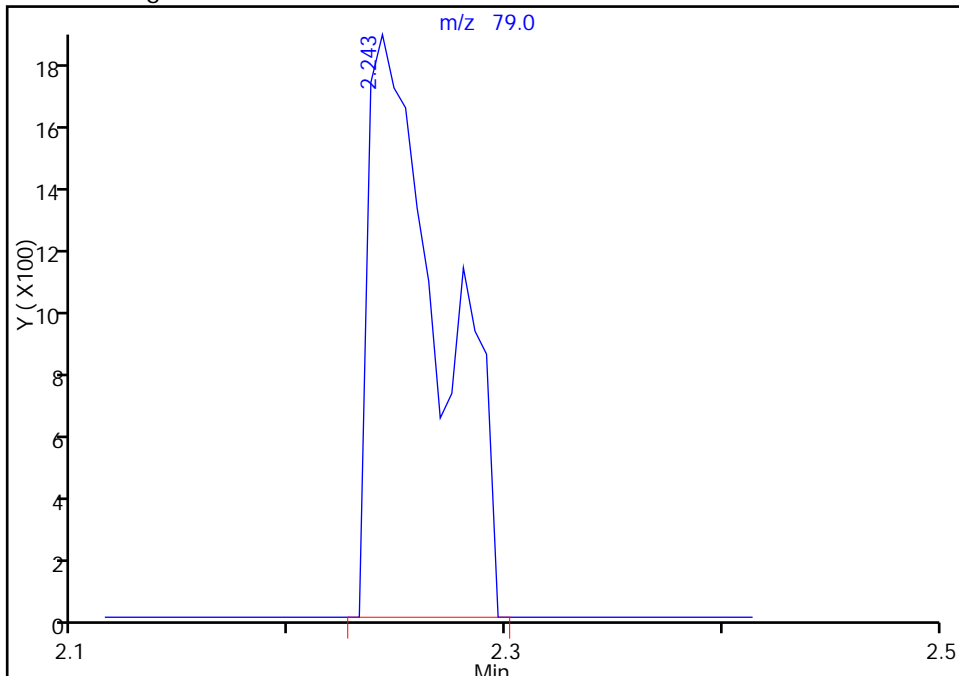
RT: 2.24
Area: 3093
Amount: 0.399812
Amount Units: ng

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

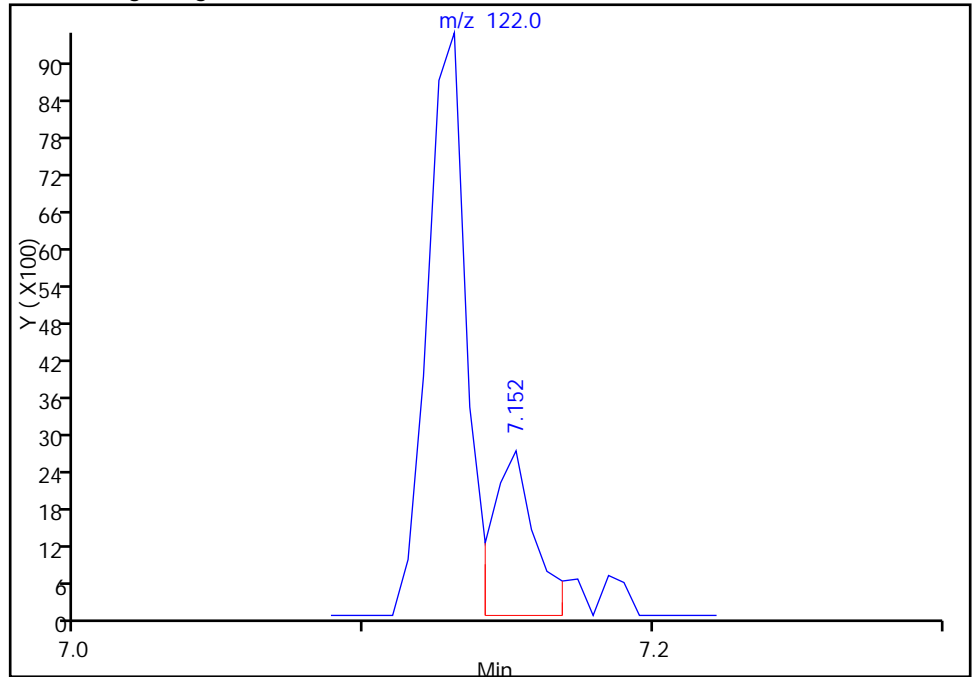
TestAmerica Pittsburgh

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

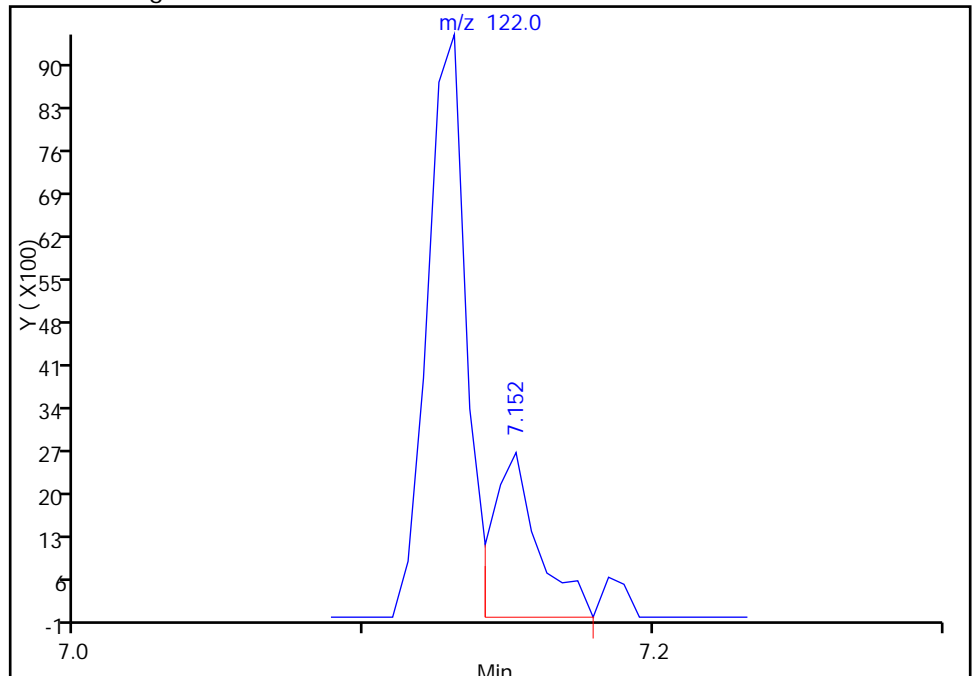
RT: 7.15
Area: 2769
Amount: 0.268892
Amount Units: ng

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

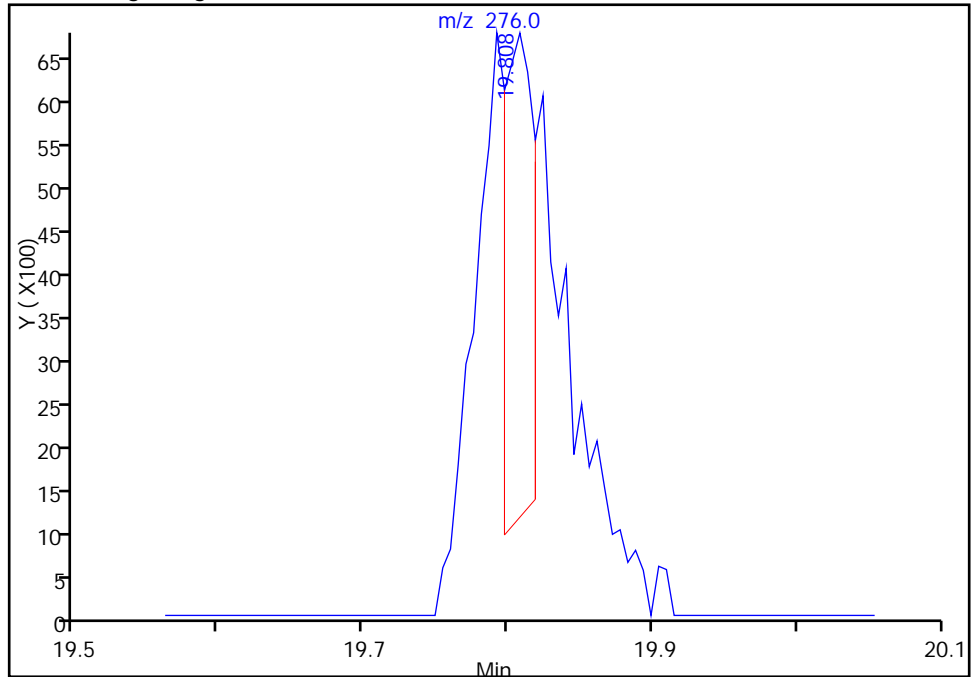
TestAmerica Pittsburgh

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

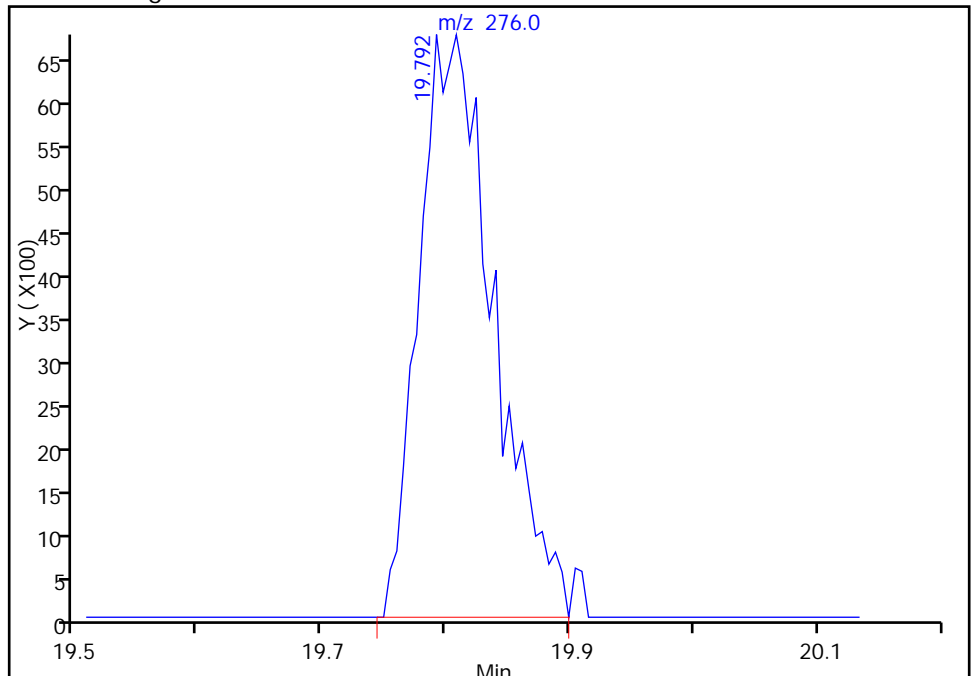
Processing Integration Results

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

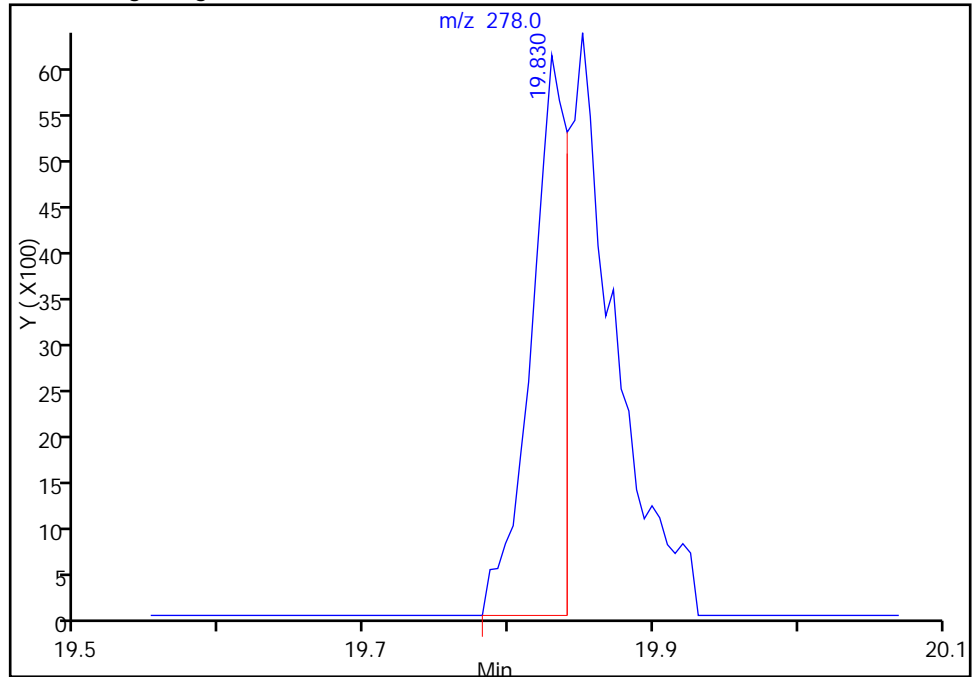
TestAmerica Pittsburgh

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

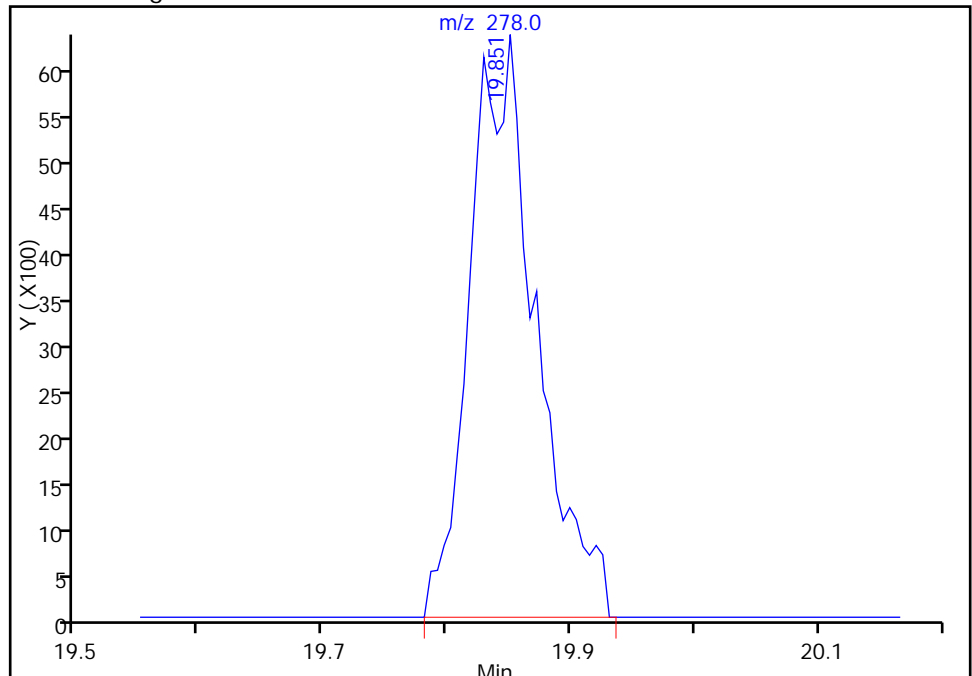
RT: 19.83
Area: 10594
Amount: 0.204719
Amount Units: ng

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

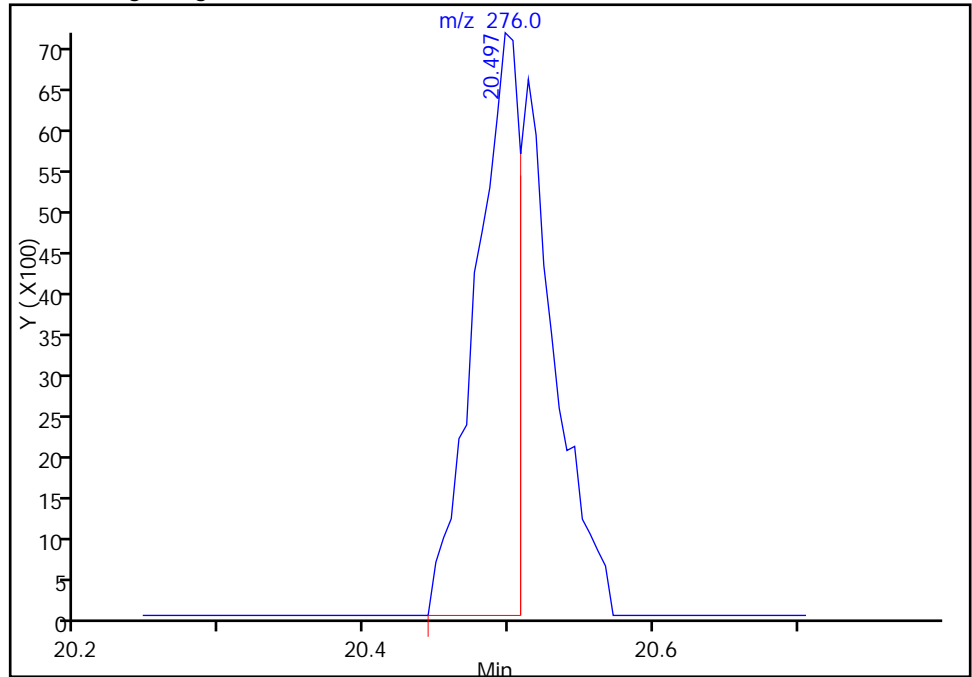
TestAmerica Pittsburgh

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

159 Benzo[g,h,i]perylene, CAS: 191-24-2

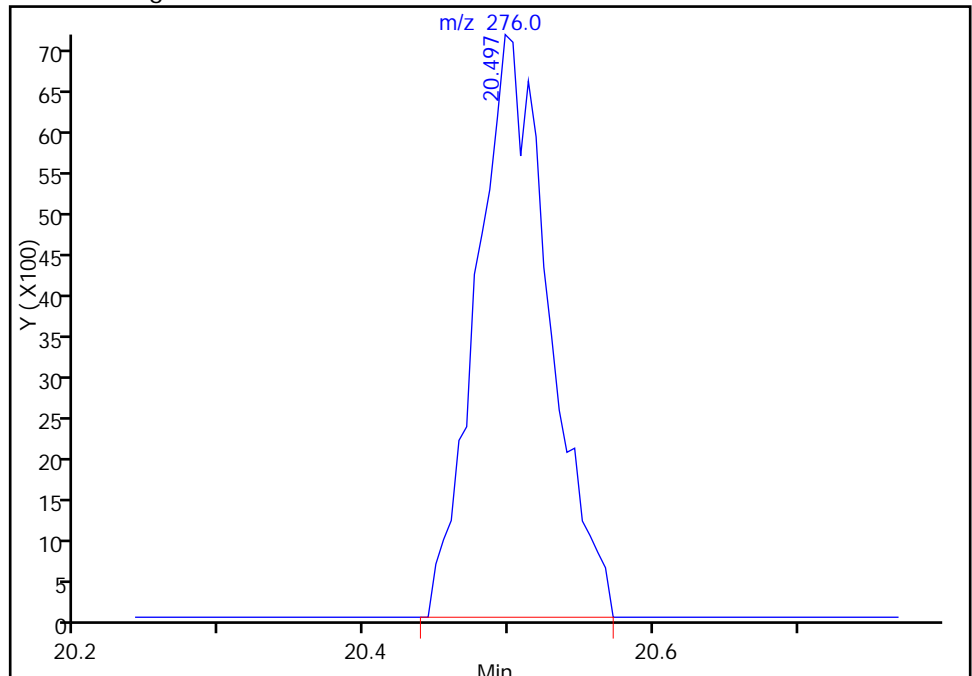
RT: 20.50
Area: 15111
Amount: 0.402477
Amount Units: ng

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 ethe	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.)	Dlt 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

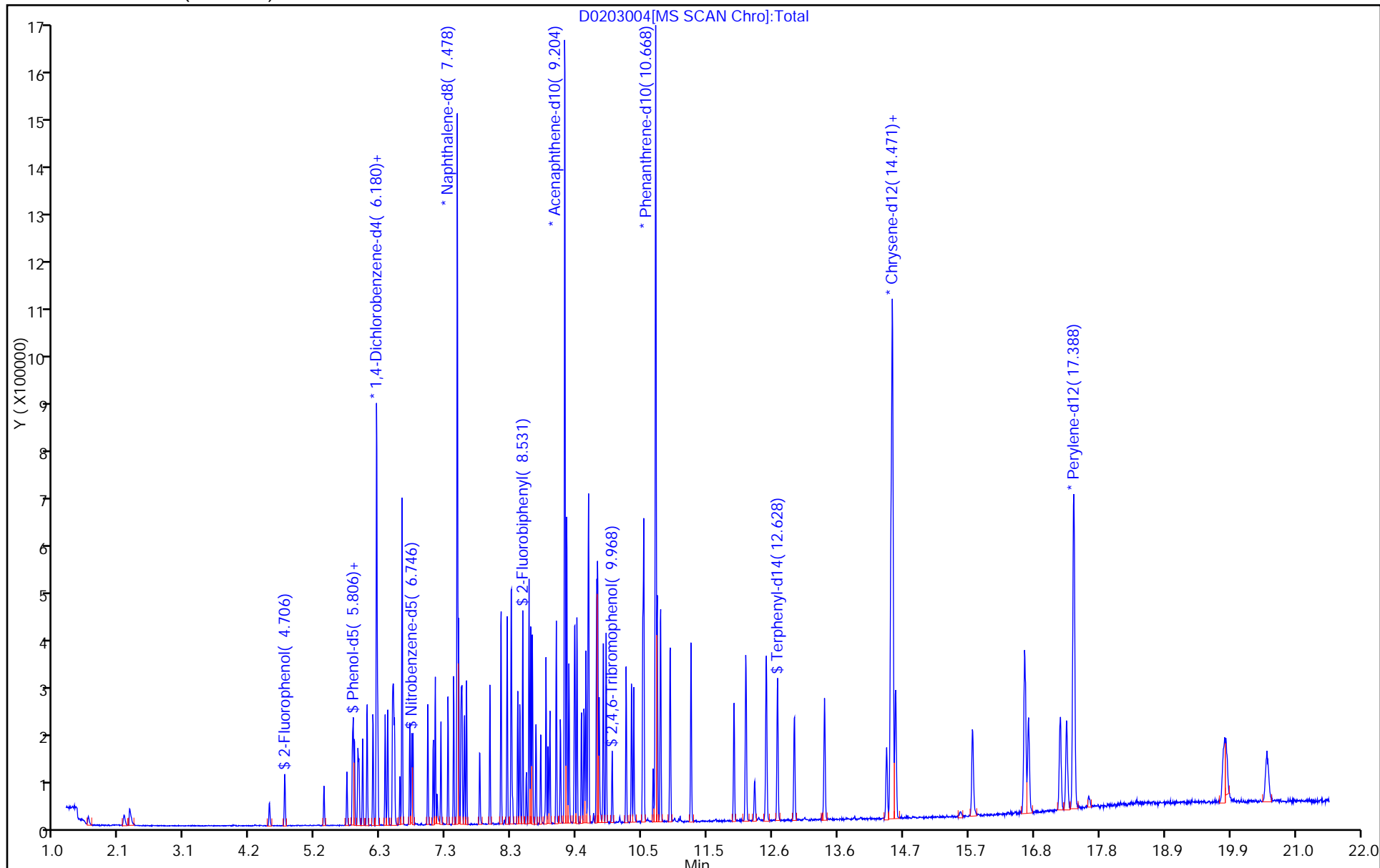
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: BNA_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



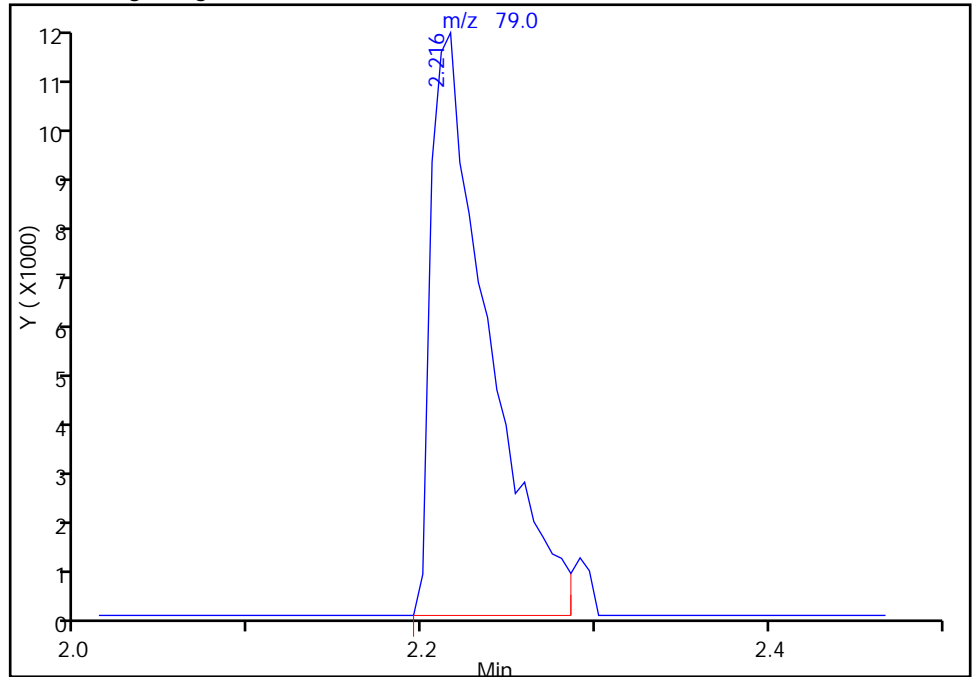
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203004.D
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-5SilMS (0.32 mm) Detector: MS SCAN

15 Pyridine, CAS: 110-86-1

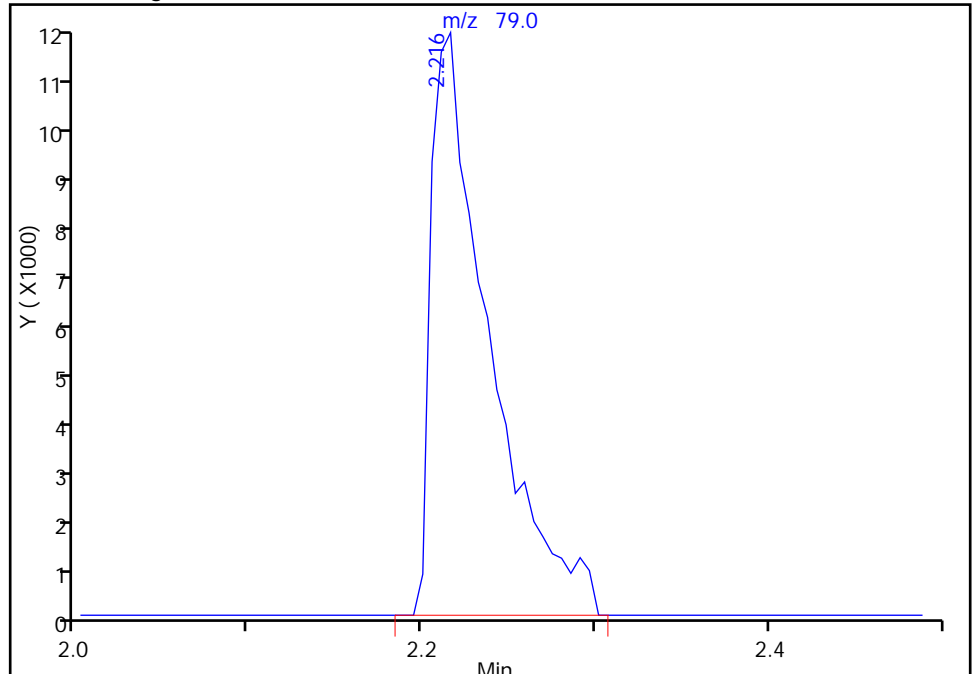
RT: 2.22
Area: 25773
Amount: 1.933329
Amount Units: ng

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

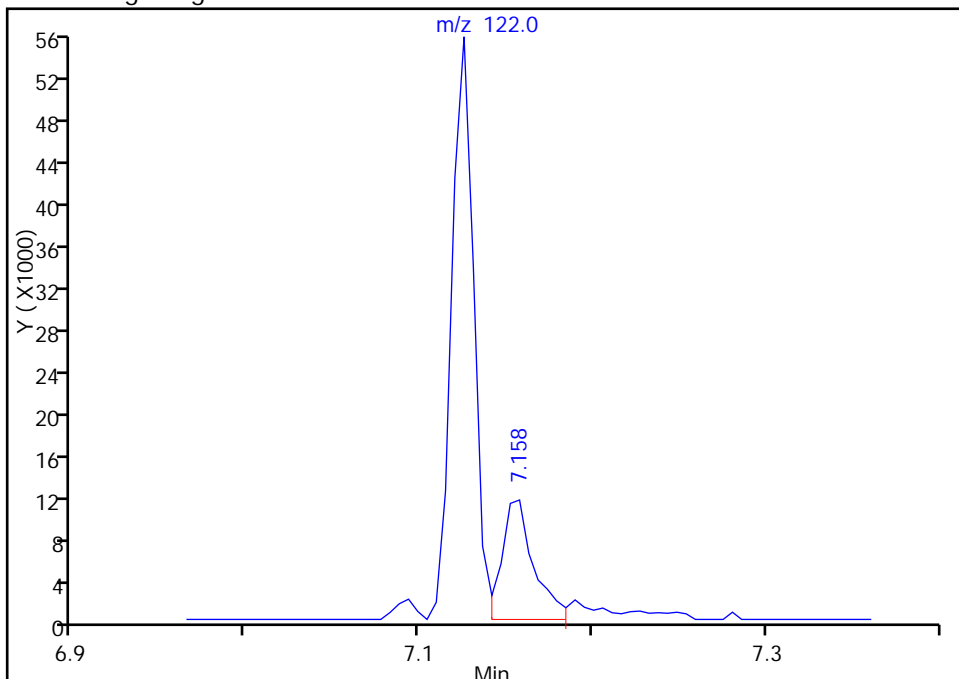
TestAmerica Pittsburgh

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

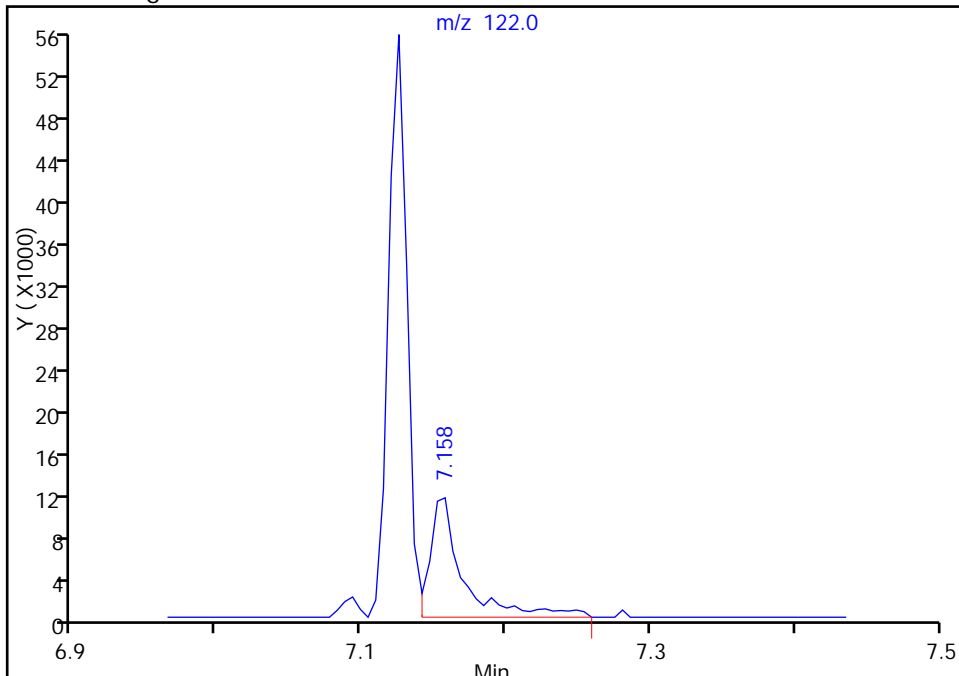
RT: 7.16
Area: 14759
Amount: 1.341947
Amount Units: ng

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

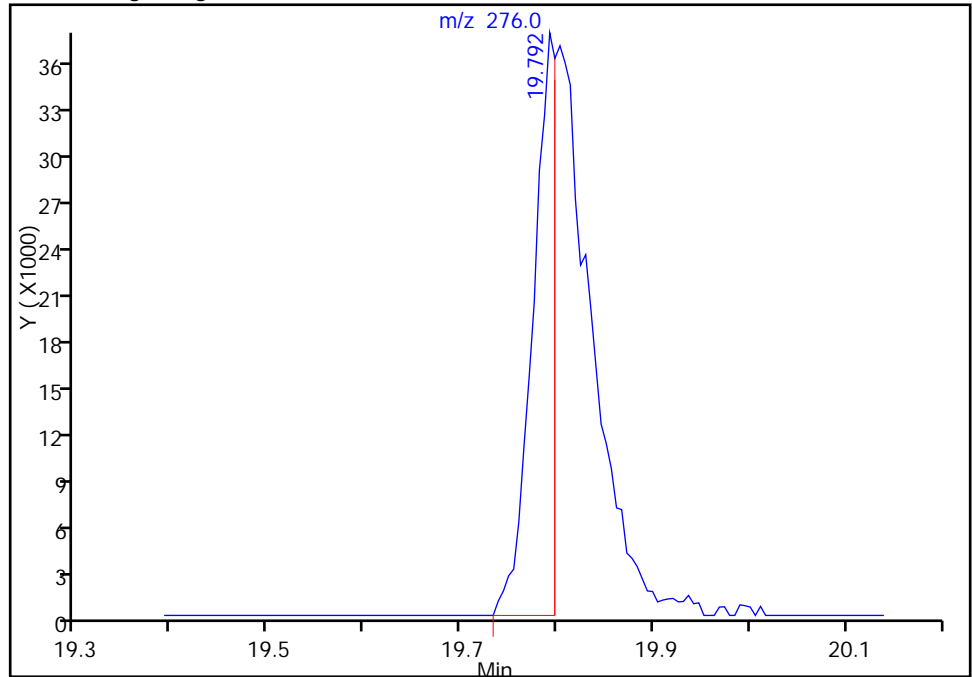
TestAmerica Pittsburgh

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

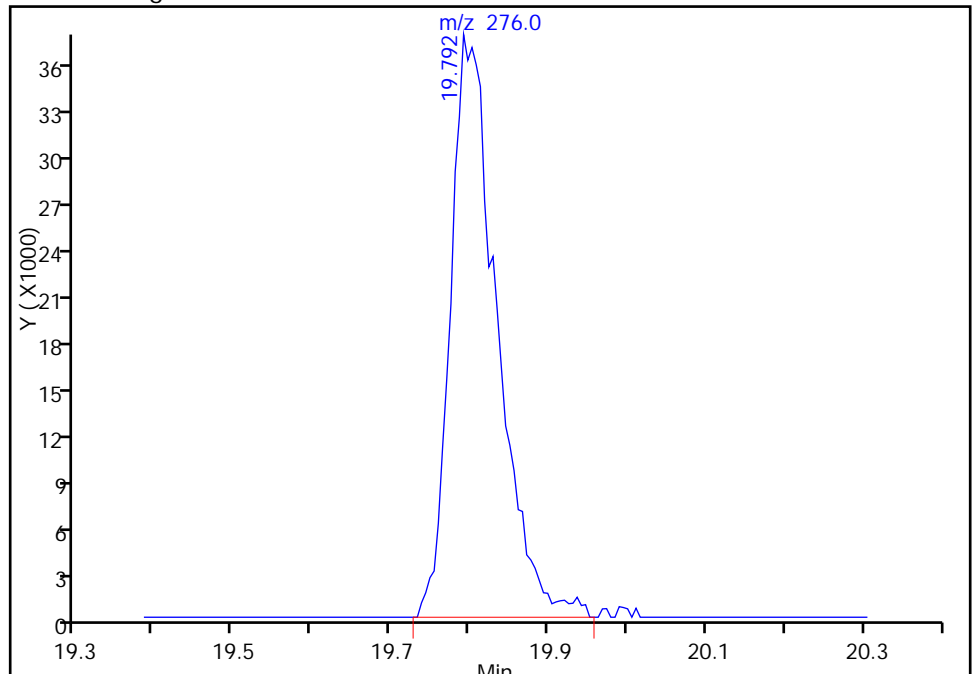
Processing Integration Results

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

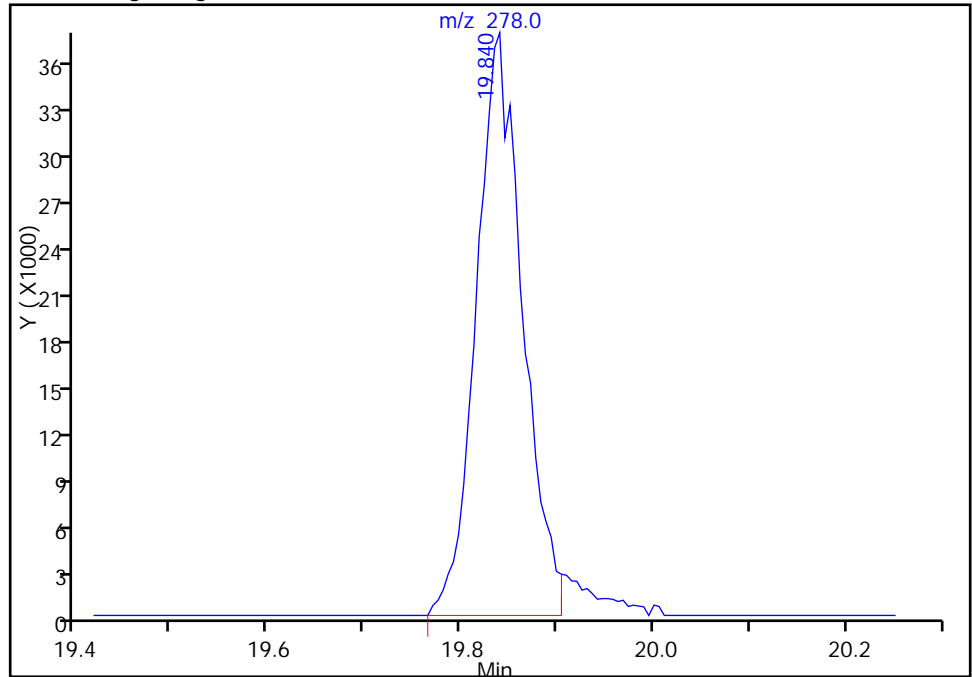
TestAmerica Pittsburgh

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

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

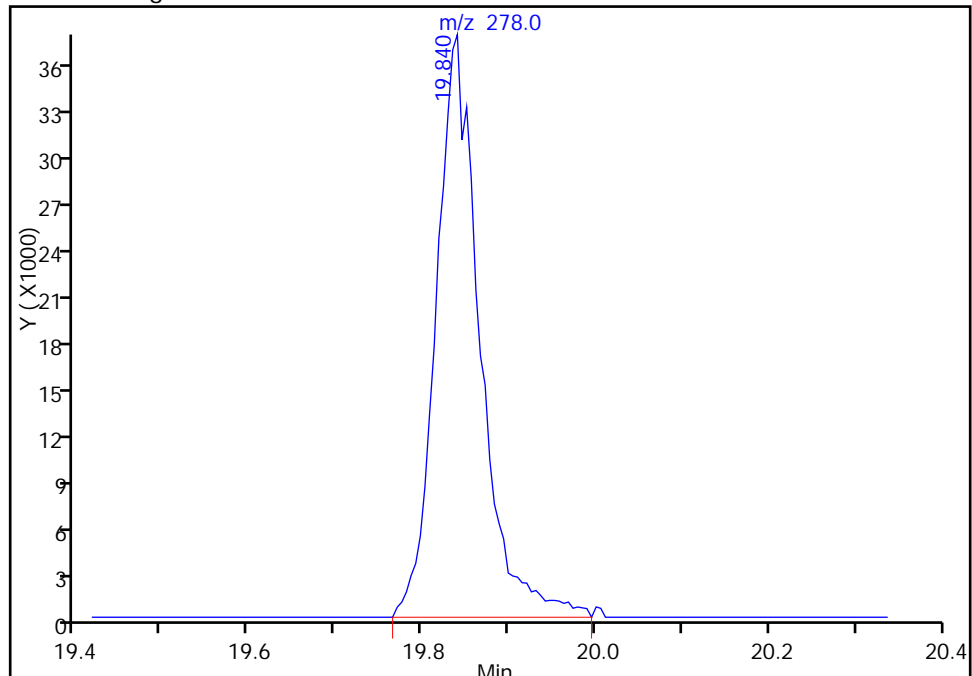
RT: 19.84
Area: 124199
Amount: 2.129613
Amount Units: ng

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

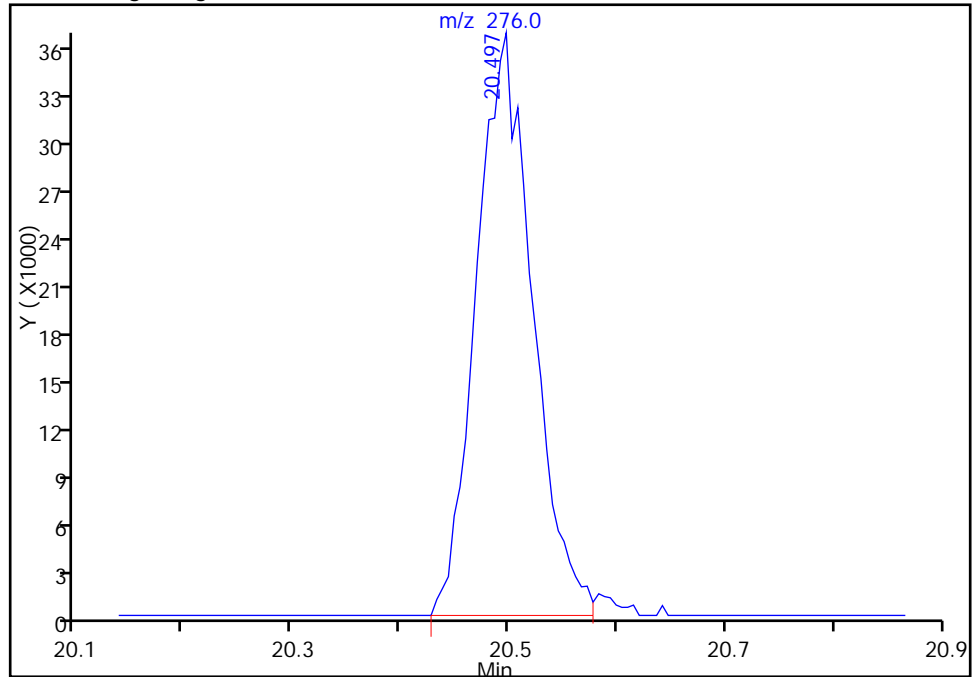
TestAmerica Pittsburgh

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

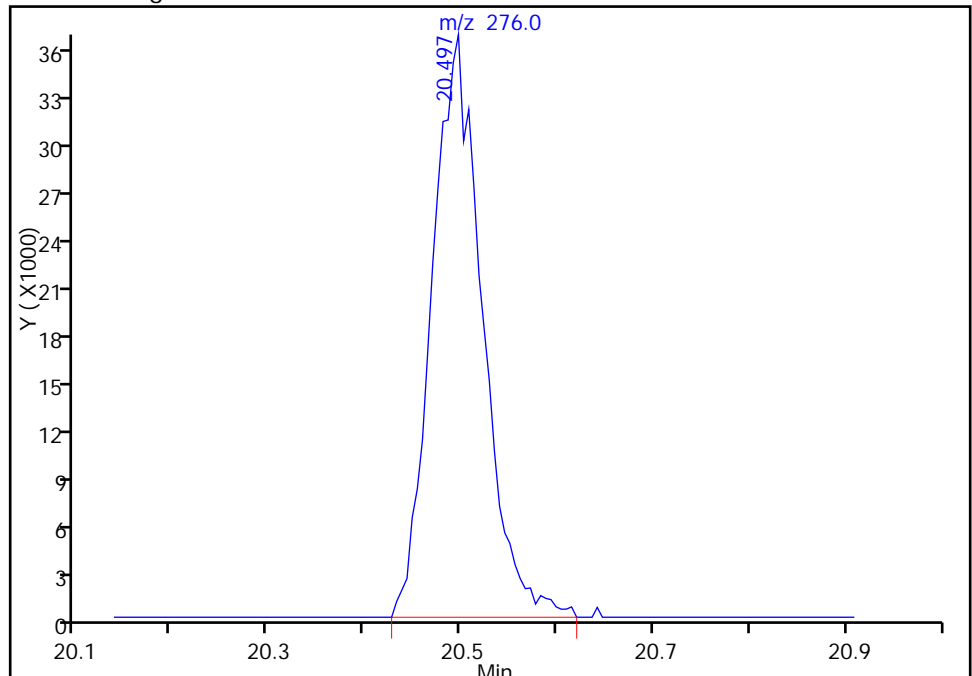
Processing Integration Results

RT: 20.50
 Area: 131022
 Amount: 1.878868
 Amount Units: ng



Manual Integration Results

RT: 20.50
 Area: 132922
 Amount: 1.809236
 Amount Units: ng



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 ethe	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.)	Dlt 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

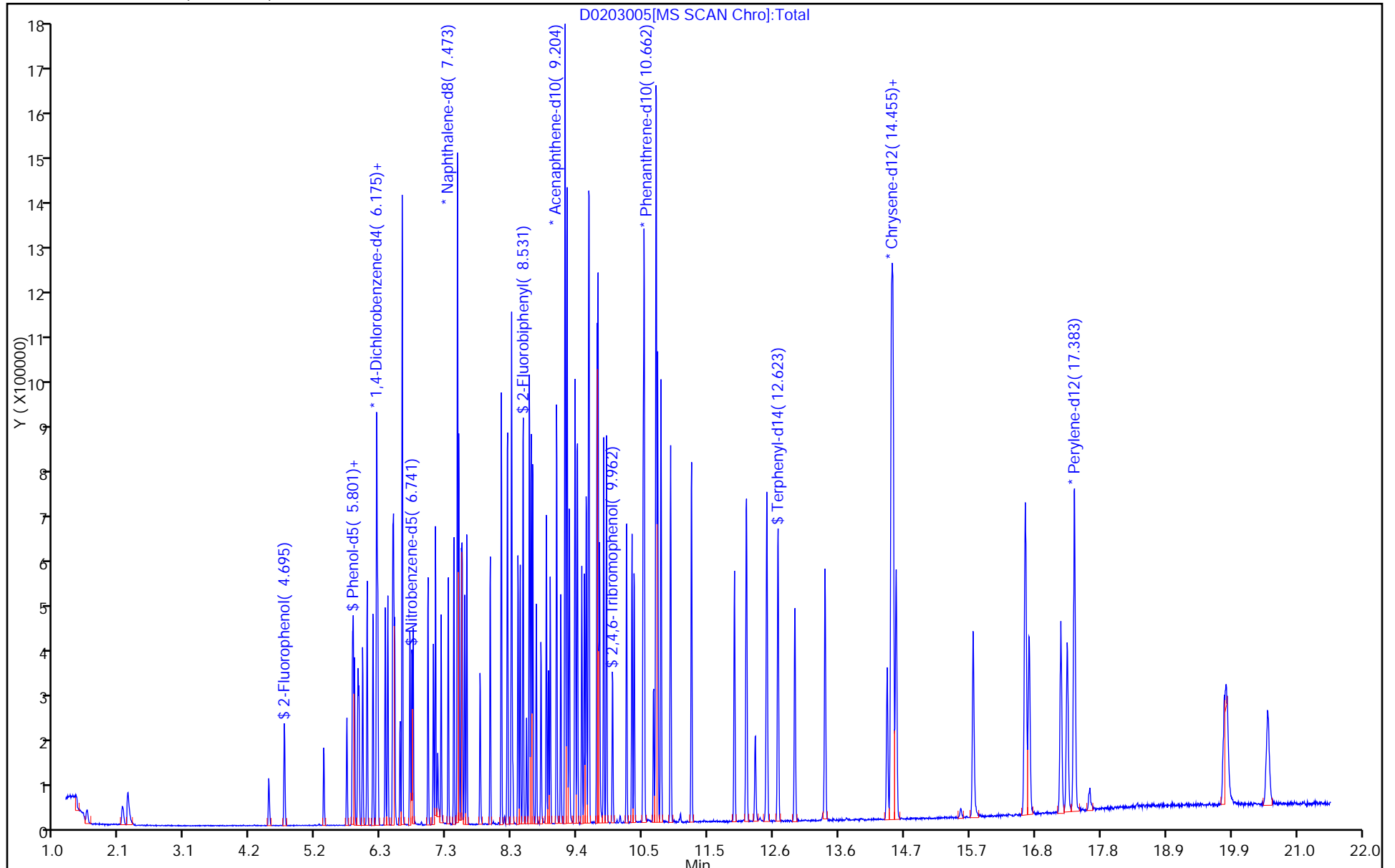
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: BNA_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



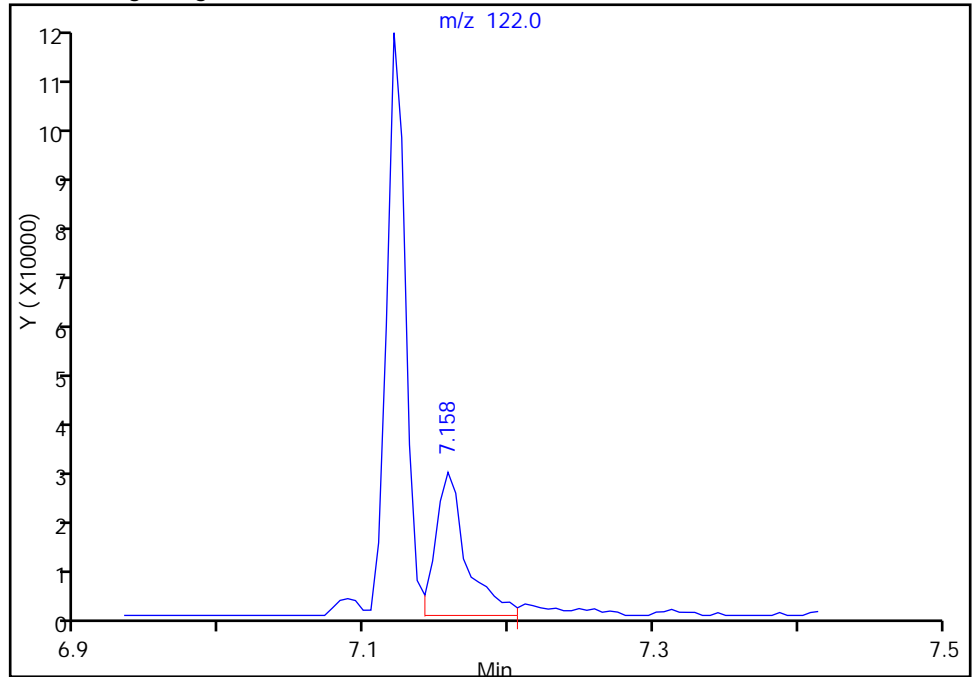
TestAmerica Pittsburgh

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

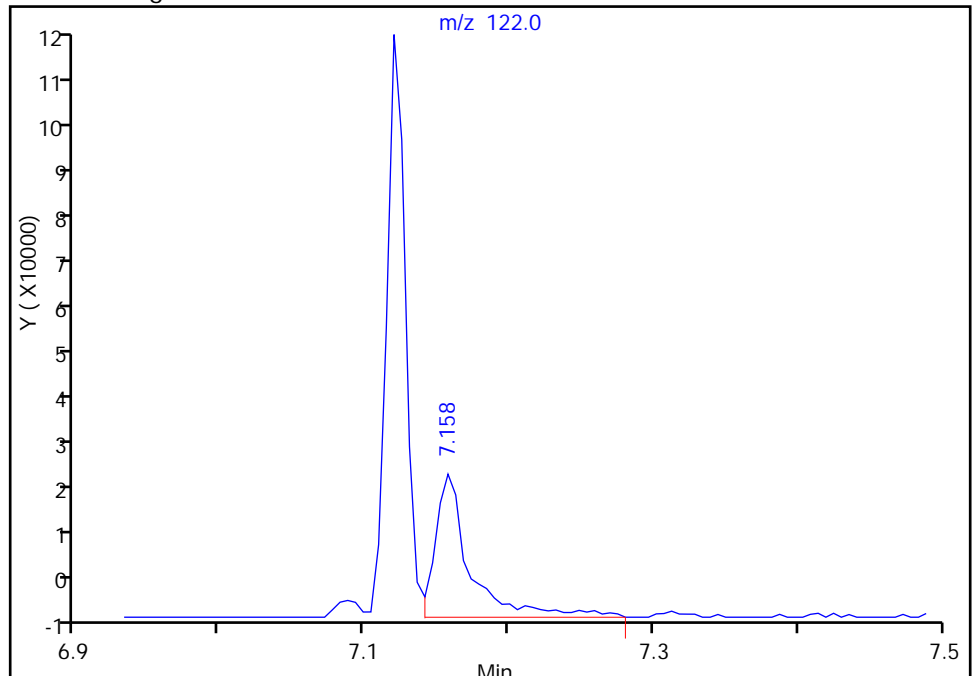
RT: 7.16
Area: 40362
Amount: 3.463586
Amount Units: ng

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

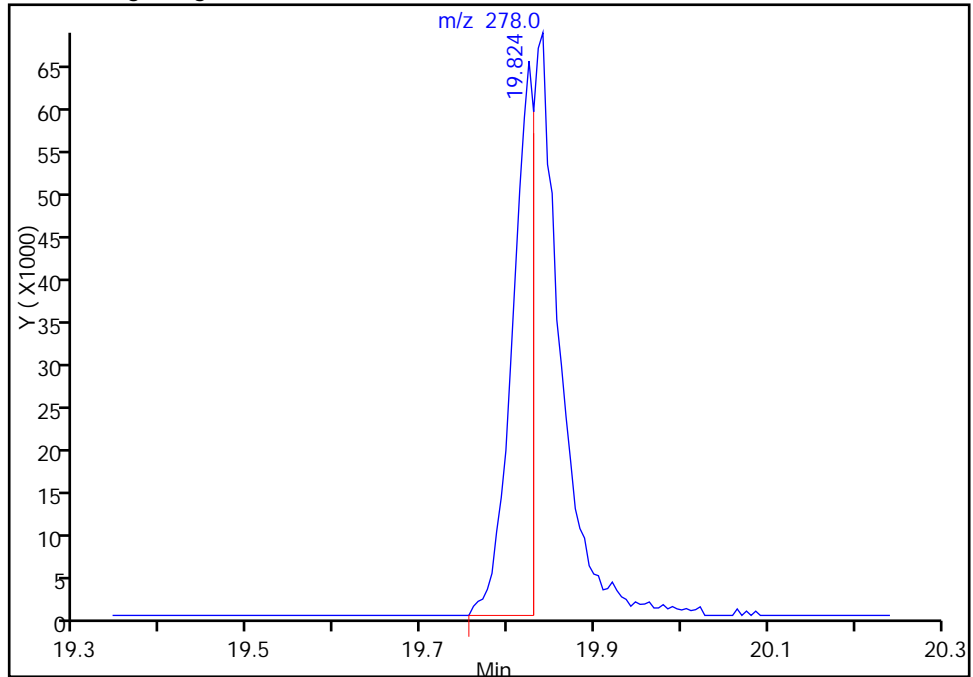
TestAmerica Pittsburgh

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

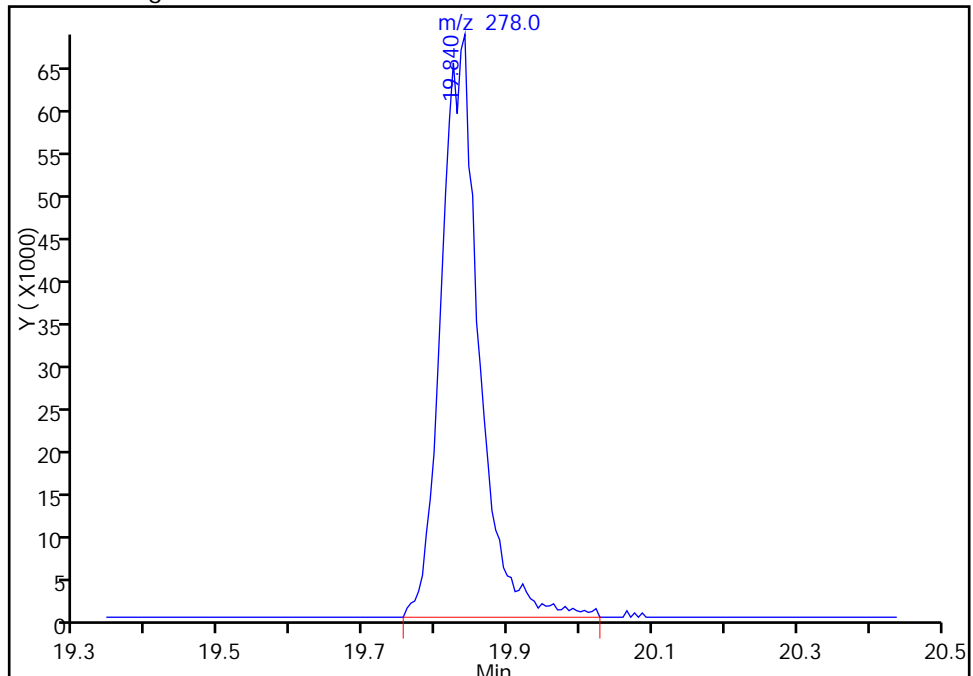
RT: 19.82
Area: 114832
Amount: 2.067137
Amount Units: ng

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.)	Dlt 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

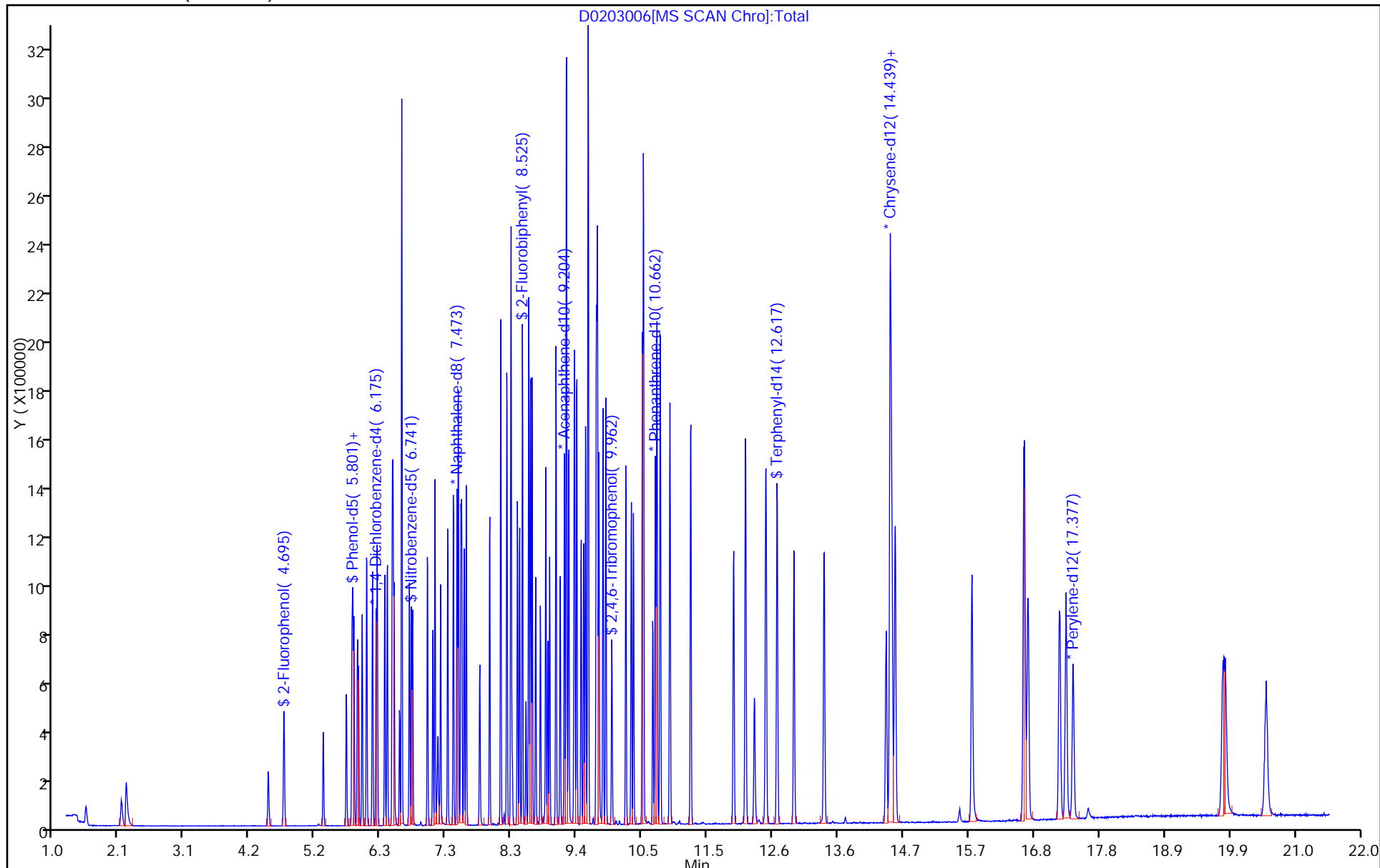
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: BNA_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



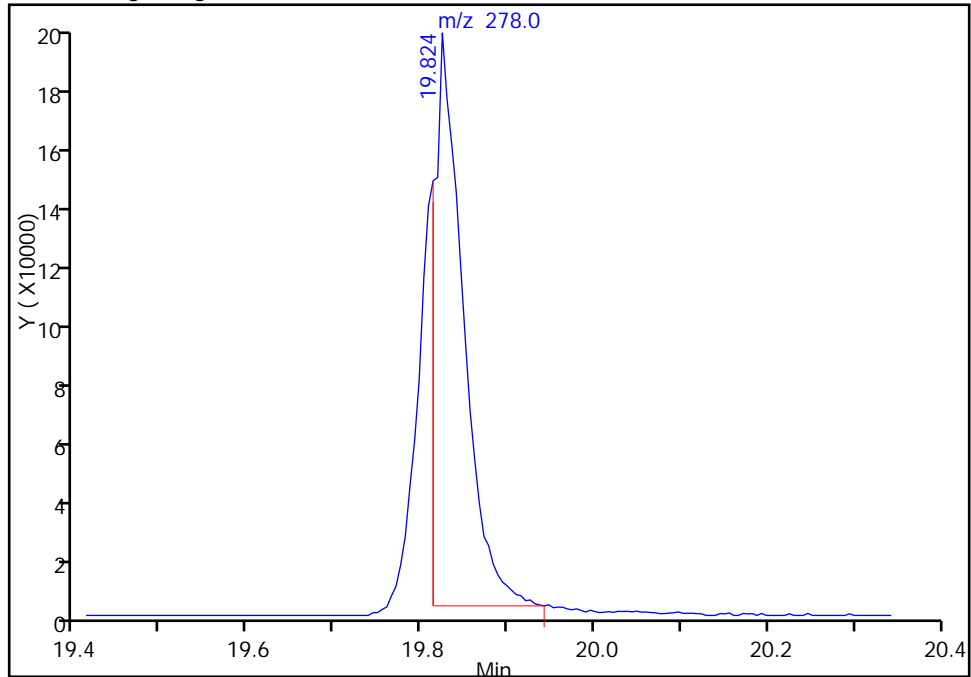
TestAmerica Pittsburgh

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

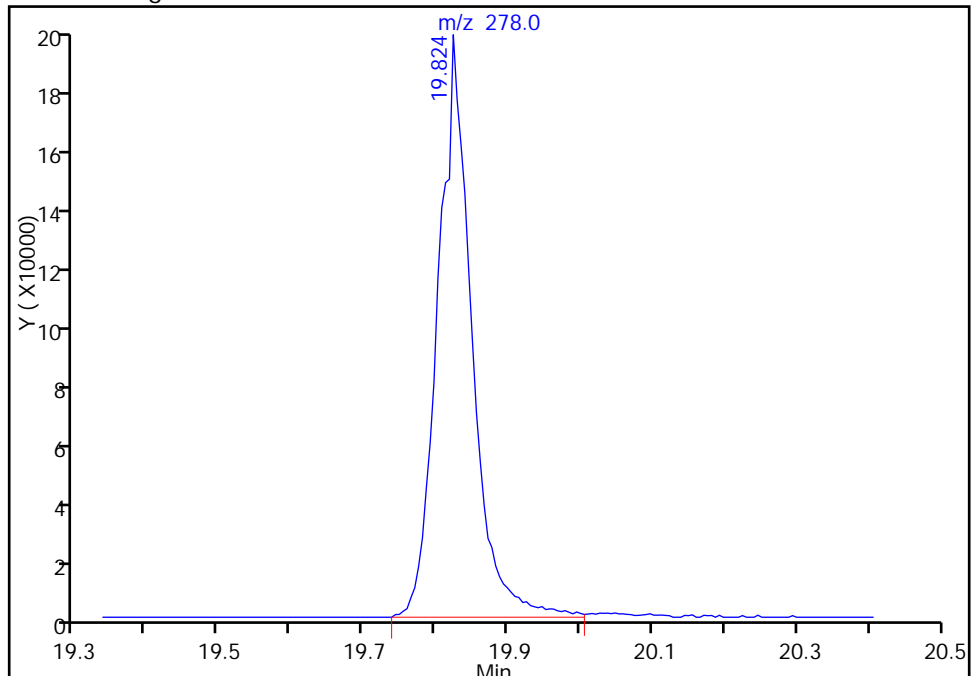
Processing Integration Results

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

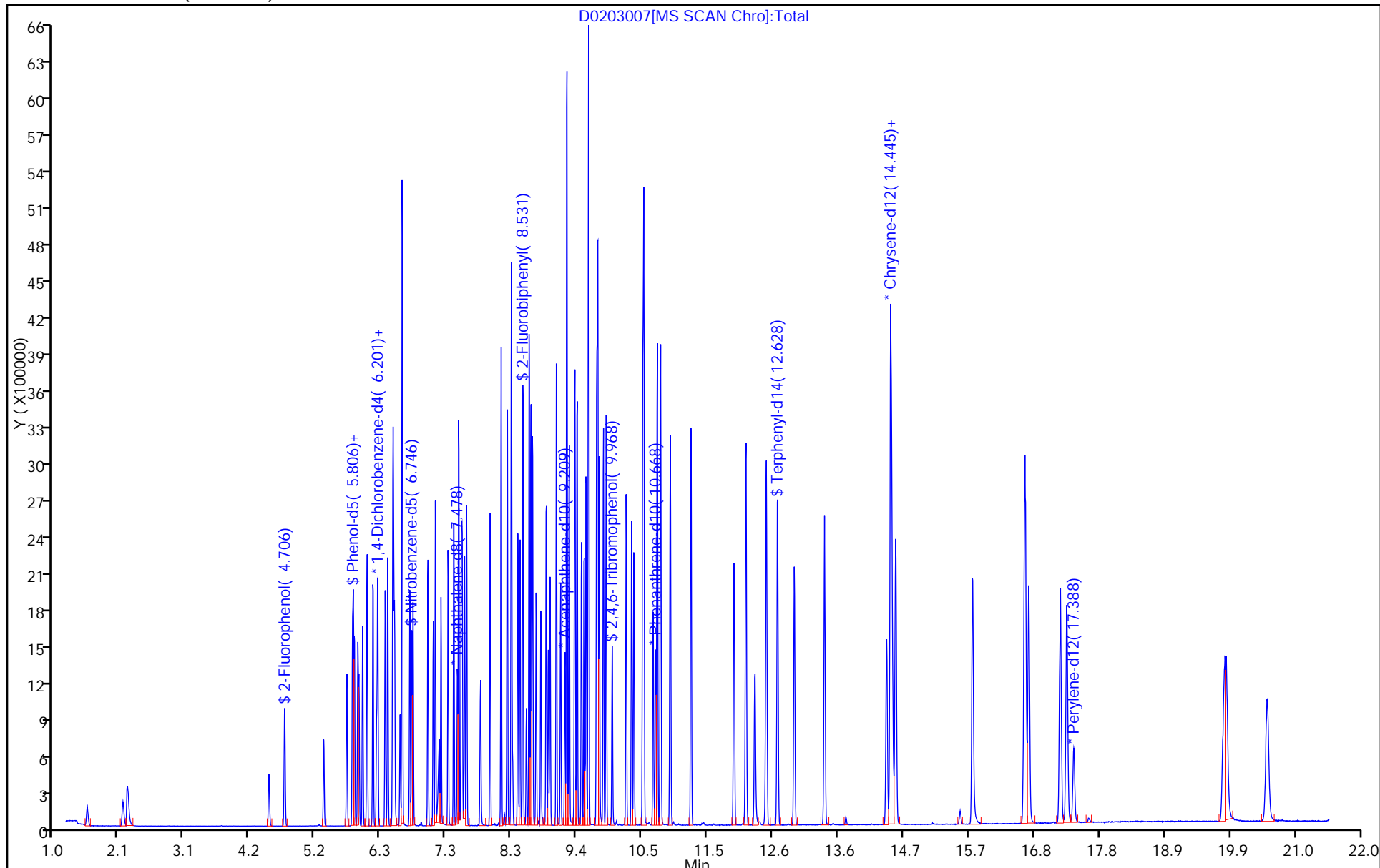
Dil. Factor: 1.0000

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

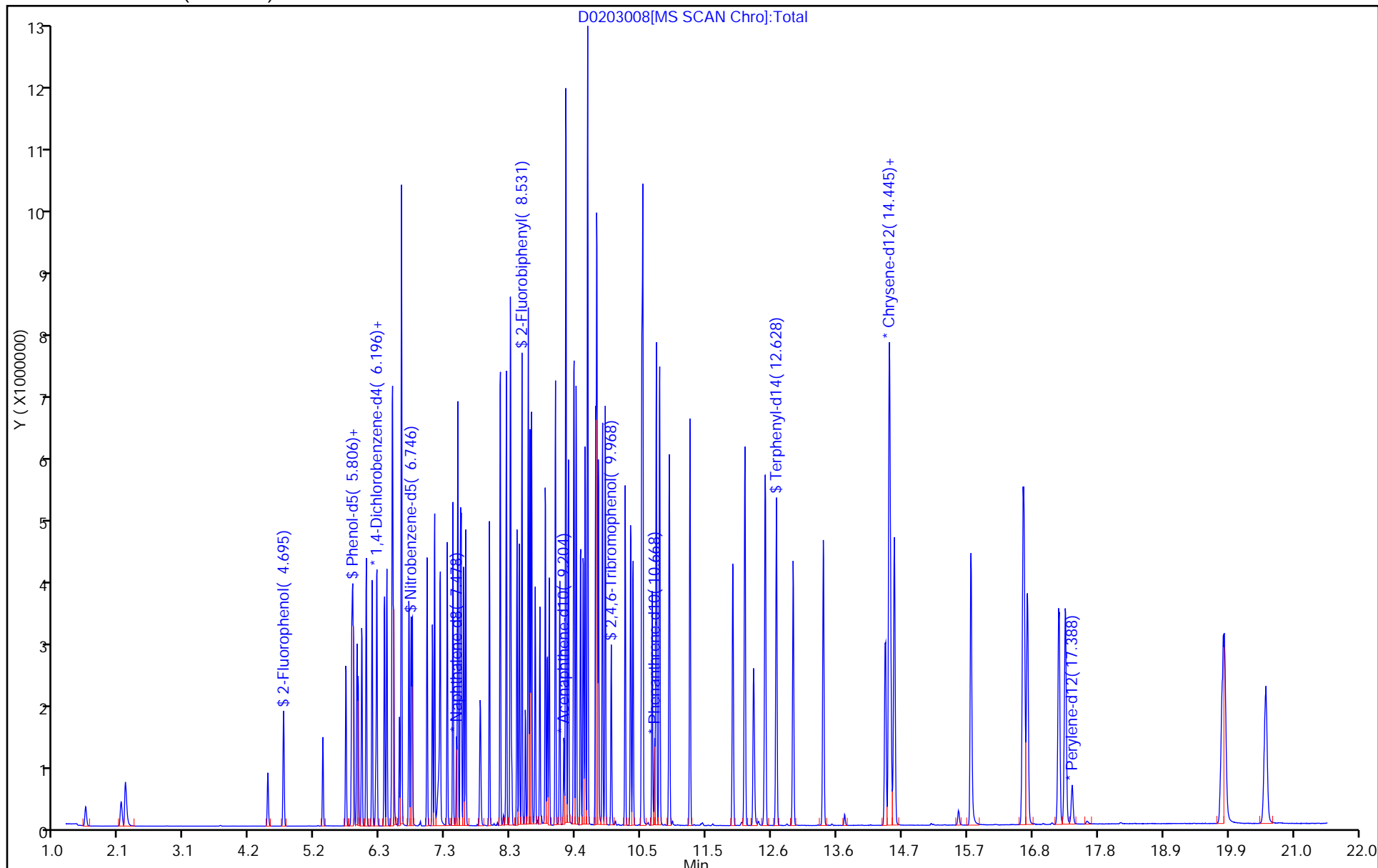
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: BNA_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



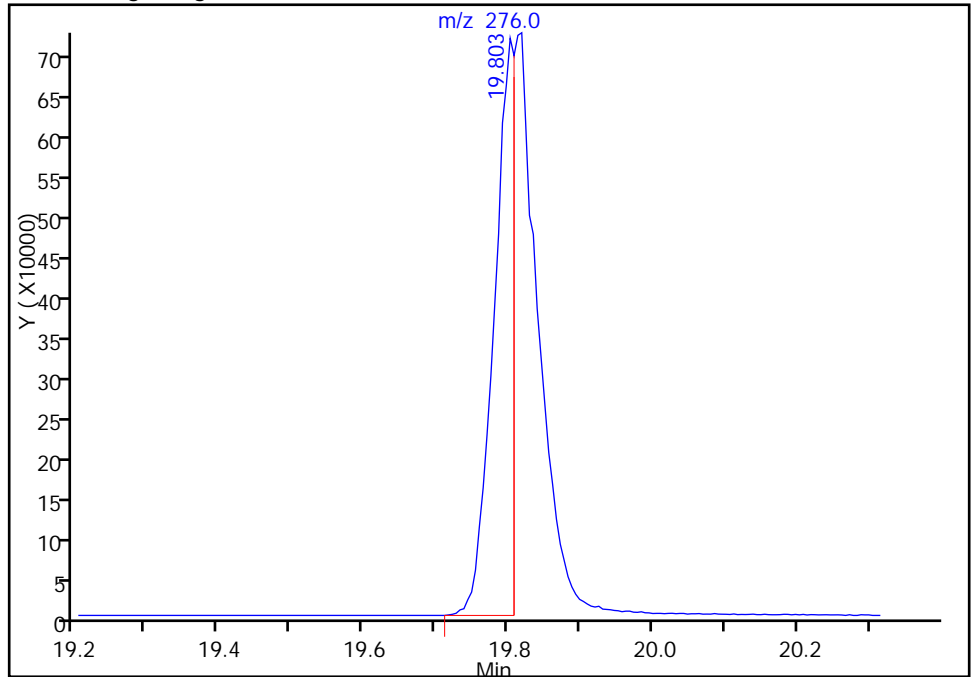
TestAmerica Pittsburgh

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

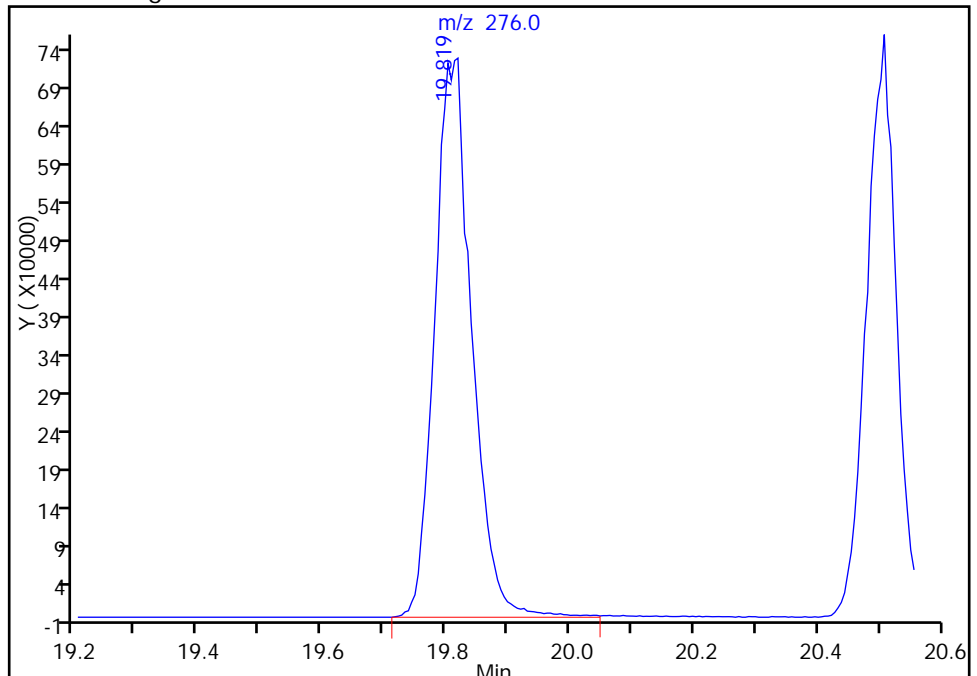
Processing Integration Results

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

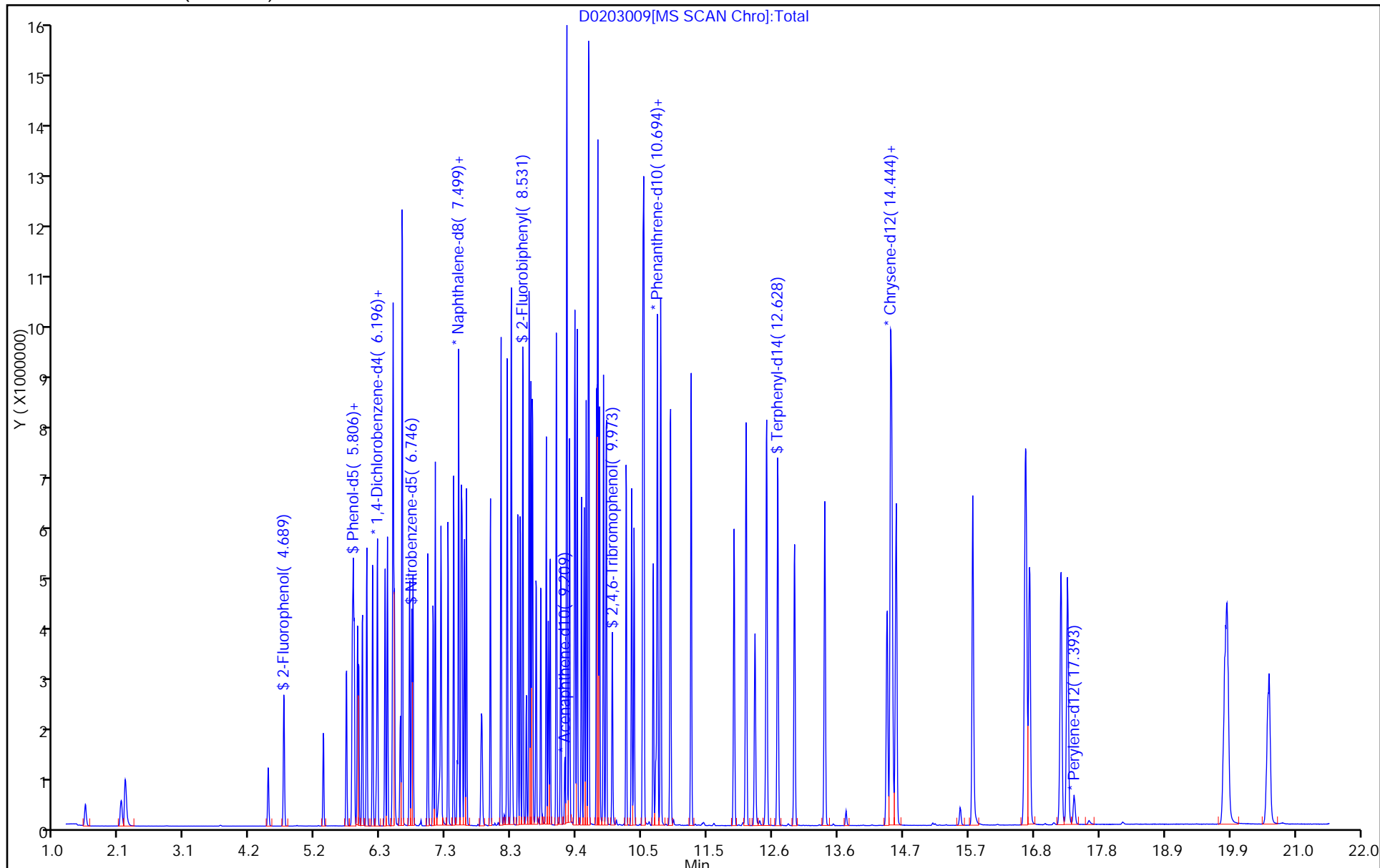
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: BNA_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



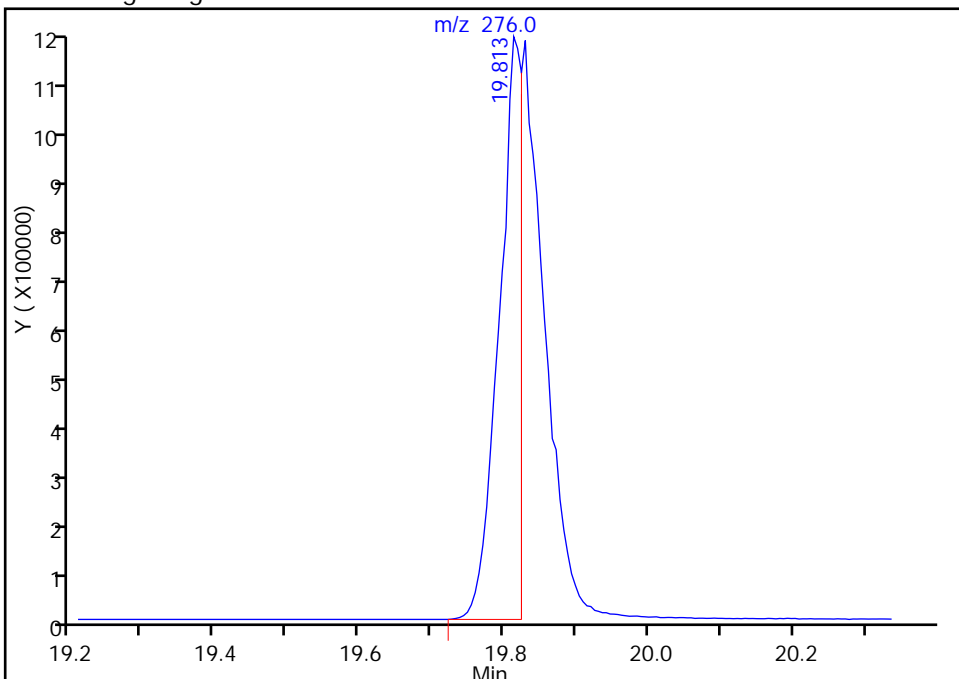
TestAmerica Pittsburgh

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

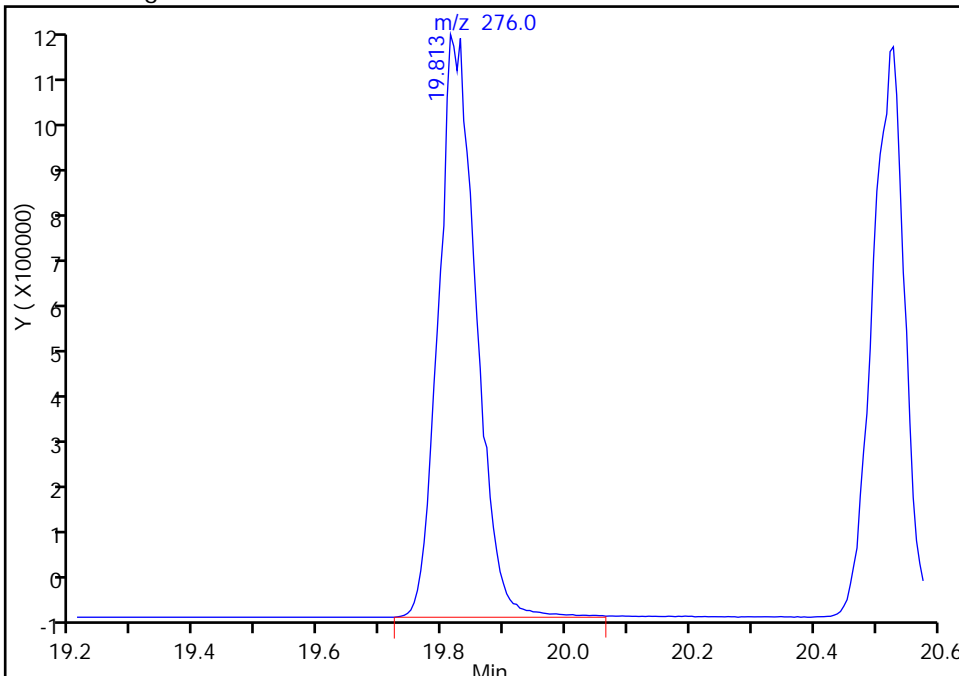
Processing Integration Results

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.)	Diff 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

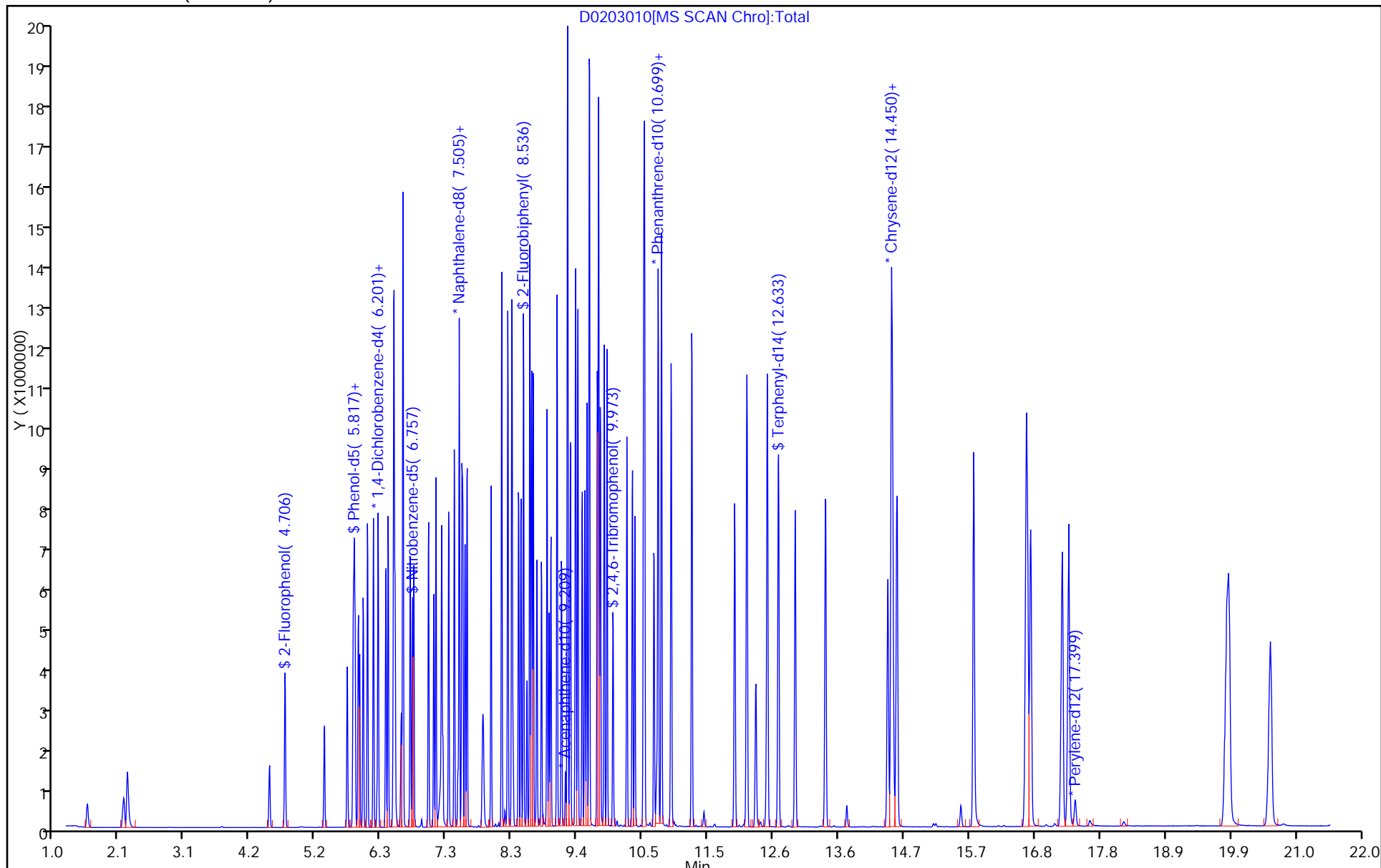
Dil. Factor: 1.0000

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.: 180-42982-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-138398/3 Calibration Date: 04/14/2015 10:00
 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: D0414003.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	0.2849	0.0100	4.47	5.00	-10.6	20.0
N-Nitrosodimethylamine	Ave	0.4305	0.4058	0.0100	4.71	5.00	-5.7	20.0
Pyridine	Ave	0.7509	0.6705	0.0100	4.46	5.00	-10.7	20.0
Methyl methanesulfonate	Ave	0.6060	0.6090	0.0100	5.02	5.00	0.5	20.0
Benzaldehyde	Ave	0.6754	0.7219	0.0100	5.34	5.00	6.9	20.0
Phenol	Ave	1.587	1.535	0.8000	4.84	5.00	-3.3	20.0
Aniline	Ave	1.756	1.715	0.0100	4.88	5.00	-2.3	20.0
Bis(2-chloroethyl)ether	Ave	1.120	1.055	0.7000	4.71	5.00	-5.8	20.0
2-Chlorophenol	Ave	1.355	1.337	0.8000	4.93	5.00	-1.3	20.0
n-Decane	Ave	1.590	1.606		5.05	5.00	1.0	20.0
1,3-Dichlorobenzene	Ave	1.578	1.585	0.0100	5.02	5.00	0.4	20.0
1,4-Dichlorobenzene	Ave	1.619	1.587	0.0100	4.90	5.00	-2.0	20.0
Benzyl alcohol	Ave	0.8521	0.8666	0.0100	5.08	5.00	1.7	20.0
1,2-Dichlorobenzene	Ave	1.574	1.562	0.0100	4.96	5.00	-0.8	20.0
2-Methylphenol	Ave	1.204	1.231	0.7000	5.11	5.00	2.3	20.0
Indene	Ave	2.185	2.195	0.0100	5.02	5.00	0.4	20.0
2,2'-oxybis[1-chloropropane]	Ave	2.359	2.445	0.0100	5.18	5.00	3.6	20.0
N-Nitrosopyrrolidine	Ave	0.5864	0.5993	0.0100	5.11	5.00	2.2	20.0
Acetophenone	Ave	1.815	1.833	0.0100	5.05	5.00	1.0	20.0
Methylphenol, 3 & 4	Ave	1.236	1.283	0.6000	5.19	5.00	3.8	20.0
N-Nitrosodi-n-propylamine	Ave	0.8551	0.8900	0.5000	5.20	5.00	4.1	20.0
Hexachloroethane	Ave	0.7013	0.7265	0.3000	5.18	5.00	3.6	20.0
Nitrobenzene	Ave	0.3334	0.3217	0.2000	4.82	5.00	-3.5	20.0
Isophorone	Ave	0.5870	0.5706	0.4000	4.86	5.00	-2.8	20.0
2-Nitrophenol	Ave	0.1845	0.1849	0.1000	5.01	5.00	0.2	20.0
2,4-Dimethylphenol	Ave	0.3367	0.3388	0.2000	5.03	5.00	0.6	20.0
Benzoic acid	Lin1		0.1897	0.0100	5.33	5.00	6.6	20.0
Bis(2-chloroethoxy)methane	Ave	0.3611	0.3526	0.3000	4.88	5.00	-2.4	20.0
2,4-Dichlorophenol	Ave	0.2941	0.2973	0.2000	5.05	5.00	1.1	20.0
1,2,4-Trichlorobenzene	Ave	0.3374	0.3382	0.0100	5.01	5.00	0.2	20.0
Naphthalene	Ave	1.082	1.059	0.7000	4.89	5.00	-2.1	20.0
4-Chloroaniline	Ave	0.4336	0.4335	0.0100	5.00	5.00	-0.0	20.0
2,6-Dichlorophenol	Ave	0.2924	0.2985	0.0100	5.10	5.00	2.1	20.0
Hexachlorobutadiene	Ave	0.2019	0.2015	0.0100	4.99	5.00	-0.2	20.0
Caprolactam	Ave	0.0985	0.0914	0.0100	4.64	5.00	-7.2	20.0
4-Chloro-3-methylphenol	Ave	0.3085	0.3081	0.2000	4.99	5.00	-0.1	20.0
2-Methylnaphthalene	Ave	0.7654	0.7771	0.4000	5.08	5.00	1.5	20.0
1-Methylnaphthalene	Ave	0.7177	0.7251	0.0100	5.05	5.00	1.0	20.0
Hexachlorocyclopentadiene	Ave	0.3480	0.3695	0.0500	5.31	5.00	6.2	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5214	0.5046	0.0100	4.84	5.00	-3.2	20.0
2,4,6-Trichlorophenol	Ave	0.3558	0.3504	0.2000	4.92	5.00	-1.5	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-138398/3 Calibration Date: 04/14/2015 10:00
 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: D0414003.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	0.3692	0.2000	4.89	5.00	-2.2	20.0
1,1'-Biphenyl	Ave	1.505	1.456	0.0100	4.84	5.00	-3.3	20.0
2-Chloronaphthalene	Ave	1.220	1.149	0.8000	4.71	5.00	-5.8	20.0
2-Nitroaniline	Ave	0.3466	0.3398	0.0100	4.90	5.00	-1.9	20.0
Dimethyl phthalate	Ave	1.270	1.198	0.0100	4.72	5.00	-5.6	20.0
1,3-Dinitrobenzene	Ave	0.1913	0.1927	0.0100	5.04	5.00	0.7	20.0
2,6-Dinitrotoluene	Ave	0.2790	0.2813	0.2000	5.04	5.00	0.8	20.0
Acenaphthylene	Ave	1.934	1.913	0.9000	4.95	5.00	-1.1	20.0
3-Nitroaniline	Ave	0.3396	0.3261	0.0100	4.80	5.00	-4.0	20.0
2,4-Dinitrophenol	Lin1		0.1569	0.0100	8.68	10.0	-13.2	20.0
Acenaphthene	Ave	1.181	1.182	0.9000	5.00	5.00	0.0	20.0
4-Nitrophenol	Ave	0.1879	0.1681	0.0100	8.95	10.0	-10.5	20.0
2,4-Dinitrotoluene	Ave	0.3667	0.3584	0.2000	4.89	5.00	-2.3	20.0
Dibenzofuran	Ave	1.694	1.677	0.8000	4.95	5.00	-1.0	20.0
2,3,5,6-Tetrachlorophenol	Ave	0.3283	0.3322	0.0100	5.06	5.00	1.2	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3217	0.3277	0.0100	5.09	5.00	1.9	20.0
2-Naphthylamine	Ave	1.207	1.234	0.0100	5.11	5.00	2.2	20.0
Diethyl phthalate	Ave	1.298	1.259	0.0100	4.85	5.00	-3.0	20.0
Hexadecane	Ave	0.5903	0.6742		5.71	5.00	14.2	20.0
4-Chlorophenyl phenyl ether	Ave	0.6218	0.6182	0.4000	4.97	5.00	-0.6	20.0
4-Nitroaniline	Ave	0.3352	0.3110	0.0100	4.64	5.00	-7.2	20.0
Fluorene	Ave	1.318	1.337	0.9000	5.07	5.00	1.4	20.0
4,6-Dinitro-2-methylphenol	Ave	0.1300	0.1227	0.0100	9.44	10.0	-5.6	20.0
N-Nitrosodiphenylamine	Ave	0.5683	0.5510	0.0100	4.85	5.00	-3.0	20.0
1,2-Diphenylhydrazine (as Azobenzene)	Ave	0.8141	0.8099	0.0100	4.97	5.00	-0.5	20.0
4-Bromophenyl phenyl ether	Ave	0.2089	0.2071	0.1000	4.96	5.00	-0.8	20.0
Hexachlorobenzene	Ave	0.2088	0.2076	0.1000	4.97	5.00	-0.6	20.0
Atrazine	Ave	0.1650	0.1706	0.0100	5.17	5.00	3.4	20.0
Pentachlorophenol	Ave	0.1472	0.1422	0.0500	9.66	10.0	-3.4	20.0
n-Octadecane	Ave	2.847	3.455		6.07	5.00	21.3*	20.0
Phenanthrene	Ave	1.202	1.157	0.7000	4.81	5.00	-3.7	20.0
Anthracene	Ave	1.229	1.185	0.7000	4.82	5.00	-3.6	20.0
Carbazole	Ave	1.076	1.007	0.0100	4.68	5.00	-6.4	20.0
Di-n-butyl phthalate	Ave	1.346	1.278	0.0100	4.75	5.00	-5.0	20.0
Fluoranthene	Ave	1.213	1.095	0.6000	4.51	5.00	-9.7	20.0
Benzidine	Lin1		0.4773	0.0100		5.00	-7.4	20.0
Pyrene	Ave	1.320	1.393	0.6000	5.28	5.00	5.5	20.0
Butyl benzyl phthalate	Ave	0.5863	0.5947	0.0100	5.07	5.00	1.4	20.0
3,3'-Dichlorobenzidine	Ave	0.3859	0.3654	0.0100	4.74	5.00	-5.3	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.8121	0.8246	0.0100	5.08	5.00	1.5	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-138398/3 Calibration Date: 04/14/2015 10:00
 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: D0414003.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	1.158	0.8000	5.00	5.00	0.0	20.0
Chrysene	Ave	1.091	1.088	0.7000	4.99	5.00	-0.3	20.0
Di-n-octyl phthalate	Ave	1.554	1.580	0.0100	5.08	5.00	1.7	20.0
7,12-Dimethylbenz(a)anthracene	Ave	0.5519	0.5174	0.0100	4.69	5.00	-6.3	20.0
Benzo[b]fluoranthene	Ave	1.297	1.273	0.7000	4.91	5.00	-1.8	20.0
Benzo[k]fluoranthene	Ave	1.271	1.271	0.7000	5.00	5.00	-0.0	20.0
Benzo[e]pyrene	Ave	1.169	1.169	0.0100	5.00	5.00	0.0	20.0
Benzo[a]pyrene	Ave	1.168	1.167	0.7000	5.00	5.00	-0.0	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.229	1.213	0.5000	4.94	5.00	-1.3	20.0
Dibenz(a,h)anthracene	Ave	1.022	1.041	0.4000	5.09	5.00	1.9	20.0
Benzo[g,h,i]perylene	Ave	1.048	1.062	0.5000	5.06	5.00	1.3	20.0
2-Fluorophenol (Surr)	Ave	1.037	0.9603		4.63	5.00	-7.4	20.0
Phenol-d5 (Surr)	Ave	1.397	1.403		5.02	5.00	0.4	20.0
Nitrobenzene-d5 (Surr)	Ave	0.3358	0.3276		4.88	5.00	-2.4	20.0
2-Fluorobiphenyl	Ave	1.314	1.283		4.88	5.00	-2.4	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.0879	0.0873	0.0100	4.96	5.00	-0.7	20.0
Terphenyl-d14 (Surr)	Ave	0.8709	0.9073		5.21	5.00	4.2	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150414-6452.b\D0414003.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 14-Apr-2015 10:00:30 ALS Bottle#: 2 Worklist Smp#: 3
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006452-003
 Misc. Info.: CCVIS
 Operator ID: 003200 Instrument ID: CH732
 Sublist: chrom-BNA_CH732*sub4
 Method: \\PITCHROM\ChromData\CH732\20150414-6452.b\BNA_CH732.m
 Limit Group: BNA 8270D ICAL
 Last Update: 15-Apr-2015 07:37:14 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: XAWRK013

First Level Reviewer: piccolinov

Date: 14-Apr-2015 10:41:51

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.153	6.153	0.000	97	156653	8.00	8.00	
* 2 Naphthalene-d8	136	7.446	7.446	0.000	100	741876	8.00	8.00	
* 3 Acenaphthene-d10	164	9.161	9.161	0.000	91	486741	8.00	8.00	
* 4 Phenanthrene-d10	188	10.614	10.614	0.000	93	852083	8.00	8.00	
* 5 Chrysene-d12	240	14.380	14.380	0.000	96	708247	8.00	8.00	
* 6 Perylene-d12	264	17.270	17.270	0.000	96	567190	8.00	8.00	
\$ 7 2-Fluorophenol	112	4.673	4.673	0.000	88	188042	10.0	9.26	
\$ 8 Phenol-d5	99	5.763	5.763	0.000	94	274634	10.0	10.0	
\$ 9 Nitrobenzene-d5	82	6.714	6.714	0.000	94	303782	10.0	9.76	
\$ 10 2-Fluorobiphenyl	172	8.493	8.493	0.000	99	780353	10.0	9.76	
\$ 11 2,4,6-Tribromophenol	330	9.925	9.925	0.000	92	92999	10.0	9.93	
\$ 12 Terphenyl-d14	244	12.548	12.548	0.000	98	803267	10.0	10.4	
13 1,4-Dioxane	88	1.500	1.500	0.000	93	55792	10.0	8.94	
14 N-Nitrosodimethylamine	74	2.066	2.066	0.000	74	79454	10.0	9.43	
15 Pyridine	79	2.152	2.152	0.000	90	131299	10.0	8.93	
21 Methyl methanesulfonate	80	4.422	4.422	0.000	89	119247	10.0	10.0	
25 Benzaldehyde	77	5.672	5.672	0.000	83	141351	10.0	10.7	
26 Phenol	94	5.779	5.779	0.000	92	300519	10.0	9.67	
27 Aniline	93	5.795	5.795	0.000	63	335728	10.0	9.77	
29 Bis(2-chloroethyl)ether	93	5.870	5.870	0.000	90	206663	10.0	9.42	
30 2-Chlorophenol	128	5.929	5.929	0.000	95	261890	10.0	9.87	
31 n-Decane	43	5.998	5.998	0.000	93	314408	10.0	10.1	
32 1,3-Dichlorobenzene	146	6.094	6.094	0.000	97	310343	10.0	10.0	
33 1,4-Dichlorobenzene	146	6.169	6.169	0.000	91	310751	10.0	9.80	
34 Benzyl alcohol	108	6.292	6.292	0.000	88	169684	10.0	10.2	
35 1,2-Dichlorobenzene	146	6.330	6.330	0.000	91	305803	10.0	9.92	
36 2-Methylphenol	108	6.410	6.410	0.000	95	241083	10.0	10.2	
37 Indene	116	6.420	6.420	0.000	77	429832	10.0	10.0	
38 2,2'-oxybis[1-chloropropan	45	6.442	6.442	0.000	89	478715	10.0	10.4	
39 N-Nitrosopyrrolidine	100	6.527	6.527	0.000	75	117345	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	6.565	6.565	0.000	79	358867	10.0	10.1	
41 N-Nitrosodi-n-propylamine	70	6.565	6.565	0.000	63	174269	10.0	10.4	
42 4-Methylphenol	108	6.565	6.565	0.000	66	251165	10.0	10.4	
45 Hexachloroethane	117	6.682	6.682	0.000	94	142268	10.0	10.4	
46 Nitrobenzene	77	6.736	6.736	0.000	94	298290	10.0	9.65	
48 Isophorone	82	6.971	6.971	0.000	95	529154	10.0	9.72	
49 2-Nitrophenol	139	7.061	7.061	0.000	97	171421	10.0	10.0	
50 2,4-Dimethylphenol	107	7.093	7.093	0.000	82	314179	10.0	10.1	
52 Benzoic acid	122	7.152	7.152	0.000	84	175904	10.0	10.7	
53 Bis(2-chloroethoxy)methane	93	7.184	7.184	0.000	88	326938	10.0	9.76	
54 2,4-Dichlorophenol	162	7.296	7.296	0.000	96	275685	10.0	10.1	
56 1,2,4-Trichlorobenzene	180	7.387	7.387	0.000	94	313619	10.0	10.0	
58 Naphthalene	128	7.467	7.467	0.000	97	982307	10.0	9.79	
59 4-Chloroaniline	127	7.510	7.510	0.000	74	402035	10.0	10.0	
60 2,6-Dichlorophenol	162	7.521	7.521	0.000	95	276835	10.0	10.2	
62 Hexachlorobutadiene	225	7.596	7.596	0.000	66	186835	10.0	9.98	
64 Caprolactam	113	7.820	7.820	0.000	64	84742	10.0	9.28	
67 4-Chloro-3-methylphenol	107	7.970	7.970	0.000	92	285741	10.0	9.99	
69 2-Methylnaphthalene	142	8.146	8.146	0.000	88	720624	10.0	10.2	
71 1-Methylnaphthalene	142	8.242	8.242	0.000	82	672448	10.0	10.1	
72 Hexachlorocyclopentadiene	237	8.306	8.306	0.000	96	224796	10.0	10.6	
73 1,2,4,5-Tetrachlorobenzene	216	8.311	8.311	0.000	97	307025	10.0	9.68	
74 2,4,6-Trichlorophenol	196	8.413	8.413	0.000	93	213168	10.0	9.85	
75 2,4,5-Trichlorophenol	196	8.445	8.445	0.000	92	224625	10.0	9.78	
76 1,1'-Biphenyl	154	8.595	8.595	0.000	94	886013	10.0	9.67	
77 2-Chloronaphthalene	162	8.621	8.621	0.000	71	698930	10.0	9.42	
79 2-Nitroaniline	65	8.701	8.701	0.000	81	206758	10.0	9.81	
82 Dimethyl phthalate	163	8.867	8.867	0.000	99	729128	10.0	9.44	
83 1,3-Dinitrobenzene	168	8.899	8.899	0.000	82	117243	10.0	10.1	
84 2,6-Dinitrotoluene	165	8.926	8.926	0.000	67	171172	10.0	10.1	
85 Acenaphthylene	152	9.027	9.027	0.000	89	1164038	10.0	9.89	
86 3-Nitroaniline	138	9.097	9.097	0.000	93	198428	10.0	9.60	
88 Acenaphthene	153	9.193	9.193	0.000	87	718949	10.0	10.0	
87 2,4-Dinitrophenol	184	9.193	9.193	0.000	53	190969	20.0	17.4	
89 4-Nitrophenol	109	9.230	9.230	0.000	88	204572	20.0	17.9	
91 2,4-Dinitrotoluene	165	9.321	9.321	0.000	88	218047	10.0	9.77	
93 Dibenzofuran	168	9.359	9.359	0.000	79	1020333	10.0	9.90	
95 2,3,5,6-Tetrachlorophenol	232	9.428	9.428	0.000	91	202136	10.0	10.1	
96 2,3,4,6-Tetrachlorophenol	232	9.471	9.471	0.000	73	199359	10.0	10.2	
97 2-Naphthylamine	143	9.503	9.503	0.000	88	750546	10.0	10.2	
98 Diethyl phthalate	149	9.540	9.540	0.000	97	765720	10.0	9.70	
99 Hexadecane	57	9.546	9.546	0.000	90	625213	10.0	11.4	
100 4-Chlorophenyl phenyl ether	204	9.674	9.674	0.000	94	376129	10.0	9.94	
101 4-Nitroaniline	138	9.684	9.684	0.000	69	189207	10.0	9.28	
103 Fluorene	166	9.690	9.690	0.000	82	813267	10.0	10.1	
104 4,6-Dinitro-2-methylphenol	198	9.717	9.717	0.000	63	261441	20.0	18.9	
105 N-Nitrosodiphenylamine	169	9.781	9.781	0.000	60	586903	10.0	9.70	
90 1,2-Diphenylhydrazine	77	9.823	9.823	0.000	99	862608	10.0	9.95	
110 4-Bromophenyl phenyl ether	248	10.149	10.149	0.000	62	220616	10.0	9.92	
112 Hexachlorobenzene	284	10.235	10.235	0.000	93	221136	10.0	9.94	
113 Atrazine	200	10.267	10.267	0.000	71	181701	10.0	10.3	
116 Pentachlorophenol	266	10.411	10.411	0.000	90	302939	20.0	19.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 n-Octadecane	57	10.422	10.422	0.000	90	676474	10.0	12.1	
121 Phenanthrene	178	10.641	10.641	0.000	96	1232369	10.0	9.63	
122 Anthracene	178	10.694	10.694	0.000	97	1261743	10.0	9.64	
124 Carbazole	167	10.844	10.844	0.000	82	1072875	10.0	9.36	
126 Di-n-butyl phthalate	149	11.175	11.175	0.000	99	1361649	10.0	9.50	
131 Fluoranthene	202	12.046	12.046	0.000	98	1166147	10.0	9.03	
132 Benzidine	184	12.185	12.185	0.000	98	422533	10.0	9.26	
57 Azobenzene	77		12.185				ND	ND	
133 Pyrene	202	12.372	12.372	0.000	97	1233262	10.0	10.6	
138 Butyl benzyl phthalate	149	13.296	13.296	0.000	97	526454	10.0	10.1	
144 3,3'-Dichlorobenzidine	252	14.289	14.289	0.000	66	323501	10.0	9.47	
145 Bis(2-ethylhexyl) phthalat	149	14.343	14.343	0.000	96	730050	10.0	10.2	
146 Benzo[a]anthracene	228	14.364	14.364	0.000	96	1025475	10.0	10.0	
147 Chrysene	228	14.428	14.428	0.000	94	962904	10.0	9.97	
150 Di-n-octyl phthalate	149	15.652	15.652	0.000	99	1120438	10.0	10.2	
151 7,12-Dimethylbenz(a)anthra	256	16.485	16.485	0.000	69	366800	10.0	9.37	
152 Benzo[b]fluoranthene	252	16.496	16.496	0.000	95	902436	10.0	9.82	
153 Benzo[k]fluoranthene	252	16.555	16.555	0.000	98	900902	10.0	10.0	
219 Benzo[e]pyrene	252	17.062	17.062	0.000	0	829060	10.0	10.0	
154 Benzo[a]pyrene	252	17.158	17.158	0.000	76	827724	10.0	10.0	
157 Indeno[1,2,3-cd]pyrene	276	19.637	19.637	0.000	92	860263	10.0	9.87	
158 Dibenz(a,h)anthracene	278	19.680	19.680	0.000	66	737786	10.0	10.2	
159 Benzo[g,h,i]perylene	276	20.326	20.326	0.000	86	752834	10.0	10.1	
S 199 Total Cresols	108				0		20.0	20.6	
S 197 Methyl Phenols,Total	108				0		20.0	20.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SVTAPSTD10i_00097

Amount Added: 1.00

Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150414-6452.b\D0414003.D

Injection Date: 14-Apr-2015 10:00:30

Instrument ID: CH732

Operator ID: 003200

Lims ID: CCVIS

Worklist Smp#: 3

Client ID:

Injection Vol: 2.0 ul

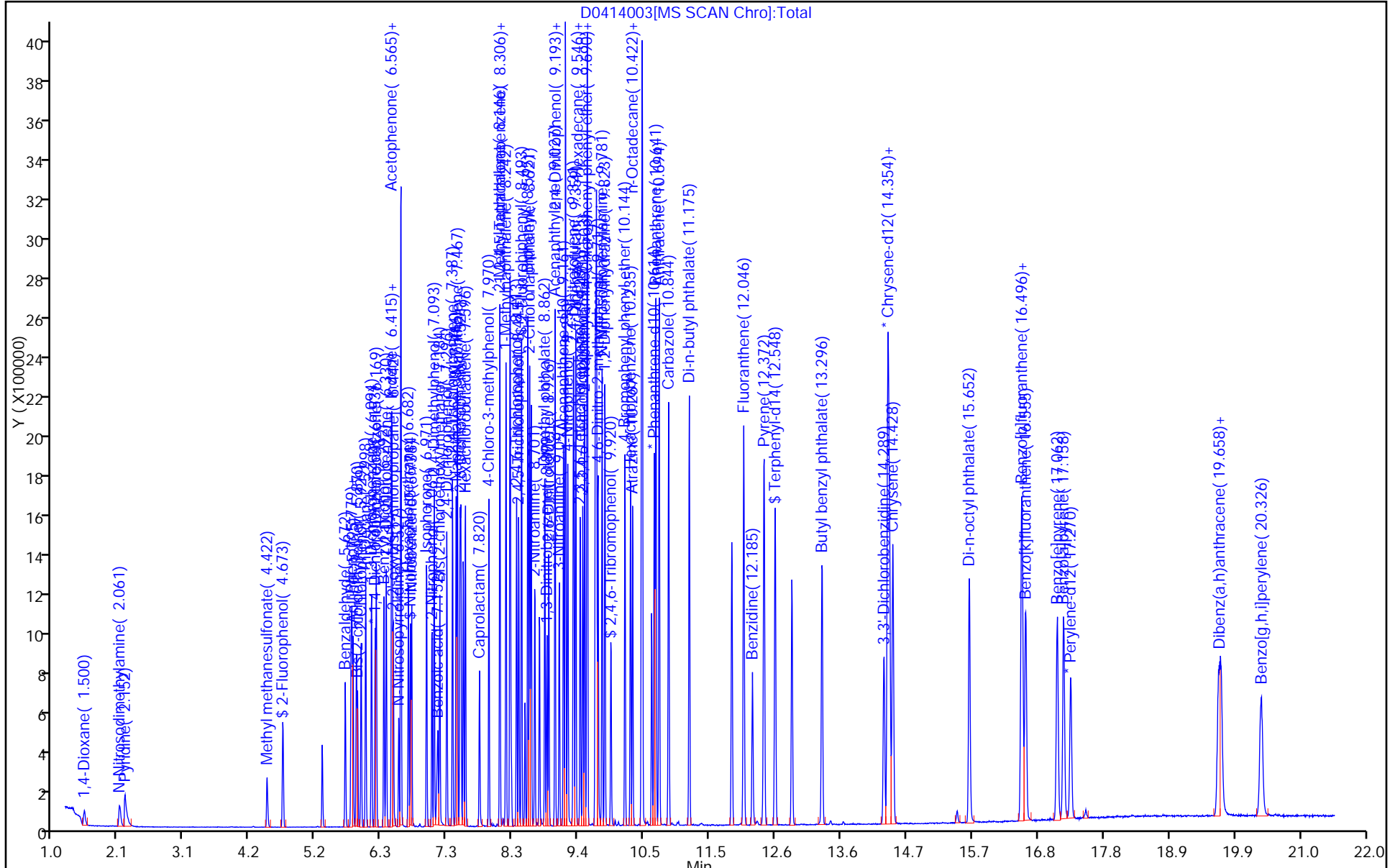
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: BNA_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



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

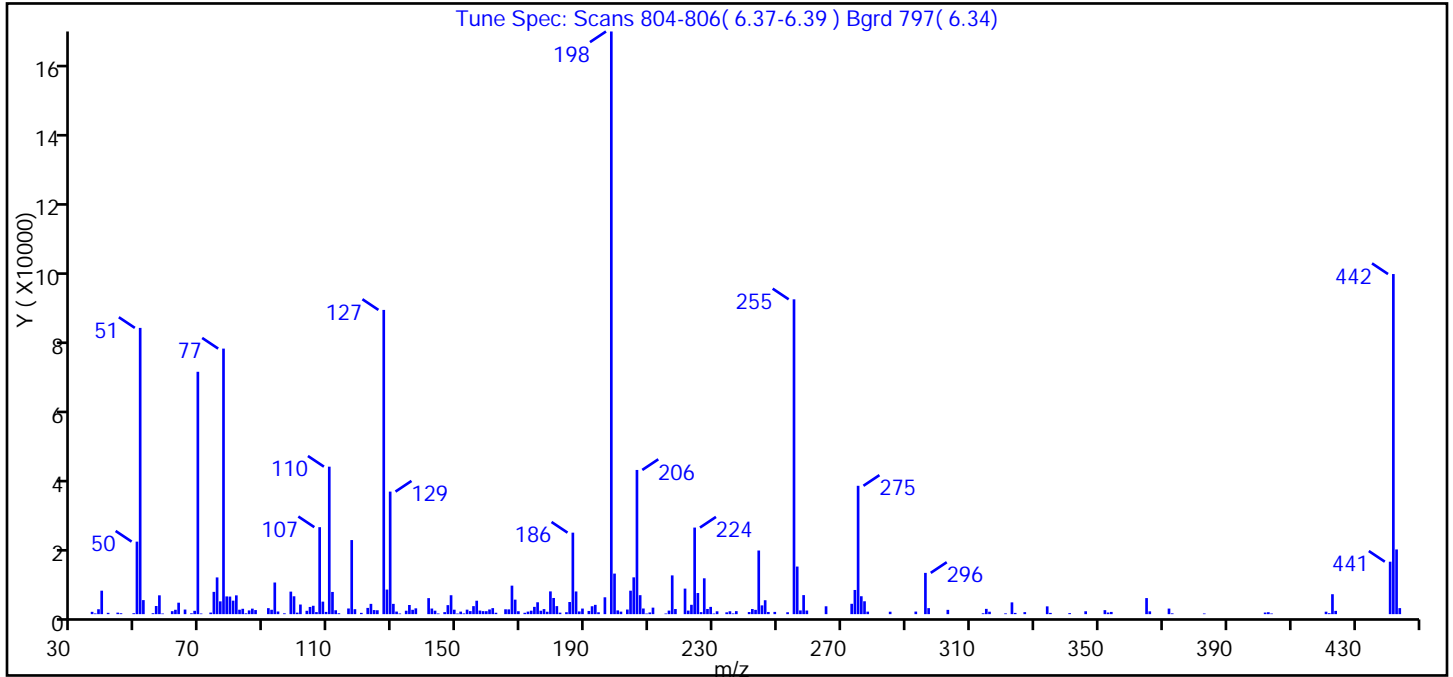
Reagents:

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

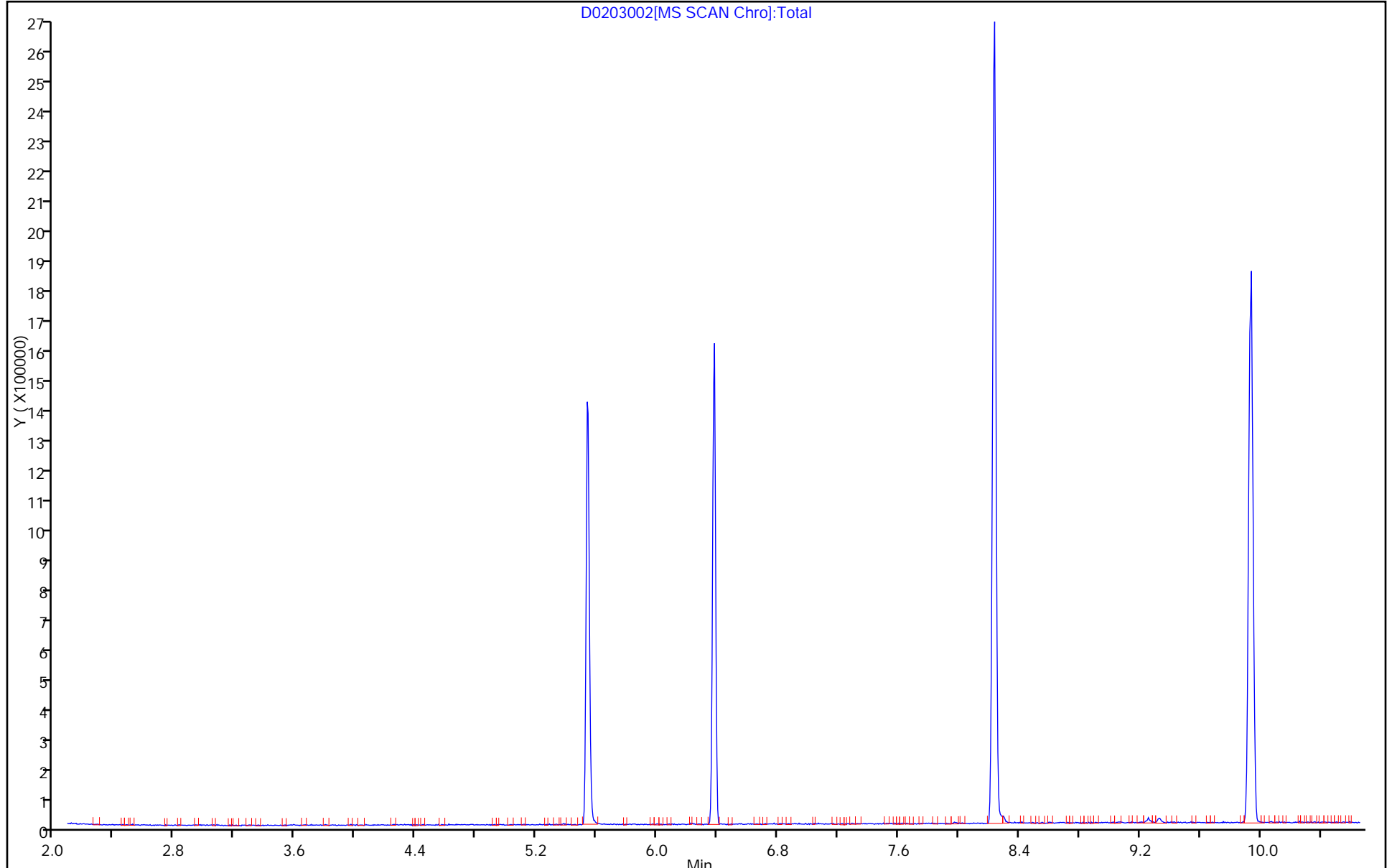
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: BNA_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



TestAmerica Pittsburgh

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

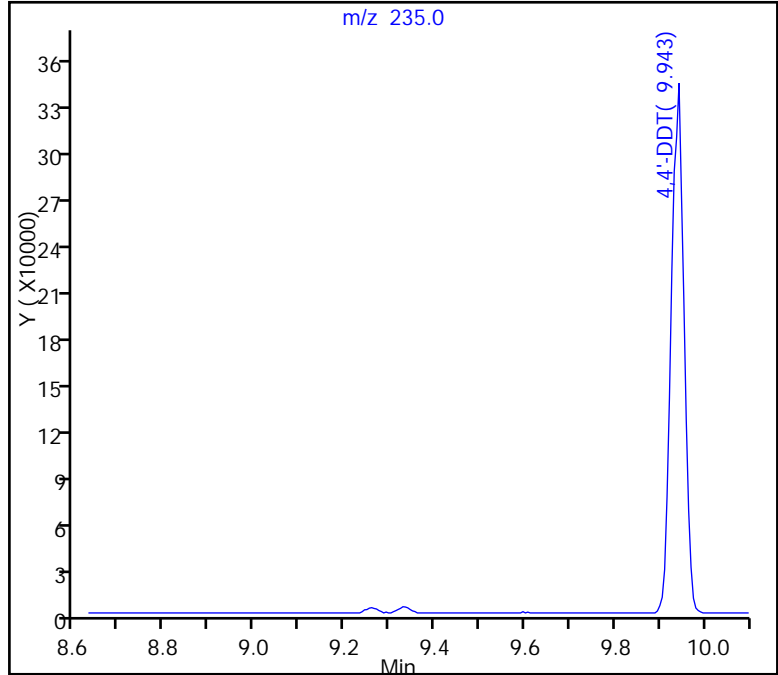
194 4,4'-DDT, Detector: MS SCAN

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

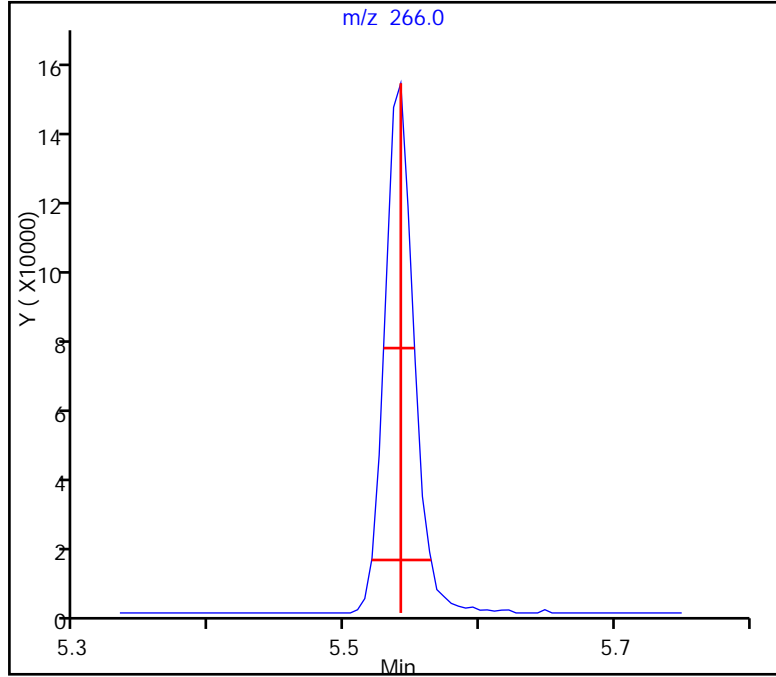
Data File: \\PITCHROM\ChromData\CH732\20150203-5518.b\D0203002.D
Injection Date: 03-Feb-2015 05:37:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL

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



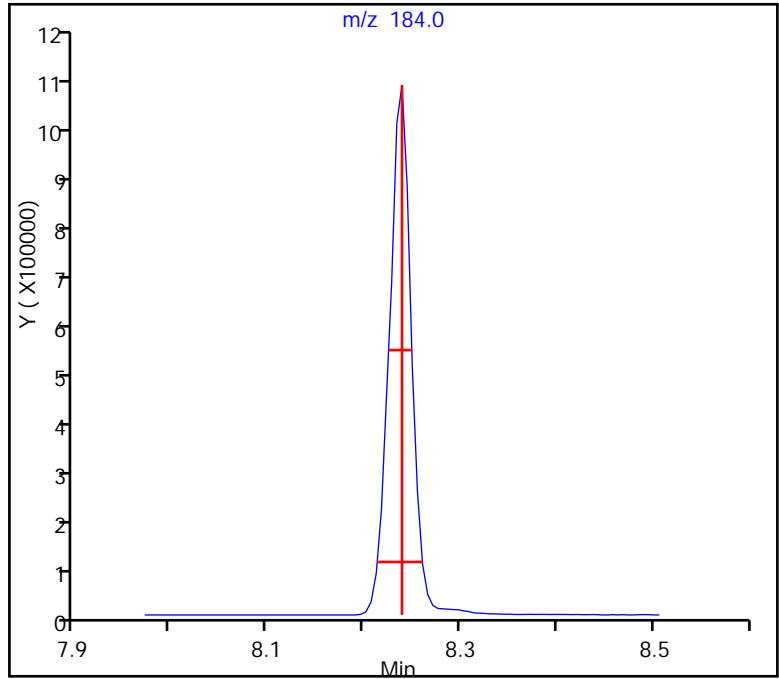
TestAmerica Pittsburgh

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\20150414-6452.b\D0414002.D
 Lims ID: DFTPP
 Client ID:
 Sample Type: DFTPP
 Inject. Date: 14-Apr-2015 09:44:30 ALS Bottle#: 1 Worklist Smp#: 2
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006452-002
 Misc. Info.: DFTPP
 Operator ID: 003200 Instrument ID: CH732
 Method: \\PITCHROM\ChromData\CH732\20150414-6452.b\BNA_CH732.m
 Limit Group: BNA 8270D ICAL
 Last Update: 15-Apr-2015 07:37:10 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: XAWRK013

First Level Reviewer: piccolinov Date: 14-Apr-2015 10:14:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
189 Pentachlorophenol_T	266	5.483	5.483	0.000	90	278212	NR	NR	
190 DFTPP									
191 Benzidine_T	184	8.170	8.170	0.000	99	1990444	NR	NR	
192 4,4'-DDE	246		9.137					ND	
193 4,4'-DDD	235	9.244	9.244	0.000	93	8966		NR	
194 4,4'-DDT	235	9.837	9.837	0.000	97	884358	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

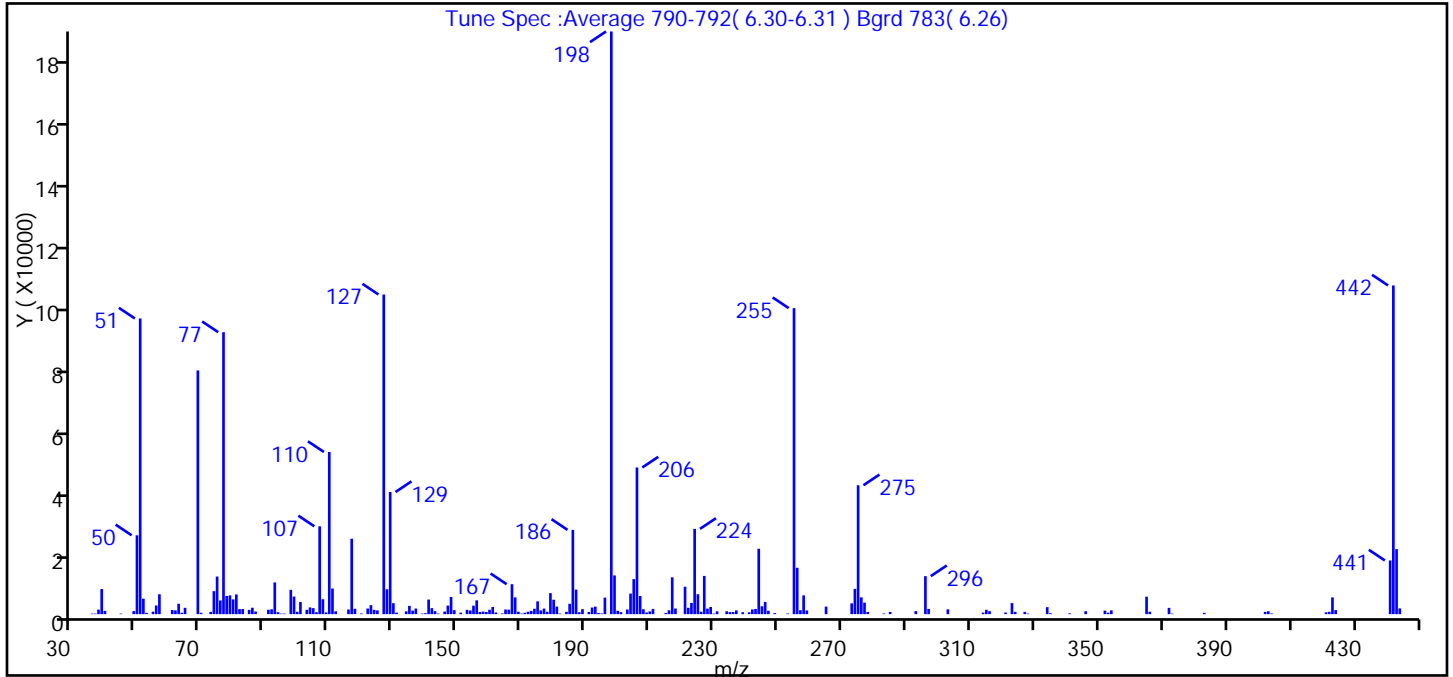
Reagents:

SVDFTPP50i_00022 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150414-6452.b\D0414002.D
 Injection Date: 14-Apr-2015 09:44:30 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	50.7
68	<2% of mass 69	0.0 (0.0)
69	Present	41.8
70	<2% of mass 69	0.2 (0.6)
127	40-60% of mass 198	54.9
197	<1% of mass 198	0.0
199	5-9% of mass 198	6.6
275	10-30% of mass 198	22.1
365	>1% of mass 198	3.0
441	Present but less than mass 443	9.2 (82.5)
442	>40% of mass 198	56.4
443	17-23% of mass 442	11.2 (19.8)

Data File: \\PITCHROM\ChromData\CH732\20150414-6452.b\D0414002.D\BNA_CH732.rslt\spectra.d
Injection Date: 14-Apr-2015 09:44:30
Spectrum: Tune Spec :Average 790-792(6.30-6.31) Bgrd 783(6.26)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 215

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	171	112.00	903	179.00	6752	246.00	3916
37.00	184	116.00	1488	180.00	4624	247.00	1088
38.00	1455	117.00	24192	181.00	2415	249.00	334
39.00	8052	118.00	1720	182.00	195	253.00	203
40.00	1047	120.00	223	184.00	751	255.00	98184
45.00	174	122.00	1802	185.00	3323	256.00	14880
49.00	987	123.00	2888	186.00	27040	257.00	1266
50.00	25296	124.00	1388	187.00	7874	258.00	6023
51.00	94864	125.00	1196	188.00	608	259.00	1175
52.00	4946	127.00	102560	189.00	1602	265.00	2422
53.00	405	128.00	7988	191.00	707	273.00	3469
55.00	785	129.00	39184	192.00	2124	274.00	8105
56.00	2780	130.00	3508	193.00	2418	275.00	41360
57.00	6381	131.00	481	194.00	379	276.00	5380
61.00	1335	134.00	895	195.00	217	277.00	3683
62.00	1209	135.00	2656	196.00	5305	278.00	721
63.00	3326	136.00	1124	198.00	186944	283.00	211
64.00	454	137.00	1803	199.00	12426	285.00	698
65.00	2026	139.00	193	200.00	1081	293.00	976
69.00	78192	140.00	302	201.00	636	296.00	12190
70.00	435	141.00	4685	203.00	1497	297.00	1672
73.00	727	142.00	1922	204.00	6602	303.00	1546
74.00	7384	143.00	961	205.00	11232	314.00	489
75.00	12065	144.00	195	206.00	47056	315.00	1397
76.00	4390	146.00	823	207.00	5815	316.00	947
77.00	90472	147.00	2759	208.00	1564	321.00	527
78.00	5826	148.00	5522	209.00	537	323.00	3550
79.00	6032	149.00	1265	210.00	887	324.00	723
80.00	4734	151.00	465	211.00	1681	327.00	727
81.00	6330	153.00	1381	215.00	383	328.00	190
82.00	1607	154.00	1166	216.00	1245	334.00	2233
83.00	1634	155.00	2715	217.00	11809	335.00	305
85.00	1369	156.00	4419	218.00	1805	341.00	258

Data File: \\PITCHROM\ChromData\CH732\20150414-6452.b\D0414002.D\BNA_CH732.rslt\spectra.d

Injection Date: 14-Apr-2015 09:44:30

Spectrum: Tune Spec :Average 790-792(6.30-6.31) Bgrd 783(6.26)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 215

m/z	Y	m/z	Y	m/z	Y	m/z	Y
86.00	2056	157.00	708	221.00	8804	346.00	929
87.00	839	158.00	832	222.00	2035	352.00	1127
91.00	1405	159.00	702	223.00	3600	353.00	477
92.00	1570	160.00	1404	224.00	27360	354.00	1216
93.00	10174	161.00	2288	225.00	6391	365.00	5603
94.00	627	162.00	559	226.00	788	366.00	779
95.00	174	164.00	224	227.00	12266	372.00	2012
96.00	183	165.00	1495	228.00	1770	373.00	181
98.00	7795	166.00	1441	229.00	2296	383.00	419
99.00	5641	167.00	9606	230.00	190	402.00	735
100.00	741	168.00	5378	231.00	902	403.00	918
101.00	3891	169.00	760	234.00	916	404.00	216
103.00	1385	170.00	176	235.00	656	421.00	572
104.00	2157	171.00	433	236.00	674	422.00	757
105.00	1924	172.00	777	237.00	1200	423.00	5374
106.00	626	173.00	1050	239.00	617	424.00	1297
107.00	28176	174.00	1722	241.00	599	441.00	17224
108.00	4790	175.00	4111	242.00	1505	442.00	105464
109.00	543	176.00	1199	243.00	1659	443.00	20872
110.00	52024	177.00	1778	244.00	20984	444.00	1838
111.00	8209	178.00	779	245.00	2534		

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150414-6452.b\D0414002.D

Injection Date: 14-Apr-2015 09:44:30

Instrument ID: CH732

Operator ID: 003200

Lims ID: DFTPP

Worklist Smp#: 2

Client ID:

Injection Vol: 2.0 ul

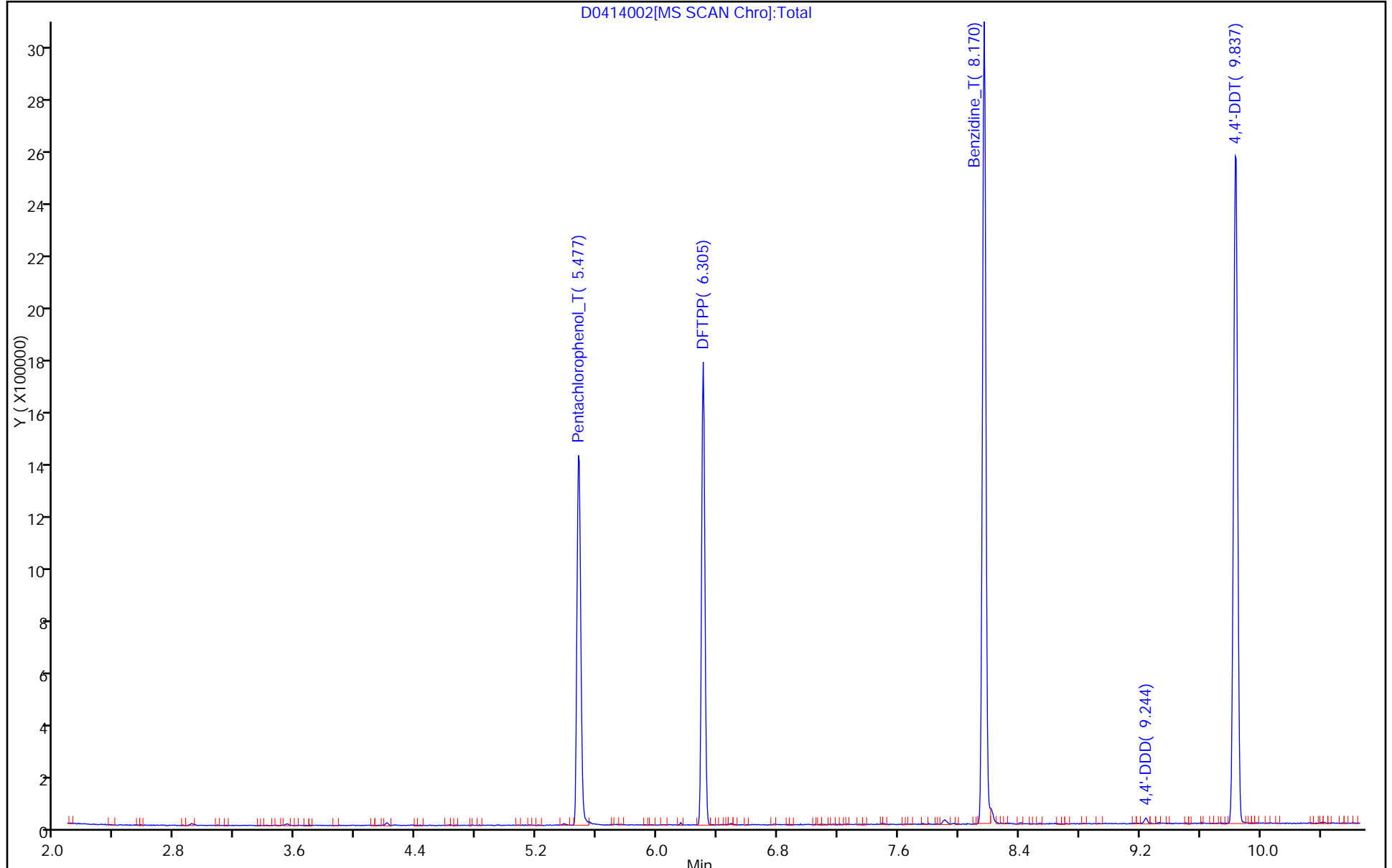
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: BNA_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150414-6452.b\D0414002.D
Injection Date: 14-Apr-2015 09:44:30 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

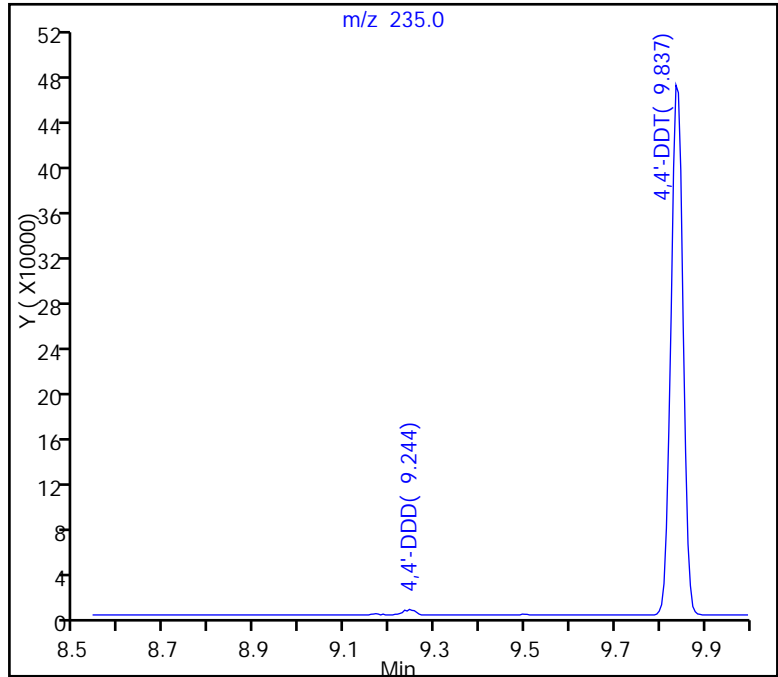
194 4,4'-DDT, Detector: MS SCAN

SW-846 Method

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

194 4,4'-DDT, Area = 884358
192 4,4'-DDE, Area = 0
193 4,4'-DDD, Area = 8966

%Breakdown: 1.00%, Max Limit: 20.00%
Passed



TestAmerica Pittsburgh

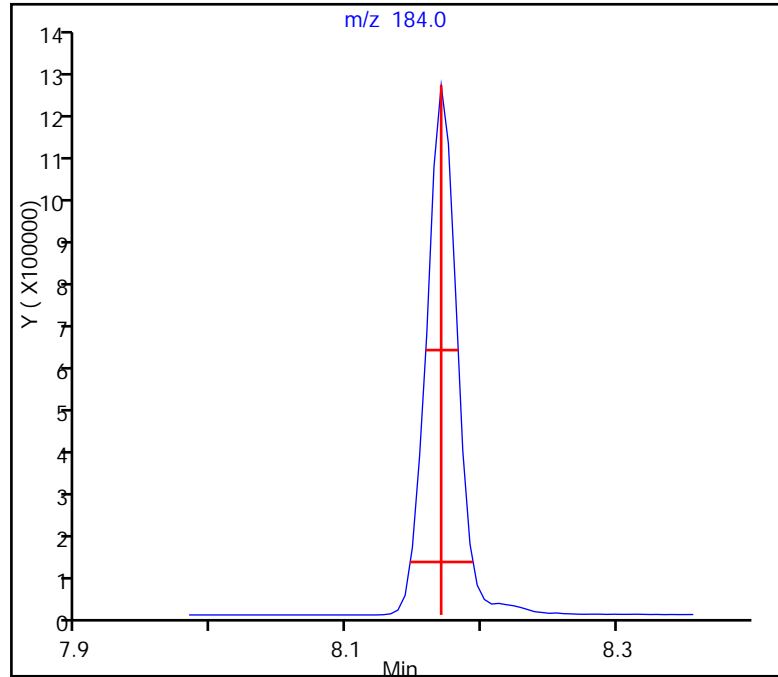
Data File: \\PITCHROM\ChromData\CH732\20150414-6452.b\D0414002.D
Injection Date: 14-Apr-2015 09:44:30 Instrument ID: CH732
Lims ID: DFTPP
Client ID:
Operator ID: 003200 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: BNA_CH732 Limit Group: BNA 8270D ICAL

191 Benzidine_T, Detector: MS SCAN

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

Back Width = 0.024 (min.)
Front Width = 0.023 (min.)

Tailing Factor = 1.0, Max. Tailing < 2.00
Passed



TestAmerica Pittsburgh

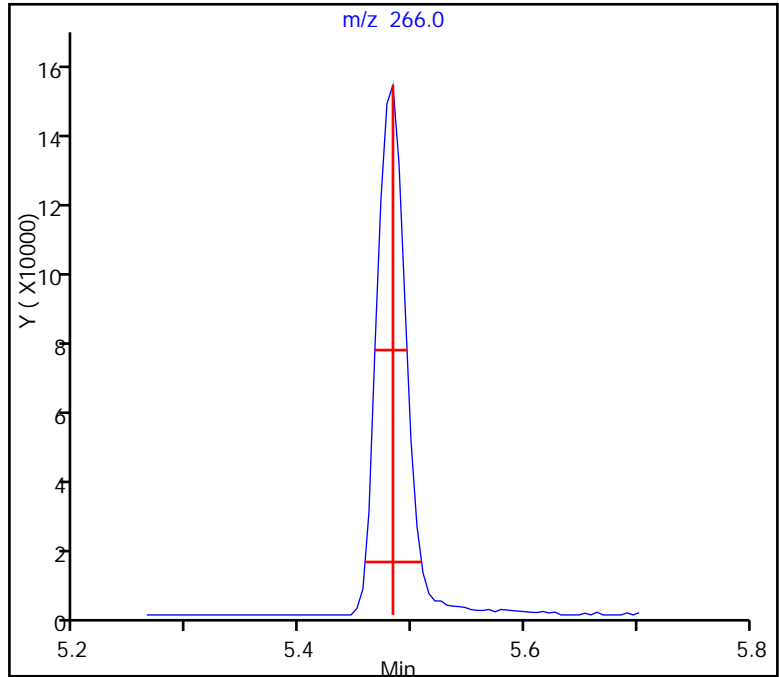
Data File:	\\PITCHROM\ChromData\CH732\20150414-6452.b\D0414002.D	Instrument ID:	CH732		
Injection Date:	14-Apr-2015 09:44:30	ALS Bottle#:	1	Worklist Smp#:	2
Lims ID:	DFTPP	Dil. Factor:	1.0000		
Client ID:		Limit Group:	BNA 8270D ICAL		
Operator ID:	003200				
Injection Vol:	2.0 ul				
Method:	BNA_CH732				

189 Pentachlorophenol_T, Detector: MS SCAN

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

Back Width = 0.025 (min.)
Front Width = 0.025 (min.)

Tailing Factor = 1.0, Max. Tailing < 2.00
Passed



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 180-138290/1-A
 Matrix: Water Lab File ID: D0414005.D
 Analysis Method: 8270D LL Date Collected: _____
 Extract. Method: 3520C Date Extracted: 04/13/2015 09:07
 Sample wt/vol: 250 (mL) Date Analyzed: 04/14/2015 10:54
 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.: 138398 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)	58		27-114
321-60-8	2-Fluorobiphenyl	53		28-109
1718-51-0	Terphenyl-d14 (Surr)	58		20-118
367-12-4	2-Fluorophenol (Surr)	57		20-105
118-79-6	2,4,6-Tribromophenol (Surr)	55		30-118
4165-62-2	Phenol-d5 (Surr)	60		25-105

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150414-6452.b\D0414005.D
 Lims ID: MB 180-138290/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 14-Apr-2015 10:54:30 ALS Bottle#: 4 Worklist Smp#: 5
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006452-005
 Operator ID: 003200 Instrument ID: CH732
 Method: \\PITCHROM\ChromData\CH732\20150414-6452.b\BNA_CH732.m
 Limit Group: BNA 8270D ICAL
 Last Update: 15-Apr-2015 06:11:36 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-5SilMS (0.32 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: piccolinov

Date: 15-Apr-2015 05:44:21

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	6.143	6.153	-0.010	98	181936	8.00	8.00	
* 2 Naphthalene-d8	136	7.441	7.446	-0.005	100	892531	8.00	8.00	
* 3 Acenaphthene-d10	164	9.156	9.161	-0.005	91	635405	8.00	8.00	
* 4 Phenanthrene-d10	188	10.609	10.614	-0.005	97	1189597	8.00	8.00	
* 5 Chrysene-d12	240	14.370	14.380	-0.010	97	912834	8.00	8.00	
* 6 Perylene-d12	264	17.265	17.270	-0.005	96	725510	8.00	8.00	
\$ 7 2-Fluorophenol	112	4.658	4.673	-0.015	92	536059	40.0	22.7	
\$ 8 Phenol-d5	99	5.753	5.763	-0.010	95	760140	40.0	23.9	
\$ 9 Nitrobenzene-d5	82	6.709	6.714	-0.005	94	865155	40.0	23.1	
\$ 10 2-Fluorobiphenyl	172	8.488	8.493	-0.005	99	2227839	40.0	21.4	
\$ 11 2,4,6-Tribromophenol	330	9.920	9.925	-0.005	93	285138	40.0	21.8	
\$ 12 Terphenyl-d14	244	12.543	12.548	-0.005	99	2322567	40.0	23.4	
13 1,4-Dioxane	88		1.500						ND
14 N-Nitrosodimethylamine	74		2.066						ND
15 Pyridine	79		2.152						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		4.422						ND
20 Acrylamide	71	4.658	4.597	0.062	26	2079			NC
22 Phenylmercaptan	110	4.663	5.000	-0.337	44	2361			NC
23 N-Nitrosodiethylamine	102		5.115						ND
24 Ethyl methanesulfonate	79		5.256						ND
25 Benzaldehyde	77		5.672						ND
26 Phenol	94		5.779						ND
27 Aniline	93		5.795						ND
28 Pentachloroethane	167		5.806						ND
29 Bis(2-chloroethyl)ether	93		5.870						ND
30 2-Chlorophenol	128		5.929						ND
31 n-Decane	43		5.998						ND
32 1,3-Dichlorobenzene	146		6.094						ND
33 1,4-Dichlorobenzene	146		6.169						ND

Compound	Sig	RT (min.)	Adj RT (min.)	DI RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
34 Benzyl alcohol	108		6.292					ND	
35 1,2-Dichlorobenzene	146		6.330					ND	
36 2-Methylphenol	108		6.410					ND	
37 Indene	116		6.420					ND	
38 2,2'-oxybis[1-chloropropan	45		6.442					ND	
39 N-Nitrosopyrrolidine	100		6.527					ND	
40 Acetophenone	105		6.565					ND	
41 N-Nitrosodi-n-propylamine	70		6.565					ND	
42 4-Methylphenol	108		6.565					ND	
43 N-Nitrosomorpholine	116		6.632					ND	
44 2-Toluidine	106		6.664					ND	
45 Hexachloroethane	117		6.682					ND	
46 Nitrobenzene	77		6.736					ND	
47 N-Nitrosopiperidine	114		6.926					ND	
48 Isophorone	82		6.971					ND	
49 2-Nitrophenol	139		7.061					ND	
50 2,4-Dimethylphenol	107		7.093					ND	
52 Benzoic acid	122		7.152					ND	
51 o,o',o"-Triethylphosphoro	198		7.182					ND	
53 Bis(2-chloroethoxy)methane	93		7.184					ND	
54 2,4-Dichlorophenol	162		7.296					ND	
55 alpha,alpha-Dimethyl phene	58	7.436	7.353	0.083	44	1199			NC
56 1,2,4-Trichlorobenzene	180		7.387					ND	
58 Naphthalene	128		7.467					ND	
59 4-Chloroaniline	127		7.510					ND	
60 2,6-Dichlorophenol	162		7.521					ND	
61 Hexachloropropene	213		7.526					ND	
62 Hexachlorobutadiene	225		7.596					ND	
63 Quinoline	129		7.786					ND	
65 N-Nitrosodi-n-butylamine	84		7.818					ND	
64 Caprolactam	113		7.820					ND	
66 p-Phenylene diamine	108	7.441	7.834	-0.393	49	97751			NC
67 4-Chloro-3-methylphenol	107		7.970					ND	
68 Safrole, Total	162		8.026					ND	
69 2-Methylnaphthalene	142		8.146					ND	
71 1-Methylnaphthalene	142		8.242					ND	
72 Hexachlorocyclopentadiene	237		8.306					ND	
73 1,2,4,5-Tetrachlorobenzene	216		8.311					ND	
74 2,4,6-Trichlorophenol	196		8.413					ND	
75 2,4,5-Trichlorophenol	196		8.445					ND	
180 Isosafrole	162		8.514					ND	
76 1,1'-Biphenyl	154		8.595					ND	
78 1-Chloronaphthalene	162		8.616					ND	
77 2-Chloronaphthalene	162		8.621					ND	
79 2-Nitroaniline	65		8.701					ND	
80 1,4-Naphthoquinone	158	8.488	8.750	-0.262	44	4217			NC
81 1,4-Dinitrobenzene	168	8.488	8.769	-0.281	31	29124			NC
82 Dimethyl phthalate	163		8.867					ND	
83 1,3-Dinitrobenzene	168		8.899					ND	
84 2,6-Dinitrotoluene	165		8.926					ND	
85 Acenaphthylene	152		9.027					ND	
86 3-Nitroaniline	138		9.097					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
88 Acenaphthene	153		9.193					ND	
87 2,4-Dinitrophenol	184		9.193					ND	
89 4-Nitrophenol	109		9.230					ND	
92 Pentachlorobenzene	250		9.294					ND	
91 2,4-Dinitrotoluene	165		9.321					ND	
94 1-Naphthylamine	143		9.340					ND	
93 Dibenzofuran	168		9.359					ND	
95 2,3,5,6-Tetrachlorophenol	232		9.428					ND	
96 2,3,4,6-Tetrachlorophenol	232		9.471					ND	
97 2-Naphthylamine	143		9.503					ND	
98 Diethyl phthalate	149	9.530	9.540	-0.010	98	30846		0.2993	
99 Hexadecane	57		9.546					ND	
102 N-Nitro-o-toluidine	152	9.914	9.586	0.328	40	4997			NC
100 4-Chlorophenyl phenyl ethe	204		9.674					ND	
101 4-Nitroaniline	138		9.684					ND	
103 Fluorene	166		9.690					ND	
104 4,6-Dinitro-2-methylphenol	198		9.717					ND	
105 N-Nitrosodiphenylamine	169		9.781					ND	
90 1,2-Diphenylhydrazine	77		9.823					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		10.149					ND	
112 Hexachlorobenzene	284		10.235					ND	
114 4-Aminobiphenyl	169	9.914	10.265	-0.350	55	13061			NC
113 Atrazine	200		10.267					ND	
117 Pronamide	173	9.914	10.297	-0.383	56	6904			NC
118 Pentachloronitrobenzene	237		10.302					ND	
116 Pentachlorophenol	266		10.411					ND	
119 Disulfoton	88		10.419					ND	
115 n-Octadecane	57		10.422					ND	
120 Dinoseb	211		10.545					ND	
123 Hexachlorophene TIC	198		10.600					ND	
121 Phenanthrene	178		10.641					ND	
122 Anthracene	178		10.694					ND	
125 Methyl parathion	109		10.793					ND	
124 Carbazole	167		10.844					ND	
126 Di-n-butyl phthalate	149		11.175					ND	
127 Ethyl Parathion	109		11.189					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	
131 Fluoranthene	202		12.046					ND	
132 Benzidine	184		12.185					ND	
57 Azobenzene	77	12.543	12.185	0.358	40	3428			NC
134 1,2,3,4 -Tetrachlorobenzen	216		12.215					ND	
133 Pyrene	202		12.372					ND	
135 p-Dimethylamino azobenzene	225	12.543	12.428	0.115	42	13588			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	12.543	12.936	-0.393	56	160102			NC
140 Kepone	272		13.030					ND	
138 Butyl benzyl phthalate	149		13.296					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		14.289					ND	
145 Bis(2-ethylhexyl) phthalat	149		14.343					ND	
146 Benzo[a]anthracene	228		14.364					ND	
147 Chrysene	228		14.428					ND	
148 Sulfotepp	97		14.530					ND	
149 6-Methylchrysene	242		14.907					ND	
150 Di-n-octyl phthalate	149		15.652					ND	
151 7,12-Dimethylbenz(a)anthra	256		16.485					ND	
152 Benzo[b]fluoranthene	252		16.496					ND	
153 Benzo[k]fluoranthene	252		16.555					ND	
219 Benzo[e]pyrene	252		17.062					ND	
154 Benzo[a]pyrene	252		17.158					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		19.637					ND	
158 Dibenz(a,h)anthracene	278		19.680					ND	
159 Benzo[g,h,i]perylene	276		20.326					ND	
161 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
168 Aramite Peak 1	185		0.000					ND	
187 1,2-Dibromo-3-Chloropropan	157		0.000					ND	
174 2-Chlorobenzoic Acid	139		0.000					ND	
215 1-Phenyl-1-(2,4-dimethylph	1		0.000					ND	
162 3-Chlorobenzoic Acid	139		0.000					ND	
179 2,5-Dichlorophenol	162		0.000					ND	
184 Diallate Peak 1	86		0.000					ND	
172 Carbaryl	144		0.000					ND	
164 Aramite Peak 2	185		0.000					ND	
218 Benzotrichloride TIC	1		0.000					ND	
213 3-Methylphenol	1		0.000					ND	
183 2,3-Dichlorophenol	162		0.000					ND	
216 1-Phenyl-1-(2,4-dimethylph	1		0.000					ND	
214 1-Phenyl-1-(4-methylphenyl	1		0.000					ND	
165 Benzotrichloride	159		0.000					ND	
182 4-Chlorophenol	128		0.000					ND	
177 1,2,3,4-Tetrahydronaphthal	104		0.000					ND	
167 Phthalic anhydride	104		0.000					ND	
176 Dimethylformamide	73		0.000					ND	
178 Trifluralin	306		0.000					ND	
170 4-tert-Octylphenol	135		0.000					ND	
212 2,3,7,8-TCDD TIC	1		0.000					ND	
169 Octachlorostyrene	308		0.000					ND	
173 Octachlorocyclopentene	307		0.000					ND	
185 4-Nitrobiphenyl	199		0.000					ND	
166 4-Chloro-3-nitro-alpha,alp	179		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
188 2-Bromonaphthalene	127		0.000					ND	
160 n,n'-Dimethylaniline	120		0.000					ND	
217 1-Phenyl-1-(4-methylphenyl	1		0.000					ND	
163 Diallate Peak 2	86		0.000					ND	
186 o-Phenylphenol	1		0.000					ND	
175 1,2,3-Trimethylbenzene	105		0.000					ND	
181 4-Chlorobenzoic Acid	139		0.000					ND	
171 4-Methyl-1-cyclohexanemeth	97		0.000					ND	
189 Pentachlorophenol_T	266		5.483					ND	
191 Benzidine_T	184		8.170					ND	
192 4,4'-DDE	246		9.137					ND	
193 4,4'-DDD	235		9.244					ND	
194 4,4'-DDT	235		9.837					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	10.609	11.514	-0.891	0	6801		0.0856	
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\20150414-6452.b\D0414005.D

Injection Date: 14-Apr-2015 10:54:30

Instrument ID: CH732

Operator ID: 003200

Lims ID: MB 180-138290/1-A

Worklist Smp#: 5

Client ID:

Injection Vol: 2.0 ul

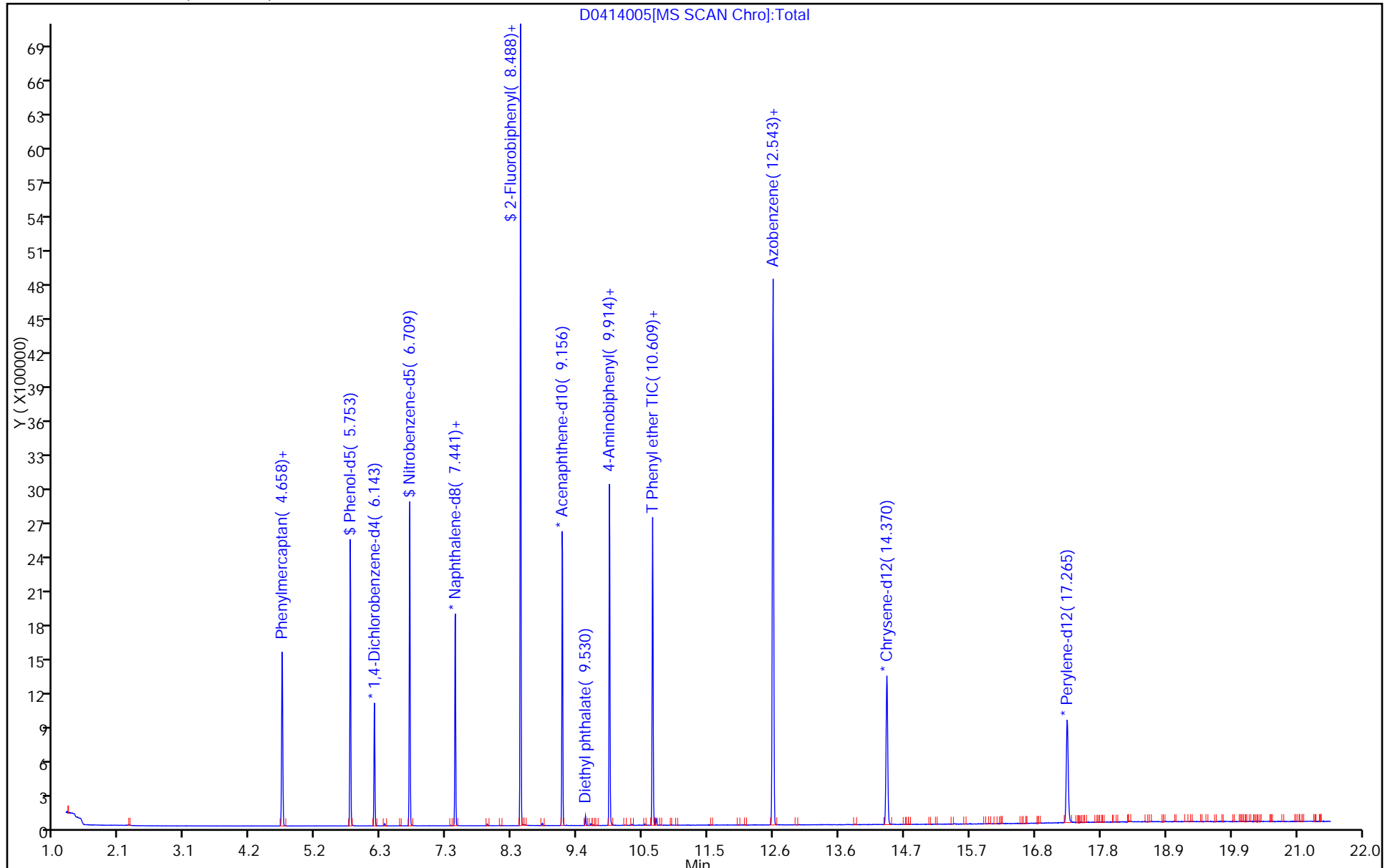
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: BNA_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 180-138290/2-A
 Matrix: Water Lab File ID: D0414009.D
 Analysis Method: 8270D LL Date Collected: _____
 Extract. Method: 3520C Date Extracted: 04/13/2015 09:07
 Sample wt/vol: 250 (mL) Date Analyzed: 04/14/2015 12:43
 Con. Extract Vol.: 0.25 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 138398 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-12-7	Anthracene	12.4		0.20	0.019
56-55-3	Benzo[a]anthracene	12.5		0.20	0.037
205-99-2	Benzo[b]fluoranthene	12.7		0.20	0.049
207-08-9	Benzo[k]fluoranthene	12.6		0.20	0.030
191-24-2	Benzo[g,h,i]perylene	13.5		0.20	0.029
50-32-8	Benzo[a]pyrene	13.1		0.20	0.028
218-01-9	Chrysene	12.5		0.20	0.031
53-70-3	Dibenz(a,h)anthracene	13.5		0.20	0.027
206-44-0	Fluoranthene	12.0		0.20	0.021
86-73-7	Fluorene	12.3		0.20	0.024
193-39-5	Indeno[1,2,3-cd]pyrene	13.6		0.20	0.043
85-01-8	Phenanthrene	12.5		0.20	0.042
129-00-0	Pyrene	13.6		0.20	0.023
83-32-9	Acenaphthene	11.3		0.20	0.029
208-96-8	Acenaphthylene	11.9		0.20	0.022
91-20-3	Naphthalene	11.7		0.20	0.023
117-81-7	Bis(2-ethylhexyl) phthalate	13.1		2.0	0.44

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	57		27-114
321-60-8	2-Fluorobiphenyl	55		28-109
1718-51-0	Terphenyl-d14 (Surr)	60		20-118
367-12-4	2-Fluorophenol (Surr)	57		20-105
118-79-6	2,4,6-Tribromophenol (Surr)	63		30-118
4165-62-2	Phenol-d5 (Surr)	61		25-105

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CH732\20150414-6452.b\D0414009.D
 Lims ID: LCS 180-138290/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 14-Apr-2015 12:43:30 ALS Bottle#: 8 Worklist Smp#: 9
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006452-009
 Operator ID: 003200 Instrument ID: CH732
 Method: \\PITCHROM\ChromData\CH732\20150414-6452.b\BNA_CH732.m
 Limit Group: BNA 8270D ICAL
 Last Update: 15-Apr-2015 06:11:36 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: XAWRK013

First Level Reviewer: piccolinov

Date: 15-Apr-2015 05:46:30

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	6.137	6.153	-0.016	97	158476	8.00	8.00	
* 2 Naphthalene-d8	136	7.441	7.446	-0.005	99	753979	8.00	8.00	
* 3 Acenaphthene-d10	164	9.161	9.161	0.000	89	514496	8.00	8.00	
* 4 Phenanthrene-d10	188	10.614	10.614	0.000	97	880447	8.00	8.00	
* 5 Chrysene-d12	240	14.381	14.380	0.000	93	735586	8.00	8.00	
* 6 Perylene-d12	264	17.271	17.270	0.001	95	602368	8.00	8.00	
\$ 7 2-Fluorophenol	112	4.658	4.673	-0.015	91	465121	40.0	22.6	
\$ 8 Phenol-d5	99	5.758	5.763	-0.005	92	679822	40.0	24.6	
\$ 9 Nitrobenzene-d5	82	6.709	6.714	-0.005	91	727394	40.0	23.0	
\$ 10 2-Fluorobiphenyl	172	8.488	8.493	-0.005	98	1846721	40.0	21.9	
\$ 11 2,4,6-Tribromophenol	330	9.920	9.925	-0.005	89	242690	40.0	25.1	
\$ 12 Terphenyl-d14	244	12.543	12.548	-0.005	98	1919902	40.0	24.0	
13 1,4-Dioxane	88	1.468	1.500	-0.032	94	144926	40.0	23.0	
14 N-Nitrosodimethylamine	74	2.029	2.066	-0.037	76	207183	40.0	24.3	
15 Pyridine	79	2.104	2.152	-0.048	89	385197	40.0	25.9	
25 Benzaldehyde	77	5.662	5.672	-0.010	85	314502	40.0	23.5	
26 Phenol	94	5.769	5.779	-0.010	92	770854	40.0	24.5	
27 Aniline	93	5.785	5.795	-0.010	93	855870	40.0	24.6	
29 Bis(2-chloroethyl)ether	93	5.860	5.870	-0.010	92	535479	40.0	24.1	
30 2-Chlorophenol	128	5.918	5.929	-0.011	96	671926	40.0	25.0	
31 n-Decane	43	5.988	5.998	-0.010	93	693441	40.0	22.0	
32 1,3-Dichlorobenzene	146	6.079	6.094	-0.015	96	737427	40.0	23.6	
33 1,4-Dichlorobenzene	146	6.159	6.169	-0.010	93	764080	40.0	23.8	
34 Benzyl alcohol	108	6.282	6.292	-0.010	87	431420	40.0	25.6	
35 1,2-Dichlorobenzene	146	6.319	6.330	-0.011	90	747393	40.0	24.0	
36 2-Methylphenol	108	6.405	6.410	-0.005	89	607087	40.0	25.5	
37 Indene	116	6.410	6.420	-0.010	84	1102994	40.0	25.5	
38 2,2'-oxybis[1-chloropropan	45	6.426	6.442	-0.016	90	1098830	40.0	23.5	
40 Acetophenone	105	6.554	6.565	-0.011	77	811049	40.0	22.6	
41 N-Nitrosodi-n-propylamine	70	6.554	6.565	-0.011	73	417115	40.0	24.6	
42 4-Methylphenol	108	6.554	6.565	-0.011	66	599900	40.0	24.5	
45 Hexachloroethane	117	6.672	6.682	-0.010	95	330494	40.0	23.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
46 Nitrobenzene	77	6.725	6.736	-0.011	91	740370	40.0	23.6	
48 Isophorone	82	6.965	6.971	-0.006	95	1323678	40.0	23.9	
49 2-Nitrophenol	139	7.051	7.061	-0.010	97	430012	40.0	24.7	
50 2,4-Dimethylphenol	107	7.088	7.093	-0.005	68	799865	40.0	25.2	
52 Benzoic acid	122	7.174	7.152	0.022	44	429320	40.0	23.7	
53 Bis(2-chloroethoxy)methane	93	7.179	7.184	-0.005	96	789237	40.0	23.2	
54 2,4-Dichlorophenol	162	7.291	7.296	-0.005	95	692871	40.0	25.0	
56 1,2,4-Trichlorobenzene	180	7.382	7.387	-0.005	92	757176	40.0	23.8	
58 Naphthalene	128	7.462	7.467	-0.005	97	2390322	40.0	23.4	
59 4-Chloroaniline	127	7.505	7.510	-0.005	77	971393	40.0	23.8	
60 2,6-Dichlorophenol	162	7.516	7.521	-0.005	95	682790	40.0	24.8	
62 Hexachlorobutadiene	225	7.585	7.596	-0.011	95	451217	40.0	23.7	
64 Caprolactam	113	7.831	7.820	0.011	65	227656	40.0	24.5	
67 4-Chloro-3-methylphenol	107	7.970	7.970	0.000	94	732754	40.0	25.2	
69 2-Methylnaphthalene	142	8.141	8.146	-0.005	86	1773355	40.0	24.6	
71 1-Methylnaphthalene	142	8.237	8.242	-0.005	82	1592519	40.0	23.5	
72 Hexachlorocyclopentadiene	237	8.301	8.306	-0.005	96	552155	40.0	24.7	
73 1,2,4,5-Tetrachlorobenzene	216	8.306	8.311	-0.005	97	721604	40.0	21.5	
74 2,4,6-Trichlorophenol	196	8.408	8.413	-0.005	94	547002	40.0	23.9	
75 2,4,5-Trichlorophenol	196	8.445	8.445	0.000	93	568144	40.0	23.4	
76 1,1'-Biphenyl	154	8.590	8.595	-0.005	94	2226806	40.0	23.0	
77 2-Chloronaphthalene	162	8.616	8.621	-0.005	72	1685315	40.0	21.5	
79 2-Nitroaniline	65	8.702	8.701	0.001	84	538170	40.0	24.1	
82 Dimethyl phthalate	163	8.862	8.867	-0.005	98	1939182	40.0	23.7	
83 1,3-Dinitrobenzene	168	8.894	8.899	-0.005	79	316075	40.0	25.7	
84 2,6-Dinitrotoluene	165	8.926	8.926	0.000	66	441145	40.0	24.6	
85 Acenaphthylene	152	9.022	9.027	-0.005	91	2967827	40.0	23.9	
86 3-Nitroaniline	138	9.092	9.097	-0.005	92	493696	40.0	22.6	
88 Acenaphthene	153	9.193	9.193	0.000	85	1718537	40.0	22.6	
87 2,4-Dinitrophenol	184	9.193	9.193	0.000	62	539773	80.0	45.2	
89 4-Nitrophenol	109	9.231	9.230	0.001	65	615435	80.0	50.9	
91 2,4-Dinitrotoluene	165	9.316	9.321	-0.005	89	590549	40.0	25.0	
93 Dibenzofuran	168	9.359	9.359	0.000	70	2603888	40.0	23.9	
96 2,3,4,6-Tetrachlorophenol	232	9.466	9.471	-0.005	75	525907	40.0	25.4	
98 Diethyl phthalate	149	9.535	9.540	-0.005	97	1975772	40.0	23.7	
99 Hexadecane	57	9.546	9.546	0.000	91	1377210	40.0	24.8	
100 4-Chlorophenyl phenyl ethe	204	9.669	9.674	-0.005	95	961013	40.0	24.0	
101 4-Nitroaniline	138	9.685	9.684	0.001	59	469936	40.0	21.8	
103 Fluorene	166	9.690	9.690	0.000	82	2092350	40.0	24.7	
104 4,6-Dinitro-2-methylphenol	198	9.717	9.717	0.001	52	733401	80.0	51.2	
105 N-Nitrosodiphenylamine	169	9.781	9.781	0.000	58	2948822	80.0	47.1	
90 1,2-Diphenylhydrazine	77	9.824	9.823	0.001	98	2151342	40.0	24.0	
110 4-Bromophenyl phenyl ether	248	10.144	10.149	-0.005	63	572057	40.0	24.9	
112 Hexachlorobenzene	284	10.230	10.235	-0.005	92	575809	40.0	25.1	
113 Atrazine	200	10.267	10.267	0.000	72	482187	40.0	26.6	
116 Pentachlorophenol	266	10.406	10.411	-0.005	88	740211	80.0	45.7	
115 n-Octadecane	57	10.422	10.422	0.000	91	1633034	40.0	29.0	
121 Phenanthrene	178	10.636	10.641	-0.005	97	3308742	40.0	25.0	
122 Anthracene	178	10.689	10.694	-0.005	96	3355009	40.0	24.8	
124 Carbazole	167	10.844	10.844	0.000	82	2953950	40.0	24.9	
126 Di-n-butyl phthalate	149	11.170	11.175	-0.005	99	3692672	40.0	24.9	
131 Fluoranthene	202	12.046	12.046	0.000	97	3214139	40.0	24.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
132 Benzidine	184	12.180	12.185	-0.005	98	437657	40.0	9.24	
57 Azobenzene	77		12.185				ND	ND	
133 Pyrene	202	12.366	12.372	-0.006	98	3294220	40.0	27.1	
138 Butyl benzyl phthalate	149	13.296	13.296	0.000	97	1427445	40.0	26.5	
144 3,3'-Dichlorobenzidine	252	14.284	14.289	-0.005	70	810094	40.0	22.8	
145 Bis(2-ethylhexyl) phthalat	149	14.343	14.343	0.000	96	1963561	40.0	26.3	
146 Benzo[a]anthracene	228	14.354	14.364	-0.010	96	2657072	40.0	25.0	
147 Chrysene	228	14.429	14.428	0.001	94	2513728	40.0	25.1	
150 Di-n-octyl phthalate	149	15.647	15.652	-0.005	99	3184716	40.0	27.2	
152 Benzo[b]fluoranthene	252	16.501	16.496	0.005	92	2487612	40.0	25.5	
153 Benzo[k]fluoranthene	252	16.555	16.555	0.000	98	2408250	40.0	25.2	
154 Benzo[a]pyrene	252	17.164	17.158	0.006	75	2311141	40.0	26.3	
157 Indeno[1,2,3-cd]pyrene	276	19.648	19.637	0.011	92	2515705	40.0	27.2	
158 Dibenz(a,h)anthracene	278	19.680	19.680	0.000	69	2078151	40.0	27.0	
159 Benzo[g,h,i]perylene	276	20.326	20.326	0.000	88	2124900	40.0	26.9	
S 199 Total Cresols	108				0		80.0	50.0	
S 197 Methyl Phenols,Total	108				0		80.0	50.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SVTAPITINTRNi_00007

Amount Added: 1.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CH732\20150414-6452.b\D0414009.D

Injection Date: 14-Apr-2015 12:43:30 Instrument ID: CH732

Lims ID: LCS 180-138290/2-A

Operator ID: 003200

Worklist Smp#: 9

Client ID:

Injection Vol: 2.0 ul

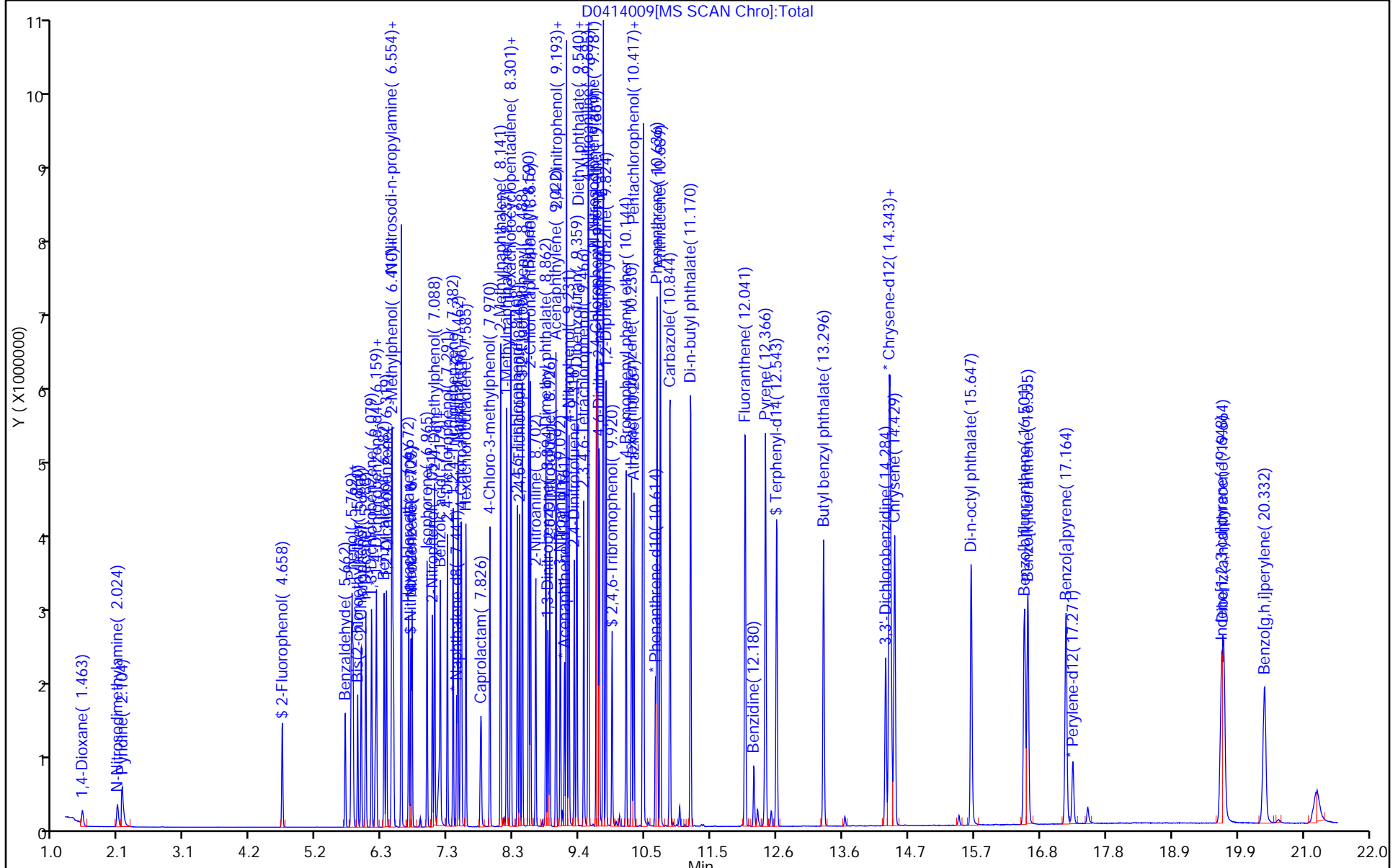
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: BNA_CH732

Limit Group: BNA 8270D ICAL

Column: Rxi-5SiIMS (0.32 mm)



GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

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.: 180-42982-1

SDG No.: _____

Instrument ID: CH732 Start Date: 04/14/2015 09:44Analysis Batch Number: 138398 End Date: 04/14/2015 19:33

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-138398/2		04/14/2015 09:44	1	D0414002.D	Rxi-5Si1MS 0.32 (mm)
CCVIS 180-138398/3		04/14/2015 10:00	1	D0414003.D	Rxi-5Si1MS 0.32 (mm)
ZZZZZ		04/14/2015 10:27	1		Rxi-5Si1MS 0.32 (mm)
MB 180-138290/1-A		04/14/2015 10:54	1	D0414005.D	Rxi-5Si1MS 0.32 (mm)
ZZZZZ		04/14/2015 11:48	1		Rxi-5Si1MS 0.32 (mm)
ZZZZZ		04/14/2015 12:16	1		Rxi-5Si1MS 0.32 (mm)
LCS 180-138290/2-A		04/14/2015 12:43	1	D0414009.D	Rxi-5Si1MS 0.32 (mm)
ZZZZZ		04/14/2015 14:05	1		Rxi-5Si1MS 0.32 (mm)
ZZZZZ		04/14/2015 14:33	1		Rxi-5Si1MS 0.32 (mm)
ZZZZZ		04/14/2015 15:00	1		Rxi-5Si1MS 0.32 (mm)
ZZZZZ		04/14/2015 15:27	40		Rxi-5Si1MS 0.32 (mm)
ZZZZZ		04/14/2015 15:55	10		Rxi-5Si1MS 0.32 (mm)
ZZZZZ		04/14/2015 16:22	10		Rxi-5Si1MS 0.32 (mm)
ZZZZZ		04/14/2015 16:49	10		Rxi-5Si1MS 0.32 (mm)
ZZZZZ		04/14/2015 17:17	10		Rxi-5Si1MS 0.32 (mm)
ZZZZZ		04/14/2015 17:44	1		Rxi-5Si1MS 0.32 (mm)
ZZZZZ		04/14/2015 18:11	1		Rxi-5Si1MS 0.32 (mm)
180-42982-1	PW-C01	04/14/2015 18:39	1	D0414022.D	Rxi-5Si1MS 0.32 (mm)
180-42982-2	PW-B01	04/14/2015 19:06	1	D0414023.D	Rxi-5Si1MS 0.32 (mm)
180-42982-3	PW-A01	04/14/2015 19:33	1	D0414024.D	Rxi-5Si1MS 0.32 (mm)

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Batch Number: 138290 Batch Start Date: 04/13/15 11:05 Batch Analyst: Trout, BillBatch Method: 3520C Batch End Date: 04/14/15 05:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	FirstAdjustpH	OPLVISPKMIX1i 00037	OPQL8270SURI 00028
MB 180-138290/1		3520C, 8270D LL		5 SU	250 mL	0.25 mL	2		25 uL
LCS 180-138290/2		3520C, 8270D LL		5 SU	250 mL	0.25 mL	2	25 uL	25 uL
180-42982-A-1	PW-C01	3520C, 8270D LL	T	7 SU	260 mL	0.25 mL	2		25 uL
180-42982-A-2	PW-B01	3520C, 8270D LL	T	7 SU	260 mL	0.25 mL	2		25 uL
180-42982-A-3	PW-A01	3520C, 8270D LL	T	7 SU	250 mL	0.25 mL	2		25 uL

Batch Notes	
Acid used for pH adjustment	1:1 Sulfuric acid
Acid used for pH adjust Lot #	1455123
Person's name who did the concentration	cdm
Time the first extraction ended 24hr	0515
Time the first extraction started 24 hr	1105
N-evap #	1
Na2SO4 Lot Number	1505618
pH Paper Lot Number	Ph paper HC432654
Prep Solvent Lot #	1524570
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: 180-42982-1

SDG No.: _____

Project: Sparrows Point Trust Offshore Investigat

Client Sample ID	Lab Sample ID
<u>PW-C01</u>	<u>180-42982-1</u>
<u>PW-B01</u>	<u>180-42982-2</u>
<u>PW-A01</u>	<u>180-42982-3</u>

Comments:

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: PW-C01

Lab Sample ID: 180-42982-1

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/10/2015 15:54

Reporting Basis: WET

Date Received: 04/11/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.20	0.078	ug/L			1	7470A

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

Client Sample ID: PW-C01

Lab Sample ID: 180-42982-1

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/10/2015 15:54

Reporting Basis: WET

Date Received: 04/11/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	6.8	10	2.9	ug/L	J		10	6020A
7440-43-9	Cadmium	ND	10	1.1	ug/L			10	6020A
7440-47-3	Chromium	ND	20	5.4	ug/L			10	6020A
7439-92-1	Lead	ND	10	0.19	ug/L			10	6020A
7782-49-2	Selenium	ND	50	4.2	ug/L			10	6020A
7440-22-4	Silver	ND	10	0.36	ug/L			10	6020A
7440-41-7	Beryllium	ND	10	0.37	ug/L			10	6020A
7440-28-0	Thallium	0.26	10	0.15	ug/L	J		10	6020A
7440-36-0	Antimony	0.66	20	0.19	ug/L	J		10	6020A
7440-02-0	Nickel	2.1	10	1.7	ug/L	J		10	6020A
7440-66-6	Zinc	12	50	9.6	ug/L	J		10	6020A
7440-50-8	Copper	ND	20	2.4	ug/L			10	6020A

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

Client Sample ID: PW-B01

Lab Sample ID: 180-42982-2

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/10/2015 14:20

Reporting Basis: WET

Date Received: 04/11/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	7.2	10	2.9	ug/L	J		10	6020A
7440-43-9	Cadmium	ND	10	1.1	ug/L			10	6020A
7440-47-3	Chromium	ND	20	5.4	ug/L			10	6020A
7439-92-1	Lead	ND	10	0.19	ug/L			10	6020A
7782-49-2	Selenium	ND	50	4.2	ug/L			10	6020A
7440-22-4	Silver	ND	10	0.36	ug/L			10	6020A
7440-41-7	Beryllium	ND	10	0.37	ug/L			10	6020A
7440-28-0	Thallium	0.17	10	0.15	ug/L	J		10	6020A
7440-36-0	Antimony	ND	20	0.19	ug/L			10	6020A
7440-02-0	Nickel	2.0	10	1.7	ug/L	J		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

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

Client Sample ID: PW-A01

Lab Sample ID: 180-42982-3

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/10/2015 12:45

Reporting Basis: WET

Date Received: 04/11/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	3.4	10	2.9	ug/L	J		10	6020A
7440-43-9	Cadmium	ND	10	1.1	ug/L			10	6020A
7440-47-3	Chromium	ND	20	5.4	ug/L			10	6020A
7439-92-1	Lead	0.19	10	0.19	ug/L	J		10	6020A
7782-49-2	Selenium	ND	50	4.2	ug/L			10	6020A
7440-22-4	Silver	ND	10	0.36	ug/L			10	6020A
7440-41-7	Beryllium	ND	10	0.37	ug/L			10	6020A
7440-28-0	Thallium	0.17	10	0.15	ug/L	J		10	6020A
7440-36-0	Antimony	ND	20	0.19	ug/L			10	6020A
7440-02-0	Nickel	2.9	10	1.7	ug/L	J		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

2A-IN
 CALIBRATION VERIFICATIONS
 METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

ICV Source: MICVX_00031 Concentration Units: ug/L

CCV Source: MCCV1X_00074

Analyte	ICV 180-139939/5 04/27/2015 21:10				CCV 180-139939/10 04/27/2015 21:36				CCV 180-139939/22 04/27/2015 22:34			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	80.8		80.0	101	99.4		100	99	99.3		100	99
Arsenic	80.8		80.0	101	101		100	101	103		100	103
Beryllium	81.7		80.0	102	102		100	102	100		100	100
Cadmium	83.3		80.0	104	103		100	103	101		100	101
Chromium	80.7		80.0	101	97.5		100	97	99.1		100	99
Copper	79.4		80.0	99	95.3		100	95	101		100	101
Lead	78.2		80.0	98	103		100	103	103		100	103
Nickel	79.0		80.0	99	95.3		100	95	99.9		100	100
Selenium	85.1		80.0	106	108		100	108	106		100	106
Silver	82.5		80.0	103	101		100	101	99.9		100	100
Thallium	82.5		80.0	103	103		100	103	104		100	104
Zinc	81.9		80.0	102	103		100	103	103		100	103

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
 Italicized analytes were not requested for this sequence.

2A-IN
 CALIBRATION VERIFICATIONS
 METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

ICV Source: MICVX_00031 Concentration Units: ug/L

CCV Source: MCCV1X_00074

Analyte	CCV 180-139939/34 04/27/2015 23:30				CCV 180-139939/46 04/28/2015 00:22				CCV 180-139939/58 04/28/2015 01:17			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	99.2		100	99	99.6		100	100	99.0		100	99
Arsenic	101		100	101	101		100	101	103		100	103
Beryllium	99.3		100	99	102		100	102	102		100	102
Cadmium	103		100	103	103		100	103	102		100	102
Chromium	98.1		100	98	99.7		100	100	98.1		100	98
Copper	95.8		100	96	97.3		100	97	98.8		100	99
Lead	106		100	106	103		100	103	102		100	102
Nickel	94.6		100	95	98.1		100	98	98.5		100	98
Selenium	107		100	107	106		100	106	107		100	107
Silver	99.5		100	99	100		100	100	99.8		100	100
Thallium	107		100	107	105		100	105	104		100	104
Zinc	104		100	104	102		100	102	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.

2A-IN
 CALIBRATION VERIFICATIONS
 METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

ICV Source: MHgWorkingicv_01002 Concentration Units: ug/L

CCV Source: MHgworkingCal_01031

Analyte	ICV 180-139774/7-A 04/27/2015 14:36				CCV 180-139774/10-A 04/27/2015 14:42				CCV 180-139774/10-A 04/27/2015 17:26			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.46		2.50	98	4.75		5.00	95	4.69		5.00	94

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.: 180-42982-1

SDG No.: _____

ICV Source: MHgWorkingicv_01002 Concentration Units: ug/L

CCV Source: MHgworkingCal_01031

Analyte	CCV 180-139774/10-A 04/27/2015 17:49				CCV 180-139774/10-A 04/27/2015 18:12				CCV 180-139774/10-A 04/27/2015 18:35			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.50		5.00	90	4.53		5.00	91	4.53		5.00	91

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.: 180-42982-1

SDG No.: _____

Method: 6020A Instrument ID: M

Lab Sample ID: CRI 180-139939/7 Concentration Units: ug/L

CRQL Check Standard Source: MCRIX_00065

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Arsenic	1.00	1.14		114	70-130
Cadmium	1.00	1.19		119	70-130
Chromium	2.00	2.03		102	70-130
Lead	1.00	1.02		102	70-130
Selenium	5.00	5.70		114	70-130
Silver	1.00	1.05		105	70-130
Beryllium	1.00	1.10		110	70-130
Thallium	1.00	0.995	J	99	70-130
Antimony	2.00	1.86	J	93	70-130
Nickel	1.00	1.10		110	70-130
Zinc	5.00	5.66		113	70-130
Copper	2.00	2.19		109	70-130

Lab Sample ID: CRI 180-139939/113 Concentration Units: ug/L

CRQL Check Standard Source: MCRIX_00065

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Arsenic	1.00	1.18		118	70-130
Cadmium	1.00	1.19		119	70-130
Chromium	2.00	2.09		105	70-130
Lead	1.00	1.16		116	70-130
Selenium	5.00	5.90		118	70-130
Silver	1.00	1.04		104	70-130
Beryllium	1.00	1.04		104	70-130
Thallium	1.00	1.10		110	70-130
Antimony	2.00	2.14		107	70-130
Nickel	1.00	1.08		108	70-130
Zinc	5.00	5.71		114	70-130
Copper	2.00	2.13		107	70-130

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

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1
 SDG No.: _____
 Method: 7470A Instrument ID: K
 Lab Sample ID: CRA 180-139774/9-A Concentration Units: ug/L
 CRQL Check Standard Source: MHgworkingCal_01031

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.193	J	96	50-150

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

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	ICB 180-139939/6 04/27/2015 21:17		CCB1 180-139939/11 04/27/2015 21:42		CCB2 180-139939/23 04/27/2015 22:41		CCB3 180-139939/35 04/27/2015 23:37	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	ND		ND		0.0400	J	ND	
Arsenic	1.0	ND		ND		ND		ND	
Beryllium	1.0	ND		ND		ND		ND	
Cadmium	1.0	ND		ND		ND		ND	
Chromium	2.0	ND		ND		ND		ND	
Copper	2.0	ND		ND		ND		ND	
Lead	1.0	ND		ND		ND		ND	
Nickel	1.0	ND		ND		ND		ND	
Selenium	5.0	ND		ND		ND		ND	
Silver	1.0	ND		ND		ND		ND	
Thallium	1.0	0.0210	J	0.0340	J	0.0300	J	0.0260	J
Zinc	5.0	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	CCB4 180-139939/47 04/28/2015 00:28		CCB5 180-139939/59 04/28/2015 01:24		Found	C	Found	C
		Found	C	Found	C				
Antimony	2.0	0.0420	J	0.0260	J				
Arsenic	1.0	ND		ND					
Beryllium	1.0	ND		ND					
Cadmium	1.0	ND		ND					
Chromium	2.0	ND		ND					
Copper	2.0	ND		ND					
Lead	1.0	ND		ND					
Nickel	1.0	ND		ND					
Selenium	5.0	ND		ND					
Silver	1.0	ND		ND					
Thallium	1.0	0.0480	J	0.0330	J				
Zinc	5.0	ND		ND					

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	ICB 180-139774/8-A 04/27/2015 14:38		CCB 180-139774/11-A 04/27/2015 14:44		CCB 180-139774/11-A 04/27/2015 17:28		CCB 180-139774/11-A 04/27/2015 17:51	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	CCB 180-139774/11-A 04/27/2015 18:14		CCB 180-139774/11-A 04/27/2015 18:37					
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	ND		ND					

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1
SDG No.: _____
Concentration Units: ug/L Lab Sample ID: MB 180-139759/1-A
Instrument Code: M Batch No.: 139939

CAS No.	Analyte	Concentration	C	Q	Method
7440-38-2	Arsenic	ND			6020A
7440-43-9	Cadmium	ND			6020A
7440-47-3	Chromium	ND			6020A
7439-92-1	Lead	ND			6020A
7782-49-2	Selenium	ND			6020A
7440-22-4	Silver	ND			6020A
7440-41-7	Beryllium	ND			6020A
7440-28-0	Thallium	ND			6020A
7440-36-0	Antimony	ND			6020A
7440-02-0	Nickel	ND			6020A
7440-66-6	Zinc	ND			6020A
7440-50-8	Copper	ND			6020A

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Concentration Units: ug/L Lab Sample ID: MB 180-139732/1-A

Instrument Code: K Batch No.: 139819

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

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1
 SDG No.: _____
 Lab Sample ID: ICSA 180-139939/8 Instrument ID: M
 Lab File ID: M50427A.xml ICS Source: MICSAX_00065
 Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		0.0410	
Arsenic		0.0760	
Beryllium		0.0160	
Cadmium		0.405	
Chromium		0.619	
Copper		1.58	
Lead		0.217	
Nickel		-0.770	
Selenium		-0.0930	
Silver		0.0840	
Thallium		0.0240	
Zinc		2.52	
<i>Aluminum</i>	<i>100000</i>	<i>104700</i>	<i>105</i>
<i>Barium</i>		<i>0.117</i>	
<i>Boron</i>		<i>0.404</i>	
<i>Calcium</i>	<i>100000</i>	<i>115000</i>	<i>115</i>
<i>Cobalt</i>		<i>0.0710</i>	
<i>Iron</i>	<i>100000</i>	<i>111600</i>	<i>112</i>
<i>Magnesium</i>	<i>100000</i>	<i>108500</i>	<i>109</i>
<i>Manganese</i>		<i>0.505</i>	
<i>Molybdenum</i>	<i>2000</i>	<i>2379</i>	<i>119</i>
<i>Potassium</i>	<i>100000</i>	<i>111300</i>	<i>111</i>
<i>Silicon</i>		<i>18.0</i>	
<i>Sodium</i>	<i>100000</i>	<i>108400</i>	<i>108</i>
<i>Strontium</i>		<i>0.767</i>	
<i>Tin</i>		<i>-0.0460</i>	
<i>Titanium</i>	<i>2000</i>	<i>2251</i>	<i>113</i>
<i>Vanadium</i>		<i>-0.308</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.: 180-42982-1
 SDG No.: _____
 Lab Sample ID: ICSAB 180-139939/9 Instrument ID: M
 Lab File ID: M50427A.xml ICS Source: MICSABX_00069
 Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution AB	Solution AB	
Antimony	20.0	21.4	107
Arsenic	20.0	22.3	112
Beryllium	20.0	20.6	103
Cadmium	20.0	21.5	108
Chromium	20.0	20.8	104
Copper	20.0	21.0	105
Lead	20.0	21.5	107
Nickel	20.0	19.1	96
Selenium	50.0	58.5	117
Silver	20.0	19.7	98
Thallium	20.0	21.0	105
Zinc	25.0	24.0	96
<i>Aluminum</i>	<i>100000</i>	<i>101337</i>	<i>101</i>
<i>Barium</i>	<i>20.0</i>	<i>21.2</i>	<i>106</i>
<i>Boron</i>	<i>50.0</i>	<i>47.6</i>	<i>95</i>
<i>Calcium</i>	<i>100000</i>	<i>109000</i>	<i>109</i>
<i>Cobalt</i>	<i>20.0</i>	<i>20.1</i>	<i>101</i>
<i>Iron</i>	<i>100000</i>	<i>106033</i>	<i>106</i>
<i>Magnesium</i>	<i>100000</i>	<i>105000</i>	<i>105</i>
<i>Manganese</i>	<i>22.5</i>	<i>21.2</i>	<i>94</i>
<i>Molybdenum</i>	<i>2000</i>	<i>2320</i>	<i>116</i>
<i>Potassium</i>	<i>100000</i>	<i>105367</i>	<i>105</i>
<i>Silicon</i>	<i>500</i>	<i>468</i>	<i>94</i>
<i>Sodium</i>	<i>100000</i>	<i>105500</i>	<i>106</i>
<i>Strontium</i>	<i>25.0</i>	<i>23.1</i>	<i>92</i>
<i>Tin</i>	<i>100</i>	<i>106</i>	<i>106</i>
<i>Titanium</i>	<i>2000</i>	<i>2084</i>	<i>104</i>
<i>Vanadium</i>	<i>20.0</i>	<i>19.3</i>	<i>97</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 180-139759/2-A

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

Sample Matrix: Water

LCS Source: MTAPITTICPMS_00020

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Arsenic	40.0	37.5		94	80	120		6020A
Cadmium	50.0	51.3		103	80	120		6020A
Chromium	200	196		98	80	120		6020A
Lead	20.0	21.4		107	80	120		6020A
Selenium	10.0	9.81		98	80	120		6020A
Silver	50.0	50.0		100	80	120		6020A
Beryllium	50.0	47.5		95	80	120		6020A
Thallium	50.0	52.2		104	80	120		6020A
Antimony	500	518		104	80	120		6020A
Nickel	500	472		94	80	120		6020A
Zinc	500	492		98	80	120		6020A
Copper	250	236		94	80	120		6020A

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 180-139732/2-A

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

Sample Matrix: Water

LCS Source: MHgworkingCal_01031

Analyte	Water (ug/L)						
	True	Found	C	%R	Limits	Q	Method
Mercury	2.50	2.65		106	80 120		7470A

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

FORM VIIA - IN

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Pittsburgh Job Number: 180-42982-1
SDG Number: _____
Matrix: Water Instrument ID: M
Method: 6020A MDL Date: 01/23/2010 18:33
Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121	2	0.0187
Arsenic	75	1	0.2908
Beryllium	9	1	0.0367
Cadmium	111	1	0.1144
Chromium	52	2	0.5433
Copper	65	2	0.2443
Lead	208	1	0.0192
Nickel	60	1	0.1749
Selenium	82	5	0.4216
Silver	107	1	0.0362
Thallium	205	1	0.0152
Zinc	66	5	0.9609

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Pittsburgh Job Number: 180-42982-1
SDG Number: _____
Matrix: Water Instrument ID: M
Method: 6020A XMDL Date: 01/23/2010 18:33

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121	2	0.0187
Arsenic	75	1	0.2908
Beryllium	9	1	0.0367
Cadmium	111	1	0.1144
Chromium	52	2	0.5433
Copper	65	2	0.2443
Lead	208	1	0.0192
Nickel	60	1	0.1749
Selenium	82	5	0.4216
Silver	107	1	0.0362
Thallium	205	1	0.0152
Zinc	66	5	0.9609

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Pittsburgh Job Number: 180-42982-1
SDG Number: _____
Matrix: Water Instrument ID: K
Method: 7470A MDL Date: 03/13/2015 17:33
Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.0778

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Pittsburgh Job Number: 180-42982-1
SDG Number: _____
Matrix: Water Instrument ID: K
Method: 7470A XMDL Date: 01/23/2010 12:30

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.0384

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Pittsburgh

Job No: 180-42982-1

SDG No.: _____

Instrument ID: M

Date: 03/14/2011 22:35

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Arsenic		4500	6020A
Cadmium		13500	6020A
Chromium		13500	6020A
Lead		20000	6020A
Selenium		4500	6020A
Silver		2500	6020A
Beryllium		9000	6020A
Thallium		13500	6020A
Antimony		13500	6020A
Nickel		13500	6020A
Zinc		25000	6020A
Copper		20000	6020A

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 180-139759/1-A	04/27/2015 11:43	139759		50	50
LCS 180-139759/2-A	04/27/2015 11:43	139759		50	50
180-42982-1	04/27/2015 11:43	139759		50	50
180-42982-2	04/27/2015 11:43	139759		50	50
180-42982-3	04/27/2015 11:43	139759		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 180-139732/1-A	04/27/2015 09:38	139732		50	50
LCS 180-139732/2-A	04/27/2015 09:38	139732		50	50
180-42982-1	04/27/2015 09:38	139732		50	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG No.: _____

Instrument ID: M

Analysis Method: 6020A

Start Date: 04/27/2015 17:04

End Date: 04/28/2015 08:03

Lab Sample Id	D/F	Type	Time	Analytes																					
				A g	A s	B s	C d	C r	C u	N i	P b	S b	S e	T l	Z n										
ITUNE 180-139939/1			17:04																						
STD1 180-139939/2 IC	1		20:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
STD2 180-139939/3 IC	1		21:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
STD3 180-139939/4 IC	1		21:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
ICV 180-139939/5	1		21:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
ICB 180-139939/6	1		21:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
CRI 180-139939/7	1		21:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
ICSA 180-139939/8	1		21:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
ICSAB 180-139939/9	1		21:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
CCV 180-139939/10	1		21:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
CCB1 180-139939/11	1		21:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
ZZZZZZ			21:46																						
ZZZZZZ			21:50																						
ZZZZZZ			21:57																						
ZZZZZZ			22:01																						
ZZZZZZ			22:05																						
ZZZZZZ			22:08																						
ZZZZZZ			22:12																						
ZZZZZZ			22:16																						
ZZZZZZ			22:23																						
ZZZZZZ			22:27																						
CCV 180-139939/22	1		22:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
CCB2 180-139939/23	1		22:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
ZZZZZZ			22:45																						
MB 180-139759/1-A	1	R	22:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
LCS 180-139759/2-A	1	R	22:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
ZZZZZZ			23:03																						
ZZZZZZ			23:07																						
ZZZZZZ			23:11																						
ZZZZZZ			23:14																						
ZZZZZZ			23:18																						
ZZZZZZ			23:22																						
ZZZZZZ			23:26																						
CCV 180-139939/34	1		23:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
CCB3 180-139939/35	1		23:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
ZZZZZZ			23:40																						
ZZZZZZ			23:44																						
ZZZZZZ			23:48																						
ZZZZZZ			23:52																						
ZZZZZZ			23:56																						
ZZZZZZ			23:59																						
ZZZZZZ			00:03																						

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Instrument ID: M Analysis Method: 6020A

Start Date: 04/27/2015 17:04 End Date: 04/28/2015 08:03

Lab Sample Id	D/F	Type	Time	Analytes																							
				A g	A s	B e	C d	C r	C u	N i	P b	S b	S e	T l	Z n												
ZZZZZZ			00:07																								
ZZZZZZ			00:11																								
ZZZZZZ			00:15																								
CCV 180-139939/46	1		00:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB4 180-139939/47	1		00:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
180-42982-1	10	R	00:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
180-42982-2	10	R	00:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
180-42982-3	10	R	00:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			00:44																								
ZZZZZZ			00:48																								
ZZZZZZ			00:51																								
ZZZZZZ			00:55																								
ZZZZZZ			01:02																								
ZZZZZZ			01:06																								
ZZZZZZ			01:10																								
CCV 180-139939/58	1		01:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB5 180-139939/59	1		01:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			01:27																								
ZZZZZZ			01:31																								
ZZZZZZ			01:35																								
ZZZZZZ			01:39																								
ZZZZZZ			01:43																								
ZZZZZZ			01:47																								
ZZZZZZ			01:50																								
ZZZZZZ			01:54																								
ZZZZZZ			01:58																								
ZZZZZZ			02:02																								
CCV 180-139939/70			02:09																								
CCB6 180-139939/71			02:16																								
ZZZZZZ			02:19																								
ZZZZZZ			02:23																								
ZZZZZZ			02:27																								
ZZZZZZ			02:31																								
ZZZZZZ			02:35																								
ZZZZZZ			02:39																								
ZZZZZZ			02:42																								
ZZZZZZ			02:46																								
ZZZZZZ			02:50																								
ZZZZZZ			02:54																								
CCV 180-139939/82			03:01																								
CCB7 180-139939/83			03:08																								
ZZZZZZ			03:12																								

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Instrument ID: M Analysis Method: 6020A

Start Date: 04/27/2015 17:04 End Date: 04/28/2015 08:03

Lab Sample Id	D/F	Type	Time	Analytes																									
				A g	A s	B e	C d	C r	C u	N i	P b	S b	S e	T l	Z n														
ZZZZZZ			03:15																										
ZZZZZZ			03:23																										
ZZZZZZ			03:26																										
ZZZZZZ			03:30																										
ZZZZZZ			03:34																										
ZZZZZZ			03:38																										
ZZZZZZ			03:42																										
ZZZZZZ			03:46																										
ZZZZZZ			03:49																										
CCV 180-139939/94			03:56																										
CCB8 180-139939/95			04:03																										
ZZZZZZ			04:07																										
ZZZZZZ			04:11																										
ZZZZZZ			04:15																										
ZZZZZZ			04:18																										
ZZZZZZ			04:22																										
ZZZZZZ			04:26																										
ZZZZZZ			04:30																										
ZZZZZZ			04:34																										
ZZZZZZ			04:37																										
ZZZZZZ			04:41																										
CCV 180-139939/106			04:48																										
CCB9 180-139939/107			04:55																										
ZZZZZZ			04:59																										
ZZZZZZ			05:03																										
ZZZZZZ			05:07																										
ZZZZZZ			05:10																										
ZZZZZZ			05:14																										
CRI 180-139939/113		1	07:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCV 180-139939/114			07:56																										
CCB11 180-139939/115			08:03																										

Prep Types:
R = Total Recoverable

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Instrument ID: K Analysis Method: 7470A

Start Date: 04/27/2015 14:24 End Date: 04/27/2015 20:10

Lab Sample Id	D/F	Type	Time	Hg	Analytes																			
IC 180-139774/1-A			14:24	X																				
IC 180-139774/2-A			14:26	X																				
IC 180-139774/3-A			14:28	X																				
IC 180-139774/4-A			14:30	X																				
IC 180-139774/5-A			14:32	X																				
IC 180-139774/6-A			14:34	X																				
ICV 180-139774/7-A	1		14:36	X																				
ICB 180-139774/8-A	1		14:38	X																				
CRA 180-139774/9-A	1		14:41	X																				
CCV 180-139774/10-A	1		14:42	X																				
CCB 180-139774/11-A	1		14:44	X																				
ZZZZZZ			14:47																					
ZZZZZZ			14:49																					
ZZZZZZ			14:50																					
ZZZZZZ			14:52																					
ZZZZZZ			14:54																					
ZZZZZZ			14:56																					
ZZZZZZ			14:58																					
ZZZZZZ			15:00																					
ZZZZZZ			15:02																					
ZZZZZZ			15:04																					
CCV 180-139774/10-A			15:06																					
CCB 180-139774/11-A			15:07																					
ZZZZZZ			15:10																					
ZZZZZZ			15:12																					
ZZZZZZ			15:13																					
ZZZZZZ			15:15																					
ZZZZZZ			15:17																					
ZZZZZZ			15:19																					
ZZZZZZ			15:21																					
ZZZZZZ			15:23																					
ZZZZZZ			15:25																					
ZZZZZZ			15:27																					
CCV 180-139774/10-A			15:28																					
CCB 180-139774/11-A			15:30																					
ZZZZZZ			15:33																					
ZZZZZZ			15:34																					
ZZZZZZ			15:36																					
ZZZZZZ			15:38																					
ZZZZZZ			15:40																					
ZZZZZZ			15:42																					
ZZZZZZ			15:44																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Instrument ID: K Analysis Method: 7470A

Start Date: 04/27/2015 14:24 End Date: 04/27/2015 20:10

Lab Sample Id	D/F	Type	Time	Analytes																											
				H	g																										
ZZZZZZ			15:46																												
ZZZZZZ			15:48																												
ZZZZZZ			15:50																												
CCV 180-139774/10-A			15:52																												
CCB 180-139774/11-A			15:54																												
ZZZZZZ			15:57																												
ZZZZZZ			15:58																												
ZZZZZZ			16:00																												
ZZZZZZ			16:02																												
ZZZZZZ			16:04																												
ZZZZZZ			16:06																												
ZZZZZZ			16:08																												
ZZZZZZ			16:10																												
ZZZZZZ			16:12																												
ZZZZZZ			16:14																												
CCV 180-139774/10-A			16:16																												
CCB 180-139774/11-A			16:19																												
ZZZZZZ			16:21																												
ZZZZZZ			16:23																												
ZZZZZZ			16:25																												
ZZZZZZ			16:26																												
ZZZZZZ			16:28																												
ZZZZZZ			16:30																												
ZZZZZZ			16:32																												
ZZZZZZ			16:34																												
ZZZZZZ			16:36																												
ZZZZZZ			16:38																												
CCV 180-139774/10-A			16:40																												
CCB 180-139774/11-A			16:42																												
ZZZZZZ			16:44																												
ZZZZZZ			16:46																												
ZZZZZZ			16:48																												
ZZZZZZ			16:50																												
ZZZZZZ			16:52																												
ZZZZZZ			16:53																												
ZZZZZZ			16:55																												
ZZZZZZ			16:57																												
ZZZZZZ			16:59																												
ZZZZZZ			17:01																												
CCV 180-139774/10-A			17:03																												
CCB 180-139774/11-A			17:05																												
ZZZZZZ			17:07																												

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Instrument ID: K Analysis Method: 7470A

Start Date: 04/27/2015 14:24 End Date: 04/27/2015 20:10

Lab Sample Id	D/F	Type	Time	Analytes																											
				H	g																										
ZZZZZZ			17:09																												
ZZZZZZ			17:11																												
ZZZZZZ			17:13																												
ZZZZZZ			17:15																												
ZZZZZZ			17:16																												
ZZZZZZ			17:18																												
ZZZZZZ			17:20																												
ZZZZZZ			17:22																												
ZZZZZZ			17:24																												
CCV 180-139774/10-A	1		17:26	X																											
CCB 180-139774/11-A	1		17:28	X																											
ZZZZZZ			17:30																												
ZZZZZZ			17:32																												
ZZZZZZ			17:34																												
ZZZZZZ			17:36																												
MB 180-139732/1-A	1	T	17:38	X																											
LCS 180-139732/2-A	1	T	17:39	X																											
ZZZZZZ			17:41																												
ZZZZZZ			17:43																												
ZZZZZZ			17:45																												
ZZZZZZ			17:47																												
CCV 180-139774/10-A	1		17:49	X																											
CCB 180-139774/11-A	1		17:51	X																											
ZZZZZZ			17:53																												
ZZZZZZ			17:55																												
ZZZZZZ			17:57																												
ZZZZZZ			17:59																												
ZZZZZZ			18:01																												
ZZZZZZ			18:03																												
ZZZZZZ			18:04																												
ZZZZZZ			18:06																												
ZZZZZZ			18:08																												
ZZZZZZ			18:10																												
CCV 180-139774/10-A	1		18:12	X																											
CCB 180-139774/11-A	1		18:14	X																											
ZZZZZZ			18:16																												
ZZZZZZ			18:18																												
ZZZZZZ			18:20																												
ZZZZZZ			18:22																												
ZZZZZZ			18:24																												
ZZZZZZ			18:26																												
ZZZZZZ			18:27																												

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Instrument ID: K Analysis Method: 7470A

Start Date: 04/27/2015 14:24 End Date: 04/27/2015 20:10

Lab Sample Id	D/F	T y p e	Time	Analytes																											
				H g																											
180-42982-1	1	T	18:29	X																											
ZZZZZZ			18:31																												
ZZZZZZ			18:33																												
CCV 180-139774/10-A	1		18:35	X																											
CCB 180-139774/11-A	1		18:37	X																											
ZZZZZZ			18:39																												
ZZZZZZ			18:41																												
ZZZZZZ			18:43																												
ZZZZZZ			18:45																												
ZZZZZZ			18:47																												
ZZZZZZ			18:49																												
ZZZZZZ			18:51																												
ZZZZZZ			18:53																												
ZZZZZZ			18:55																												
ZZZZZZ			18:57																												
CCV 180-139774/10-A			18:59																												
CCB 180-139774/11-A			19:01																												
ZZZZZZ			19:03																												
ZZZZZZ			19:05																												
ZZZZZZ			19:07																												
ZZZZZZ			19:09																												
ZZZZZZ			19:11																												
ZZZZZZ			19:13																												
ZZZZZZ			19:14																												
ZZZZZZ			19:16																												
ZZZZZZ			19:18																												
ZZZZZZ			19:20																												
CCV 180-139774/10-A			19:22																												
CCB 180-139774/11-A			19:24																												
ZZZZZZ			19:27																												
ZZZZZZ			19:28																												
ZZZZZZ			19:30																												
ZZZZZZ			19:32																												
ZZZZZZ			19:35																												
ZZZZZZ			19:37																												
ZZZZZZ			19:39																												
ZZZZZZ			19:41																												
ZZZZZZ			19:43																												
ZZZZZZ			19:45																												
CCV 180-139774/10-A			19:47																												
CCB 180-139774/11-A			19:49																												
ZZZZZZ			19:51																												

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Instrument ID: K Analysis Method: 7470A

Start Date: 04/27/2015 14:24 End Date: 04/27/2015 20:10

Lab Sample Id	D/F	Type	Time	Analytes																											
				H	g																										
ZZZZZZ			19:53																												
ZZZZZZ			19:55																												
ZZZZZZ			19:57																												
ZZZZZZ			19:59																												
ZZZZZZ			20:01																												
ZZZZZZ			20:02																												
ZZZZZZ			20:04																												
ZZZZZZ			20:06																												
CCV 180-139774/10-A			20:08																												
CCB 180-139774/11-A			20:10																												

Prep Types: _____
T = Total/NA

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

ICP-MS Instrument ID: M Start Date: 04/27/2015 End Date: 04/28/2015

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 180-139939/2 IC	20:57	100		100		100		100		100	
STD2 180-139939/3 IC	21:03	89		95		88		83		84	
STD3 180-139939/4 IC	21:06	95		98		94		96		96	
ICV 180-139939/5	21:10	95		102		107		92		93	
ICB 180-139939/6	21:17	100		102		100		100		100	
CRI 180-139939/7	21:20	96		100		98		98		99	
ICSA 180-139939/8	21:25			76		76		78		80	
ICSAB 180-139939/9	21:29			79		80		81		86	
CCV 180-139939/10	21:36	76		88		94		88		95	
CCB1 180-139939/11	21:42	86		93		102		100		106	
CCV 180-139939/22	22:34	86		94		92		89		91	
CCB2 180-139939/23	22:41	97		102		106		107		108	
MB 180-139759/1-A	22:52	89		99		104		104		105	
LCS 180-139759/2-A	22:56	73		74		80		75		80	
CCV 180-139939/34	23:30			73		80		76		82	
CCB3 180-139939/35	23:37	84		88		98		98		101	
CCV 180-139939/46	00:22	74		82		87		82		86	
CCB4 180-139939/47	00:28	89		91		97		98		100	
180-42982-1	00:32	76		81		88		85		89	
180-42982-2	00:36	69		78		84		80		86	
180-42982-3	00:40	69		78		86		82		88	
CCV 180-139939/58	01:17	81		89		90		88		91	
CCB5 180-139939/59	01:24	101		97		103		105		103	
CRI 180-139939/113	07:53	77		95		107		110		103	

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

ICP-MS Instrument ID: M Start Date: 04/27/2015 End Date: 04/28/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 180-139939/2 IC	20:57	100		100		100					
STD2 180-139939/3 IC	21:03	87		87		85					
STD3 180-139939/4 IC	21:06	97		97		99					
ICV 180-139939/5	21:10	95		95		98					
ICB 180-139939/6	21:17	100		100		106					
CRI 180-139939/7	21:20	100		100		103					
ICSA 180-139939/8	21:25	85		85		103					
ICSAB 180-139939/9	21:29	89		89		96					
CCV 180-139939/10	21:36	104		105		102					
CCB1 180-139939/11	21:42	112		113		118					
CCV 180-139939/22	22:34	96		96		91					
CCB2 180-139939/23	22:41	108		109		110					
MB 180-139759/1-A	22:52	108		108		111					
LCS 180-139759/2-A	22:56	93		95		88					
CCV 180-139939/34	23:30	91		93		89					
CCB3 180-139939/35	23:37	105		105		109					
CCV 180-139939/46	00:22	94		94		91					
CCB4 180-139939/47	00:28	102		103		107					
180-42982-1	00:32	98		99		107					
180-42982-2	00:36	95		97		97					
180-42982-3	00:40	98		99		98					
CCV 180-139939/58	01:17	96		97		95					
CCB5 180-139939/59	01:24	105		105		109					
CRI 180-139939/113	07:53	109		109		112					

Dilution Corrected Concentrations

STD1 1542084 INT STD 4/27/2015 8:57:46 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:58:06	99.943%	0.009	-0.047	0.015	0.000	0.015	-0.078	0.088
2	20:58:25	103.090%	0.007	-0.003	-0.019	0.000	-0.044	0.021	-0.071
3	20:58:44	96.967%	-0.016	0.049	0.005	0.000	0.029	0.057	-0.016
X		100.000%	0.000	-0.000	0.000	0.000	-0.000	-0.000	-0.000
σ		3.062%	0.014	0.048	0.018	0.000	0.039	0.070	0.081
%RSD		3.062	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	20:58:06	-0.080	5.090	0.000	0.099	1.519	0.525	100.516%	-0.059
2	20:58:25	0.020	3.343	0.000	0.474	0.423	-0.163	99.002%	-0.002
3	20:58:44	0.061	-8.433	0.000	-0.574	-1.942	-0.362	100.482%	0.062
X		-0.000	-0.000	0.000	-0.000	0.000	-0.000	100.000%	0.000
σ		0.073	7.356	0.000	0.531	1.769	0.466	0.865%	0.060
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.865	0.000
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:58:06	-0.005	-0.001	0.001	0.341	-0.376	-0.001	-0.020	-0.014
2	20:58:25	0.012	-0.006	0.006	0.624	0.363	-0.001	0.021	-0.002
3	20:58:44	-0.007	0.007	-0.007	-0.964	0.013	0.001	-0.001	0.017
X		0.000	-0.000	-0.000	-0.000	-0.000	0.000	-0.000	0.000
σ		0.011	0.006	0.006	0.847	0.370	0.001	0.020	0.016
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:58:06	0.018	-0.050	0.071	-0.013	0.094	-0.029	0.000	-0.002
2	20:58:25	-0.001	0.071	0.051	-0.021	-0.052	-0.048	0.000	-0.002
3	20:58:44	-0.017	-0.021	-0.122	0.034	-0.042	0.077	0.000	0.003
X		-0.000	-0.000	-0.000	-0.000	-0.000	0.000	0.000	0.000
σ		0.018	0.063	0.106	0.030	0.081	0.068	0.000	0.003
%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	20:58:06	98.540%	-0.005	-0.004	99.797%	-0.005	-0.007	-0.022	-0.015
2	20:58:25	100.714%	-0.000	0.004	100.090%	0.003	-0.006	0.026	0.020
3	20:58:44	100.746%	0.005	-0.001	100.113%	0.002	0.013	-0.004	-0.005
X		100.000%	0.000	-0.000	100.000%	0.000	-0.000	-0.000	0.000
σ		1.265%	0.005	0.004	0.176%	0.004	0.011	0.024	0.018
%RSD		1.265	0.000	0.000	0.176	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	20:58:06	99.135%	-0.004	-0.001	-0.009	0.003	-0.002	98.257%	98.420%
2	20:58:25	99.903%	-0.009	-0.004	0.006	-0.003	0.002	100.781%	100.734%
3	20:58:44	100.962%	0.012	0.005	0.004	-0.000	0.000	100.962%	100.847%
X		100.000%	-0.000	0.000	-0.000	-0.000	0.000	100.000%	100.000%
σ		0.918%	0.011	0.005	0.008	0.003	0.002	1.512%	1.370%
%RSD		0.918	0.000	0.000	0.000	0.000	0.000	1.512	1.370
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:58:06	0.001	0.000	0.003	-0.001	0.001	100.082%		
2	20:58:25	0.001	0.000	-0.002	-0.001	-0.001	99.349%		
3	20:58:44	-0.002	-0.001	-0.000	0.002	0.001	100.568%		
X		0.000	-0.000	-0.000	-0.000	0.000	100.000%		
σ		0.002	0.000	0.003	0.001	0.001	0.614%		
%RSD		0.000	0.000	0.000	0.000	0.000	0.614		

STD2 1533078

4/27/2015 9:03:11 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:03:11	92.157%	192.600	0.379	0.240	0.000	97010.000	96520.000	96870.000
2	21:03:30	88.696%	203.200	0.217	0.208	0.000	99790.000	100700.000	100900.000
3	21:03:49	85.178%	204.200	0.202	0.242	0.000	103200.000	102800.000	102300.000
x		88.677%	200.000	0.266	0.230	0.000	100000.000	100000.000	100000.000
σ		3.490%	6.426	0.098	0.019	0.000	3101.000	3182.000	2803.000
%RSD		3.935	3.213	36.960	8.139	0.000	3.101	3.182	2.803
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:03:11	977.000	-22.910	0.000	97220.000	96890.000	96360.000	97.876%	-0.068
2	21:03:30	1001.000	-4.027	0.000	100500.000	100600.000	100600.000	94.491%	0.074
3	21:03:49	1022.000	-16.260	0.000	102300.000	102500.000	103000.000	93.853%	0.076
x		1000.000	-14.400	0.000	100000.000	100000.000	100000.000	95.407%	0.028
σ		22.330	9.580	0.000	2564.000	2842.000	3374.000	2.162%	0.083
%RSD		2.233	66.520	0.000	2.564	2.842	3.374	2.266	299.200
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:03:11	194.700	197.400	983.500	48950.000	49500.000	198.000	196.500	198.800
2	21:03:30	203.000	202.200	1010.000	50890.000	50460.000	201.400	203.100	201.400
3	21:03:49	202.400	200.300	1006.000	50170.000	50030.000	200.500	200.400	199.800
x		200.000	200.000	1000.000	50000.000	50000.000	200.000	200.000	200.000
σ		4.635	2.414	14.470	979.600	480.300	1.768	3.337	1.319
%RSD		2.317	1.207	1.447	1.959	0.961	0.884	1.668	0.659
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:03:11	197.500	196.100	196.900	198.300	199.100	198.900	0.000	198.700
2	21:03:30	201.900	201.600	200.200	198.600	199.000	198.100	0.000	199.400
3	21:03:49	200.600	202.300	202.900	203.000	201.800	203.000	0.000	201.900
x		200.000	200.000	200.000	200.000	200.000	200.000	0.000	200.000
σ		2.230	3.381	3.044	2.643	1.595	2.594	0.000	1.654
%RSD		1.115	1.691	1.522	1.321	0.798	1.297	0.000	0.827
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:03:11	88.389%	0.061	0.089	83.511%	197.700	198.000	197.700	198.300
2	21:03:30	88.886%	0.072	0.077	82.559%	201.000	201.100	201.800	200.800
3	21:03:49	87.711%	0.066	0.092	82.061%	201.300	200.900	200.500	200.800
x		88.329%	0.066	0.086	82.710%	200.000	200.000	200.000	200.000
σ		0.590%	0.005	0.008	0.737%	2.015	1.761	2.071	1.463
%RSD		0.668	8.283	9.426	0.891	1.007	0.880	1.035	0.731
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:03:11	84.295%	-0.050	0.137	0.117	198.200	197.400	87.268%	86.588%
2	21:03:30	83.338%	-0.050	0.150	0.162	201.800	202.400	87.184%	87.439%
3	21:03:49	83.924%	-0.038	0.158	0.155	200.000	200.200	87.788%	87.311%
x		83.853%	-0.046	0.148	0.145	200.000	200.000	87.414%	87.113%
σ		0.482%	0.007	0.011	0.024	1.780	2.528	0.327%	0.459%
%RSD		0.575	14.710	7.108	16.770	0.890	1.264	0.374	0.527
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:03:11	194.500	196.500	194.300	194.400	194.500	86.068%		
2	21:03:30	202.400	200.900	201.400	201.400	201.300	84.274%		
3	21:03:49	203.200	202.600	204.300	204.200	204.100	84.071%		
x		200.000	200.000	200.000	200.000	200.000	84.804%		
σ		4.816	3.129	5.179	5.071	4.961	1.099%		
%RSD		2.408	1.564	2.590	2.535	2.480	1.296		

STD3 1533079

4/27/2015 9:06:47 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:47	98.536%	0.043	203.400	206.200	0.000	33.590	28.610	29.120
2	21:07:06	94.472%	0.087	199.500	199.600	0.000	40.080	39.750	40.570
3	21:07:25	93.128%	0.047	197.100	194.200	0.000	29.810	28.330	28.260
X		95.379%	0.059	200.000	200.000	0.000	34.500	32.230	32.650
σ		2.816%	0.024	3.201	5.963	0.000	5.198	6.514	6.870
%RSD		2.952	41.530	1.600	2.982	0.000	15.070	20.210	21.040
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:47	13.240	9826.000	0.000	34.280	26.910	97.800	98.714%	197.000
2	21:07:06	13.760	10210.000	0.000	37.420	44.660	107.300	97.449%	202.100
3	21:07:25	12.590	9959.000	0.000	27.870	32.370	92.920	96.860%	200.900
X		13.200	10000.000	0.000	33.190	34.650	99.340	97.674%	200.000
σ		0.585	197.300	0.000	4.864	9.093	7.314	0.947%	2.703
%RSD		4.433	1.973	0.000	14.660	26.240	7.362	0.970	1.352
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:47	0.088	0.063	0.354	58.570	61.070	0.057	0.156	0.148
2	21:07:06	0.121	0.080	0.475	44.220	47.620	0.074	0.228	0.140
3	21:07:25	0.101	0.084	0.369	31.350	33.400	0.063	0.181	0.137
X		0.104	0.076	0.400	44.710	47.360	0.065	0.188	0.141
σ		0.017	0.011	0.066	13.620	13.840	0.009	0.036	0.006
%RSD		16.070	14.530	16.550	30.450	29.210	13.790	19.380	3.913
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:47	0.225	2.318	2.094	0.860	0.677	0.798	0.000	0.075
2	21:07:06	0.205	2.331	2.083	0.912	0.587	0.724	0.000	0.088
3	21:07:25	0.185	1.927	2.195	0.828	0.545	0.675	0.000	0.073
X		0.205	2.192	2.124	0.867	0.603	0.732	0.000	0.079
σ		0.020	0.230	0.062	0.043	0.068	0.062	0.000	0.008
%RSD		9.708	10.490	2.919	4.932	11.200	8.495	0.000	10.260
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:47	93.434%	195.900	196.000	94.406%	0.080	0.147	0.372	-0.190
2	21:07:06	95.070%	201.700	200.100	95.693%	0.075	0.188	0.254	-0.119
3	21:07:25	94.759%	202.400	203.900	96.495%	0.069	0.188	0.316	-0.183
X		94.421%	200.000	200.000	95.531%	0.075	0.174	0.314	-0.164
σ		0.869%	3.538	3.979	1.054%	0.005	0.023	0.059	0.039
%RSD		0.920	1.769	1.990	1.103	7.313	13.470	18.760	23.850
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:47	93.458%	197.900	198.700	197.500	0.102	0.290	94.174%	93.559%
2	21:07:06	96.199%	199.600	200.100	201.100	0.114	0.290	96.826%	96.468%
3	21:07:25	97.357%	202.500	201.200	201.400	0.128	0.308	98.958%	99.333%
X		95.671%	200.000	200.000	200.000	0.115	0.296	96.653%	96.453%
σ		2.002%	2.313	1.284	2.168	0.013	0.011	2.397%	2.887%
%RSD		2.093	1.156	0.642	1.084	11.600	3.545	2.480	2.993
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:06:47	0.144	0.135	0.121	0.140	0.139	98.500%		
2	21:07:06	0.146	0.128	0.163	0.175	0.171	99.034%		
3	21:07:25	0.108	0.106	0.165	0.177	0.166	100.571%		
X		0.133	0.123	0.150	0.164	0.159	99.368%		
σ		0.021	0.015	0.025	0.021	0.017	1.075%		
%RSD		16.220	12.480	16.670	12.680	10.580	1.082		

ICV 1527873 4/27/2015 9:10:24 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:10:24	95.268%	83.470	82.790	83.270	0.000	39270.000	39000.000	39110.000
2	21:10:44	96.567%	82.120	84.460	84.680	0.000	40080.000	39320.000	39610.000
3	21:11:03	93.423%	79.640	82.190	81.340	0.000	39650.000	39620.000	40040.000
X		95.086%	102.183%	103.931%	103.868%	0.000	99.162%	98.281%	98.965%
σ		1.580%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.662	2.376	1.412	2.018	0.000	1.021	0.793	1.175
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:10:24	398.500	4439.000	0.000	40200.000	37120.000	39330.000	103.601%	80.330
2	21:10:44	411.600	4508.000	0.000	40410.000	37820.000	40190.000	101.237%	80.610
3	21:11:03	404.900	4516.000	0.000	40370.000	38120.000	40640.000	100.698%	81.010
X		101.251%	112.194%	0.000	100.815%	94.210%	100.135%	101.845%	100.812%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.544%	n/a
%RSD		1.623	0.943	0.000	0.275	1.367	1.666	1.516	0.423
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:10:24	78.730	80.440	386.900	19580.000	19240.000	78.260	79.200	80.500
2	21:10:44	78.740	79.560	387.400	19430.000	19100.000	76.920	78.500	78.800
3	21:11:03	80.540	82.130	395.100	20180.000	19670.000	77.290	79.280	79.980
X		99.170%	100.887%	97.446%	98.648%	96.696%	96.864%	98.741%	99.703%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.310	1.624	1.173	2.015	1.540	0.892	0.546	1.095
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:10:24	78.950	79.560	80.200	80.340	84.740	83.880	0.000	71.570
2	21:10:44	79.590	82.850	82.540	80.990	85.890	83.840	0.000	73.060
3	21:11:03	79.560	83.350	83.100	81.100	84.720	83.760	0.000	73.440
X		99.209%	102.400%	102.435%	101.015%	106.392%	104.784%	0.000	90.860%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.458	2.513	1.875	0.510	0.786	0.074	0.000	1.359
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:10:24	105.556%	75.390	78.420	91.623%	81.530	81.460	82.340	81.820
2	21:10:44	106.686%	78.230	81.220	92.022%	83.440	82.570	83.100	83.830
3	21:11:03	107.146%	77.150	80.780	91.881%	82.540	83.110	84.540	84.090
X		106.463%	96.153%	100.176%	91.842%	103.128%	102.977%	104.159%	104.058%
σ		0.818%	n/a	n/a	0.202%	n/a	n/a	n/a	n/a
%RSD		0.769	1.863	1.882	0.220	1.162	1.018	1.338	1.495
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:10:24	93.473%	79.160	79.930	79.430	78.360	78.760	94.328%	93.645%
2	21:10:44	92.897%	81.190	81.460	81.460	81.040	80.760	94.189%	94.558%
3	21:11:03	93.474%	81.650	81.040	82.040	81.030	80.670	96.328%	96.227%
X		93.282%	100.836%	101.009%	101.217%	100.178%	100.078%	94.949%	94.810%
σ		0.333%	n/a	n/a	n/a	n/a	n/a	1.197%	1.309%
%RSD		0.357	1.642	0.980	1.693	1.931	1.415	1.261	1.381
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:10:24	79.850	80.680	78.660	75.770	76.130	97.889%		
2	21:10:44	80.830	82.510	80.500	78.680	78.600	97.895%		
3	21:11:03	82.760	84.300	82.120	78.980	80.010	97.443%		
X		101.436%	103.119%	100.537%	97.260%	97.806%	97.742%		
σ		n/a	n/a	n/a	n/a	n/a	0.259%		
%RSD		1.824	2.196	2.153	2.282	2.508	0.265		

ICB 4/27/2015 9:17:15 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:17:15	97.950%	0.023	0.117	0.071	0.000	2.599	1.808	1.907
2	21:17:34	101.510%	0.021	0.180	0.026	0.000	5.093	4.885	4.969
3	21:17:53	99.038%	0.009	-0.046	0.057	0.000	4.111	4.295	4.426
X		99.499%	0.018	0.084	0.052	0.000	3.934	3.663	3.767
σ		1.824%	0.007	0.117	0.023	0.000	1.256	1.633	1.633
%RSD		1.833	41.100	139.300	44.610	0.000	31.930	44.590	43.360
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:17:15	-0.477	18.760	0.000	5.553	-0.384	2.471	105.287%	-0.112
2	21:17:34	-0.367	23.870	0.000	9.805	6.715	6.258	100.457%	-0.066
3	21:17:53	-0.390	4.473	0.000	8.007	8.671	5.473	98.751%	-0.063
X		-0.411	15.700	0.000	7.788	5.001	4.734	101.499%	-0.080
σ		0.058	10.050	0.000	2.134	4.764	1.999	3.390%	0.027
%RSD		14.090	64.030	0.000	27.410	95.270	42.220	3.340	33.970
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:17:15	0.008	0.001	0.010	0.270	3.045	0.001	-0.017	-0.056
2	21:17:34	0.003	-0.024	0.049	3.136	4.659	0.010	-0.001	-0.046
3	21:17:53	0.006	0.004	0.039	1.723	3.499	0.010	-0.002	-0.037
X		0.006	-0.006	0.032	1.710	3.734	0.007	-0.007	-0.046
σ		0.003	0.015	0.020	1.433	0.833	0.005	0.009	0.010
%RSD		44.630	248.000	61.660	83.840	22.300	73.050	132.200	21.120
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:17:15	-0.046	-0.088	-0.186	0.004	-0.058	0.060	0.000	0.001
2	21:17:34	0.003	-0.086	-0.089	0.060	-0.106	0.157	0.000	0.004
3	21:17:53	-0.029	-0.031	-0.206	0.026	-0.053	-0.011	0.000	0.009
X		-0.024	-0.068	-0.160	0.030	-0.072	0.069	0.000	0.005
σ		0.025	0.033	0.063	0.028	0.029	0.085	0.000	0.004
%RSD		105.500	47.670	39.110	92.170	40.400	123.000	0.000	85.470
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:17:15	98.781%	0.187	0.188	100.101%	-0.049	-0.045	0.105	0.078
2	21:17:34	99.916%	0.180	0.185	99.897%	-0.045	-0.043	0.085	0.058
3	21:17:53	100.591%	0.133	0.172	99.974%	-0.031	-0.038	0.125	0.081
X		99.763%	0.167	0.182	99.991%	-0.042	-0.042	0.105	0.073
σ		0.915%	0.029	0.009	0.103%	0.009	0.004	0.020	0.013
%RSD		0.917	17.540	4.798	0.103	22.160	8.425	19.470	17.530
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:17:15	99.266%	-0.120	-0.018	-0.014	-0.013	0.002	98.590%	98.009%
2	21:17:34	99.428%	-0.053	-0.000	-0.012	-0.013	0.008	100.052%	100.059%
3	21:17:53	100.855%	-0.084	-0.006	-0.011	-0.019	0.018	101.621%	101.927%
X		99.849%	-0.086	-0.008	-0.012	-0.015	0.009	100.088%	99.999%
σ		0.874%	0.034	0.009	0.002	0.003	0.008	1.516%	1.960%
%RSD		0.876	39.330	116.400	15.770	21.680	84.720	1.514	1.960
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:17:15	0.017	0.017	-0.023	-0.015	-0.013	106.207%		
2	21:17:34	0.019	0.022	-0.004	0.001	-0.002	105.572%		
3	21:17:53	0.021	0.024	-0.007	0.002	-0.006	106.593%		
X		0.019	0.021	-0.011	-0.004	-0.007	106.124%		
σ		0.002	0.004	0.010	0.010	0.005	0.515%		
%RSD		10.220	17.890	90.980	238.800	77.890	0.486		

CRI 1525173 4/27/2015 9:20:55 PM QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:20:55	100.385%	1.162	19.690	19.300	0.000	473.900	453.400	458.600
2	21:21:14	94.696%	1.178	20.330	19.260	0.000	504.300	498.400	495.200
3	21:21:33	93.700%	0.971	19.560	20.080	0.000	491.700	489.200	497.200
X		96.260%	110.403%	397.250%	390.913%	0.000	489.958%	480.310%	483.654%
σ		3.606%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		3.746	10.430	2.075	2.351	0.000	3.114	4.956	4.483
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:20:55	28.200	454.100	0.000	486.700	433.400	490.900	103.220%	4.544
2	21:21:14	30.320	493.500	0.000	518.700	436.300	516.900	99.207%	4.524
3	21:21:33	30.620	461.300	0.000	515.300	464.300	522.600	97.337%	4.733
X		99.048%	93.922%	0.000	506.914%	444.672%	510.130%	99.921%	92.005%
σ		n/a	n/a	0.000	n/a	n/a	n/a	3.006%	n/a
%RSD		4.434	4.465	0.000	3.464	3.836	3.316	3.008	2.510
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:20:55	0.937	2.022	4.724	50.400	51.050	0.529	1.162	2.246
2	21:21:14	0.958	2.066	4.914	50.780	52.120	0.531	1.053	2.100
3	21:21:33	0.950	2.008	4.917	48.860	53.210	0.517	1.081	2.166
X		94.825%	101.602%	97.037%	100.029%	104.256%	105.164%	109.890%	108.525%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.105	1.498	2.277	2.028	2.076	1.421	5.140	3.375
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:20:55	2.125	5.584	5.417	1.195	5.677	5.758	0.000	4.868
2	21:21:14	2.227	5.492	5.922	1.117	5.662	5.688	0.000	4.965
3	21:21:33	2.207	5.907	5.770	1.122	5.746	5.762	0.000	4.896
X		109.320%	113.224%	114.063%	114.465%	113.902%	114.716%	0.000	98.196%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.483	3.851	4.541	3.829	0.788	0.724	0.000	1.022
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:20:55	97.820%	4.479	4.629	97.578%	1.047	1.013	1.189	1.113
2	21:21:14	97.493%	4.744	4.881	96.930%	1.071	1.020	1.211	1.115
3	21:21:33	98.825%	4.686	4.703	99.086%	1.022	1.037	1.178	1.124
X		98.046%	92.726%	94.748%	97.865%	104.663%	102.320%	119.248%	111.739%
σ		0.694%	n/a	n/a	1.106%	n/a	n/a	n/a	n/a
%RSD		0.708	3.002	2.737	1.131	2.326	1.179	1.409	0.552
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:20:55	97.442%	4.623	1.865	1.808	9.725	9.604	98.822%	99.063%
2	21:21:14	99.283%	4.805	1.902	1.888	9.967	9.768	100.061%	100.486%
3	21:21:33	99.968%	5.028	1.827	1.922	9.655	9.589	102.143%	101.391%
X		98.898%	96.377%	93.246%	93.628%	97.822%	96.538%	100.342%	100.314%
σ		1.306%	n/a	n/a	n/a	n/a	n/a	1.678%	1.174%
%RSD		1.321	4.211	2.025	3.126	1.674	1.028	1.673	1.170
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:20:55	0.941	0.968	1.046	1.025	0.997	102.073%		
2	21:21:14	0.987	1.003	1.044	1.025	1.029	102.991%		
3	21:21:33	0.980	1.013	1.069	1.070	1.048	104.579%		
X		96.914%	99.497%	105.318%	103.966%	102.484%	103.214%		
σ		n/a	n/a	n/a	n/a	n/a	1.268%		
%RSD		2.551	2.380	1.344	2.487	2.492	1.228		

ICSA 1533081 4/27/2015 9:25:43 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:25:43	70.508%	-0.007	0.586	0.425	0.000	107900.000	106300.000	106100.000
2	21:26:03	69.985%	-0.015	0.397	0.405	0.000	106400.000	106400.000	107100.000
3	21:26:23	62.748%	0.069	0.449	0.383	0.000	110900.000	112300.000	112400.000
X		67.747%	0.016	0.477	0.404	0.000	108400.000	108300.000	108500.000
σ		4.337%	0.047	0.097	0.021	0.000	2299.000	3441.000	3361.000
%RSD		6.401	294.500	20.420	5.163	0.000	2.121	3.177	3.098
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:25:43	100700.000	27.960	0.000	109400.000	113500.000	113500.000	78.763%	2235.000
2	21:26:03	105000.000	11.190	0.000	110000.000	114000.000	114700.000	75.774%	2258.000
3	21:26:23	108400.000	14.960	0.000	114500.000	117500.000	117000.000	74.053%	2261.000
X		104700.000	18.040	0.000	111300.000	115000.000	115000.000	76.197%	2251.000
σ		3847.000	8.797	0.000	2742.000	2164.000	1804.000	2.384%	14.540
%RSD		3.674	48.770	0.000	2.464	1.882	1.568	3.128	0.646
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:25:43	-0.226	0.620	0.500	110700.000	111100.000	0.088	-0.765	1.371
2	21:26:03	-0.298	0.677	0.522	111700.000	112400.000	0.056	-0.786	1.364
3	21:26:23	-0.398	0.560	0.492	112400.000	111200.000	0.068	-0.758	1.290
X		-0.308	0.619	0.505	111600.000	111600.000	0.071	-0.770	1.342
σ		0.086	0.059	0.015	858.300	703.200	0.017	0.015	0.045
%RSD		28.060	9.466	3.036	0.769	0.630	23.290	1.932	3.357
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:25:43	1.774	2.641	1.516	0.012	-0.106	0.140	0.000	0.777
2	21:26:03	1.498	2.528	1.590	0.145	-0.101	0.250	0.000	0.770
3	21:26:23	1.472	2.399	1.503	0.072	-0.073	0.124	0.000	0.753
X		1.581	2.522	1.536	0.076	-0.093	0.171	0.000	0.767
σ		0.167	0.121	0.047	0.067	0.018	0.068	0.000	0.013
%RSD		10.580	4.787	3.047	87.180	18.850	40.010	0.000	1.635
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:25:43	75.214%	2345.000	2346.000	77.896%	0.079	0.097	0.231	0.322
2	21:26:03	75.689%	2384.000	2394.000	76.996%	0.081	0.084	0.508	0.321
3	21:26:23	75.570%	2349.000	2397.000	77.808%	0.093	0.097	0.476	0.310
X		75.491%	2359.000	2379.000	77.567%	0.084	0.093	0.405	0.318
σ		0.247%	21.370	28.540	0.496%	0.008	0.008	0.151	0.007
%RSD		0.328	0.906	1.200	0.640	9.062	8.448	37.330	2.141
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:25:43	78.088%	-0.039	0.047	0.014	0.085	0.116	82.143%	82.171%
2	21:26:03	79.290%	-0.055	0.026	0.024	0.115	0.116	85.380%	85.566%
3	21:26:23	81.326%	-0.044	0.049	0.027	0.102	0.119	86.410%	86.948%
X		79.568%	-0.046	0.041	0.021	0.101	0.117	84.644%	84.895%
σ		1.637%	0.008	0.013	0.007	0.015	0.002	2.227%	2.458%
%RSD		2.057	17.380	32.510	30.580	14.670	1.465	2.631	2.895
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:25:43	0.019	0.020	0.216	0.186	0.185	112.300%		
2	21:26:03	0.020	0.028	0.249	0.225	0.226	100.190%		
3	21:26:23	0.019	0.022	0.257	0.230	0.240	95.310%		
X		0.019	0.024	0.241	0.214	0.217	102.600%		
σ		0.001	0.004	0.022	0.024	0.029	8.748%		
%RSD		3.598	16.280	9.050	11.290	13.320	8.526		

IC SAB 1533082 4/27/2015 9:29:24 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:24	69.122%	19.860	49.590	47.020	0.000	105000.000	103500.000	103400.000
2	21:29:43	67.067%	21.400	51.120	48.950	0.000	104800.000	106100.000	105200.000
3	21:30:03	62.570%	20.580	50.850	46.900	0.000	106700.000	107000.000	106400.000
X		66.253%	103.068%	101.040%	95.246%	0.000	105.495%	105.531%	104.981%
σ		3.351%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		5.058	3.746	1.624	2.409	0.000	0.965	1.744	1.455
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:24	99610.000	470.100	0.000	103700.000	107200.000	105300.000	82.233%	2067.000
2	21:29:43	101200.000	474.800	0.000	105100.000	109300.000	109700.000	78.362%	2087.000
3	21:30:03	103200.000	459.000	0.000	107300.000	112100.000	112000.000	77.359%	2099.000
X		101.363%	93.592%	0.000	105.363%	109.548%	109.003%	79.318%	104.202%
σ		n/a	n/a	0.000	n/a	n/a	n/a	2.573%	n/a
%RSD		1.799	1.739	0.000	1.746	2.232	3.129	3.245	0.773
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:24	18.630	20.440	20.710	103900.000	103900.000	20.110	19.380	20.770
2	21:29:43	19.640	21.060	21.480	108200.000	109300.000	20.600	19.660	21.340
3	21:30:03	19.690	20.990	21.360	106000.000	106300.000	19.680	18.290	20.700
X		96.600%	104.150%	92.112%	106.021%	106.511%	100.667%	95.555%	104.680%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		3.090	1.635	1.958	2.025	2.569	2.288	3.769	1.683
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:24	20.720	23.770	22.640	22.690	58.190	58.860	0.000	22.970
2	21:29:43	21.260	24.010	23.270	22.470	57.930	56.640	0.000	23.250
3	21:30:03	20.870	24.140	23.480	21.880	59.250	58.480	0.000	23.070
X		104.749%	95.906%	92.514%	111.727%	116.915%	115.988%	0.000	115.475%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.325	0.781	1.898	1.876	1.200	2.055	0.000	0.627
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:24	80.777%	2282.000	2292.000	81.414%	19.590	19.630	21.220	20.880
2	21:29:43	80.668%	2296.000	2327.000	81.889%	19.770	19.440	21.500	20.610
3	21:30:03	79.893%	2302.000	2340.000	79.516%	19.630	19.510	21.790	20.780
X		80.446%	114.659%	115.992%	80.940%	98.304%	97.641%	107.514%	103.793%
σ		0.482%	n/a	n/a	1.256%	n/a	n/a	n/a	n/a
%RSD		0.600	0.455	1.077	1.552	0.483	0.503	1.325	0.664
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:24	85.497%	105.400	21.280	21.380	21.120	21.130	87.645%	87.642%
2	21:29:43	86.760%	105.900	21.520	21.740	21.480	21.340	88.964%	90.244%
3	21:30:03	86.511%	107.100	21.350	21.730	22.110	21.270	90.180%	90.198%
X		86.256%	106.150%	106.915%	108.082%	107.835%	106.222%	88.930%	89.361%
σ		0.669%	n/a	n/a	n/a	n/a	n/a	1.268%	1.489%
%RSD		0.775	0.830	0.570	0.960	2.332	0.498	1.426	1.666
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:29:24	19.290	19.450	20.690	20.500	20.230	99.227%		
2	21:29:43	20.810	21.310	22.220	22.080	21.730	94.917%		
3	21:30:03	21.750	22.090	22.830	22.590	22.500	92.871%		
X		103.094%	104.740%	109.560%	108.630%	107.432%	95.672%		
σ		n/a	n/a	n/a	n/a	n/a	3.245%		
%RSD		6.031	6.461	5.036	5.012	5.389	3.391		

CCV 1533080 4/27/2015 9:36:13 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:36:13	77.832%	98.930	96.080	92.090	0.000	49940.000	49650.000	49590.000
2	21:36:32	75.605%	102.500	98.970	92.880	0.000	50000.000	51040.000	50910.000
3	21:36:51	74.224%	103.500	101.600	95.920	0.000	50190.000	49890.000	50340.000
x		75.887%	101.658%	98.881%	93.630%	0.000	100.083%	100.387%	100.557%
σ		1.821%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.399	2.375	2.784	2.160	0.000	0.259	1.480	1.313
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:36:13	494.000	4752.000	0.000	49650.000	46240.000	49130.000	91.768%	96.270
2	21:36:32	504.500	4852.000	0.000	51930.000	49330.000	52260.000	85.649%	99.910
3	21:36:51	503.300	4721.000	0.000	51410.000	48890.000	51680.000	86.025%	99.510
x		100.122%	95.494%	0.000	101.995%	96.308%	102.049%	87.814%	98.562%
σ		n/a	n/a	0.000	n/a	n/a	n/a	3.430%	n/a
%RSD		1.143	1.431	0.000	2.338	3.470	3.259	3.906	2.024
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:36:13	94.890	95.270	495.000	24570.000	24110.000	93.400	95.380	94.300
2	21:36:32	97.290	98.190	515.200	25800.000	25390.000	96.350	95.320	96.890
3	21:36:51	98.120	98.980	517.400	25530.000	24890.000	95.270	95.210	96.490
x		96.765%	97.479%	101.835%	101.208%	99.190%	95.005%	95.304%	95.892%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.734	2.002	2.421	2.556	2.612	1.574	0.093	1.456
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:36:13	94.320	101.300	101.100	100.900	107.300	107.600	0.000	101.900
2	21:36:32	96.510	104.500	103.400	101.200	107.900	106.800	0.000	102.200
3	21:36:51	95.000	103.800	105.500	100.500	107.300	106.700	0.000	103.200
x		95.278%	103.178%	103.295%	100.850%	107.515%	107.023%	0.000	102.453%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.180	1.642	2.120	0.347	0.287	0.461	0.000	0.620
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:36:13	93.305%	98.060	99.550	88.246%	100.600	98.840	101.500	101.400
2	21:36:32	94.195%	98.610	102.600	88.094%	100.600	99.560	103.300	103.400
3	21:36:51	92.961%	100.800	103.900	87.654%	100.400	100.000	103.500	101.400
x		93.487%	99.168%	102.006%	87.998%	100.544%	99.476%	102.762%	102.079%
σ		0.637%	n/a	n/a	0.307%	n/a	n/a	n/a	n/a
%RSD		0.681	1.482	2.170	0.349	0.101	0.600	1.041	1.114
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:36:13	94.974%	97.570	97.920	98.600	96.990	97.280	103.278%	104.105%
2	21:36:32	94.474%	98.890	100.600	101.300	98.580	98.560	103.291%	106.201%
3	21:36:51	95.137%	98.250	99.670	100.400	96.680	96.650	104.909%	105.780%
x		94.862%	98.236%	99.403%	100.096%	97.416%	97.494%	103.826%	105.362%
σ		0.345%	n/a	n/a	n/a	n/a	n/a	0.938%	1.109%
%RSD		0.364	0.672	1.380	1.371	1.044	0.999	0.904	1.052
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:36:13	100.100	100.700	102.600	101.100	100.600	102.287%		
2	21:36:32	103.600	103.500	104.500	105.100	104.100	102.131%		
3	21:36:51	103.100	103.400	104.100	105.300	103.800	102.505%		
x		102.256%	102.529%	103.758%	103.826%	102.849%	102.307%		
σ		n/a	n/a	n/a	n/a	n/a	0.188%		
%RSD		1.845	1.508	0.992	2.281	1.912	0.183		

CCB1 4/27/2015 9:42:55 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	21:43:15	86.622%	-0.006	0.118	0.066	0.000	9.464	5.846	5.547
2	21:43:34	86.069%	-0.021	-0.013	0.021	0.000	8.758	5.837	6.621
3	21:43:53	83.794%	0.003	0.044	0.008	0.000	6.717	4.822	4.159
X		85.495%	-0.008	0.050	0.031	0.000	8.313	5.502	5.442
σ		1.499%	0.012	0.066	0.030	0.000	1.426	0.589	1.234
%RSD		1.753	154.200	132.200	95.910	0.000	17.160	10.700	22.680
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:43:15	1.552	-32.210	0.000	14.220	6.772	6.363	95.210%	-0.029
2	21:43:34	2.027	-49.120	0.000	14.710	11.630	8.508	91.617%	0.008
3	21:43:53	1.337	-58.710	0.000	11.510	5.984	6.100	91.083%	0.002
X		1.639	-46.680	0.000	13.480	8.130	6.990	92.636%	-0.006
σ		0.353	13.410	0.000	1.723	3.060	1.321	2.245%	0.020
%RSD		21.560	28.730	0.000	12.780	37.640	18.890	2.423	315.400
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:43:15	-0.009	-0.030	0.031	2.476	5.294	0.008	-0.019	-0.043
2	21:43:34	0.005	-0.001	0.029	2.615	7.170	0.009	0.008	-0.022
3	21:43:53	0.010	0.005	0.016	1.708	4.688	0.000	0.025	-0.036
X		0.002	-0.009	0.025	2.266	5.717	0.006	0.005	-0.034
σ		0.010	0.019	0.008	0.489	1.294	0.005	0.022	0.011
%RSD		528.300	215.400	33.000	21.560	22.630	87.980	464.800	31.990
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:43:15	0.000	-0.306	-0.440	0.020	-0.222	0.076	0.000	0.000
2	21:43:34	-0.025	-0.331	-0.337	-0.014	-0.090	-0.071	0.000	0.009
3	21:43:53	0.009	-0.234	-0.345	0.004	-0.152	-0.071	0.000	0.003
X		-0.005	-0.290	-0.374	0.004	-0.155	-0.022	0.000	0.004
σ		0.018	0.050	0.057	0.017	0.066	0.085	0.000	0.004
%RSD		337.200	17.330	15.300	491.000	42.760	380.900	0.000	111.700
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:43:15	100.885%	0.454	0.458	99.330%	-0.061	-0.059	0.069	0.044
2	21:43:34	101.645%	0.476	0.472	100.403%	-0.063	-0.059	0.110	0.066
3	21:43:53	102.359%	0.443	0.445	99.952%	-0.063	-0.067	0.055	0.038
X		101.630%	0.458	0.458	99.895%	-0.063	-0.062	0.078	0.049
σ		0.737%	0.017	0.014	0.539%	0.001	0.004	0.029	0.015
%RSD		0.725	3.617	3.004	0.539	1.781	6.912	37.070	29.550
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:43:15	105.451%	-0.128	0.018	0.005	-0.003	0.007	111.027%	111.644%
2	21:43:34	106.658%	-0.156	0.016	0.013	-0.008	0.006	112.057%	113.704%
3	21:43:53	106.029%	-0.158	0.000	0.005	-0.010	0.000	112.845%	114.640%
X		106.046%	-0.147	0.011	0.008	-0.007	0.005	111.976%	113.330%
σ		0.604%	0.016	0.010	0.005	0.004	0.004	0.912%	1.533%
%RSD		0.569	11.190	87.390	66.590	57.110	81.940	0.814	1.352
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:43:15	0.036	0.032	-0.011	-0.013	-0.011	117.282%		
2	21:43:34	0.027	0.035	-0.009	-0.004	-0.009	117.769%		
3	21:43:53	0.026	0.033	-0.015	-0.009	-0.013	118.665%		
X		0.030	0.034	-0.011	-0.009	-0.011	117.905%		
σ		0.005	0.002	0.003	0.005	0.002	0.702%		
%RSD		18.450	4.998	29.740	50.990	17.770	0.595		

MB 180-139582/1-A 4/27/2015 9:46:46 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:47:05	83.432%	-0.004	0.044	0.062	0.000	6.561	2.120	2.531
2	21:47:24	81.509%	-0.043	0.019	0.121	0.000	6.628	3.022	3.550
3	21:47:43	78.838%	-0.019	0.023	0.011	0.000	5.223	2.347	2.250
X		81.260%	-0.022	0.029	0.065	0.000	6.138	2.496	2.777
σ		2.307%	0.020	0.013	0.055	0.000	0.793	0.469	0.684
%RSD		2.839	88.800	46.330	85.710	0.000	12.910	18.800	24.640
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:47:05	1.129	-23.180	0.000	13.450	1.463	5.159	91.795%	-0.051
2	21:47:24	1.524	-33.430	0.000	13.180	4.195	5.084	89.735%	-0.062
3	21:47:43	1.215	-42.400	0.000	11.030	8.405	5.282	87.591%	-0.081
X		1.289	-33.000	0.000	12.550	4.687	5.175	89.707%	-0.064
σ		0.208	9.620	0.000	1.321	3.497	0.100	2.102%	0.015
%RSD		16.110	29.150	0.000	10.530	74.610	1.932	2.343	23.480
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:47:05	-0.039	0.046	0.026	-0.309	4.322	0.000	-0.014	-0.040
2	21:47:24	0.001	0.050	0.032	-0.721	3.222	-0.000	-0.005	-0.072
3	21:47:43	-0.018	0.064	0.030	-0.040	3.664	-0.001	0.011	-0.063
X		-0.018	0.053	0.029	-0.357	3.736	-0.000	-0.002	-0.058
σ		0.020	0.009	0.003	0.343	0.554	0.001	0.012	0.017
%RSD		108.700	17.270	10.110	96.160	14.820	329.500	497.300	28.820
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:47:05	-0.052	0.115	0.030	-0.011	-0.322	-0.033	0.000	0.004
2	21:47:24	-0.042	0.186	0.131	0.109	-0.181	0.101	0.000	0.002
3	21:47:43	-0.051	0.125	0.105	0.018	-0.128	0.179	0.000	0.002
X		-0.048	0.142	0.088	0.039	-0.210	0.082	0.000	0.003
σ		0.006	0.038	0.053	0.063	0.100	0.107	0.000	0.001
%RSD		11.440	27.010	59.390	162.900	47.650	130.100	0.000	54.870
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:47:05	100.064%	0.306	0.323	98.155%	-0.052	-0.045	0.047	0.024
2	21:47:24	98.672%	0.306	0.345	96.431%	-0.039	-0.042	0.027	0.021
3	21:47:43	99.801%	0.299	0.329	96.227%	-0.045	-0.036	0.021	0.004
X		99.512%	0.304	0.333	96.938%	-0.045	-0.041	0.032	0.016
σ		0.739%	0.004	0.012	1.059%	0.007	0.005	0.014	0.010
%RSD		0.743	1.388	3.472	1.092	14.460	11.850	42.980	64.240
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:47:05	102.736%	1.054	-0.015	-0.015	-0.014	-0.002	108.250%	109.842%
2	21:47:24	103.090%	1.020	-0.007	-0.007	-0.012	0.004	110.606%	111.925%
3	21:47:43	104.388%	0.904	-0.005	-0.018	0.007	0.012	113.229%	113.317%
X		103.405%	0.993	-0.009	-0.014	-0.006	0.004	110.695%	111.695%
σ		0.870%	0.079	0.006	0.006	0.012	0.007	2.491%	1.749%
%RSD		0.841	7.929	62.580	42.620	184.300	151.700	2.250	1.566
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:47:05	0.031	0.025	0.015	0.022	0.013	117.499%		
2	21:47:24	0.019	0.029	0.012	0.008	0.014	113.367%		
3	21:47:43	0.022	0.030	0.013	0.014	0.015	111.175%		
X		0.024	0.028	0.013	0.015	0.014	114.014%		
σ		0.006	0.003	0.002	0.007	0.001	3.211%		
%RSD		25.150	9.154	13.910	49.230	6.995	2.817		

LCS 180-139582/2-A 4/27/2015 9:50:33 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:50:52	80.040%	44.630	900.900	873.700	0.000	45780.000	45230.000	45040.000
2	21:51:11	74.268%	45.850	942.400	893.200	0.000	48470.000	47130.000	46680.000
3	21:51:31	73.964%	45.640	920.100	863.700	0.000	47530.000	46290.000	45800.000
X		76.091%	45.370	921.200	876.800	0.000	47260.000	46220.000	45840.000
σ		3.423%	0.653	20.750	15.040	0.000	1365.000	956.600	818.800
%RSD		4.499	1.440	2.252	1.715	0.000	2.889	2.070	1.786
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:50:52	1779.000	7958.000	0.000	47940.000	47140.000	50510.000	73.223%	964.000
2	21:51:11	1788.000	8247.000	0.000	48680.000	47950.000	51050.000	71.758%	971.900
3	21:51:31	1781.000	8121.000	0.000	48290.000	48060.000	51160.000	69.995%	981.800
X		1783.000	8108.000	0.000	48300.000	47720.000	50910.000	71.659%	972.600
σ		4.493	145.300	0.000	365.500	503.900	351.300	1.616%	8.966
%RSD		0.252	1.792	0.000	0.757	1.056	0.690	2.256	0.922
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:50:52	514.700	200.900	512.200	1063.000	1113.000	509.000	493.800	244.600
2	21:51:11	512.400	198.400	508.700	1044.000	1084.000	501.500	488.000	246.400
3	21:51:31	512.500	198.600	521.900	1057.000	1089.000	515.700	489.000	242.100
X		513.200	199.300	514.300	1055.000	1095.000	508.700	490.300	244.300
σ		1.305	1.409	6.864	9.626	15.370	7.112	3.089	2.169
%RSD		0.254	0.707	1.335	0.912	1.403	1.398	0.630	0.887
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:50:52	246.700	454.000	455.500	34.610	8.878	8.900	0.000	1045.000
2	21:51:11	246.800	460.200	461.100	34.170	8.158	8.891	0.000	1042.000
3	21:51:31	242.900	461.400	459.800	34.360	8.146	8.915	0.000	1049.000
X		245.500	458.500	458.800	34.380	8.394	8.902	0.000	1045.000
σ		2.222	3.990	2.929	0.219	0.419	0.012	0.000	3.113
%RSD		0.905	0.870	0.638	0.638	4.998	0.136	0.000	0.298
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:50:52	70.790%	1088.000	1092.000	73.787%	47.050	46.960	46.120	40.000
2	21:51:11	70.781%	1078.000	1102.000	73.515%	47.580	47.570	45.850	38.380
3	21:51:31	70.986%	1051.000	1100.000	73.573%	47.560	47.300	45.290	39.870
X		70.852%	1072.000	1098.000	73.625%	47.400	47.270	45.750	39.420
σ		0.116%	19.370	5.534	0.143%	0.301	0.303	0.421	0.898
%RSD		0.163	1.806	0.504	0.195	0.636	0.642	0.921	2.278
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:50:52	77.919%	1976.000	449.700	458.800	1853.000	1845.000	90.020%	90.655%
2	21:51:11	78.260%	1981.000	454.500	457.500	1871.000	1841.000	89.711%	92.445%
3	21:51:31	78.646%	1986.000	458.100	460.800	1868.000	1845.000	91.436%	93.005%
X		78.275%	1981.000	454.100	459.100	1864.000	1844.000	90.389%	92.035%
σ		0.364%	4.967	4.220	1.641	9.539	2.169	0.920%	1.227%
%RSD		0.465	0.251	0.929	0.357	0.512	0.118	1.017	1.334
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:50:52	52.650	53.930	21.800	21.760	21.700	77.348%		
2	21:51:11	52.500	53.960	21.910	22.120	21.850	79.401%		
3	21:51:31	52.480	53.820	21.600	21.900	21.620	80.216%		
X		52.540	53.900	21.770	21.930	21.720	78.988%		
σ		0.096	0.071	0.156	0.179	0.120	1.478%		
%RSD		0.182	0.131	0.718	0.817	0.551	1.871		

180-42915-A-2-D 4/27/2015 9:57:32 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:57:51	77.549%	5.914	15.770	15.020	0.000	20630.000	1098.000	1117.000
2	21:58:10	73.997%	5.778	15.800	14.820	0.000	20610.000	1082.000	1105.000
3	21:58:29	74.356%	5.285	12.600	14.020	0.000	18760.000	1013.000	1018.000
X		75.300%	5.659	14.720	14.620	0.000	20000.000	1064.000	1080.000
σ		1.955%	0.331	1.839	0.529	0.000	1076.000	45.140	54.110
%RSD		2.597	5.846	12.490	3.621	0.000	5.382	4.241	5.011
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:57:51	61770.000	3329.000	0.000	15940.000	9199.000	9551.000	91.791%	110.300
2	21:58:10	63260.000	3410.000	0.000	15930.000	9084.000	9246.000	93.408%	111.500
3	21:58:29	57210.000	3080.000	0.000	14700.000	8612.000	9077.000	94.139%	101.700
X		60750.000	3273.000	0.000	15520.000	8965.000	9291.000	93.113%	107.800
σ		3154.000	172.100	0.000	710.000	311.200	240.200	1.202%	5.312
%RSD		5.192	5.260	0.000	4.574	3.472	2.585	1.291	4.926
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:57:51	75.710	80.580	1421.000	399900.000	440500.000	178.400	97.180	263.000
2	21:58:10	74.710	80.110	1403.000	395000.000	437000.000	177.600	93.350	256.700
3	21:58:29	69.710	74.310	1331.000	373700.000	414600.000	167.300	89.380	241.400
X		73.370	78.330	1385.000	389500.000	430700.000	174.400	93.300	253.700
σ		3.216	3.492	47.390	13940.000	14050.000	6.183	3.901	11.120
%RSD		4.383	4.457	3.422	3.579	3.261	3.544	4.181	4.382
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:57:51	264.200	433.500	440.200	80.840	1.088	2.503	0.000	3118.000
2	21:58:10	256.800	435.600	439.400	80.180	1.031	2.208	0.000	3120.000
3	21:58:29	241.000	413.300	418.400	76.810	1.031	2.165	0.000	2983.000
X		254.000	427.500	432.700	79.280	1.050	2.292	0.000	3074.000
σ		11.840	12.300	12.350	2.164	0.033	0.184	0.000	78.640
%RSD		4.661	2.876	2.854	2.730	3.146	8.025	0.000	2.558
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:57:51	0.000	3.943	3.960	83.150%	0.115	-0.002	1.001	0.611
2	21:58:10	0.000	3.868	3.898	81.950%	0.110	-0.002	1.069	0.723
3	21:58:29	0.000	3.632	3.653	82.922%	0.088	0.004	1.033	0.614
X		0.000	3.814	3.837	82.674%	0.104	0.000	1.035	0.649
σ		0.000	0.163	0.163	0.637%	0.014	0.003	0.034	0.064
%RSD		0.000	4.259	4.234	0.770	13.780	1167.000	3.285	9.857
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:57:51	84.130%	37.400	1.940	2.047	1820.000	1808.000	92.290%	91.862%
2	21:58:10	86.377%	37.090	1.916	2.051	1791.000	1783.000	94.801%	94.473%
3	21:58:29	87.895%	34.760	1.772	1.913	1720.000	1677.000	96.841%	97.352%
X		86.134%	36.410	1.876	2.004	1777.000	1756.000	94.644%	94.562%
σ		1.895%	1.438	0.091	0.078	51.450	69.440	2.279%	2.746%
%RSD		2.200	3.949	4.838	3.904	2.895	3.954	2.408	2.904
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:57:51	1.649	1.630	74.310	68.100	70.570	76.351%		
2	21:58:10	1.639	1.639	73.740	68.070	70.440	79.146%		
3	21:58:29	1.418	1.431	63.990	58.950	60.930	89.738%		
X		1.568	1.567	70.680	65.040	67.310	81.745%		
σ		0.131	0.118	5.799	5.276	5.529	7.062%		
%RSD		8.328	7.527	8.205	8.112	8.213	8.639		

180-42915-A-1-B 4/27/2015 10:01:20 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:01:39	82.058%	5.881	34.950	32.750	0.000	38860.000	1351.000	1360.000
2	22:01:58	73.843%	6.053	34.980	34.950	0.000	41420.000	1445.000	1442.000
3	22:02:17	78.107%	5.534	33.810	32.140	0.000	39000.000	1343.000	1353.000
x		78.003%	5.823	34.580	33.280	0.000	39760.000	1380.000	1385.000
σ		4.108%	0.264	0.663	1.480	0.000	1443.000	56.330	49.730
%RSD		5.267	4.534	1.918	4.448	0.000	3.628	4.083	3.590
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:01:39	50980.000	3266.000	0.000	14110.000	19120.000	20460.000	99.919%	147.400
2	22:01:58	54870.000	3548.000	0.000	14850.000	20040.000	20650.000	99.132%	153.100
3	22:02:17	51300.000	3328.000	0.000	14310.000	19720.000	20510.000	99.358%	146.900
x		52380.000	3380.000	0.000	14420.000	19620.000	20540.000	99.470%	149.100
σ		2155.000	147.900	0.000	382.400	467.800	96.170	0.405%	3.418
%RSD		4.114	4.377	0.000	2.651	2.384	0.468	0.407	2.292
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:01:39	81.850	96.370	753.900	298500.000	320600.000	67.380	84.720	306.200
2	22:01:58	85.930	97.680	778.100	303600.000	323900.000	67.560	85.860	308.300
3	22:02:17	83.170	93.800	760.200	293700.000	309900.000	63.120	81.280	298.000
x		83.650	95.950	764.100	298600.000	318100.000	66.020	83.950	304.100
σ		2.080	1.972	12.510	4950.000	7313.000	2.514	2.384	5.445
%RSD		2.487	2.055	1.637	1.657	2.299	3.808	2.840	1.790
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:01:39	306.500	426.500	424.600	196.700	1.658	2.921	0.000	5834.000
2	22:01:58	304.300	432.400	446.100	204.400	1.684	3.105	0.000	6024.000
3	22:02:17	294.400	429.100	435.700	197.900	1.601	2.653	0.000	5932.000
x		301.700	429.300	435.500	199.600	1.648	2.893	0.000	5930.000
σ		6.485	2.951	10.770	4.127	0.042	0.227	0.000	95.170
%RSD		2.149	0.687	2.474	2.067	2.547	7.845	0.000	1.605
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:01:39	0.000	4.121	4.101	89.139%	0.081	-0.017	1.193	0.782
2	22:01:58	0.000	4.202	4.205	86.960%	0.102	-0.020	0.967	0.600
3	22:02:17	0.000	4.113	4.158	87.882%	0.074	-0.021	0.901	0.555
x		0.000	4.146	4.155	87.994%	0.086	-0.019	1.020	0.646
σ		0.000	0.049	0.052	1.093%	0.014	0.002	0.153	0.120
%RSD		0.000	1.193	1.257	1.243	16.830	11.240	15.010	18.620
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:01:39	89.682%	34.420	4.590	4.872	2484.000	2455.000	97.018%	96.228%
2	22:01:58	90.132%	35.030	4.716	4.991	2525.000	2496.000	97.759%	97.675%
3	22:02:17	90.753%	35.190	4.648	4.937	2502.000	2468.000	99.948%	99.049%
x		90.189%	34.880	4.652	4.933	2504.000	2473.000	98.242%	97.651%
σ		0.538%	0.408	0.063	0.059	20.090	21.020	1.524%	1.411%
%RSD		0.596	1.171	1.353	1.205	0.802	0.850	1.551	1.445
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:01:39	1.170	1.147	82.290	75.860	78.420	81.471%		
2	22:01:58	1.148	1.163	83.370	76.410	79.180	83.125%		
3	22:02:17	1.108	1.163	84.460	77.630	80.620	82.086%		
x		1.142	1.158	83.370	76.630	79.400	82.228%		
σ		0.032	0.009	1.081	0.906	1.119	0.836%		
%RSD		2.777	0.800	1.297	1.182	1.409	1.017		

180-42915-A-1-B SD@5 4/27/2015 10:05:08 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	22:05:28	94.924%	1.061	6.912	6.894	0.000	7591.000	274.700	284.500
2	22:05:47	90.115%	1.033	6.689	7.011	0.000	7847.000	281.900	280.600
3	22:06:06	92.675%	0.916	6.405	6.699	0.000	7711.000	275.100	272.600
X		92.572%	1.003	6.669	6.868	0.000	7716.000	277.200	279.200
σ		2.406%	0.077	0.254	0.158	0.000	127.800	4.048	6.057
%RSD		2.599	7.683	3.810	2.297	0.000	1.656	1.460	2.169
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:05:28	10240.000	639.800	0.000	2899.000	4061.000	4111.000	106.237%	31.520
2	22:05:47	10270.000	640.300	0.000	2918.000	4143.000	4117.000	103.340%	30.410
3	22:06:06	10260.000	607.200	0.000	2908.000	4209.000	4213.000	101.845%	30.030
X		10260.000	629.100	0.000	2908.000	4138.000	4147.000	103.807%	30.660
σ		16.320	18.950	0.000	9.802	74.100	56.900	2.233%	0.775
%RSD		0.159	3.012	0.000	0.337	1.791	1.372	2.151	2.527
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:05:28	17.080	19.810	153.800	65670.000	65700.000	13.730	18.360	66.340
2	22:05:47	16.730	19.700	154.900	64530.000	64250.000	13.680	18.030	65.200
3	22:06:06	16.530	19.960	154.700	65620.000	64840.000	13.590	17.600	64.660
X		16.780	19.820	154.500	65270.000	64930.000	13.670	18.000	65.400
σ		0.281	0.135	0.624	646.200	727.400	0.069	0.384	0.854
%RSD		1.671	0.679	0.404	0.990	1.120	0.502	2.135	1.305
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:05:28	65.560	94.190	96.050	41.860	0.383	0.630	0.000	1063.000
2	22:05:47	64.740	95.940	95.990	41.270	0.300	0.493	0.000	1063.000
3	22:06:06	65.030	95.120	95.750	42.220	0.034	0.377	0.000	1045.000
X		65.110	95.090	95.930	41.780	0.239	0.500	0.000	1057.000
σ		0.415	0.877	0.161	0.479	0.182	0.127	0.000	10.640
%RSD		0.638	0.922	0.168	1.147	76.390	25.380	0.000	1.007
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:05:28	109.324%	0.896	0.923	101.556%	-0.050	-0.066	0.306	0.212
2	22:05:47	111.319%	0.904	0.861	102.528%	-0.045	-0.064	0.242	0.154
3	22:06:06	112.431%	0.840	0.848	103.147%	-0.049	-0.068	0.306	0.224
X		111.025%	0.880	0.877	102.410%	-0.048	-0.066	0.285	0.196
σ		1.574%	0.035	0.040	0.802%	0.002	0.002	0.037	0.038
%RSD		1.418	3.965	4.611	0.783	5.003	2.742	13.040	19.190
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:05:28	101.575%	6.710	0.997	0.987	471.800	471.200	105.439%	104.095%
2	22:05:47	103.562%	6.720	0.990	0.966	475.500	472.500	106.738%	107.640%
3	22:06:06	102.430%	6.620	0.976	0.994	473.100	477.200	109.092%	109.043%
X		102.522%	6.684	0.988	0.982	473.500	473.600	107.090%	106.926%
σ		0.996%	0.055	0.011	0.015	1.872	3.143	1.851%	2.550%
%RSD		0.972	0.827	1.084	1.483	0.395	0.664	1.729	2.385
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:05:28	0.213	0.231	15.910	14.390	15.040	98.257%		
2	22:05:47	0.215	0.228	15.830	14.640	15.210	98.988%		
3	22:06:06	0.239	0.225	16.010	14.580	15.130	101.530%		
X		0.222	0.228	15.920	14.540	15.130	99.592%		
σ		0.015	0.003	0.094	0.127	0.083	1.718%		
%RSD		6.596	1.118	0.588	0.872	0.550	1.725		

180-42915-A-1-C MS 4/27/2015 10:08:57 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	22:09:16	72.876%	49.100	793.400	784.200	0.000	84580.000	47910.000	47590.000
2	22:09:36	65.304%	53.030	846.600	805.000	0.000	86020.000	49630.000	50080.000
3	22:09:55	66.896%	47.560	809.600	783.300	0.000	82960.000	47920.000	47610.000
X		68.358%	49.900	816.600	790.800	0.000	84520.000	48490.000	48430.000
σ		3.992%	2.825	27.250	12.270	0.000	1529.000	990.600	1437.000
%RSD		5.840	5.662	3.337	1.551	0.000	1.809	2.043	2.967
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:09:16	125900.000	6107.000	0.000	74340.000	61600.000	66550.000	88.283%	784.200
2	22:09:36	130200.000	6086.000	0.000	75770.000	62290.000	66510.000	85.589%	775.400
3	22:09:55	125000.000	5876.000	0.000	73000.000	61570.000	66230.000	83.214%	750.800
X		127100.000	6023.000	0.000	74370.000	61820.000	66430.000	85.695%	770.100
σ		2782.000	128.100	0.000	1383.000	406.500	175.900	2.536%	17.300
%RSD		2.189	2.127	0.000	1.860	0.657	0.265	2.960	2.246
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:09:16	620.600	339.000	1366.000	302000.000	322400.000	556.200	530.800	492.600
2	22:09:36	624.700	338.100	1379.000	307800.000	325100.000	545.900	528.400	496.900
3	22:09:55	604.000	331.600	1361.000	302700.000	323300.000	547.200	512.500	478.600
X		616.400	336.200	1369.000	304200.000	323600.000	549.800	523.900	489.300
σ		10.970	4.053	9.428	3193.000	1385.000	5.611	9.944	9.563
%RSD		1.780	1.205	0.689	1.050	0.428	1.021	1.898	1.954
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:09:16	492.000	712.400	718.800	170.500	8.010	9.992	0.000	7156.000
2	22:09:36	492.800	721.700	731.700	175.500	8.904	10.060	0.000	7298.000
3	22:09:55	485.400	713.400	728.900	172.300	8.849	10.300	0.000	7314.000
X		490.100	715.800	726.500	172.700	8.588	10.120	0.000	7256.000
σ		4.057	5.114	6.813	2.523	0.501	0.163	0.000	86.650
%RSD		0.828	0.715	0.938	1.461	5.833	1.606	0.000	1.194
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:09:16	0.000	1028.000	1046.000	76.632%	44.840	44.340	44.730	37.840
2	22:09:36	0.000	991.700	1050.000	74.771%	44.570	44.370	44.870	38.500
3	22:09:55	0.000	1049.000	1064.000	74.883%	44.900	44.410	44.410	37.580
X		0.000	1023.000	1053.000	75.429%	44.770	44.370	44.670	37.970
σ		0.000	28.830	9.467	1.044%	0.179	0.032	0.232	0.479
%RSD		0.000	2.818	0.899	1.383	0.401	0.073	0.520	1.260
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:09:16	78.577%	1940.000	276.900	272.500	4993.000	4971.000	87.829%	86.582%
2	22:09:36	79.117%	1927.000	274.500	275.500	4980.000	4892.000	89.609%	88.221%
3	22:09:55	79.347%	1933.000	278.500	278.800	4973.000	4951.000	90.335%	89.832%
X		79.014%	1933.000	276.600	275.600	4982.000	4938.000	89.258%	88.212%
σ		0.395%	6.581	2.015	3.143	10.340	41.160	1.290%	1.625%
%RSD		0.500	0.340	0.729	1.141	0.208	0.834	1.445	1.842
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:09:16	53.610	54.440	122.900	115.400	118.800	69.405%		
2	22:09:36	52.930	53.830	122.700	114.300	118.300	71.724%		
3	22:09:55	53.560	54.370	123.500	115.300	118.100	72.804%		
X		53.370	54.210	123.000	115.000	118.400	71.311%		
σ		0.380	0.335	0.396	0.607	0.373	1.737%		
%RSD		0.712	0.618	0.322	0.528	0.315	2.435		

180-42915-A-1-D MSD 4/27/2015 10:12:46 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	22:13:05	65.908%	52.480	843.700	834.300	0.000	88160.000	49700.000	49680.000
2	22:13:25	61.143%	53.170	836.100	787.700	0.000	86110.000	49080.000	49050.000
3	22:13:44	62.681%	49.670	787.700	763.200	0.000	83430.000	48050.000	48540.000
X		63.244%	51.780	822.500	795.100	0.000	85900.000	48940.000	49090.000
σ		2.432%	1.855	30.360	36.130	0.000	2371.000	836.100	572.100
%RSD		3.845	3.583	3.692	4.545	0.000	2.761	1.708	1.165
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:13:05	128700.000	5756.000	0.000	74640.000	62180.000	66410.000	84.963%	748.100
2	22:13:25	128500.000	5761.000	0.000	76430.000	63380.000	67060.000	82.779%	744.400
3	22:13:44	125400.000	5522.000	0.000	74610.000	63140.000	67540.000	81.199%	736.000
X		127500.000	5679.000	0.000	75230.000	62900.000	67000.000	82.980%	742.900
σ		1824.000	136.500	0.000	1042.000	638.100	566.200	1.890%	6.197
%RSD		1.431	2.403	0.000	1.385	1.015	0.845	2.278	0.834
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:13:05	621.400	333.400	1242.000	295900.000	309600.000	585.500	544.200	490.200
2	22:13:25	614.900	330.700	1248.000	299700.000	310800.000	591.500	541.100	483.800
3	22:13:44	613.400	331.100	1263.000	301500.000	314600.000	581.700	534.700	488.900
X		616.600	331.700	1251.000	299000.000	311600.000	586.300	540.000	487.600
σ		4.288	1.479	10.500	2867.000	2625.000	4.947	4.848	3.404
%RSD		0.695	0.446	0.839	0.959	0.842	0.844	0.898	0.698
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:13:05	495.000	810.300	822.200	157.000	8.864	10.130	0.000	7111.000
2	22:13:25	485.400	818.000	828.000	157.400	8.857	10.170	0.000	7173.000
3	22:13:44	484.500	821.700	831.700	158.000	9.092	10.360	0.000	7229.000
X		488.300	816.700	827.300	157.500	8.938	10.220	0.000	7171.000
σ		5.849	5.831	4.819	0.474	0.134	0.121	0.000	59.100
%RSD		1.198	0.714	0.583	0.301	1.497	1.179	0.000	0.824
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:13:05	0.000	1050.000	1072.000	73.964%	45.790	45.150	45.900	38.580
2	22:13:25	0.000	1045.000	1071.000	73.426%	45.790	45.310	46.280	38.940
3	22:13:44	0.000	995.000	1072.000	72.309%	45.250	44.910	45.880	38.550
X		0.000	1030.000	1072.000	73.233%	45.610	45.120	46.020	38.690
σ		0.000	30.310	0.603	0.844%	0.313	0.204	0.227	0.217
%RSD		0.000	2.943	0.056	1.152	0.687	0.453	0.494	0.560
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:13:05	77.909%	1971.000	269.400	267.100	4309.000	4283.000	88.576%	87.336%
2	22:13:25	77.649%	1986.000	270.500	269.200	4329.000	4315.000	88.986%	88.397%
3	22:13:44	78.472%	1962.000	270.400	270.200	4298.000	4238.000	90.773%	89.501%
X		78.010%	1973.000	270.100	268.800	4312.000	4279.000	89.445%	88.411%
σ		0.421%	12.430	0.615	1.614	15.880	38.590	1.168%	1.083%
%RSD		0.539	0.630	0.228	0.600	0.368	0.902	1.306	1.225
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:13:05	51.720	52.610	126.800	119.300	122.000	73.929%		
2	22:13:25	52.630	53.640	128.400	120.700	124.000	74.412%		
3	22:13:44	53.020	54.140	130.100	121.100	124.900	74.093%		
X		52.460	53.460	128.400	120.400	123.600	74.144%		
σ		0.667	0.776	1.642	0.969	1.500	0.246%		
%RSD		1.271	1.452	1.279	0.805	1.214	0.332		

180-42915-A-1-B PDS 4/27/2015 10:16:36 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	22:16:55	65.572%	52.600	951.200	918.000	0.000	88060.000	52370.000	52590.000
2	22:17:14	62.356%	53.430	960.700	931.900	0.000	87180.000	52380.000	52890.000
3	22:17:33	62.215%	54.660	962.800	908.100	0.000	86820.000	51040.000	52380.000
x		63.381%	53.570	958.200	919.300	0.000	87360.000	51930.000	52620.000
σ		1.899%	1.036	6.205	11.960	0.000	638.700	767.800	254.000
%RSD		2.996	1.934	0.647	1.301	0.000	0.731	1.479	0.483
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:16:55	50890.000	12990.000	0.000	65440.000	66870.000	71960.000	83.092%	1134.000
2	22:17:14	51630.000	13040.000	0.000	64720.000	67940.000	73250.000	80.468%	1147.000
3	22:17:33	50330.000	12450.000	0.000	64800.000	67330.000	72830.000	77.430%	1140.000
x		50950.000	12830.000	0.000	64980.000	67380.000	72680.000	80.330%	1140.000
σ		651.700	329.100	0.000	398.600	541.200	655.500	2.834%	6.826
%RSD		1.279	2.565	0.000	0.613	0.803	0.902	3.527	0.599
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:16:55	592.700	298.600	1216.000	286600.000	301600.000	557.200	530.800	506.700
2	22:17:14	589.100	299.300	1248.000	293200.000	307300.000	555.600	531.900	512.900
3	22:17:33	590.700	290.800	1268.000	299100.000	310800.000	573.100	550.900	521.000
x		590.900	296.200	1244.000	293000.000	306600.000	562.000	537.900	513.500
σ		1.794	4.727	26.210	6252.000	4684.000	9.679	11.300	7.167
%RSD		0.304	1.596	2.106	2.134	1.528	1.722	2.101	1.396
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:16:55	503.600	850.100	865.100	223.300	10.320	11.440	0.000	6961.000
2	22:17:14	511.100	867.200	875.500	227.900	10.520	11.800	0.000	7006.000
3	22:17:33	515.600	870.500	883.700	226.500	10.750	11.310	0.000	7194.000
x		510.100	862.600	874.800	225.900	10.530	11.520	0.000	7054.000
σ		6.075	10.970	9.302	2.377	0.212	0.256	0.000	123.700
%RSD		1.191	1.272	1.063	1.052	2.010	2.225	0.000	1.753
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:16:55	0.000	1242.000	1264.000	74.016%	46.240	45.650	50.550	41.990
2	22:17:14	0.000	1259.000	1270.000	73.130%	46.730	45.990	51.120	41.350
3	22:17:33	0.000	1262.000	1283.000	72.771%	46.230	45.470	51.140	42.500
x		0.000	1254.000	1273.000	73.306%	46.400	45.700	50.940	41.950
σ		0.000	10.890	9.885	0.641%	0.286	0.263	0.333	0.579
%RSD		0.000	0.868	0.777	0.874	0.617	0.574	0.654	1.381
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:16:55	77.871%	2362.000	544.600	534.400	4479.000	4475.000	91.128%	90.511%
2	22:17:14	78.682%	2368.000	549.300	535.700	4500.000	4474.000	91.873%	92.300%
3	22:17:33	77.943%	2373.000	555.700	541.200	4470.000	4453.000	92.041%	92.640%
x		78.165%	2368.000	549.900	537.100	4483.000	4467.000	91.681%	91.817%
σ		0.449%	5.254	5.560	3.618	15.260	12.720	0.486%	1.143%
%RSD		0.574	0.222	1.011	0.674	0.340	0.285	0.530	1.245
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:16:55	56.150	56.920	102.400	96.250	98.950	76.333%		
2	22:17:14	57.500	58.640	104.700	98.550	101.300	76.102%		
3	22:17:33	57.680	58.800	105.100	99.450	101.600	76.652%		
x		57.110	58.120	104.100	98.080	100.600	76.363%		
σ		0.840	1.043	1.488	1.647	1.441	0.276%		
%RSD		1.470	1.795	1.430	1.680	1.432	0.362		

180-42915-A-3-B 4/27/2015 10:23:35 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	22:23:54	73.911%	5.907	24.520	23.330	0.000	26370.000	2173.000	2323.000
2	22:24:14	72.136%	5.900	23.020	22.440	0.000	26810.000	2218.000	2189.000
3	22:24:33	65.928%	5.566	22.680	22.070	0.000	26880.000	2311.000	2343.000
X		70.659%	5.791	23.400	22.610	0.000	26690.000	2234.000	2285.000
σ		4.191%	0.195	0.978	0.647	0.000	275.400	70.420	83.980
%RSD		5.932	3.360	4.181	2.860	0.000	1.032	3.152	3.675
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:23:54	79540.000	3248.000	0.000	15450.000	12260.000	12980.000	93.041%	203.800
2	22:24:14	76250.000	3162.000	0.000	15920.000	12630.000	13170.000	91.359%	208.500
3	22:24:33	80780.000	3298.000	0.000	16240.000	12580.000	13470.000	89.255%	205.300
X		78860.000	3236.000	0.000	15870.000	12490.000	13210.000	91.218%	205.800
σ		2340.000	68.720	0.000	397.100	201.000	250.000	1.897%	2.414
%RSD		2.968	2.124	0.000	2.502	1.610	1.893	2.080	1.173
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:23:54	120.000	93.170	765.600	320300.000	347000.000	51.160	61.420	228.800
2	22:24:14	123.500	92.210	774.000	325000.000	346200.000	51.400	60.580	229.200
3	22:24:33	121.500	92.630	773.800	327600.000	347800.000	50.110	59.930	227.300
X		121.700	92.670	771.100	324300.000	347000.000	50.890	60.650	228.400
σ		1.738	0.481	4.781	3733.000	799.600	0.689	0.745	1.013
%RSD		1.428	0.519	0.620	1.151	0.230	1.354	1.228	0.443
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:23:54	232.300	190.100	195.100	121.300	1.990	3.134	0.000	4328.000
2	22:24:14	228.600	191.000	192.600	120.100	1.953	3.003	0.000	4403.000
3	22:24:33	226.800	192.000	195.000	123.200	2.169	3.127	0.000	4386.000
X		229.200	191.000	194.300	121.500	2.037	3.088	0.000	4373.000
σ		2.798	0.952	1.409	1.572	0.116	0.074	0.000	39.380
%RSD		1.221	0.498	0.725	1.293	5.667	2.382	0.000	0.901
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:23:54	0.000	5.455	5.559	82.756%	0.086	-0.014	0.979	0.576
2	22:24:14	0.000	5.341	5.352	82.534%	0.070	-0.021	0.830	0.455
3	22:24:33	0.000	5.058	5.012	81.941%	0.071	-0.012	0.818	0.451
X		0.000	5.285	5.308	82.410%	0.076	-0.016	0.876	0.494
σ		0.000	0.204	0.276	0.422%	0.009	0.005	0.089	0.071
%RSD		0.000	3.870	5.208	0.511	11.720	31.570	10.200	14.330
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:23:54	87.049%	38.080	3.413	3.595	3095.000	3065.000	95.405%	94.774%
2	22:24:14	87.323%	37.930	3.217	3.350	3080.000	3060.000	97.384%	97.329%
3	22:24:33	87.376%	38.460	3.128	3.371	3088.000	3058.000	97.598%	97.428%
X		87.249%	38.160	3.253	3.439	3087.000	3061.000	96.795%	96.510%
σ		0.176%	0.271	0.146	0.136	7.565	3.266	1.209%	1.504%
%RSD		0.201	0.710	4.488	3.956	0.245	0.107	1.249	1.559
Run	Time	203TI	205TI	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:23:54	1.778	1.847	88.590	81.190	84.160	82.712%		
2	22:24:14	1.791	1.847	89.710	82.210	85.030	83.539%		
3	22:24:33	1.791	1.860	89.060	81.840	84.920	85.110%		
X		1.787	1.851	89.120	81.750	84.700	83.787%		
σ		0.008	0.007	0.562	0.515	0.471	1.218%		
%RSD		0.421	0.401	0.630	0.630	0.556	1.454		

180-42915-A-4-B 4/27/2015 10:27:25 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:27:44	71.465%	7.803	14.820	14.350	0.000	26270.000	1351.000	1386.000
2	22:28:04	71.921%	7.185	15.810	13.500	0.000	25520.000	1328.000	1329.000
3	22:28:23	74.205%	6.638	12.660	13.140	0.000	25670.000	1298.000	1285.000
X		72.530%	7.209	14.430	13.660	0.000	25820.000	1326.000	1334.000
σ		1.469%	0.583	1.610	0.624	0.000	397.400	26.760	50.680
%RSD		2.025	8.083	11.160	4.567	0.000	1.539	2.018	3.800
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:27:44	52220.000	3035.000	0.000	13360.000	11620.000	12340.000	92.567%	106.000
2	22:28:04	49130.000	2920.000	0.000	13620.000	11490.000	12170.000	91.498%	109.700
3	22:28:23	48170.000	2785.000	0.000	13400.000	11640.000	12120.000	88.319%	107.200
X		49840.000	2914.000	0.000	13460.000	11580.000	12210.000	90.795%	107.600
σ		2114.000	125.400	0.000	140.900	81.180	116.900	2.210%	1.904
%RSD		4.241	4.305	0.000	1.047	0.701	0.957	2.434	1.769
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:27:44	114.900	87.200	285.400	230700.000	237100.000	18.790	72.670	163.100
2	22:28:04	113.300	86.710	284.400	231700.000	239700.000	18.960	71.930	166.200
3	22:28:23	111.200	84.560	291.900	235300.000	242600.000	19.700	74.530	165.700
X		113.100	86.160	287.200	232600.000	239800.000	19.150	73.050	165.000
σ		1.873	1.406	4.091	2425.000	2722.000	0.486	1.340	1.643
%RSD		1.656	1.632	1.424	1.042	1.135	2.537	1.834	0.996
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:27:44	161.100	323.600	330.300	117.200	1.506	2.613	0.000	3839.000
2	22:28:04	164.700	326.600	330.900	118.500	1.754	2.533	0.000	3893.000
3	22:28:23	168.800	333.700	336.100	118.300	1.639	2.803	0.000	3964.000
X		164.900	328.000	332.400	118.000	1.633	2.650	0.000	3898.000
σ		3.851	5.210	3.218	0.666	0.124	0.138	0.000	62.730
%RSD		2.336	1.588	0.968	0.564	7.615	5.217	0.000	1.609
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:27:44	0.000	3.747	3.882	85.695%	0.053	-0.018	0.948	0.628
2	22:28:04	0.000	3.970	4.083	84.573%	0.090	-0.023	0.959	0.636
3	22:28:23	0.000	3.857	4.098	84.474%	0.089	-0.033	0.997	0.689
X		0.000	3.858	4.021	84.914%	0.077	-0.025	0.968	0.651
σ		0.000	0.112	0.121	0.678%	0.021	0.008	0.026	0.033
%RSD		0.000	2.894	3.000	0.799	27.320	30.550	2.686	5.074
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:27:44	89.324%	36.620	5.522	5.623	405.200	401.000	101.884%	100.542%
2	22:28:04	89.543%	36.310	5.651	5.847	403.600	402.400	103.476%	102.590%
3	22:28:23	89.267%	36.570	5.785	5.782	404.100	400.100	104.243%	103.068%
X		89.378%	36.500	5.653	5.751	404.300	401.200	103.201%	102.067%
σ		0.146%	0.168	0.132	0.115	0.813	1.150	1.204%	1.342%
%RSD		0.163	0.460	2.330	2.006	0.201	0.287	1.166	1.315
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:27:44	1.200	1.217	113.100	104.100	108.200	85.474%		
2	22:28:04	1.171	1.184	113.100	104.100	108.000	87.531%		
3	22:28:23	1.177	1.244	113.700	105.100	109.100	87.356%		
X		1.183	1.215	113.300	104.500	108.400	86.787%		
σ		0.015	0.030	0.374	0.577	0.591	1.140%		
%RSD		1.300	2.448	0.330	0.552	0.545	1.314		

CCV 1533080 4/27/2015 10:34:34 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:34:34	87.839%	99.510	103.900	97.640	0.000	49100.000	49220.000	49720.000
2	22:34:54	87.406%	99.380	98.250	91.220	0.000	48710.000	48730.000	49150.000
3	22:35:13	82.470%	101.700	93.820	92.140	0.000	50620.000	50810.000	50060.000
X		85.905%	100.183%	98.650%	93.668%	0.000	98.953%	99.168%	99.283%
σ		2.982%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		3.472	1.274	5.113	3.707	0.000	2.045	2.193	0.924
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:34:34	494.900	4779.000	0.000	48810.000	44970.000	48120.000	99.390%	93.380
2	22:34:54	491.800	4590.000	0.000	49320.000	46540.000	50410.000	93.179%	96.770
3	22:35:13	505.400	4812.000	0.000	51630.000	48150.000	51740.000	88.847%	97.970
X		99.481%	94.541%	0.000	99.841%	93.102%	100.174%	93.805%	96.038%
σ		n/a	n/a	0.000	n/a	n/a	n/a	5.299%	n/a
%RSD		1.431	2.535	0.000	3.004	3.418	3.657	5.649	2.480
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:34:34	95.070	96.660	485.200	24660.000	24570.000	95.970	98.850	100.500
2	22:34:54	99.310	100.900	504.700	25630.000	25270.000	100.100	100.400	102.500
3	22:35:13	99.670	99.690	516.200	25720.000	25510.000	99.520	100.400	101.100
X		98.014%	99.070%	100.408%	101.344%	100.462%	98.537%	99.907%	101.357%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.607	2.192	3.128	2.329	1.960	2.272	0.912	1.003
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:34:34	99.250	100.600	100.400	101.800	104.800	105.500	0.000	100.600
2	22:34:54	102.800	103.700	104.700	104.800	105.900	107.500	0.000	102.400
3	22:35:13	101.200	105.200	105.800	103.500	107.500	105.300	0.000	102.300
X		101.102%	103.170%	103.658%	103.367%	106.071%	106.118%	0.000	101.780%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.778	2.278	2.771	1.495	1.259	1.169	0.000	1.034
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:34:34	93.404%	94.630	96.990	89.818%	99.200	98.860	99.990	98.950
2	22:34:54	92.202%	96.740	99.090	88.231%	99.800	99.740	101.100	101.600
3	22:35:13	90.834%	98.450	100.100	87.500%	100.600	99.660	101.500	101.300
X		92.147%	96.607%	98.743%	88.516%	99.869%	99.421%	100.848%	100.621%
σ		1.286%	n/a	n/a	1.185%	n/a	n/a	n/a	n/a
%RSD		1.396	1.978	1.625	1.339	0.709	0.486	0.767	1.446
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:34:34	91.227%	96.810	97.420	98.060	99.150	97.900	95.153%	95.133%
2	22:34:54	90.622%	98.310	100.400	101.000	99.490	99.070	96.391%	96.835%
3	22:35:13	91.134%	97.850	99.980	100.700	98.550	97.680	97.512%	96.969%
X		90.994%	97.659%	99.269%	99.913%	99.063%	98.215%	96.352%	96.312%
σ		0.326%	n/a	n/a	n/a	n/a	n/a	1.180%	1.023%
%RSD		0.358	0.789	1.630	1.620	0.480	0.760	1.225	1.063
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:34:34	100.600	102.700	102.400	101.900	101.100	91.200%		
2	22:34:54	103.800	104.200	105.000	104.300	103.600	90.981%		
3	22:35:13	105.000	104.900	106.600	106.300	105.100	91.107%		
X		103.131%	103.922%	104.677%	104.155%	103.251%	91.096%		
σ		n/a	n/a	n/a	n/a	n/a	0.110%		
%RSD		2.191	1.052	2.047	2.125	1.956	0.121		

CCB2 4/27/2015 10:41:16 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:41:36	100.393%	-0.017	0.113	0.211	0.000	8.854	5.198	5.597
2	22:41:55	96.102%	-0.023	0.122	0.178	0.000	6.060	4.332	4.698
3	22:42:14	94.019%	-0.009	0.126	0.118	0.000	3.514	2.698	2.535
X		96.838%	-0.016	0.120	0.169	0.000	6.143	4.076	4.277
σ		3.250%	0.007	0.007	0.047	0.000	2.671	1.269	1.574
%RSD		3.356	43.830	5.552	27.960	0.000	43.480	31.140	36.800
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:41:36	8.726	-127.800	0.000	12.910	9.746	5.683	103.798%	-0.111
2	22:41:55	7.506	-98.650	0.000	10.760	5.951	5.166	102.704%	0.265
3	22:42:14	3.673	-144.600	0.000	8.920	6.733	4.117	100.708%	-0.100
X		6.635	-123.700	0.000	10.860	7.477	4.989	102.404%	0.018
σ		2.637	23.260	0.000	1.995	2.004	0.798	1.567%	0.214
%RSD		39.740	18.800	0.000	18.370	26.800	16.000	1.530	1195.000
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:41:36	0.054	0.030	0.128	53.950	41.930	0.035	0.035	0.008
2	22:41:55	0.038	0.033	0.094	33.250	33.900	0.030	0.024	-0.009
3	22:42:14	0.017	0.016	0.053	23.790	21.320	0.015	0.004	-0.041
X		0.036	0.026	0.092	36.990	32.380	0.027	0.021	-0.014
σ		0.019	0.009	0.038	15.420	10.390	0.010	0.016	0.025
%RSD		52.150	35.490	41.140	41.690	32.080	38.580	75.820	175.100
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:41:36	0.018	-0.270	-0.152	0.074	0.029	0.102	0.000	0.596
2	22:41:55	-0.011	-0.257	-0.321	0.016	0.098	0.075	0.000	0.438
3	22:42:14	-0.006	-0.232	-0.326	0.072	0.215	0.069	0.000	0.256
X		0.000	-0.253	-0.266	0.054	0.114	0.082	0.000	0.430
σ		0.016	0.019	0.099	0.033	0.094	0.017	0.000	0.170
%RSD		7480.000	7.595	37.210	61.040	82.540	20.970	0.000	39.550
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:41:36	105.880%	0.215	0.244	107.129%	-0.065	-0.065	0.039	0.032
2	22:41:55	108.704%	0.188	0.197	109.632%	-0.063	-0.067	0.038	0.034
3	22:42:14	104.733%	0.212	0.198	103.021%	-0.070	-0.066	0.052	0.034
X		106.439%	0.205	0.213	106.594%	-0.066	-0.066	0.043	0.033
σ		2.044%	0.015	0.027	3.338%	0.004	0.001	0.008	0.001
%RSD		1.920	7.142	12.770	3.131	5.906	0.939	18.000	4.344
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:41:36	106.816%	-0.115	0.038	0.045	0.304	0.323	105.470%	105.352%
2	22:41:55	110.684%	-0.158	0.055	0.038	0.206	0.217	110.783%	111.653%
3	22:42:14	107.427%	-0.140	0.029	0.038	0.152	0.146	109.066%	108.593%
X		108.309%	-0.137	0.040	0.040	0.221	0.229	108.439%	108.532%
σ		2.079%	0.022	0.013	0.004	0.077	0.089	2.711%	3.151%
%RSD		1.920	15.830	31.860	10.250	34.790	38.980	2.500	2.903
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:41:36	0.022	0.028	-0.008	-0.007	-0.006	109.822%		
2	22:41:55	0.024	0.029	-0.003	-0.011	-0.008	111.094%		
3	22:42:14	0.026	0.032	-0.015	0.000	-0.010	110.402%		
X		0.024	0.030	-0.009	-0.006	-0.008	110.439%		
σ		0.002	0.002	0.006	0.006	0.002	0.637%		
%RSD		6.865	6.071	71.980	97.730	19.820	0.577		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:45:27	87.762%	4.742	15.860	15.310	0.000	6815.000	849.600	849.700
2	22:45:46	81.697%	5.190	16.000	16.050	0.000	7199.000	880.900	890.400
3	22:46:05	77.597%	4.631	16.190	15.520	0.000	6774.000	867.700	904.800
X		82.352%	4.855	16.020	15.630	0.000	6929.000	866.000	881.700
σ		5.114%	0.296	0.166	0.379	0.000	234.700	15.690	28.560
%RSD		6.210	6.090	1.039	2.428	0.000	3.387	1.812	3.240
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:45:27	43120.000	2769.000	0.000	13890.000	7425.000	7478.000	98.327%	121.900
2	22:45:46	43730.000	2808.000	0.000	14410.000	7543.000	7595.000	96.260%	119.300
3	22:46:05	44660.000	2821.000	0.000	14320.000	7475.000	7701.000	94.102%	116.900
X		43840.000	2799.000	0.000	14210.000	7481.000	7591.000	96.230%	119.400
σ		775.200	27.350	0.000	280.100	59.190	111.700	2.113%	2.519
%RSD		1.768	0.977	0.000	1.971	0.791	1.471	2.195	2.110
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:45:27	95.600	66.620	143.800	95670.000	96360.000	10.240	38.270	81.800
2	22:45:46	101.400	66.080	142.400	93380.000	93070.000	9.494	35.930	78.370
3	22:46:05	98.580	66.560	151.100	95290.000	95250.000	9.586	35.340	77.840
X		98.540	66.420	145.700	94780.000	94890.000	9.773	36.510	79.340
σ		2.919	0.298	4.664	1225.000	1674.000	0.405	1.550	2.152
%RSD		2.962	0.448	3.200	1.293	1.764	4.146	4.245	2.712
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:45:27	82.960	110.400	110.500	68.730	0.941	1.746	0.000	2245.000
2	22:45:46	78.690	108.300	111.100	66.880	0.876	1.691	0.000	2241.000
3	22:46:05	79.160	109.100	111.100	67.520	0.885	1.748	0.000	2252.000
X		80.270	109.200	110.900	67.710	0.901	1.728	0.000	2246.000
σ		2.344	1.055	0.343	0.939	0.035	0.032	0.000	5.411
%RSD		2.921	0.966	0.309	1.387	3.919	1.869	0.000	0.241
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:45:27	0.000	2.240	2.118	91.633%	0.047	-0.036	0.942	0.536
2	22:45:46	0.000	2.066	2.106	91.683%	0.050	-0.029	0.838	0.543
3	22:46:05	0.000	2.080	2.045	90.086%	0.046	-0.038	0.873	0.572
X		0.000	2.129	2.090	91.134%	0.048	-0.034	0.884	0.550
σ		0.000	0.097	0.039	0.908%	0.002	0.005	0.053	0.019
%RSD		0.000	4.555	1.858	0.997	4.188	14.480	6.024	3.467
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:45:27	93.752%	34.200	2.745	2.778	1759.000	1744.000	108.102%	107.067%
2	22:45:46	94.407%	33.990	2.699	2.836	1760.000	1744.000	109.188%	109.278%
3	22:46:05	95.929%	33.810	2.640	2.727	1736.000	1725.000	111.852%	110.550%
X		94.696%	34.000	2.695	2.780	1752.000	1738.000	109.714%	108.965%
σ		1.117%	0.194	0.053	0.054	13.630	10.770	1.929%	1.762%
%RSD		1.179	0.570	1.954	1.953	0.778	0.620	1.759	1.617
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:45:27	1.079	1.102	69.350	63.470	66.240	93.625%		
2	22:45:46	1.107	1.119	70.680	64.980	67.360	93.864%		
3	22:46:05	1.079	1.108	70.350	64.260	66.890	94.764%		
X		1.088	1.109	70.120	64.240	66.830	94.085%		
σ		0.016	0.009	0.693	0.755	0.561	0.601%		
%RSD		1.490	0.781	0.988	1.175	0.840	0.638		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:52:45	91.957%	-0.022	0.255	0.176	0.000	2.467	2.252	2.462
2	22:53:04	87.412%	-0.021	0.063	0.144	0.000	0.674	1.744	1.772
3	22:53:23	86.055%	-0.028	0.093	0.118	0.000	-0.586	1.029	1.277
X		88.474%	-0.024	0.137	0.146	0.000	0.851	1.675	1.837
σ		3.091%	0.004	0.103	0.029	0.000	1.534	0.615	0.596
%RSD		3.494	16.220	75.370	19.980	0.000	180.200	36.690	32.420
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:52:45	7.227	-122.400	0.000	8.923	1.591	1.278	99.675%	-0.092
2	22:53:04	4.928	-122.800	0.000	5.937	0.434	-2.042	99.692%	-0.146
3	22:53:23	3.151	-130.500	0.000	5.279	2.984	-2.513	96.804%	-0.144
X		5.102	-125.200	0.000	6.713	1.670	-1.092	98.724%	-0.127
σ		2.043	4.601	0.000	1.942	1.277	2.066	1.663%	0.031
%RSD		40.050	3.674	0.000	28.930	76.470	189.100	1.684	23.990
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:52:45	-0.012	0.077	0.077	37.770	31.600	0.017	0.004	-0.062
2	22:53:04	-0.017	0.058	0.047	22.440	22.610	0.014	-0.005	-0.081
3	22:53:23	-0.022	0.061	0.032	16.320	15.630	0.010	0.004	-0.085
X		-0.017	0.065	0.052	25.510	23.280	0.014	0.001	-0.076
σ		0.005	0.010	0.023	11.050	8.006	0.003	0.005	0.012
%RSD		29.540	15.590	44.360	43.330	34.390	23.070	560.600	16.030
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:52:45	-0.024	-0.057	-0.068	0.023	0.162	0.099	0.000	0.490
2	22:53:04	-0.071	-0.055	-0.143	-0.049	0.313	0.093	0.000	0.316
3	22:53:23	-0.061	-0.178	-0.315	-0.105	0.155	-0.032	0.000	0.222
X		-0.052	-0.097	-0.175	-0.044	0.210	0.053	0.000	0.342
σ		0.025	0.070	0.126	0.064	0.089	0.074	0.000	0.136
%RSD		47.640	72.700	71.990	146.100	42.430	138.800	0.000	39.770
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:52:45	104.245%	0.061	0.069	104.378%	-0.084	-0.083	-0.005	0.002
2	22:53:04	104.314%	0.036	0.072	103.590%	-0.087	-0.082	0.024	0.011
3	22:53:23	104.316%	0.060	0.055	103.633%	-0.084	-0.079	0.008	0.006
X		104.292%	0.052	0.065	103.867%	-0.085	-0.082	0.009	0.006
σ		0.041%	0.014	0.009	0.443%	0.002	0.002	0.015	0.005
%RSD		0.039	27.360	13.980	0.426	2.057	2.347	158.100	75.060
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:52:45	104.222%	-0.186	-0.007	-0.019	0.330	0.349	106.546%	105.965%
2	22:53:04	106.513%	-0.209	-0.026	-0.029	0.191	0.186	108.833%	108.395%
3	22:53:23	103.663%	-0.205	-0.029	-0.018	0.176	0.139	108.938%	109.727%
X		104.799%	-0.200	-0.021	-0.022	0.232	0.225	108.106%	108.029%
σ		1.510%	0.012	0.012	0.006	0.085	0.110	1.351%	1.907%
%RSD		1.441	6.117	57.470	28.200	36.450	48.890	1.250	1.766
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:52:45	0.008	0.008	-0.011	-0.012	-0.009	112.249%		
2	22:53:04	0.009	0.008	-0.008	-0.013	-0.012	110.326%		
3	22:53:23	0.002	0.006	-0.021	-0.017	-0.017	110.969%		
X		0.006	0.007	-0.014	-0.014	-0.013	111.182%		
σ		0.004	0.001	0.007	0.002	0.004	0.979%		
%RSD		65.830	14.410	49.200	15.560	32.340	0.880		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:32	77.078%	46.970	931.800	905.000	0.000	44510.000	44570.000	45390.000
2	22:56:52	73.119%	48.120	919.200	888.000	0.000	45730.000	45000.000	44960.000
3	22:57:11	70.091%	47.400	940.000	907.800	0.000	45760.000	45330.000	47180.000
X		73.429%	47.500	930.400	900.300	0.000	45330.000	44970.000	45840.000
σ		3.504%	0.580	10.480	10.720	0.000	712.500	380.600	1180.000
%RSD		4.771	1.221	1.127	1.191	0.000	1.572	0.846	2.573
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:32	1790.000	8718.000	0.000	47950.000	46430.000	50910.000	76.819%	951.900
2	22:56:52	1750.000	8429.000	0.000	49200.000	47710.000	51610.000	73.254%	978.000
3	22:57:11	1791.000	8525.000	0.000	50000.000	48940.000	52770.000	70.507%	948.500
X		1777.000	8557.000	0.000	49050.000	47690.000	51770.000	73.527%	959.500
σ		23.380	147.100	0.000	1034.000	1254.000	939.000	3.165%	16.160
%RSD		1.316	1.719	0.000	2.108	2.629	1.814	4.304	1.685
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:32	499.800	194.900	504.100	1149.000	1187.000	505.000	472.900	238.300
2	22:56:52	507.700	197.300	520.600	1180.000	1181.000	508.600	479.800	237.500
3	22:57:11	507.200	196.700	515.100	1164.000	1166.000	495.600	462.800	236.000
X		504.900	196.300	513.300	1164.000	1178.000	503.100	471.900	237.300
σ		4.421	1.251	8.432	15.380	10.830	6.686	8.546	1.156
%RSD		0.876	0.637	1.643	1.320	0.919	1.329	1.811	0.487
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:32	236.800	488.100	489.900	37.780	9.720	10.020	0.000	1001.000
2	22:56:52	234.200	494.300	492.600	37.770	9.857	10.240	0.000	1023.000
3	22:57:11	235.900	492.800	495.600	36.800	9.851	10.350	0.000	1012.000
X		235.600	491.800	492.700	37.450	9.809	10.200	0.000	1012.000
σ		1.344	3.241	2.874	0.558	0.078	0.168	0.000	10.690
%RSD		0.570	0.659	0.583	1.489	0.790	1.650	0.000	1.056
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:32	80.358%	1056.000	1096.000	75.539%	49.970	49.640	51.610	44.700
2	22:56:52	79.148%	1069.000	1115.000	74.201%	49.890	49.530	51.270	44.210
3	22:57:11	79.112%	1068.000	1099.000	73.892%	50.050	50.110	51.040	44.440
X		79.540%	1064.000	1103.000	74.544%	49.970	49.760	51.310	44.450
σ		0.709%	7.414	10.660	0.876%	0.077	0.309	0.287	0.248
%RSD		0.892	0.697	0.966	1.175	0.154	0.620	0.559	0.558
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:32	80.000%	2087.000	518.800	503.600	2030.000	2007.000	92.644%	94.002%
2	22:56:52	80.766%	2081.000	516.700	499.600	2008.000	1993.000	93.562%	95.329%
3	22:57:11	80.263%	2089.000	518.200	505.100	2000.000	1996.000	94.035%	95.700%
X		80.343%	2085.000	517.900	502.800	2012.000	1999.000	93.414%	95.011%
σ		0.389%	4.311	1.094	2.834	15.570	7.645	0.707%	0.893%
%RSD		0.484	0.207	0.211	0.564	0.774	0.383	0.757	0.940
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:56:32	49.760	50.290	21.050	20.850	20.780	89.236%		
2	22:56:52	51.590	52.530	21.940	21.730	21.640	87.445%		
3	22:57:11	52.380	53.720	22.120	21.980	21.820	87.321%		
X		51.250	52.180	21.700	21.520	21.410	88.001%		
σ		1.344	1.738	0.573	0.595	0.555	1.072%		
%RSD		2.623	3.332	2.638	2.765	2.594	1.218		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:03:50	81.600%	0.005	10.020	10.300	0.000	9.006	5.762	5.707
2	23:04:09	77.357%	-0.009	9.692	9.896	0.000	8.393	5.313	5.372
3	23:04:29	73.069%	-0.016	9.138	10.360	0.000	6.038	3.963	4.086
X		77.342%	-0.007	9.616	10.180	0.000	7.813	5.013	5.055
σ		4.266%	0.011	0.445	0.252	0.000	1.567	0.936	0.856
%RSD		5.515	154.600	4.624	2.475	0.000	20.060	18.680	16.930
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:03:50	5.501	-114.000	0.000	9.713	15.620	15.010	78.681%	0.306
2	23:04:09	5.552	-106.000	0.000	8.343	9.923	17.270	73.487%	0.352
3	23:04:29	4.189	-113.200	0.000	5.243	11.120	12.430	75.623%	0.372
X		5.081	-111.100	0.000	7.766	12.220	14.910	75.931%	0.343
σ		0.773	4.389	0.000	2.290	3.006	2.424	2.611%	0.034
%RSD		15.210	3.951	0.000	29.480	24.590	16.260	3.438	9.821
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:03:50	-0.664	0.824	0.414	28.170	33.170	0.033	0.045	0.724
2	23:04:09	-0.587	0.801	0.421	31.020	37.710	0.035	0.058	0.743
3	23:04:29	-1.202	0.761	0.368	22.730	27.810	0.023	0.038	0.696
X		-0.817	0.795	0.401	27.300	32.900	0.031	0.047	0.721
σ		0.335	0.032	0.029	4.213	4.959	0.007	0.010	0.024
%RSD		41.020	3.974	7.128	15.430	15.070	21.880	21.240	3.323
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:03:50	0.758	6.671	5.906	0.149	-0.287	0.167	0.000	0.406
2	23:04:09	0.814	6.299	5.977	-0.938	-0.330	0.062	0.000	0.405
3	23:04:29	0.696	6.177	6.018	-0.351	-0.284	0.190	0.000	0.251
X		0.756	6.382	5.967	-0.380	-0.301	0.140	0.000	0.354
σ		0.059	0.257	0.057	0.544	0.026	0.068	0.000	0.089
%RSD		7.841	4.025	0.948	143.300	8.546	48.660	0.000	25.170
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:03:50	80.996%	0.916	0.862	82.014%	-0.072	-0.064	-0.016	-0.017
2	23:04:09	80.068%	0.760	0.805	80.112%	-0.072	-0.061	0.003	0.008
3	23:04:29	80.074%	0.668	0.686	79.514%	-0.066	-0.058	-0.040	-0.034
X		80.379%	0.781	0.784	80.546%	-0.070	-0.061	-0.018	-0.014
σ		0.534%	0.126	0.090	1.305%	0.004	0.003	0.022	0.021
%RSD		0.665	16.080	11.460	1.621	5.292	5.311	122.600	146.900
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:03:50	83.508%	0.656	0.081	0.072	0.328	0.312	94.199%	95.865%
2	23:04:09	84.461%	0.500	0.055	0.075	0.325	0.347	94.645%	95.581%
3	23:04:29	84.440%	0.396	0.064	0.049	0.214	0.231	94.639%	96.238%
X		84.136%	0.517	0.067	0.066	0.289	0.297	94.494%	95.895%
σ		0.544%	0.131	0.013	0.014	0.065	0.059	0.255%	0.330%
%RSD		0.647	25.350	19.530	21.420	22.450	20.010	0.270	0.344
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:03:50	0.084	0.088	0.042	0.057	0.053	100.550%		
2	23:04:09	0.081	0.082	0.060	0.055	0.063	98.048%		
3	23:04:29	0.092	0.082	0.060	0.068	0.058	98.681%		
X		0.086	0.084	0.054	0.060	0.058	99.093%		
σ		0.006	0.003	0.010	0.007	0.005	1.301%		
%RSD		6.629	4.117	19.400	12.180	9.251	1.313		

180-43046-H-1-C 4/27/2015 11:07:19 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:38	47.962%	-0.016	308.900	296.900	0.000	333700.000	68360.000	68690.000
2	23:07:57	47.962%	-0.016	290.500	272.300	0.000	311500.000	64990.000	64990.000
3	23:08:17	43.941%	-0.043	298.800	281.600	0.000	322800.000	66590.000	66480.000
X		46.622%	-0.025	299.400	283.600	0.000	322600.000	66650.000	66720.000
σ		2.321%	0.015	9.186	12.410	0.000	11120.000	1682.000	1860.000
%RSD		4.979	61.190	3.068	4.376	0.000	3.446	2.524	2.788
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:38	12.220	10390.000	0.000	30490.000	514700.000	504600.000	58.640%	11.390
2	23:07:57	12.840	9939.000	0.000	30430.000	516400.000	519000.000	55.207%	11.650
3	23:08:17	12.380	9963.000	0.000	30730.000	521300.000	517400.000	54.122%	11.490
X		12.480	10100.000	0.000	30550.000	517500.000	513700.000	55.989%	11.510
σ		0.322	252.000	0.000	156.100	3393.000	7894.000	2.358%	0.129
%RSD		2.577	2.497	0.000	0.511	0.656	1.537	4.212	1.120
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:38	0.118	0.601	2211.000	146600.000	147300.000	37.430	135.400	1.803
2	23:07:57	-0.312	0.604	2257.000	151000.000	151200.000	38.540	139.000	1.723
3	23:08:17	-0.417	0.663	2277.000	150800.000	150800.000	38.460	136.800	1.807
X		-0.204	0.623	2248.000	149400.000	149800.000	38.140	137.000	1.778
σ		0.284	0.035	33.980	2482.000	2165.000	0.616	1.800	0.048
%RSD		139.300	5.665	1.511	1.661	1.445	1.614	1.313	2.686
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:38	1.145	32.420	32.160	-0.551	-0.271	0.767	0.000	6424.000
2	23:07:57	1.144	33.390	33.140	-0.037	-0.390	0.257	0.000	6469.000
3	23:08:17	1.029	32.680	32.840	0.252	-0.232	0.714	0.000	6470.000
X		1.106	32.830	32.710	-0.112	-0.298	0.579	0.000	6454.000
σ		0.067	0.500	0.500	0.406	0.082	0.280	0.000	26.380
%RSD		6.038	1.523	1.529	362.900	27.610	48.400	0.000	0.409
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:38	62.970%	0.870	0.889	57.078%	-0.065	-0.070	-0.003	-0.002
2	23:07:57	62.707%	0.882	0.935	55.755%	-0.063	-0.066	0.001	0.000
3	23:08:17	60.870%	0.860	0.959	54.042%	-0.065	-0.057	0.056	0.043
X		62.182%	0.871	0.927	55.625%	-0.064	-0.064	0.018	0.014
σ		1.144%	0.011	0.036	1.522%	0.001	0.006	0.033	0.025
%RSD		1.840	1.278	3.850	2.736	1.628	10.010	182.500	181.900
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:38	63.758%	0.135	0.163	0.322	26.270	26.190	75.694%	76.103%
2	23:07:57	63.047%	0.155	0.153	0.335	26.240	26.320	75.907%	77.535%
3	23:08:17	62.640%	0.132	0.155	0.356	26.080	26.310	76.295%	77.971%
X		63.148%	0.141	0.157	0.337	26.200	26.270	75.965%	77.203%
σ		0.566%	0.012	0.005	0.017	0.101	0.070	0.305%	0.978%
%RSD		0.896	8.869	3.449	5.093	0.385	0.265	0.401	1.266
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:07:38	0.051	0.049	0.164	0.141	0.161	69.417%		
2	23:07:57	0.051	0.054	0.160	0.163	0.159	69.125%		
3	23:08:17	0.063	0.055	0.172	0.157	0.165	69.055%		
X		0.055	0.053	0.165	0.154	0.162	69.199%		
σ		0.007	0.003	0.006	0.011	0.003	0.192%		
%RSD		12.190	6.034	3.597	7.270	1.999	0.277		

180-43046-H-2-C 4/27/2015 11:11:07 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	23:11:26	52.884%	1.127	55.640	51.600	0.000	17690.000	15980.000	16390.000
2	23:11:45	51.455%	1.135	49.960	51.120	0.000	17490.000	15880.000	15900.000
3	23:12:04	50.593%	1.273	45.260	48.140	0.000	17130.000	15630.000	15290.000
X		51.644%	1.178	50.290	50.290	0.000	17440.000	15830.000	15860.000
σ		1.157%	0.082	5.198	1.873	0.000	284.600	178.300	553.800
%RSD		2.241	6.949	10.340	3.725	0.000	1.632	1.126	3.492
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:11:26	7230.000	13320.000	0.000	3289.000	70980.000	75670.000	57.154%	150.600
2	23:11:45	7159.000	13450.000	0.000	3357.000	71020.000	76920.000	55.523%	182.400
3	23:12:04	6768.000	12930.000	0.000	3249.000	70980.000	76210.000	52.840%	230.200
X		7052.000	13230.000	0.000	3298.000	70990.000	76270.000	55.173%	187.800
σ		249.000	267.400	0.000	54.340	22.790	627.300	2.179%	40.070
%RSD		3.530	2.020	0.000	1.647	0.032	0.822	3.949	21.340
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:11:26	27.870	17.650	1275.000	72480.000	72060.000	31.730	22.330	52.800
2	23:11:45	28.090	17.990	1337.000	74570.000	72660.000	32.420	22.380	52.080
3	23:12:04	27.430	17.410	1319.000	74140.000	73320.000	32.680	22.560	51.780
X		27.800	17.680	1310.000	73730.000	72680.000	32.280	22.420	52.220
σ		0.335	0.288	31.770	1105.000	629.600	0.494	0.123	0.524
%RSD		1.204	1.628	2.424	1.498	0.866	1.531	0.546	1.003
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:11:26	52.710	148.800	147.800	5.190	-0.451	0.439	0.000	302.200
2	23:11:45	52.660	150.700	148.700	5.518	-0.453	0.208	0.000	305.100
3	23:12:04	52.480	148.500	146.600	5.208	-0.523	0.306	0.000	302.200
X		52.620	149.300	147.700	5.305	-0.476	0.318	0.000	303.100
σ		0.118	1.204	1.041	0.185	0.041	0.116	0.000	1.655
%RSD		0.225	0.806	0.705	3.477	8.658	36.420	0.000	0.546
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:11:26	80.992%	0.406	0.429	63.939%	0.028	0.043	0.752	0.750
2	23:11:45	79.771%	0.440	0.423	62.250%	0.027	0.023	0.911	0.849
3	23:12:04	80.179%	0.355	0.398	61.811%	0.040	0.019	0.724	0.772
X		80.314%	0.400	0.417	62.667%	0.032	0.028	0.796	0.790
σ		0.621%	0.043	0.017	1.124%	0.007	0.013	0.101	0.052
%RSD		0.774	10.740	4.036	1.793	22.780	45.670	12.680	6.546
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:11:26	71.299%	0.271	0.746	0.791	67.860	66.990	86.672%	88.696%
2	23:11:45	72.260%	0.256	0.783	0.722	68.080	67.550	87.845%	89.740%
3	23:12:04	71.863%	0.276	0.757	0.730	68.150	66.750	88.829%	90.937%
X		71.807%	0.268	0.762	0.748	68.030	67.090	87.782%	89.791%
σ		0.483%	0.010	0.019	0.038	0.155	0.410	1.080%	1.121%
%RSD		0.673	3.911	2.470	5.060	0.228	0.612	1.231	1.249
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:11:26	0.236	0.251	302.000	281.100	292.300	86.997%		
2	23:11:45	0.262	0.256	302.900	282.200	293.400	87.568%		
3	23:12:04	0.257	0.260	306.800	286.100	297.900	88.281%		
X		0.252	0.255	303.900	283.100	294.500	87.615%		
σ		0.014	0.004	2.563	2.655	2.930	0.643%		
%RSD		5.462	1.696	0.844	0.938	0.995	0.734		

180-43046-H-4-C 4/27/2015 11:14:55 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	23:15:14	54.281%	3.181	53.770	51.870	0.000	69620.000	41380.000	42270.000
2	23:15:33	51.501%	3.691	51.320	51.540	0.000	72720.000	42540.000	41670.000
3	23:15:53	50.307%	3.330	51.940	51.520	0.000	73420.000	42870.000	42190.000
x		52.029%	3.400	52.340	51.640	0.000	71920.000	42260.000	42040.000
σ		2.039%	0.262	1.278	0.198	0.000	2023.000	781.900	328.800
%RSD		3.919	7.711	2.442	0.383	0.000	2.813	1.850	0.782
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:15:14	15900.000	21190.000	0.000	5897.000	96160.000	106100.000	67.597%	274.000
2	23:15:33	16100.000	21750.000	0.000	6079.000	98150.000	107600.000	63.782%	293.800
3	23:15:53	15560.000	21150.000	0.000	6070.000	100400.000	108800.000	60.043%	287.000
x		15850.000	21360.000	0.000	6015.000	98250.000	107500.000	63.807%	284.900
σ		269.800	335.000	0.000	102.700	2135.000	1331.000	3.777%	10.030
%RSD		1.702	1.568	0.000	1.707	2.173	1.238	5.920	3.522
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:15:14	44.620	13.750	7961.000	313200.000	330900.000	63.570	151.900	616.600
2	23:15:33	47.970	14.000	8086.000	322800.000	329500.000	62.790	150.700	615.300
3	23:15:53	47.530	14.220	8504.000	334500.000	343800.000	66.750	157.800	732.000
x		46.700	13.990	8183.000	323500.000	334700.000	64.370	153.500	654.700
σ		1.821	0.238	284.500	10700.000	7897.000	2.099	3.838	67.010
%RSD		3.900	1.704	3.476	3.309	2.359	3.261	2.501	10.240
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:15:14	710.500	322.600	329.800	2.906	0.287	2.068	0.000	630.600
2	23:15:33	691.500	328.600	334.300	2.761	0.400	2.244	0.000	645.800
3	23:15:53	726.000	342.200	344.100	3.904	0.568	2.309	0.000	659.000
x		709.400	331.200	336.100	3.190	0.418	2.207	0.000	645.100
σ		17.260	10.040	7.337	0.623	0.141	0.125	0.000	14.210
%RSD		2.434	3.031	2.183	19.520	33.800	5.647	0.000	2.202
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:15:14	0.000	0.458	0.425	71.236%	-0.067	-0.063	0.802	0.709
2	23:15:33	0.000	0.503	0.405	70.118%	-0.064	-0.056	0.671	0.615
3	23:15:53	0.000	0.419	0.397	69.548%	-0.061	-0.060	0.799	0.750
x		0.000	0.460	0.409	70.301%	-0.064	-0.060	0.757	0.691
σ		0.000	0.042	0.014	0.859%	0.003	0.004	0.075	0.070
%RSD		0.000	9.218	3.521	1.222	4.492	5.997	9.898	10.060
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:15:14	78.011%	2.335	32.820	33.070	33.490	32.980	92.062%	94.094%
2	23:15:33	77.808%	2.338	35.230	33.480	32.910	32.770	91.530%	94.663%
3	23:15:53	77.498%	2.304	33.940	33.430	33.040	32.810	92.640%	94.146%
x		77.772%	2.326	34.000	33.330	33.150	32.850	92.077%	94.301%
σ		0.258%	0.019	1.209	0.224	0.309	0.113	0.555%	0.315%
%RSD		0.332	0.810	3.558	0.671	0.933	0.344	0.603	0.334
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:15:14	0.866	0.895	179.300	163.800	175.700	85.777%		
2	23:15:33	0.898	0.919	182.900	168.400	180.100	84.798%		
3	23:15:53	0.912	0.946	186.200	171.300	183.200	84.267%		
x		0.892	0.920	182.800	167.800	179.700	84.947%		
σ		0.024	0.025	3.469	3.809	3.793	0.766%		
%RSD		2.704	2.760	1.897	2.269	2.111	0.902		

180-43046-H-5-C@10 4/27/2015 11:18:44 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	23:19:03	74.624%	0.343	6.053	5.836	0.000	7223.000	4283.000	4220.000
2	23:19:22	78.192%	0.303	4.429	5.393	0.000	7063.000	4113.000	4161.000
3	23:19:41	70.904%	0.407	6.465	5.767	0.000	7152.000	4253.000	4263.000
X		74.573%	0.351	5.649	5.665	0.000	7146.000	4217.000	4215.000
σ		3.644%	0.053	1.076	0.238	0.000	80.240	90.580	51.470
%RSD		4.887	15.050	19.050	4.208	0.000	1.123	2.148	1.221
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:19:03	2241.000	3087.000	0.000	689.500	9689.000	10200.000	91.180%	917.900
2	23:19:22	2172.000	2940.000	0.000	687.800	9614.000	10480.000	85.834%	903.800
3	23:19:41	2299.000	3040.000	0.000	689.300	9488.000	10340.000	87.670%	914.800
X		2237.000	3022.000	0.000	688.900	9597.000	10340.000	88.228%	912.200
σ		63.560	75.030	0.000	0.936	101.600	141.200	2.716%	7.443
%RSD		2.841	2.483	0.000	0.136	1.058	1.365	3.079	0.816
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:19:03	9.364	4.542	781.100	35060.000	34080.000	6.560	16.370	87.270
2	23:19:22	9.336	4.569	789.200	36210.000	36230.000	6.758	17.110	91.800
3	23:19:41	8.989	4.508	790.400	35450.000	34650.000	6.609	16.260	86.150
X		9.230	4.540	786.900	35570.000	34980.000	6.642	16.580	88.410
σ		0.209	0.031	5.053	587.400	1113.000	0.103	0.464	2.990
%RSD		2.264	0.673	0.642	1.651	3.181	1.550	2.796	3.383
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:19:03	88.190	35.760	36.100	3.519	-0.075	0.103	0.000	55.550
2	23:19:22	91.700	36.330	36.230	3.840	-0.121	0.211	0.000	55.730
3	23:19:41	87.340	35.960	35.820	3.699	-0.001	0.214	0.000	56.390
X		89.080	36.020	36.050	3.686	-0.066	0.176	0.000	55.890
σ		2.308	0.288	0.208	0.161	0.060	0.063	0.000	0.441
%RSD		2.591	0.799	0.576	4.367	92.070	35.990	0.000	0.789
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:19:03	103.650%	0.420	0.485	96.699%	-0.042	-0.039	0.136	0.091
2	23:19:22	104.721%	0.414	0.425	97.776%	-0.050	-0.038	0.171	0.118
3	23:19:41	103.456%	0.460	0.474	97.299%	-0.037	-0.036	0.167	0.108
X		103.942%	0.432	0.461	97.258%	-0.043	-0.038	0.158	0.106
σ		0.681%	0.025	0.032	0.540%	0.006	0.002	0.019	0.013
%RSD		0.655	5.804	6.976	0.555	15.030	4.146	12.170	12.740
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:19:03	102.682%	14.490	43.080	44.930	23.970	23.780	107.836%	108.225%
2	23:19:22	101.356%	14.620	46.740	45.040	24.850	23.990	109.957%	109.844%
3	23:19:41	102.899%	14.880	44.260	45.270	24.380	24.200	110.040%	110.768%
X		102.312%	14.660	44.690	45.080	24.400	23.990	109.278%	109.612%
σ		0.836%	0.201	1.868	0.174	0.440	0.212	1.249%	1.287%
%RSD		0.817	1.368	4.179	0.387	1.802	0.884	1.143	1.174
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:19:03	0.110	0.111	25.570	23.440	24.510	116.374%		
2	23:19:22	0.117	0.117	27.490	25.100	26.230	112.302%		
3	23:19:41	0.107	0.126	27.930	25.340	26.500	111.304%		
X		0.111	0.118	27.000	24.630	25.750	113.326%		
σ		0.005	0.008	1.254	1.039	1.082	2.686%		
%RSD		4.813	6.461	4.646	4.218	4.204	2.370		

180-43046-H-5-C@100

4/27/2015 11:22:32 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	23:22:52	88.542%	0.022	0.758	0.723	0.000	732.200	412.400	417.400
2	23:23:13	83.767%	-0.020	0.856	0.675	0.000	746.700	421.300	421.700
3	23:23:32	82.917%	0.027	0.565	0.796	0.000	733.500	421.700	422.400
X		85.075%	0.010	0.726	0.731	0.000	737.500	418.500	420.500
σ		3.032%	0.026	0.148	0.061	0.000	8.032	5.256	2.675
%RSD		3.564	266.300	20.400	8.340	0.000	1.089	1.256	0.636
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:22:52	228.600	164.100	0.000	70.380	940.200	1017.000	96.753%	86.140
2	23:23:13	224.500	195.900	0.000	74.680	928.100	1025.000	96.746%	83.970
3	23:23:32	264.500	166.700	0.000	69.910	919.600	1036.000	95.400%	101.000
X		239.200	175.600	0.000	71.660	929.300	1026.000	96.299%	90.390
σ		21.980	17.640	0.000	2.624	10.350	9.577	0.779%	9.292
%RSD		9.190	10.050	0.000	3.663	1.114	0.933	0.809	10.280
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:22:52	0.968	0.510	76.360	3649.000	3519.000	0.717	1.606	9.520
2	23:23:13	0.950	0.464	75.700	3625.000	3408.000	0.697	1.671	9.268
3	23:23:32	0.989	0.473	76.040	3610.000	3516.000	0.724	1.819	9.192
X		0.969	0.482	76.040	3628.000	3481.000	0.713	1.699	9.327
σ		0.020	0.024	0.332	19.640	63.150	0.014	0.109	0.172
%RSD		2.014	5.008	0.437	0.541	1.814	1.948	6.428	1.844
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:22:52	9.458	2.888	2.954	0.417	0.034	0.038	0.000	6.515
2	23:23:13	9.306	2.844	3.040	0.284	0.020	0.001	0.000	6.045
3	23:23:32	9.430	3.077	3.059	0.377	0.256	0.054	0.000	5.923
X		9.398	2.936	3.018	0.359	0.103	0.031	0.000	6.161
σ		0.081	0.124	0.056	0.068	0.133	0.027	0.000	0.312
%RSD		0.861	4.210	1.850	19.010	128.200	87.640	0.000	5.069
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:22:52	107.045%	0.080	0.113	105.175%	-0.083	-0.079	0.058	0.041
2	23:23:13	106.806%	0.097	0.100	106.833%	-0.086	-0.082	0.002	-0.011
3	23:23:32	106.270%	0.091	0.103	104.928%	-0.080	-0.084	0.037	0.023
X		106.707%	0.090	0.105	105.645%	-0.083	-0.082	0.033	0.018
σ		0.397%	0.008	0.007	1.036%	0.003	0.003	0.028	0.026
%RSD		0.372	9.466	6.291	0.981	4.073	3.071	87.310	147.900
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:22:52	104.916%	1.258	4.687	4.462	2.489	2.521	110.327%	110.564%
2	23:23:13	109.651%	1.289	4.479	4.151	2.322	2.395	111.360%	112.244%
3	23:23:32	109.304%	1.248	4.020	4.322	2.548	2.444	113.277%	113.692%
X		107.957%	1.265	4.395	4.312	2.453	2.453	111.655%	112.167%
σ		2.639%	0.021	0.341	0.156	0.117	0.064	1.497%	1.565%
%RSD		2.445	1.672	7.764	3.607	4.783	2.590	1.341	1.396
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:22:52	0.029	0.031	2.709	2.502	2.585	111.931%		
2	23:23:13	0.026	0.031	2.686	2.519	2.621	111.691%		
3	23:23:32	0.025	0.030	2.695	2.525	2.629	112.570%		
X		0.027	0.031	2.697	2.515	2.612	112.064%		
σ		0.002	0.001	0.011	0.012	0.024	0.454%		
%RSD		7.145	2.199	0.414	0.466	0.900	0.406		

180-43046-J-11-C@10 4/27/2015 11:26:23 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:26:42	42.662%	0.655	53.460	53.000	0.000	51280.000	119400.000	122800.000
2	23:27:02	40.288%	0.523	55.940	54.160	0.000	52920.000	121900.000	121400.000
3	23:27:21	39.657%	0.710	52.130	52.190	0.000	49460.000	110500.000	114600.000
X		40.869%	0.629	53.840	53.120	0.000	51220.000	117300.000	119600.000
σ		1.585%	0.096	1.931	0.989	0.000	1734.000	5992.000	4400.000
%RSD		3.877	15.220	3.586	1.863	0.000	3.386	5.109	3.678
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:26:42	10430.000	2169.000	0.000	5744.000	47970.000	53590.000	61.181%	8.338
2	23:27:02	10460.000	2135.000	0.000	5743.000	48160.000	53320.000	57.164%	12.670
3	23:27:21	9825.000	2007.000	0.000	5485.000	47740.000	53680.000	54.198%	7.735
X		10240.000	2104.000	0.000	5657.000	47960.000	53530.000	57.515%	9.582
σ		358.500	85.040	0.000	149.000	212.100	186.700	3.505%	2.694
%RSD		3.502	4.042	0.000	2.633	0.442	0.349	6.094	28.120
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:26:42	89.330	22.630	15210.000	618500.000	1006000.000	63.290	105.900	2.883
2	23:27:02	88.730	22.150	15270.000	657700.000	988400.000	62.840	102.400	2.886
3	23:27:21	87.840	22.450	15550.000	687600.000	1032000.000	65.400	105.800	2.849
X		88.630	22.410	15350.000	654600.000	1009000.000	63.840	104.700	2.873
σ		0.750	0.240	182.600	34670.000	21700.000	1.367	1.974	0.021
%RSD		0.846	1.072	1.190	5.296	2.152	2.141	1.885	0.716
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:26:42	3.885	476.000	474.300	-0.101	-0.481	0.262	0.000	1077.000
2	23:27:02	3.802	485.400	483.600	-0.035	-0.547	0.171	0.000	1091.000
3	23:27:21	3.906	492.000	489.600	-0.038	-0.526	0.226	0.000	1083.000
X		3.864	484.500	482.500	-0.058	-0.518	0.220	0.000	1084.000
σ		0.055	8.020	7.691	0.037	0.034	0.045	0.000	7.120
%RSD		1.417	1.655	1.594	64.150	6.511	20.690	0.000	0.657
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:26:42	84.753%	0.134	0.086	63.287%	-0.088	-0.080	0.136	0.108
2	23:27:02	81.825%	0.092	0.087	60.775%	-0.086	-0.083	0.071	0.047
3	23:27:21	81.328%	0.119	0.051	59.699%	-0.087	-0.080	0.137	0.094
X		82.635%	0.115	0.075	61.254%	-0.087	-0.081	0.115	0.083
σ		1.851%	0.021	0.020	1.841%	0.001	0.002	0.038	0.032
%RSD		2.240	18.600	27.280	3.006	1.362	2.560	32.850	38.140
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:26:42	68.663%	-0.010	0.030	0.020	2.261	2.316	75.978%	77.040%
2	23:27:02	68.500%	0.038	0.018	0.013	2.223	2.254	76.607%	77.679%
3	23:27:21	66.900%	-0.001	0.019	0.028	2.326	2.096	77.355%	77.854%
X		68.021%	0.009	0.022	0.020	2.270	2.222	76.647%	77.524%
σ		0.974%	0.025	0.007	0.008	0.053	0.113	0.689%	0.429%
%RSD		1.432	275.500	29.560	37.980	2.313	5.097	0.899	0.553
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:26:42	0.056	0.052	19.920	18.210	18.930	79.309%		
2	23:27:02	0.055	0.053	21.350	19.430	20.230	75.622%		
3	23:27:21	0.052	0.056	21.820	20.250	20.850	73.634%		
X		0.055	0.054	21.030	19.300	20.000	76.188%		
σ		0.002	0.002	0.989	1.027	0.982	2.879%		
%RSD		3.719	4.016	4.705	5.323	4.908	3.779		

CCV 1533080 4/27/2015 11:30:20 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:30:20	67.231%	98.270	94.990	93.530	0.000	48450.000	48070.000	48300.000
2	23:30:39	66.427%	98.190	98.490	89.290	0.000	48050.000	48580.000	48950.000
3	23:30:58	63.513%	101.500	97.060	88.920	0.000	48500.000	49770.000	50210.000
X		65.724%	99.318%	96.847%	90.579%	0.000	96.661%	97.615%	98.308%
σ		1.956%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.976	1.902	1.816	2.831	0.000	0.504	1.787	1.980
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:30:20	484.300	4536.000	0.000	48680.000	46270.000	50470.000	74.654%	94.650
2	23:30:39	494.400	4452.000	0.000	49150.000	46750.000	51490.000	73.937%	94.790
3	23:30:58	493.000	4454.000	0.000	50280.000	48840.000	52470.000	70.945%	99.220
X		98.110%	89.611%	0.000	98.738%	94.575%	102.954%	73.179%	96.221%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.968%	n/a
%RSD		1.114	1.068	0.000	1.662	2.884	1.939	2.689	2.698
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:30:20	92.690	94.690	508.200	25220.000	25170.000	95.440	93.950	95.050
2	23:30:39	96.660	99.490	507.900	25700.000	25160.000	93.100	93.330	93.370
3	23:30:58	98.620	100.200	516.700	26290.000	25990.000	96.580	96.390	97.320
X		95.992%	98.129%	102.194%	102.959%	101.750%	95.039%	94.559%	95.248%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		3.148	3.054	0.977	2.078	1.867	1.869	1.712	2.083
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:30:20	96.280	104.000	104.000	100.800	106.500	106.600	0.000	101.300
2	23:30:39	94.230	102.600	104.400	100.300	107.900	107.300	0.000	102.200
3	23:30:58	96.870	105.600	105.400	100.900	107.400	107.100	0.000	102.300
X		95.793%	104.048%	104.568%	100.675%	107.269%	106.997%	0.000	101.926%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.446	1.460	0.686	0.354	0.641	0.340	0.000	0.523
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:30:20	78.887%	93.840	96.250	75.866%	99.220	99.080	102.400	102.000
2	23:30:39	79.608%	95.180	97.620	76.297%	99.260	99.520	102.700	102.200
3	23:30:58	81.199%	97.300	100.400	76.553%	100.000	99.070	104.300	103.000
X		79.898%	95.440%	98.094%	76.239%	99.502%	99.224%	103.107%	102.404%
σ		1.183%	n/a	n/a	0.347%	n/a	n/a	n/a	n/a
%RSD		1.481	1.829	2.164	0.455	0.459	0.260	0.977	0.499
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:30:20	81.355%	97.770	98.170	98.280	94.540	94.750	89.698%	90.903%
2	23:30:39	82.860%	98.040	98.610	99.170	95.900	95.440	92.043%	93.269%
3	23:30:58	82.961%	99.250	100.900	101.000	98.040	98.240	92.230%	93.548%
X		82.392%	98.352%	99.214%	99.466%	96.160%	96.145%	91.323%	92.573%
σ		0.900%	n/a	n/a	n/a	n/a	n/a	1.411%	1.453%
%RSD		1.092	0.803	1.448	1.368	1.831	1.924	1.545	1.570
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:30:20	103.600	105.400	105.300	105.300	104.500	88.084%		
2	23:30:39	105.900	108.000	107.600	106.700	106.500	88.405%		
3	23:30:58	106.400	108.800	108.800	108.400	107.400	89.005%		
X		105.307%	107.368%	107.219%	106.784%	106.151%	88.498%		
σ		n/a	n/a	n/a	n/a	n/a	0.467%		
%RSD		1.406	1.667	1.616	1.415	1.386	0.528		

CCB3 4/27/2015 11:37:02 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	23:37:22	83.455%	-0.028	0.401	0.170	0.000	11.060	7.905	8.173
2	23:37:41	85.834%	-0.013	0.202	0.158	0.000	6.685	5.465	5.648
3	23:38:00	83.119%	-0.012	0.018	0.150	0.000	4.730	3.925	4.071
X		84.136%	-0.017	0.207	0.160	0.000	7.490	5.765	5.964
σ		1.480%	0.009	0.192	0.010	0.000	3.239	2.007	2.069
%RSD		1.759	50.280	92.650	6.200	0.000	43.240	34.810	34.690
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:22	3.930	-187.100	0.000	10.280	13.980	8.662	89.448%	-0.061
2	23:37:41	2.352	-189.900	0.000	8.079	8.298	6.901	87.943%	-0.135
3	23:38:00	1.814	-190.200	0.000	6.614	5.753	5.457	87.192%	-0.165
X		2.699	-189.100	0.000	8.325	9.343	7.007	88.194%	-0.120
σ		1.100	1.707	0.000	1.846	4.211	1.605	1.149%	0.053
%RSD		40.760	0.903	0.000	22.170	45.070	22.910	1.303	44.390
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:22	0.013	-0.004	0.518	50.930	46.970	0.020	0.012	-0.026
2	23:37:41	0.032	0.023	0.354	35.750	34.690	0.013	-0.002	-0.039
3	23:38:00	0.015	-0.007	0.229	24.400	25.390	0.011	0.013	-0.034
X		0.020	0.004	0.367	37.020	35.680	0.015	0.008	-0.033
σ		0.011	0.017	0.145	13.310	10.820	0.005	0.009	0.007
%RSD		52.930	410.700	39.540	35.950	30.340	31.760	106.200	20.000
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:22	-0.003	-0.411	-0.449	0.067	-0.067	0.094	0.000	0.319
2	23:37:41	-0.019	-0.545	-0.515	0.047	0.128	0.057	0.000	0.201
3	23:38:00	-0.014	-0.518	-0.630	0.041	-0.101	0.024	0.000	0.127
X		-0.012	-0.491	-0.532	0.051	-0.013	0.058	0.000	0.216
σ		0.008	0.070	0.092	0.014	0.124	0.035	0.000	0.097
%RSD		65.710	14.340	17.210	26.950	927.700	60.100	0.000	44.740
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:22	97.159%	0.236	0.212	97.661%	-0.074	-0.060	0.065	0.048
2	23:37:41	98.706%	0.171	0.175	97.797%	-0.075	-0.064	0.046	0.032
3	23:38:00	98.487%	0.170	0.174	98.149%	-0.065	-0.069	0.074	0.049
X		98.117%	0.192	0.187	97.869%	-0.071	-0.064	0.062	0.043
σ		0.837%	0.038	0.022	0.252%	0.006	0.004	0.014	0.010
%RSD		0.853	19.790	11.710	0.258	7.796	6.883	22.700	22.500
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:22	100.186%	-0.149	0.006	0.024	0.123	0.171	103.275%	103.630%
2	23:37:41	101.188%	-0.173	0.019	0.017	0.069	0.084	105.293%	105.193%
3	23:38:00	101.650%	-0.179	0.025	0.028	0.055	0.049	106.869%	106.173%
X		101.008%	-0.167	0.017	0.023	0.082	0.102	105.146%	104.999%
σ		0.748%	0.016	0.010	0.006	0.036	0.063	1.801%	1.283%
%RSD		0.741	9.552	57.910	23.760	43.530	62.170	1.713	1.222
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:37:22	0.028	0.031	-0.014	-0.013	-0.007	109.454%		
2	23:37:41	0.021	0.024	-0.018	-0.011	-0.013	109.202%		
3	23:38:00	0.022	0.022	-0.017	-0.014	-0.013	109.425%		
X		0.024	0.026	-0.016	-0.012	-0.011	109.361%		
σ		0.004	0.005	0.002	0.002	0.004	0.138%		
%RSD		15.530	19.710	13.380	12.830	31.790	0.126		

180-43150-H-2-C 4/27/2015 11:40:54 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	23:41:13	76.778%	-0.026	8.879	8.125	0.000	198.600	34.860	33.630
2	23:41:32	73.899%	0.010	8.398	8.267	0.000	199.400	34.090	34.480
3	23:41:51	72.973%	-0.043	8.749	8.562	0.000	195.900	35.460	34.340
X		74.550%	-0.020	8.675	8.318	0.000	198.000	34.800	34.150
σ		1.984%	0.027	0.249	0.223	0.000	1.799	0.684	0.456
%RSD		2.661	136.800	2.871	2.682	0.000	0.909	1.964	1.335
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:41:13	10.590	-152.200	0.000	23.020	200.100	207.700	71.605%	4.175
2	23:41:32	11.100	-154.200	0.000	21.630	233.000	214.600	70.042%	4.214
3	23:41:51	9.773	-156.500	0.000	20.800	200.900	213.200	67.638%	3.816
X		10.490	-154.300	0.000	21.820	211.300	211.800	69.762%	4.068
σ		0.671	2.191	0.000	1.119	18.720	3.657	1.998%	0.220
%RSD		6.399	1.420	0.000	5.131	8.859	1.726	2.865	5.395
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:41:13	-0.741	2.495	41.640	1522.000	1451.000	0.249	2.593	3.253
2	23:41:32	-0.140	2.614	42.930	1564.000	1482.000	0.270	2.792	3.301
3	23:41:51	0.269	2.552	41.700	1514.000	1457.000	0.273	2.627	3.321
X		-0.204	2.554	42.090	1533.000	1463.000	0.264	2.671	3.292
σ		0.508	0.059	0.727	27.120	16.430	0.013	0.107	0.035
%RSD		249.000	2.328	1.728	1.769	1.123	4.871	3.997	1.066
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:41:13	3.438	6.913	6.869	-0.108	-0.344	0.264	0.000	1.775
2	23:41:32	3.187	6.884	7.029	-0.045	-0.346	0.192	0.000	1.789
3	23:41:51	3.338	6.823	6.808	-0.312	-0.078	-0.039	0.000	1.670
X		3.321	6.874	6.902	-0.155	-0.256	0.139	0.000	1.745
σ		0.126	0.046	0.114	0.139	0.154	0.158	0.000	0.065
%RSD		3.799	0.662	1.656	89.850	60.270	113.700	0.000	3.720
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:41:13	78.084%	0.395	0.413	78.541%	-0.074	-0.067	0.053	0.040
2	23:41:32	77.113%	0.406	0.349	77.650%	-0.067	-0.065	0.033	0.023
3	23:41:51	78.709%	0.309	0.342	78.663%	-0.076	-0.074	0.037	0.025
X		77.969%	0.370	0.368	78.285%	-0.072	-0.068	0.041	0.029
σ		0.804%	0.053	0.039	0.553%	0.005	0.005	0.010	0.010
%RSD		1.031	14.370	10.690	0.707	6.300	7.082	25.230	33.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:41:13	80.438%	0.174	0.117	0.122	0.634	0.655	87.755%	88.628%
2	23:41:32	81.005%	0.144	0.114	0.126	0.535	0.629	89.271%	90.704%
3	23:41:51	81.801%	0.070	0.106	0.067	0.575	0.602	90.850%	91.602%
X		81.081%	0.129	0.112	0.105	0.581	0.629	89.292%	90.311%
σ		0.684%	0.053	0.006	0.032	0.050	0.027	1.547%	1.525%
%RSD		0.844	41.070	5.075	30.980	8.566	4.250	1.733	1.689
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:41:13	0.026	0.029	0.076	0.084	0.080	95.530%		
2	23:41:32	0.029	0.028	0.084	0.085	0.084	93.740%		
3	23:41:51	0.022	0.024	0.070	0.079	0.081	94.533%		
X		0.026	0.027	0.077	0.083	0.082	94.601%		
σ		0.004	0.003	0.007	0.004	0.002	0.897%		
%RSD		14.060	10.070	9.430	4.380	2.852	0.948		

180-43150-H-3-C@10 4/27/2015 11:44:43 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	23:45:02	82.277%	0.255	10.210	10.200	0.000	29190.000	2855.000	3043.000
2	23:45:21	80.485%	0.367	11.590	10.730	0.000	30620.000	3042.000	3177.000
3	23:45:41	79.424%	0.283	10.190	9.724	0.000	29550.000	2954.000	3083.000
X		80.729%	0.302	10.660	10.220	0.000	29790.000	2950.000	3101.000
σ		1.442%	0.058	0.799	0.504	0.000	740.900	93.490	68.940
%RSD		1.787	19.240	7.492	4.931	0.000	2.487	3.169	2.223
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:45:02	80.260	277.300	0.000	886.800	26840.000	29400.000	88.393%	1.193
2	23:45:21	85.640	260.700	0.000	925.000	28110.000	30210.000	83.964%	0.872
3	23:45:41	77.650	246.800	0.000	926.500	28030.000	30450.000	80.079%	3.773
X		81.190	261.600	0.000	912.800	27660.000	30020.000	84.146%	1.946
σ		4.074	15.310	0.000	22.490	711.700	549.500	4.160%	1.590
%RSD		5.018	5.852	0.000	2.463	2.573	1.830	4.944	81.730
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:45:02	1.504	0.098	576.100	27040.000	27240.000	1.286	0.998	0.431
2	23:45:21	1.424	0.109	585.800	28100.000	27910.000	1.308	1.086	0.445
3	23:45:41	1.563	0.071	602.900	28410.000	27500.000	1.317	1.151	0.406
X		1.497	0.093	588.300	27850.000	27550.000	1.304	1.078	0.427
σ		0.070	0.019	13.560	716.600	336.300	0.016	0.077	0.019
%RSD		4.664	20.850	2.305	2.573	1.221	1.222	7.107	4.529
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:45:02	0.372	1.478	1.392	0.059	-0.126	0.295	0.000	127.400
2	23:45:21	0.351	1.547	1.519	0.116	-0.177	-0.011	0.000	129.300
3	23:45:41	0.326	1.428	1.501	0.167	-0.076	0.118	0.000	128.900
X		0.349	1.485	1.470	0.114	-0.126	0.134	0.000	128.500
σ		0.023	0.060	0.069	0.054	0.051	0.153	0.000	1.004
%RSD		6.579	4.031	4.674	47.010	40.100	114.300	0.000	0.781
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:45:02	91.416%	0.424	0.386	89.421%	-0.063	-0.057	0.065	0.049
2	23:45:21	92.452%	0.408	0.403	89.757%	-0.068	-0.068	0.043	0.037
3	23:45:41	93.465%	0.358	0.433	89.975%	-0.069	-0.061	0.078	0.053
X		92.445%	0.397	0.407	89.718%	-0.067	-0.062	0.062	0.046
σ		1.025%	0.035	0.024	0.279%	0.003	0.006	0.018	0.008
%RSD		1.109	8.715	5.830	0.311	4.330	9.399	28.990	17.570
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:45:02	90.994%	-0.187	0.231	0.214	3.916	3.691	95.886%	96.257%
2	23:45:21	91.885%	-0.179	0.244	0.252	3.798	3.928	97.870%	98.214%
3	23:45:41	91.762%	-0.181	0.210	0.209	3.989	3.788	98.995%	100.193%
X		91.547%	-0.182	0.228	0.225	3.901	3.802	97.584%	98.221%
σ		0.483%	0.004	0.017	0.023	0.097	0.119	1.574%	1.968%
%RSD		0.527	2.372	7.645	10.390	2.478	3.130	1.613	2.004
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:45:02	0.007	0.009	0.085	0.072	0.072	103.507%		
2	23:45:21	0.011	0.012	0.070	0.060	0.069	101.124%		
3	23:45:41	0.011	0.010	0.063	0.068	0.071	100.990%		
X		0.010	0.010	0.073	0.067	0.071	101.874%		
σ		0.003	0.001	0.011	0.006	0.001	1.416%		
%RSD		26.900	12.840	15.720	8.964	2.085	1.390		

180-43150-H-4-G 4/27/2015 11:48:33 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:48:52	65.511%	0.225	20.350	18.570	0.000	7207.000	19210.000	19550.000
2	23:49:11	63.948%	0.140	18.260	19.150	0.000	7396.000	19740.000	19570.000
3	23:49:31	61.172%	0.202	21.030	18.780	0.000	7281.000	19510.000	19510.000
X		63.544%	0.189	19.880	18.830	0.000	7295.000	19490.000	19540.000
σ		2.197%	0.044	1.444	0.298	0.000	95.010	265.700	29.910
%RSD		3.458	23.090	7.263	1.582	0.000	1.302	1.363	0.153
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:48:52	2494.000	3670.000	0.000	2493.000	46230.000	50600.000	64.702%	8.113
2	23:49:11	2492.000	3685.000	0.000	2570.000	47000.000	52170.000	60.809%	14.950
3	23:49:31	2485.000	3604.000	0.000	2657.000	48520.000	52210.000	58.013%	8.833
X		2490.000	3653.000	0.000	2574.000	47250.000	51660.000	61.175%	10.630
σ		4.786	43.160	0.000	82.000	1166.000	919.200	3.359%	3.756
%RSD		0.192	1.182	0.000	3.186	2.467	1.779	5.491	35.330
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:48:52	0.442	2.374	381.300	1343.000	1340.000	22.500	53.310	29.130
2	23:49:11	-0.383	2.399	391.000	1383.000	1381.000	23.490	57.600	30.250
3	23:49:31	-0.230	2.514	395.900	1370.000	1359.000	22.950	56.160	29.910
X		-0.057	2.429	389.400	1365.000	1360.000	22.980	55.690	29.760
σ		0.439	0.074	7.426	20.080	20.470	0.491	2.182	0.573
%RSD		767.800	3.066	1.907	1.471	1.506	2.137	3.918	1.926
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:48:52	28.940	142.000	143.600	1.073	0.262	0.881	0.000	535.800
2	23:49:11	30.040	149.800	149.500	0.500	0.297	0.810	0.000	542.600
3	23:49:31	29.300	148.000	148.400	0.223	0.133	0.875	0.000	549.600
X		29.430	146.600	147.200	0.599	0.231	0.855	0.000	542.700
σ		0.557	4.073	3.160	0.434	0.086	0.039	0.000	6.875
%RSD		1.893	2.778	2.147	72.400	37.370	4.607	0.000	1.267
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:48:52	81.031%	0.160	0.148	67.843%	-0.077	-0.072	0.773	0.763
2	23:49:11	79.772%	0.121	0.133	67.278%	-0.069	-0.071	0.819	0.729
3	23:49:31	79.114%	0.139	0.148	66.547%	-0.084	-0.064	0.806	0.672
X		79.972%	0.140	0.143	67.223%	-0.077	-0.069	0.799	0.721
σ		0.974%	0.019	0.009	0.650%	0.007	0.004	0.024	0.046
%RSD		1.219	13.900	6.080	0.967	9.248	6.380	2.990	6.401
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:48:52	73.461%	-0.036	0.082	0.106	36.620	37.520	84.791%	86.186%
2	23:49:11	72.811%	-0.023	0.085	0.090	37.260	36.290	86.447%	87.492%
3	23:49:31	72.689%	-0.043	0.072	0.100	36.960	36.070	86.598%	89.115%
X		72.987%	-0.034	0.080	0.099	36.940	36.620	85.945%	87.598%
σ		0.415%	0.010	0.007	0.008	0.320	0.780	1.002%	1.467%
%RSD		0.568	29.000	8.712	8.517	0.865	2.129	1.166	1.675
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:48:52	0.081	0.072	0.688	0.523	0.551	85.801%		
2	23:49:11	0.081	0.072	0.636	0.570	0.556	86.069%		
3	23:49:31	0.070	0.079	0.948	0.685	0.678	86.800%		
X		0.078	0.075	0.757	0.593	0.595	86.223%		
σ		0.007	0.004	0.167	0.083	0.072	0.518%		
%RSD		8.470	5.445	22.080	14.000	12.080	0.600		

180-43150-H-4-G SD@5

4/27/2015 11:52:21 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	23:52:40	71.218%	-0.007	4.083	4.049	0.000	1523.000	4093.000	4152.000
2	23:53:00	67.832%	0.072	4.012	3.902	0.000	1578.000	4165.000	4175.000
3	23:53:19	70.136%	0.022	4.159	3.643	0.000	1461.000	3803.000	3880.000
X		69.729%	0.029	4.085	3.865	0.000	1521.000	4020.000	4069.000
σ		1.729%	0.040	0.074	0.205	0.000	58.420	191.500	164.100
%RSD		2.480	136.500	1.803	5.317	0.000	3.842	4.763	4.033
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:52:40	529.400	602.000	0.000	518.900	9572.000	10180.000	70.362%	0.995
2	23:53:00	521.800	630.700	0.000	532.800	9626.000	10430.000	68.152%	1.426
3	23:53:19	507.000	605.500	0.000	517.700	9491.000	10310.000	67.410%	3.610
X		519.400	612.700	0.000	523.100	9563.000	10310.000	68.641%	2.010
σ		11.410	15.690	0.000	8.368	67.560	127.500	1.536%	1.402
%RSD		2.197	2.560	0.000	1.600	0.707	1.237	2.238	69.750
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:52:40	-0.099	0.478	72.480	281.400	281.100	4.610	11.820	6.445
2	23:53:00	0.287	0.415	74.040	281.100	285.800	4.620	12.110	6.274
3	23:53:19	-0.138	0.435	74.420	270.800	275.900	4.625	11.660	6.271
X		0.017	0.443	73.650	277.800	280.900	4.619	11.870	6.330
σ		0.235	0.032	1.027	6.080	4.934	0.008	0.225	0.100
%RSD		1385.000	7.314	1.395	2.189	1.756	0.167	1.898	1.575
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:52:40	6.339	30.790	30.910	-0.014	-0.299	0.135	0.000	112.800
2	23:53:00	6.411	30.750	31.800	0.048	-0.252	-0.008	0.000	113.100
3	23:53:19	6.374	31.200	30.620	0.181	-0.359	0.051	0.000	113.700
X		6.375	30.920	31.110	0.072	-0.304	0.059	0.000	113.200
σ		0.036	0.247	0.614	0.099	0.054	0.071	0.000	0.443
%RSD		0.563	0.799	1.973	138.700	17.640	120.900	0.000	0.391
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:52:40	85.364%	0.036	0.041	78.845%	-0.090	-0.084	0.139	0.127
2	23:53:00	85.330%	0.038	0.031	78.744%	-0.089	-0.083	0.152	0.153
3	23:53:19	84.293%	0.026	0.028	77.456%	-0.082	-0.083	0.152	0.155
X		84.996%	0.033	0.033	78.348%	-0.087	-0.084	0.147	0.145
σ		0.609%	0.007	0.007	0.774%	0.004	0.001	0.008	0.016
%RSD		0.717	19.720	20.230	0.988	4.686	0.887	5.331	10.840
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:52:40	81.746%	-0.209	-0.024	-0.022	7.660	7.341	90.588%	91.796%
2	23:53:00	83.821%	-0.208	-0.025	-0.015	7.448	7.490	91.934%	93.882%
3	23:53:19	83.442%	-0.222	-0.030	-0.023	7.122	7.223	93.225%	95.293%
X		83.003%	-0.213	-0.026	-0.020	7.410	7.351	91.916%	93.657%
σ		1.105%	0.008	0.003	0.005	0.271	0.134	1.319%	1.759%
%RSD		1.331	3.529	12.520	23.380	3.661	1.823	1.435	1.878
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:52:40	0.018	0.015	0.096	0.067	0.076	99.311%		
2	23:53:00	0.011	0.017	0.158	0.072	0.108	98.677%		
3	23:53:19	0.019	0.014	0.094	0.063	0.084	98.096%		
X		0.016	0.015	0.116	0.067	0.089	98.695%		
σ		0.004	0.001	0.036	0.004	0.017	0.608%		
%RSD		26.790	7.170	31.000	6.295	18.640	0.616		

180-43150-H-4-H MS 4/27/2015 11:56:08 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	23:56:27	57.957%	48.230	951.000	920.100	0.000	53300.000	64840.000	65070.000
2	23:56:46	55.020%	47.810	941.800	879.000	0.000	51000.000	62490.000	62980.000
3	23:57:06	53.457%	44.280	874.200	862.200	0.000	48100.000	60010.000	59890.000
X		55.478%	46.780	922.300	887.100	0.000	50800.000	62440.000	62650.000
σ		2.285%	2.169	41.940	29.770	0.000	2608.000	2413.000	2609.000
%RSD		4.118	4.637	4.547	3.356	0.000	5.134	3.864	4.165
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:56:27	4891.000	12760.000	0.000	50870.000	93860.000	101100.000	60.605%	936.400
2	23:56:46	4820.000	12550.000	0.000	51490.000	94000.000	102500.000	58.099%	940.800
3	23:57:06	4621.000	11930.000	0.000	49900.000	93470.000	101500.000	55.875%	936.600
X		4778.000	12410.000	0.000	50760.000	93780.000	101700.000	58.193%	937.900
σ		139.900	436.000	0.000	799.100	277.500	758.600	2.366%	2.485
%RSD		2.928	3.512	0.000	1.574	0.296	0.746	4.066	0.265
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:56:27	486.900	184.700	841.200	2276.000	2247.000	472.300	465.300	235.700
2	23:56:46	493.200	186.300	854.600	2279.000	2251.000	454.200	461.600	226.700
3	23:57:06	481.000	184.700	868.600	2298.000	2312.000	473.800	467.900	235.400
X		487.000	185.200	854.800	2284.000	2270.000	466.800	464.900	232.600
σ		6.129	0.961	13.720	11.960	36.440	10.920	3.145	5.089
%RSD		1.258	0.519	1.605	0.524	1.605	2.341	0.676	2.188
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:56:27	233.600	578.200	579.700	34.860	9.427	10.410	0.000	1389.000
2	23:56:46	226.400	569.200	575.900	33.770	9.558	10.060	0.000	1401.000
3	23:57:06	231.800	576.100	576.100	34.340	9.269	9.939	0.000	1398.000
X		230.600	574.500	577.200	34.320	9.418	10.140	0.000	1396.000
σ		3.769	4.687	2.131	0.546	0.145	0.242	0.000	6.294
%RSD		1.634	0.816	0.369	1.590	1.540	2.392	0.000	0.451
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:56:27	79.222%	919.600	1033.000	64.659%	48.290	48.490	51.170	44.500
2	23:56:46	77.727%	927.900	1039.000	63.124%	48.990	47.860	52.050	44.150
3	23:57:06	77.552%	931.900	1041.000	61.522%	49.010	48.330	53.470	44.680
X		78.167%	926.500	1037.000	63.101%	48.770	48.220	52.230	44.440
σ		0.918%	6.267	4.475	1.568%	0.410	0.326	1.161	0.273
%RSD		1.174	0.676	0.431	2.486	0.841	0.675	2.223	0.614
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:56:27	70.124%	2059.000	516.500	520.700	2007.000	1975.000	84.978%	87.307%
2	23:56:46	69.971%	2064.000	516.500	523.500	2007.000	1990.000	86.384%	88.382%
3	23:57:06	68.574%	2087.000	528.600	532.000	2016.000	1995.000	86.426%	88.342%
X		69.556%	2070.000	520.500	525.400	2010.000	1987.000	85.929%	88.011%
σ		0.854%	14.530	7.025	5.866	5.336	10.450	0.824%	0.609%
%RSD		1.228	0.702	1.350	1.117	0.266	0.526	0.959	0.692
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:56:27	48.150	49.060	21.340	21.020	20.950	83.981%		
2	23:56:46	49.530	51.050	21.760	21.620	21.610	83.105%		
3	23:57:06	51.080	51.990	22.280	22.230	22.100	81.949%		
X		49.590	50.700	21.790	21.620	21.550	83.012%		
σ		1.468	1.495	0.469	0.608	0.574	1.019%		
%RSD		2.960	2.949	2.151	2.814	2.665	1.228		

180-43150-H-4-I MSD 4/27/2015 11:59:55 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	00:00:15	54.716%	47.420	941.300	909.700	0.000	50530.000	62830.000	63740.000
2	00:00:34	54.126%	45.910	888.200	876.100	0.000	49560.000	60390.000	60900.000
3	00:00:53	50.791%	44.400	949.400	880.400	0.000	51120.000	63480.000	63870.000
X		53.211%	45.910	926.300	888.700	0.000	50400.000	62230.000	62840.000
σ		2.117%	1.512	33.270	18.280	0.000	788.000	1630.000	1677.000
%RSD		3.978	3.294	3.592	2.057	0.000	1.564	2.619	2.669
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:00:15	4734.000	12050.000	0.000	49690.000	93360.000	101400.000	57.662%	926.200
2	00:00:34	4468.000	11480.000	0.000	49090.000	93590.000	101700.000	54.292%	914.000
3	00:00:53	4536.000	11620.000	0.000	51260.000	95740.000	103600.000	52.609%	962.300
X		4579.000	11720.000	0.000	50010.000	94230.000	102200.000	54.854%	934.100
σ		137.900	297.100	0.000	1117.000	1313.000	1182.000	2.573%	25.120
%RSD		3.011	2.535	0.000	2.234	1.394	1.156	4.690	2.689
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:00:15	485.300	186.200	848.100	2197.000	2190.000	470.600	463.100	234.500
2	00:00:34	481.300	187.100	868.500	2219.000	2245.000	484.200	467.800	231.600
3	00:00:53	484.200	185.200	851.700	2158.000	2145.000	459.200	460.100	233.800
X		483.600	186.200	856.100	2191.000	2193.000	471.300	463.700	233.300
σ		2.075	0.978	10.940	31.100	50.250	12.540	3.907	1.519
%RSD		0.429	0.525	1.278	1.419	2.291	2.661	0.843	0.651
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:00:15	235.700	573.000	576.900	35.020	9.060	9.596	0.000	1412.000
2	00:00:34	234.900	581.400	576.800	34.140	9.191	10.080	0.000	1417.000
3	00:00:53	230.400	583.300	585.400	35.380	9.395	9.516	0.000	1418.000
X		233.600	579.200	579.700	34.840	9.215	9.729	0.000	1416.000
σ		2.871	5.485	4.938	0.638	0.169	0.303	0.000	3.094
%RSD		1.229	0.947	0.852	1.833	1.832	3.110	0.000	0.219
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:00:15	76.097%	929.400	1039.000	62.596%	48.840	48.710	51.790	44.530
2	00:00:34	76.031%	929.300	1041.000	60.466%	48.560	48.410	51.610	43.560
3	00:00:53	75.246%	926.100	1044.000	60.189%	48.750	48.320	52.310	44.090
X		75.791%	928.200	1041.000	61.084%	48.710	48.480	51.900	44.060
σ		0.473%	1.881	2.692	1.317%	0.142	0.205	0.368	0.486
%RSD		0.625	0.203	0.259	2.156	0.291	0.423	0.709	1.103
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:00:15	68.587%	2085.000	509.400	494.600	2006.000	2003.000	84.549%	87.353%
2	00:00:34	69.385%	2051.000	519.100	517.200	2001.000	1974.000	85.974%	88.017%
3	00:00:53	68.284%	2080.000	520.000	528.000	2012.000	1986.000	84.406%	87.433%
X		68.752%	2072.000	516.200	513.300	2006.000	1987.000	84.976%	87.601%
σ		0.569%	18.530	5.859	17.050	5.828	14.770	0.867%	0.362%
%RSD		0.827	0.894	1.135	3.321	0.290	0.743	1.020	0.414
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:00:15	49.620	50.190	21.650	21.550	21.400	83.081%		
2	00:00:34	51.350	52.560	22.360	22.260	22.030	81.832%		
3	00:00:53	51.570	52.800	22.700	22.620	22.350	81.804%		
X		50.850	51.850	22.240	22.140	21.920	82.239%		
σ		1.068	1.443	0.536	0.546	0.485	0.729%		
%RSD		2.100	2.783	2.410	2.466	2.213	0.887		

180-43150-H-4-G PDS 4/28/2015 12:03:43 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:04:02	52.026%	49.000	952.800	925.600	0.000	51730.000	63520.000	64290.000
2	00:04:21	51.430%	47.670	954.600	876.200	0.000	53320.000	64190.000	63750.000
3	00:04:40	49.368%	47.380	964.800	946.800	0.000	52500.000	64220.000	65500.000
X		50.941%	48.020	957.400	916.200	0.000	52510.000	63980.000	64510.000
σ		1.395%	0.865	6.452	36.180	0.000	795.300	398.300	897.400
%RSD		2.738	1.802	0.674	3.949	0.000	1.514	0.623	1.391
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:04:02	4118.000	12280.000	0.000	52270.000	95440.000	104300.000	55.511%	1044.000
2	00:04:21	4058.000	12150.000	0.000	54810.000	98950.000	107400.000	51.002%	1055.000
3	00:04:40	4198.000	12500.000	0.000	53510.000	97860.000	106600.000	52.407%	1046.000
X		4125.000	12310.000	0.000	53530.000	97420.000	106100.000	52.973%	1048.000
σ		70.120	175.800	0.000	1268.000	1798.000	1610.000	2.307%	5.724
%RSD		1.700	1.428	0.000	2.369	1.846	1.517	4.355	0.546
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:04:02	501.100	193.000	883.200	2295.000	2290.000	492.100	477.800	240.100
2	00:04:21	506.400	192.800	916.900	2378.000	2321.000	498.500	497.100	246.000
3	00:04:40	494.000	188.500	866.200	2201.000	2211.000	462.800	455.200	230.500
X		500.500	191.400	888.700	2291.000	2274.000	484.500	476.700	238.900
σ		6.227	2.557	25.810	88.640	57.040	19.050	20.960	7.823
%RSD		1.244	1.336	2.904	3.869	2.508	3.933	4.397	3.275
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:04:02	237.900	588.600	591.600	35.330	9.442	10.250	0.000	1427.000
2	00:04:21	244.500	615.500	613.100	35.030	9.966	9.972	0.000	1451.000
3	00:04:40	229.900	588.900	587.900	35.490	9.620	10.180	0.000	1443.000
X		237.500	597.700	597.500	35.280	9.676	10.130	0.000	1440.000
σ		7.276	15.450	13.620	0.237	0.267	0.145	0.000	12.190
%RSD		3.064	2.585	2.279	0.672	2.755	1.427	0.000	0.847
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:04:02	75.106%	1052.000	1184.000	59.916%	46.250	45.650	54.290	44.920
2	00:04:21	73.334%	1058.000	1192.000	58.782%	46.100	45.500	55.160	46.540
3	00:04:40	72.921%	1054.000	1185.000	58.977%	46.080	45.470	54.420	45.680
X		73.787%	1054.000	1187.000	59.225%	46.140	45.540	54.620	45.720
σ		1.161%	3.039	4.224	0.606%	0.097	0.096	0.470	0.811
%RSD		1.574	0.288	0.356	1.023	0.210	0.210	0.860	1.774
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:04:02	67.553%	2361.000	580.900	568.500	2086.000	2062.000	83.679%	86.140%
2	00:04:21	66.486%	2366.000	595.300	575.200	2089.000	2074.000	84.532%	86.602%
3	00:04:40	67.425%	2358.000	584.300	590.200	2070.000	2059.000	83.877%	86.711%
X		67.155%	2361.000	586.800	577.900	2082.000	2065.000	84.029%	86.484%
σ		0.583%	4.112	7.560	11.110	10.070	7.879	0.447%	0.304%
%RSD		0.868	0.174	1.288	1.922	0.484	0.382	0.532	0.351
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:04:02	52.520	53.570	22.120	21.770	21.740	82.233%		
2	00:04:21	54.130	55.540	22.760	22.880	22.510	80.428%		
3	00:04:40	53.800	55.220	22.460	22.570	22.380	81.358%		
X		53.480	54.780	22.440	22.410	22.210	81.339%		
σ		0.852	1.058	0.321	0.577	0.414	0.903%		
%RSD		1.592	1.931	1.431	2.575	1.862	1.110		

180-42954-H-1-C@10 4/28/2015 12:07:30 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	00:07:50	66.649%	0.025	107.800	103.200	0.000	250700.000	30660.000	30680.000
2	00:08:09	63.324%	-0.023	106.100	102.800	0.000	256600.000	31450.000	31160.000
3	00:08:28	62.282%	0.019	98.940	102.400	0.000	246400.000	30960.000	31130.000
X		64.085%	0.007	104.300	102.800	0.000	251200.000	31020.000	30990.000
σ		2.281%	0.026	4.699	0.397	0.000	5127.000	401.400	272.000
%RSD		3.559	377.400	4.507	0.386	0.000	2.041	1.294	0.877
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:50	31.560	-43.730	0.000	9797.000	10960.000	12140.000	74.158%	1.072
2	00:08:09	27.030	-35.860	0.000	10050.000	11250.000	12180.000	73.144%	0.850
3	00:08:28	26.750	-0.913	0.000	9968.000	11270.000	12390.000	74.267%	0.617
X		28.450	-26.840	0.000	9938.000	11160.000	12240.000	73.856%	0.847
σ		2.699	22.790	0.000	128.400	174.800	136.500	0.619%	0.228
%RSD		9.487	84.940	0.000	1.292	1.566	1.116	0.838	26.880
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:50	0.198	0.317	8.889	45.520	58.620	0.329	0.507	1.784
2	00:08:09	0.223	0.258	8.539	54.620	57.570	0.197	0.357	1.677
3	00:08:28	0.013	0.203	8.244	36.410	53.530	0.116	0.366	1.595
X		0.145	0.260	8.557	45.520	56.570	0.214	0.410	1.685
σ		0.115	0.057	0.323	9.105	2.691	0.107	0.084	0.095
%RSD		79.250	21.970	3.778	20.000	4.756	50.220	20.420	5.624
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:50	0.490	1.755	1.241	0.303	-0.058	1.457	0.000	202.900
2	00:08:09	0.386	1.612	1.620	0.559	0.049	1.981	0.000	200.100
3	00:08:28	0.379	1.194	1.198	0.606	-0.116	1.919	0.000	198.900
X		0.418	1.521	1.353	0.489	-0.042	1.785	0.000	200.600
σ		0.062	0.291	0.232	0.163	0.083	0.286	0.000	2.069
%RSD		14.840	19.150	17.170	33.370	200.200	16.050	0.000	1.031
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:50	81.878%	4.983	5.308	79.315%	-0.053	-0.051	0.131	0.085
2	00:08:09	82.433%	4.191	4.335	78.531%	-0.056	-0.054	0.084	0.061
3	00:08:28	82.497%	3.199	3.446	78.354%	-0.068	-0.064	0.032	0.013
X		82.269%	4.124	4.363	78.733%	-0.059	-0.056	0.082	0.053
σ		0.340%	0.894	0.931	0.511%	0.008	0.007	0.049	0.036
%RSD		0.414	21.670	21.340	0.649	13.850	11.740	59.860	68.430
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:50	83.467%	2.520	0.917	0.889	4.003	3.946	93.628%	94.288%
2	00:08:09	84.436%	1.823	0.698	0.670	3.486	3.376	95.238%	96.352%
3	00:08:28	85.312%	1.435	0.555	0.572	3.331	3.290	96.465%	97.561%
X		84.405%	1.926	0.723	0.710	3.607	3.537	95.110%	96.067%
σ		0.923%	0.550	0.182	0.163	0.352	0.356	1.423%	1.655%
%RSD		1.094	28.540	25.180	22.910	9.750	10.080	1.496	1.723
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:07:50	0.196	0.198	0.090	0.064	0.076	95.738%		
2	00:08:09	0.177	0.186	0.088	0.078	0.079	92.950%		
3	00:08:28	0.159	0.171	0.078	0.083	0.078	93.712%		
X		0.177	0.185	0.085	0.075	0.078	94.133%		
σ		0.018	0.013	0.006	0.010	0.001	1.441%		
%RSD		10.310	7.214	7.311	12.850	1.540	1.531		

180-42954-H-2-C@10 4/28/2015 12:11:19 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	00:11:38	66.608%	0.024	109.000	108.000	0.000	265600.000	32330.000	32340.000
2	00:11:57	66.512%	-0.033	106.800	108.900	0.000	256900.000	31890.000	32120.000
3	00:12:16	63.788%	-0.033	104.200	105.500	0.000	263000.000	32290.000	32570.000
X		65.636%	-0.014	106.600	107.500	0.000	261900.000	32170.000	32340.000
σ		1.601%	0.033	2.405	1.780	0.000	4448.000	243.500	222.500
%RSD		2.439	237.200	2.256	1.656	0.000	1.698	0.757	0.688
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:11:38	19.300	-36.980	0.000	10470.000	11640.000	12570.000	78.451%	0.152
2	00:11:57	21.680	-71.970	0.000	10450.000	11620.000	12770.000	77.344%	0.279
3	00:12:16	18.700	-68.390	0.000	10420.000	11430.000	12500.000	76.772%	0.676
X		19.890	-59.110	0.000	10440.000	11560.000	12610.000	77.522%	0.369
σ		1.577	19.250	0.000	26.080	113.500	139.000	0.854%	0.274
%RSD		7.925	32.570	0.000	0.250	0.982	1.102	1.101	74.070
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:11:38	0.237	0.193	11.370	48.010	51.650	0.101	0.306	1.522
2	00:11:57	-0.025	0.172	11.310	31.820	48.800	0.083	0.281	1.560
3	00:12:16	-0.220	0.158	11.290	26.370	42.660	0.068	0.257	1.367
X		-0.002	0.174	11.330	35.400	47.700	0.084	0.281	1.483
σ		0.229	0.018	0.043	11.260	4.595	0.017	0.024	0.102
%RSD		9593.000	10.180	0.378	31.790	9.632	19.870	8.704	6.897
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:11:38	0.212	0.948	0.913	0.597	-0.093	2.204	0.000	212.200
2	00:11:57	0.221	0.847	1.000	0.543	-0.243	2.407	0.000	211.800
3	00:12:16	0.271	0.863	0.829	0.502	-0.151	2.073	0.000	207.200
X		0.235	0.886	0.914	0.547	-0.163	2.228	0.000	210.400
σ		0.032	0.055	0.086	0.048	0.076	0.168	0.000	2.799
%RSD		13.500	6.155	9.367	8.687	46.650	7.538	0.000	1.330
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:11:38	84.659%	1.237	1.232	80.146%	-0.069	-0.061	0.072	0.050
2	00:11:57	84.371%	1.083	1.154	79.667%	-0.066	-0.069	0.063	0.042
3	00:12:16	86.493%	1.039	1.021	79.289%	-0.070	-0.063	0.025	0.011
X		85.174%	1.120	1.136	79.701%	-0.068	-0.065	0.053	0.034
σ		1.151%	0.104	0.107	0.429%	0.002	0.004	0.025	0.021
%RSD		1.352	9.298	9.375	0.539	3.452	6.498	46.280	60.480
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:11:38	86.530%	0.339	0.215	0.219	3.253	3.110	94.363%	97.343%
2	00:11:57	85.349%	0.240	0.192	0.224	3.211	3.298	98.175%	98.343%
3	00:12:16	86.700%	0.195	0.173	0.163	3.324	3.118	97.797%	99.403%
X		86.193%	0.258	0.193	0.202	3.263	3.175	96.778%	98.363%
σ		0.736%	0.074	0.021	0.034	0.057	0.106	2.100%	1.030%
%RSD		0.853	28.690	10.780	16.850	1.751	3.353	2.170	1.048
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:11:38	0.064	0.070	0.039	0.032	0.040	101.173%		
2	00:11:57	0.073	0.080	0.041	0.046	0.043	97.746%		
3	00:12:16	0.062	0.082	0.025	0.043	0.036	96.681%		
X		0.066	0.077	0.035	0.040	0.040	98.533%		
σ		0.006	0.007	0.009	0.007	0.003	2.347%		
%RSD		8.804	8.755	24.260	17.390	8.345	2.382		

180-43187-F-1-C@10 4/28/2015 12:15:07 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	00:15:26	63.352%	0.079	16.720	16.270	0.000	45430.000	22130.000	22480.000
2	00:15:45	61.524%	0.083	16.720	16.820	0.000	45280.000	22230.000	22220.000
3	00:16:04	58.124%	0.090	17.990	16.580	0.000	45610.000	22700.000	23200.000
X		61.000%	0.084	17.140	16.560	0.000	45440.000	22350.000	22630.000
σ		2.653%	0.006	0.729	0.280	0.000	164.200	304.200	505.700
%RSD		4.349	6.612	4.255	1.688	0.000	0.361	1.361	2.234
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:15:26	742.300	1561.000	0.000	1669.000	56080.000	60560.000	71.246%	1143.000
2	00:15:45	798.900	1576.000	0.000	1671.000	57610.000	62030.000	68.255%	1203.000
3	00:16:04	780.000	1600.000	0.000	1738.000	59130.000	63280.000	65.860%	1228.000
X		773.700	1579.000	0.000	1693.000	57610.000	61960.000	68.454%	1191.000
σ		28.820	19.720	0.000	39.280	1525.000	1363.000	2.698%	43.330
%RSD		3.724	1.249	0.000	2.320	2.646	2.200	3.942	3.637
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:15:26	185.000	75.040	776.200	10850.000	10770.000	1.089	6.968	2.913
2	00:15:45	185.900	77.620	776.600	11080.000	10870.000	1.059	6.981	3.128
3	00:16:04	196.300	77.910	788.200	11260.000	11200.000	1.021	7.181	3.130
X		189.100	76.860	780.300	11060.000	10950.000	1.056	7.043	3.057
σ		6.311	1.580	6.762	207.400	222.500	0.034	0.119	0.125
%RSD		3.338	2.056	0.867	1.875	2.032	3.233	1.692	4.078
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:15:26	3.245	7.368	6.933	0.398	-0.179	0.281	0.000	442.300
2	00:15:45	3.364	7.613	6.870	0.292	-0.227	0.323	0.000	444.200
3	00:16:04	3.260	7.423	6.917	0.299	-0.198	0.170	0.000	446.400
X		3.290	7.468	6.907	0.330	-0.202	0.258	0.000	444.300
σ		0.065	0.128	0.033	0.059	0.024	0.079	0.000	2.063
%RSD		1.975	1.718	0.476	18.050	12.050	30.630	0.000	0.464
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:15:26	79.031%	1.872	2.124	74.989%	0.177	0.121	1.406	0.848
2	00:15:45	78.500%	1.636	1.845	74.708%	0.184	0.085	1.359	0.805
3	00:16:04	78.550%	1.887	1.860	74.875%	0.170	0.070	1.436	0.842
X		78.694%	1.798	1.943	74.857%	0.177	0.092	1.400	0.832
σ		0.294%	0.141	0.157	0.141%	0.007	0.026	0.039	0.023
%RSD		0.373	7.839	8.077	0.189	3.729	28.470	2.752	2.821
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:15:26	82.536%	18.390	0.270	0.312	10.660	9.653	93.041%	94.652%
2	00:15:45	82.125%	18.580	0.282	0.297	9.124	9.783	94.644%	95.965%
3	00:16:04	82.632%	18.240	0.252	0.311	9.786	9.702	94.751%	95.758%
X		82.431%	18.400	0.268	0.307	9.856	9.713	94.146%	95.459%
σ		0.269%	0.170	0.015	0.009	0.768	0.066	0.958%	0.706%
%RSD		0.327	0.921	5.712	2.848	7.796	0.677	1.017	0.740
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:15:26	0.052	0.051	4.879	3.647	3.997	104.087%		
2	00:15:45	0.051	0.056	5.022	3.851	4.223	100.648%		
3	00:16:04	0.061	0.059	5.170	4.072	4.343	97.948%		
X		0.055	0.055	5.024	3.857	4.188	100.894%		
σ		0.006	0.004	0.145	0.213	0.176	3.077%		
%RSD		10.160	7.232	2.895	5.516	4.201	3.050		

CCV 1533080 4/28/2015 12:22:15 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:22:15	74.693%	103.300	98.250	90.890	0.000	48960.000	48350.000	48360.000
2	00:22:34	73.918%	100.800	97.960	96.310	0.000	48330.000	48150.000	48420.000
3	00:22:53	72.924%	101.700	98.440	91.920	0.000	49600.000	48930.000	48910.000
X		73.845%	101.909%	98.216%	93.043%	0.000	97.928%	96.956%	97.131%
σ		0.887%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.201	1.243	0.248	3.093	0.000	1.302	0.838	0.616
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:22:15	478.900	4614.000	0.000	49490.000	46040.000	49770.000	83.287%	95.280
2	00:22:34	489.100	4659.000	0.000	49200.000	45450.000	50290.000	82.438%	96.120
3	00:22:53	483.100	4615.000	0.000	50230.000	45990.000	50490.000	80.862%	98.670
X		96.738%	92.587%	0.000	99.281%	91.653%	100.369%	82.196%	96.692%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.230%	n/a
%RSD		1.059	0.556	0.000	1.073	0.715	0.739	1.497	1.824
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:22:15	96.010	99.450	498.600	25450.000	25130.000	97.280	98.250	98.530
2	00:22:34	96.300	99.360	508.400	25510.000	25430.000	97.720	97.060	98.290
3	00:22:53	98.590	100.300	517.300	25830.000	25350.000	97.450	98.860	98.300
X		96.967%	99.703%	101.625%	102.381%	101.205%	97.485%	98.060%	98.373%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.457	0.521	1.837	0.800	0.618	0.224	0.933	0.137
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:22:15	97.720	100.900	102.000	101.200	106.400	104.400	0.000	98.010
2	00:22:34	97.850	102.500	100.900	101.800	105.000	103.600	0.000	97.800
3	00:22:53	96.370	102.600	102.600	100.900	105.300	105.200	0.000	99.490
X		97.316%	102.013%	101.828%	101.298%	105.579%	104.366%	0.000	98.432%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.841	0.915	0.830	0.444	0.664	0.778	0.000	0.935
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:22:15	86.550%	93.850	95.120	82.020%	98.980	100.200	102.300	101.500
2	00:22:34	87.681%	96.480	97.770	81.623%	101.000	100.600	103.600	103.000
3	00:22:53	87.341%	96.820	100.300	81.761%	100.100	99.750	103.000	101.900
X		87.191%	95.719%	97.744%	81.801%	100.013%	100.167%	102.940%	102.138%
σ		0.580%	n/a	n/a	0.202%	n/a	n/a	n/a	n/a
%RSD		0.665	1.699	2.674	0.246	1.000	0.400	0.642	0.753
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:22:15	85.321%	97.020	98.270	97.490	96.920	97.190	91.736%	91.557%
2	00:22:34	85.961%	98.830	100.300	100.300	98.030	97.890	94.085%	94.213%
3	00:22:53	87.649%	98.400	100.100	100.300	96.990	97.880	94.918%	95.346%
X		86.310%	98.086%	99.561%	99.363%	97.314%	97.654%	93.580%	93.705%
σ		1.203%	n/a	n/a	n/a	n/a	n/a	1.650%	1.945%
%RSD		1.393	0.964	1.131	1.630	0.639	0.411	1.763	2.076
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:22:15	101.900	103.200	102.700	102.900	101.800	90.190%		
2	00:22:34	103.600	105.500	103.900	104.800	103.600	91.031%		
3	00:22:53	103.400	106.400	108.800	105.100	104.900	92.260%		
X		102.964%	105.053%	105.129%	104.263%	103.413%	91.160%		
σ		n/a	n/a	n/a	n/a	n/a	1.041%		
%RSD		0.932	1.552	3.065	1.121	1.513	1.142		

CCB4 4/28/2015 12:28:57 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	00:29:16	87.855%	-0.021	0.299	0.228	0.000	14.200	5.939	6.462
2	00:29:36	87.713%	-0.043	0.327	0.219	0.000	12.630	5.876	6.633
3	00:29:55	90.610%	-0.014	0.187	0.213	0.000	8.251	4.584	4.913
X		88.726%	-0.026	0.271	0.220	0.000	11.690	5.466	6.003
σ		1.633%	0.015	0.074	0.007	0.000	3.082	0.765	0.948
%RSD		1.841	57.380	27.400	3.276	0.000	26.360	13.990	15.790
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:29:16	1.673	-208.000	0.000	10.320	10.330	8.194	91.699%	-0.095
2	00:29:36	1.602	-209.500	0.000	10.190	10.100	8.223	88.987%	-0.090
3	00:29:55	1.296	-212.100	0.000	6.984	12.220	4.373	91.617%	-0.117
X		1.524	-209.900	0.000	9.162	10.890	6.930	90.768%	-0.101
σ		0.200	2.094	0.000	1.887	1.164	2.214	1.542%	0.014
%RSD		13.130	0.998	0.000	20.600	10.690	31.950	1.699	13.950
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:29:16	0.004	-0.004	0.175	11.490	13.310	0.019	0.018	-0.050
2	00:29:36	0.040	-0.004	0.145	12.550	15.450	0.019	0.025	-0.040
3	00:29:55	0.026	-0.003	0.107	9.168	11.930	0.012	0.019	-0.050
X		0.023	-0.004	0.142	11.070	13.560	0.017	0.021	-0.047
σ		0.018	0.000	0.034	1.730	1.774	0.004	0.004	0.006
%RSD		79.310	8.561	24.200	15.630	13.080	23.580	19.050	12.660
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:29:16	-0.019	-0.577	-0.510	0.046	-0.036	0.162	0.000	0.169
2	00:29:36	-0.051	-0.521	-0.589	0.088	-0.008	0.267	0.000	0.153
3	00:29:55	-0.019	-0.563	-0.641	0.053	-0.064	0.210	0.000	0.104
X		-0.030	-0.554	-0.580	0.062	-0.036	0.213	0.000	0.142
σ		0.018	0.029	0.066	0.022	0.028	0.053	0.000	0.034
%RSD		62.100	5.287	11.400	35.610	78.450	24.700	0.000	23.980
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:29:16	96.170%	0.240	0.269	97.227%	-0.079	-0.069	0.057	0.046
2	00:29:36	97.241%	0.235	0.252	98.647%	-0.080	-0.072	0.070	0.050
3	00:29:55	97.774%	0.220	0.226	98.057%	-0.074	-0.069	0.069	0.049
X		97.062%	0.232	0.249	97.977%	-0.078	-0.070	0.065	0.048
σ		0.817%	0.010	0.021	0.713%	0.003	0.002	0.007	0.002
%RSD		0.842	4.462	8.603	0.728	4.023	3.028	10.990	5.012
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:29:16	98.080%	-0.104	0.049	0.048	0.094	0.096	100.313%	100.383%
2	00:29:36	100.146%	-0.110	0.049	0.029	0.094	0.095	102.193%	102.614%
3	00:29:55	100.260%	-0.122	0.029	0.034	0.059	0.076	104.521%	104.362%
X		99.495%	-0.112	0.042	0.037	0.083	0.089	102.342%	102.453%
σ		1.227%	0.009	0.011	0.010	0.020	0.011	2.108%	1.994%
%RSD		1.233	8.115	26.950	27.430	24.590	12.480	2.060	1.946
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:29:16	0.053	0.049	-0.014	-0.015	-0.012	105.773%		
2	00:29:36	0.036	0.048	-0.007	-0.001	-0.008	107.528%		
3	00:29:55	0.042	0.047	-0.021	-0.014	-0.014	108.298%		
X		0.044	0.048	-0.014	-0.010	-0.012	107.200%		
σ		0.009	0.001	0.007	0.008	0.003	1.294%		
%RSD		19.490	2.874	52.830	79.560	27.770	1.207		

180-42982-D-1-C@10 4/28/2015 12:32:48 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	00:33:07	77.054%	-0.026	83.790	79.560	0.000	185900.000	22820.000	23140.000
2	00:33:26	76.303%	-0.001	72.050	77.130	0.000	181000.000	21820.000	21970.000
3	00:33:46	73.188%	-0.017	69.230	72.020	0.000	182600.000	22050.000	21960.000
X		75.515%	-0.015	75.030	76.240	0.000	183200.000	22230.000	22360.000
σ		2.050%	0.013	7.722	3.848	0.000	2503.000	526.500	679.300
%RSD		2.715	88.970	10.290	5.048	0.000	1.366	2.368	3.039
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:33:07	56.600	-48.900	0.000	7185.000	8627.000	9146.000	83.016%	1.511
2	00:33:26	29.150	-48.450	0.000	7066.000	8639.000	9273.000	80.168%	0.169
3	00:33:46	25.530	-54.030	0.000	7100.000	8644.000	9293.000	80.985%	0.132
X		37.090	-50.460	0.000	7117.000	8637.000	9237.000	81.390%	0.604
σ		16.990	3.098	0.000	61.220	9.135	79.470	1.466%	0.786
%RSD		45.800	6.139	0.000	0.860	0.106	0.860	1.802	130.200
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:33:07	-0.059	0.037	57.910	351.900	331.300	0.083	0.205	0.965
2	00:33:26	-0.069	0.084	59.130	351.300	335.300	0.080	0.182	0.997
3	00:33:46	0.104	0.096	58.720	344.300	327.400	0.067	0.229	0.962
X		-0.008	0.072	58.590	349.200	331.300	0.076	0.205	0.974
σ		0.097	0.031	0.619	4.240	3.936	0.009	0.023	0.019
%RSD		1226.000	43.450	1.056	1.214	1.188	11.250	11.380	1.972
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:33:07	0.075	1.217	1.356	0.691	-0.091	1.409	0.000	145.900
2	00:33:26	0.094	1.256	1.110	0.627	-0.163	1.057	0.000	146.400
3	00:33:46	0.127	1.120	0.863	0.714	-0.131	1.032	0.000	149.100
X		0.099	1.198	1.110	0.677	-0.128	1.166	0.000	147.200
σ		0.026	0.070	0.247	0.045	0.036	0.211	0.000	1.728
%RSD		26.690	5.837	22.210	6.606	28.190	18.100	0.000	1.175
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:33:07	87.717%	0.754	0.736	85.748%	-0.068	-0.054	0.048	0.031
2	00:33:26	87.689%	0.719	0.785	85.176%	-0.074	-0.058	0.065	0.041
3	00:33:46	87.088%	0.738	0.770	83.088%	-0.072	-0.059	0.050	0.029
X		87.498%	0.737	0.764	84.671%	-0.072	-0.057	0.055	0.034
σ		0.355%	0.018	0.025	1.400%	0.003	0.002	0.009	0.006
%RSD		0.406	2.433	3.296	1.654	4.322	4.325	16.440	17.970
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:33:07	88.590%	-0.056	0.069	0.070	3.837	3.988	96.715%	97.312%
2	00:33:26	88.345%	-0.039	0.075	0.091	3.679	3.850	98.595%	99.226%
3	00:33:46	89.216%	-0.064	0.054	0.055	3.640	3.759	97.778%	99.329%
X		88.717%	-0.053	0.066	0.072	3.719	3.866	97.696%	98.622%
σ		0.449%	0.013	0.011	0.018	0.104	0.115	0.942%	1.136%
%RSD		0.506	23.980	16.070	25.000	2.806	2.978	0.965	1.152
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:33:07	0.028	0.024	0.020	0.013	0.014	112.615%		
2	00:33:26	0.022	0.029	0.018	0.012	0.014	104.916%		
3	00:33:46	0.034	0.025	0.032	0.005	0.018	103.618%		
X		0.028	0.026	0.023	0.010	0.015	107.049%		
σ		0.006	0.003	0.008	0.004	0.002	4.863%		
%RSD		22.520	10.350	33.840	44.700	14.370	4.543		

180-42982-D-2-B@10 4/28/2015 12:36:37 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	00:36:57	70.445%	-0.025	107.000	104.000	0.000	281100.000	35170.000	34930.000
2	00:37:16	67.371%	-0.024	105.000	106.600	0.000	276400.000	34670.000	35220.000
3	00:37:35	67.979%	-0.034	107.400	105.000	0.000	282600.000	35600.000	35220.000
X		68.598%	-0.027	106.500	105.200	0.000	280000.000	35150.000	35130.000
σ		1.628%	0.005	1.296	1.329	0.000	3256.000	464.300	168.900
%RSD		2.373	19.380	1.217	1.264	0.000	1.163	1.321	0.481
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:36:57	12.900	-48.100	0.000	10900.000	12610.000	13750.000	79.049%	0.021
2	00:37:16	13.040	-46.920	0.000	10870.000	12470.000	13900.000	79.277%	-0.073
3	00:37:35	12.560	-54.480	0.000	11040.000	12650.000	13980.000	76.395%	0.021
X		12.830	-49.830	0.000	10940.000	12580.000	13880.000	78.240%	-0.010
σ		0.250	4.066	0.000	89.190	96.170	115.900	1.602%	0.054
%RSD		1.949	8.160	0.000	0.816	0.765	0.835	2.047	542.200
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:36:57	0.001	0.098	33.740	31.740	50.050	0.034	0.176	1.439
2	00:37:16	-0.224	0.100	33.860	29.350	49.290	0.038	0.194	1.385
3	00:37:35	-0.038	0.112	34.280	27.420	46.870	0.025	0.221	1.516
X		-0.087	0.103	33.960	29.510	48.740	0.032	0.197	1.447
σ		0.120	0.008	0.282	2.166	1.658	0.007	0.022	0.066
%RSD		138.300	7.655	0.831	7.340	3.402	21.020	11.350	4.554
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:36:57	0.116	0.875	0.826	0.711	-0.029	2.653	0.000	226.700
2	00:37:16	0.093	0.812	0.697	0.767	-0.002	2.642	0.000	225.700
3	00:37:35	0.166	0.910	0.738	0.693	0.072	2.476	0.000	227.900
X		0.125	0.866	0.754	0.724	0.014	2.590	0.000	226.800
σ		0.037	0.050	0.066	0.039	0.052	0.099	0.000	1.079
%RSD		29.530	5.744	8.756	5.336	381.700	3.823	0.000	0.476
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:36:57	84.225%	0.328	0.387	80.775%	-0.066	-0.068	0.050	0.027
2	00:37:16	84.294%	0.361	0.389	79.907%	-0.075	-0.066	0.102	0.063
3	00:37:35	84.433%	0.329	0.357	80.357%	-0.071	-0.067	0.042	0.026
X		84.317%	0.339	0.378	80.347%	-0.071	-0.067	0.065	0.039
σ		0.106%	0.019	0.018	0.434%	0.004	0.001	0.033	0.021
%RSD		0.126	5.584	4.766	0.540	6.303	2.018	50.460	55.010
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:36:57	84.817%	-0.077	0.007	0.013	4.819	4.866	93.646%	94.827%
2	00:37:16	85.357%	0.008	0.014	-0.008	4.843	4.746	95.986%	97.216%
3	00:37:35	86.235%	-0.077	0.002	0.008	4.764	4.715	96.714%	97.855%
X		85.470%	-0.048	0.008	0.004	4.809	4.776	95.449%	96.633%
σ		0.715%	0.049	0.006	0.011	0.041	0.079	1.603%	1.596%
%RSD		0.837	100.400	79.130	247.800	0.848	1.662	1.679	1.652
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:36:57	0.014	0.017	0.006	0.003	0.005	100.153%		
2	00:37:16	0.020	0.017	0.006	0.001	0.005	96.166%		
3	00:37:35	0.018	0.016	-0.004	0.019	0.010	95.728%		
X		0.018	0.017	0.003	0.008	0.006	97.349%		
σ		0.003	0.001	0.006	0.010	0.003	2.438%		
%RSD		15.810	3.477	203.600	127.100	43.000	2.504		

180-42982-D-3-B@10 4/28/2015 12:40:27 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:46	70.488%	-0.016	96.370	97.010	0.000	245700.000	30900.000	31210.000
2	00:41:05	69.150%	-0.024	95.740	93.330	0.000	252100.000	31130.000	30890.000
3	00:41:24	68.138%	-0.024	91.610	91.020	0.000	247300.000	30390.000	30360.000
X		69.259%	-0.021	94.570	93.780	0.000	248400.000	30800.000	30820.000
σ		1.179%	0.005	2.585	3.021	0.000	3319.000	376.800	427.600
%RSD		1.702	23.250	2.733	3.221	0.000	1.336	1.223	1.387
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:46	3.166	-18.060	0.000	9576.000	11170.000	12230.000	79.647%	-0.023
2	00:41:05	3.146	-22.010	0.000	9615.000	11250.000	12370.000	77.427%	-0.052
3	00:41:24	2.566	-23.740	0.000	9582.000	11460.000	12440.000	76.638%	-0.085
X		2.960	-21.270	0.000	9591.000	11290.000	12350.000	77.904%	-0.053
σ		0.341	2.912	0.000	20.870	149.300	106.700	1.560%	0.031
%RSD		11.510	13.690	0.000	0.218	1.322	0.864	2.003	58.550
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:46	-0.326	0.084	22.070	50.290	65.920	0.044	0.297	1.202
2	00:41:05	-0.222	0.108	22.400	50.410	65.410	0.036	0.285	1.305
3	00:41:24	-0.132	0.100	22.710	46.380	60.430	0.035	0.287	1.296
X		-0.227	0.097	22.400	49.030	63.920	0.038	0.290	1.268
σ		0.097	0.012	0.322	2.292	3.037	0.005	0.007	0.057
%RSD		42.750	12.580	1.436	4.675	4.751	12.710	2.281	4.489
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:46	0.032	0.107	-0.115	0.496	-0.122	1.683	0.000	196.100
2	00:41:05	0.042	0.143	0.039	0.343	-0.097	1.497	0.000	198.700
3	00:41:24	-0.022	0.082	0.039	0.169	-0.145	1.178	0.000	199.000
X		0.017	0.111	-0.012	0.336	-0.121	1.453	0.000	197.900
σ		0.035	0.031	0.089	0.164	0.024	0.255	0.000	1.597
%RSD		199.900	27.750	717.900	48.740	19.870	17.560	0.000	0.807
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:46	85.640%	0.280	0.300	81.469%	-0.091	-0.085	0.075	0.052
2	00:41:05	85.785%	0.271	0.288	81.821%	-0.087	-0.085	0.069	0.047
3	00:41:24	85.845%	0.245	0.271	81.385%	-0.091	-0.084	0.036	0.021
X		85.757%	0.266	0.286	81.558%	-0.090	-0.085	0.060	0.040
σ		0.106%	0.018	0.015	0.231%	0.003	0.001	0.021	0.016
%RSD		0.123	6.870	5.093	0.283	2.819	0.649	34.410	40.690
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:46	86.549%	-0.147	0.003	-0.000	4.891	5.092	96.342%	97.290%
2	00:41:05	87.776%	-0.143	0.010	0.002	5.106	4.952	99.099%	100.002%
3	00:41:24	88.244%	-0.150	-0.010	0.012	5.211	4.993	98.965%	100.736%
X		87.523%	-0.146	0.001	0.004	5.069	5.012	98.135%	99.343%
σ		0.875%	0.003	0.010	0.006	0.164	0.072	1.554%	1.815%
%RSD		1.000	2.371	758.600	138.700	3.225	1.441	1.584	1.827
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:40:46	0.014	0.016	0.017	0.017	0.018	99.956%		
2	00:41:05	0.016	0.018	0.019	0.027	0.021	97.471%		
3	00:41:24	0.021	0.019	0.025	0.012	0.018	95.379%		
X		0.017	0.017	0.021	0.019	0.019	97.602%		
σ		0.003	0.001	0.004	0.007	0.002	2.292%		
%RSD		18.810	7.369	20.370	39.620	9.486	2.348		

180-43210-A-4-B@10

4/28/2015 12:44:16 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	00:44:35	65.070%	-0.033	6.096	5.608	0.000	208100.000	6068.000	6074.000
2	00:44:54	62.960%	-0.033	4.678	5.086	0.000	211700.000	6202.000	6254.000
3	00:45:13	63.224%	-0.023	5.395	5.530	0.000	214500.000	6280.000	6271.000
X		63.751%	-0.030	5.390	5.408	0.000	211400.000	6183.000	6200.000
σ		1.150%	0.006	0.709	0.281	0.000	3213.000	107.200	109.400
%RSD		1.804	20.220	13.160	5.204	0.000	1.520	1.734	1.764
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:44:35	1.090	922.700	0.000	3098.000	26870.000	29110.000	73.441%	0.252
2	00:44:54	1.873	914.700	0.000	3179.000	27520.000	29850.000	71.013%	0.107
3	00:45:13	1.861	942.900	0.000	3242.000	28230.000	30400.000	68.974%	0.126
X		1.608	926.800	0.000	3173.000	27540.000	29780.000	71.143%	0.162
σ		0.449	14.570	0.000	72.510	682.200	645.000	2.236%	0.079
%RSD		27.920	1.573	0.000	2.285	2.477	2.166	3.143	48.670
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:44:35	-0.170	0.083	448.800	5735.000	5471.000	0.161	0.053	0.928
2	00:44:54	-0.057	0.078	457.700	5755.000	5477.000	0.171	-0.072	0.960
3	00:45:13	0.035	0.099	462.200	5833.000	5522.000	0.179	0.068	0.992
X		-0.064	0.087	456.200	5774.000	5490.000	0.170	0.017	0.960
σ		0.103	0.011	6.826	51.830	28.000	0.009	0.077	0.032
%RSD		160.700	12.740	1.496	0.897	0.510	5.355	463.800	3.331
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:44:35	-0.013	-0.181	-0.412	0.705	-0.241	0.378	0.000	132.600
2	00:44:54	-0.042	-0.292	-0.473	0.486	-0.280	0.276	0.000	134.300
3	00:45:13	0.004	-0.289	-0.191	0.653	-0.169	0.143	0.000	135.400
X		-0.017	-0.254	-0.359	0.615	-0.230	0.265	0.000	134.100
σ		0.023	0.064	0.148	0.114	0.056	0.118	0.000	1.406
%RSD		135.600	25.000	41.320	18.600	24.540	44.390	0.000	1.048
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:44:35	78.634%	0.383	0.434	75.140%	-0.089	-0.082	0.069	0.035
2	00:44:54	77.924%	0.501	0.412	74.628%	-0.086	-0.086	0.090	0.056
3	00:45:13	78.059%	0.468	0.434	74.582%	-0.087	-0.081	0.048	0.032
X		78.206%	0.450	0.426	74.783%	-0.087	-0.083	0.069	0.041
σ		0.377%	0.061	0.013	0.310%	0.002	0.003	0.021	0.013
%RSD		0.482	13.480	3.041	0.414	2.223	3.212	30.020	31.580
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:44:35	80.839%	-0.184	0.002	0.008	55.350	54.570	90.784%	91.828%
2	00:44:54	81.445%	-0.159	0.023	0.005	54.810	54.330	92.049%	93.832%
3	00:45:13	81.391%	-0.180	0.006	0.005	56.250	54.230	94.180%	95.259%
X		81.225%	-0.174	0.010	0.006	55.470	54.380	92.338%	93.639%
σ		0.336%	0.014	0.011	0.002	0.726	0.173	1.716%	1.724%
%RSD		0.413	7.796	108.800	32.410	1.309	0.318	1.858	1.841
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:44:35	0.011	0.012	-0.018	-0.016	-0.014	97.731%		
2	00:44:54	0.019	0.016	-0.015	-0.016	-0.013	94.100%		
3	00:45:13	0.010	0.016	-0.019	-0.013	-0.016	92.418%		
X		0.013	0.015	-0.017	-0.015	-0.014	94.749%		
σ		0.005	0.002	0.002	0.002	0.002	2.715%		
%RSD		36.640	15.980	12.040	12.340	11.340	2.866		

180-43210-A-5-C@10 4/28/2015 12:48:06 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	00:48:25	78.038%	-0.002	5.455	5.484	0.000	83070.000	5861.000	5711.000
2	00:48:45	73.654%	-0.017	5.941	5.775	0.000	84580.000	5961.000	5983.000
3	00:49:04	70.202%	0.003	5.382	5.407	0.000	84950.000	5984.000	5868.000
X		73.965%	-0.005	5.593	5.555	0.000	84200.000	5935.000	5854.000
σ		3.927%	0.010	0.304	0.194	0.000	996.700	65.600	136.500
%RSD		5.309	196.300	5.441	3.490	0.000	1.184	1.105	2.332
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:48:25	1.516	1058.000	0.000	4587.000	20950.000	22490.000	82.125%	0.093
2	00:48:45	1.788	1062.000	0.000	4567.000	21100.000	22810.000	81.599%	0.055
3	00:49:04	1.118	1049.000	0.000	4629.000	21360.000	23010.000	79.665%	0.129
X		1.474	1056.000	0.000	4594.000	21140.000	22770.000	81.130%	0.092
σ		0.337	6.491	0.000	31.970	205.400	259.000	1.296%	0.037
%RSD		22.880	0.615	0.000	0.696	0.972	1.138	1.597	40.200
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:48:25	-0.062	0.183	247.400	12360.000	12180.000	1.395	0.570	0.408
2	00:48:45	-0.092	0.178	249.500	12660.000	12560.000	1.389	0.619	0.457
3	00:49:04	-0.114	0.216	256.400	12790.000	12590.000	1.348	0.629	0.417
X		-0.090	0.192	251.100	12600.000	12440.000	1.377	0.606	0.427
σ		0.026	0.021	4.676	217.500	230.600	0.026	0.031	0.026
%RSD		28.920	10.800	1.862	1.726	1.854	1.872	5.184	6.074
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:48:25	0.032	4.747	4.695	0.617	-0.340	0.249	0.000	192.100
2	00:48:45	0.025	4.936	4.792	0.520	0.021	0.208	0.000	198.300
3	00:49:04	0.088	4.419	4.864	0.578	-0.093	0.102	0.000	198.300
X		0.048	4.700	4.784	0.572	-0.137	0.186	0.000	196.200
σ		0.035	0.262	0.085	0.049	0.184	0.076	0.000	3.564
%RSD		71.430	5.562	1.775	8.486	134.600	40.870	0.000	1.816
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:48:25	90.872%	0.368	0.380	86.456%	-0.088	-0.085	0.081	0.053
2	00:48:45	89.055%	0.401	0.421	86.678%	-0.086	-0.087	0.010	0.014
3	00:49:04	90.000%	0.441	0.394	86.888%	-0.088	-0.084	0.074	0.044
X		89.975%	0.403	0.398	86.674%	-0.088	-0.085	0.055	0.037
σ		0.909%	0.037	0.021	0.216%	0.001	0.002	0.039	0.021
%RSD		1.010	9.080	5.304	0.249	1.533	1.897	71.510	55.800
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:48:25	91.530%	-0.171	-0.007	0.007	83.350	82.210	100.392%	101.725%
2	00:48:45	92.517%	-0.204	-0.007	-0.002	83.460	82.570	102.317%	102.624%
3	00:49:04	93.787%	-0.213	-0.003	-0.001	82.550	82.040	103.678%	104.730%
X		92.611%	-0.196	-0.006	0.001	83.120	82.280	102.129%	103.027%
σ		1.132%	0.022	0.002	0.005	0.495	0.270	1.651%	1.542%
%RSD		1.222	11.230	37.780	374.900	0.596	0.328	1.616	1.497
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:48:25	0.010	0.012	-0.006	-0.003	-0.004	102.657%		
2	00:48:45	0.013	0.012	-0.001	0.005	0.001	102.244%		
3	00:49:04	0.010	0.013	0.001	0.000	0.001	101.990%		
X		0.011	0.012	-0.002	0.001	-0.000	102.297%		
σ		0.002	0.001	0.003	0.004	0.003	0.337%		
%RSD		14.970	4.345	176.100	429.400	604.600	0.329		

180-43210-A-6-B@10 4/28/2015 12:51:55 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	00:52:14	78.935%	-0.035	4.534	4.598	0.000	78110.000	3874.000	3859.000
2	00:52:34	78.757%	-0.043	4.922	4.695	0.000	78170.000	3893.000	3869.000
3	00:52:53	75.858%	-0.017	5.765	4.893	0.000	79580.000	3968.000	3986.000
X		77.850%	-0.032	5.074	4.728	0.000	78620.000	3912.000	3905.000
σ		1.727%	0.013	0.629	0.150	0.000	832.300	49.530	70.620
%RSD		2.219	41.060	12.400	3.184	0.000	1.059	1.266	1.809
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:52:14	1.831	1017.000	0.000	2003.000	17360.000	18930.000	86.046%	0.079
2	00:52:34	1.155	946.100	0.000	2047.000	17780.000	19190.000	80.825%	0.023
3	00:52:53	1.059	965.600	0.000	2079.000	18470.000	19690.000	79.832%	0.077
X		1.348	976.200	0.000	2043.000	17870.000	19270.000	82.234%	0.060
σ		0.421	36.520	0.000	38.470	560.700	389.800	3.338%	0.032
%RSD		31.210	3.742	0.000	1.883	3.138	2.023	4.059	52.720
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:52:14	-0.260	0.189	198.900	9640.000	9522.000	0.566	0.169	0.453
2	00:52:34	-0.063	0.225	209.300	10120.000	9731.000	0.583	0.158	0.479
3	00:52:53	0.036	0.174	206.100	10030.000	9768.000	0.565	0.189	0.488
X		-0.096	0.196	204.800	9930.000	9674.000	0.571	0.172	0.473
σ		0.150	0.026	5.310	255.400	132.800	0.010	0.016	0.019
%RSD		157.200	13.320	2.593	2.572	1.373	1.755	9.266	3.927
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:52:14	0.084	0.219	0.143	0.839	-0.130	0.292	0.000	164.400
2	00:52:34	0.065	0.266	-0.033	0.864	-0.060	0.095	0.000	163.600
3	00:52:53	0.070	0.163	0.322	1.018	-0.171	0.273	0.000	165.600
X		0.073	0.216	0.144	0.907	-0.120	0.220	0.000	164.500
σ		0.010	0.052	0.177	0.097	0.056	0.109	0.000	1.001
%RSD		13.510	23.850	123.100	10.700	46.840	49.350	0.000	0.609
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:52:14	90.696%	0.342	0.319	88.726%	-0.084	-0.081	0.101	0.060
2	00:52:34	92.469%	0.294	0.330	88.859%	-0.090	-0.084	0.090	0.064
3	00:52:53	91.581%	0.314	0.300	88.256%	-0.088	-0.085	0.014	0.010
X		91.582%	0.316	0.316	88.614%	-0.087	-0.083	0.068	0.045
σ		0.887%	0.024	0.015	0.317%	0.003	0.002	0.047	0.030
%RSD		0.968	7.625	4.829	0.358	3.961	2.975	68.920	67.090
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:52:14	93.194%	-0.207	-0.021	-0.008	60.090	60.570	101.328%	102.187%
2	00:52:34	93.990%	-0.203	-0.013	-0.012	60.440	60.650	103.703%	104.659%
3	00:52:53	94.651%	-0.204	-0.014	0.006	60.630	59.650	104.179%	105.608%
X		93.945%	-0.205	-0.016	-0.005	60.390	60.290	103.070%	104.151%
σ		0.729%	0.002	0.004	0.010	0.271	0.555	1.528%	1.766%
%RSD		0.776	1.082	25.030	209.800	0.449	0.920	1.482	1.696
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:52:14	0.010	0.010	-0.019	-0.013	-0.016	109.482%		
2	00:52:34	0.014	0.011	-0.016	-0.012	-0.012	105.616%		
3	00:52:53	0.013	0.011	-0.019	-0.017	-0.015	104.686%		
X		0.012	0.011	-0.018	-0.014	-0.015	106.595%		
σ		0.002	0.000	0.002	0.003	0.002	2.543%		
%RSD		18.430	1.456	10.740	20.960	13.020	2.386		

180-43210-B-7-C 4/28/2015 12:55:42 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	00:56:01	72.151%	-0.025	0.452	0.302	0.000	116.800	45.940	45.650
2	00:56:21	71.071%	-0.034	0.135	0.278	0.000	108.400	46.200	47.200
3	00:56:40	69.116%	-0.024	0.376	0.283	0.000	88.980	46.300	46.180
X		70.779%	-0.028	0.321	0.288	0.000	104.700	46.150	46.340
σ		1.539%	0.005	0.165	0.013	0.000	14.290	0.187	0.786
%RSD		2.174	19.390	51.440	4.516	0.000	13.640	0.405	1.696
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:56:01	11.470	-182.500	0.000	54.540	347.400	363.600	69.708%	0.711
2	00:56:21	11.880	-182.100	0.000	54.920	326.400	371.400	67.408%	0.842
3	00:56:40	11.800	-182.100	0.000	52.900	337.700	385.500	65.869%	0.784
X		11.720	-182.200	0.000	54.120	337.200	373.500	67.662%	0.779
σ		0.220	0.225	0.000	1.073	10.500	11.110	1.932%	0.066
%RSD		1.881	0.124	0.000	1.982	3.113	2.975	2.856	8.432
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:56:01	-1.741	0.627	1.100	40.210	43.790	0.032	0.261	1.765
2	00:56:21	-2.580	0.685	1.163	41.990	45.640	0.047	0.226	1.831
3	00:56:40	-0.962	0.595	1.045	33.000	40.300	0.028	0.218	1.821
X		-1.761	0.636	1.103	38.400	43.240	0.036	0.235	1.806
σ		0.809	0.046	0.059	4.759	2.714	0.010	0.023	0.036
%RSD		45.970	7.185	5.360	12.390	6.276	27.880	9.593	1.972
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:56:01	1.831	11.040	11.420	-0.358	-0.320	0.146	0.000	0.675
2	00:56:21	1.729	11.080	11.220	-0.323	-0.171	0.098	0.000	0.706
3	00:56:40	1.791	11.440	11.260	-0.283	-0.183	0.166	0.000	0.589
X		1.784	11.180	11.300	-0.321	-0.224	0.137	0.000	0.657
σ		0.051	0.221	0.106	0.038	0.083	0.035	0.000	0.060
%RSD		2.868	1.973	0.937	11.710	36.990	25.630	0.000	9.208
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:56:01	78.207%	0.086	0.092	78.160%	-0.080	-0.074	0.012	0.004
2	00:56:21	77.228%	0.109	0.100	76.101%	-0.067	-0.067	0.055	0.032
3	00:56:40	78.301%	0.065	0.099	78.267%	-0.081	-0.071	0.009	-0.002
X		77.912%	0.086	0.097	77.509%	-0.076	-0.070	0.025	0.011
σ		0.594%	0.022	0.004	1.221%	0.008	0.003	0.026	0.018
%RSD		0.763	25.150	4.410	1.575	10.100	4.789	103.000	164.600
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:56:01	83.641%	0.685	0.112	0.132	0.610	0.704	92.761%	95.251%
2	00:56:21	83.360%	0.755	0.129	0.131	0.704	0.668	94.249%	95.959%
3	00:56:40	83.760%	0.659	0.115	0.101	0.694	0.666	93.917%	96.343%
X		83.587%	0.700	0.118	0.121	0.669	0.679	93.643%	95.851%
σ		0.205%	0.049	0.009	0.017	0.051	0.022	0.781%	0.554%
%RSD		0.246	7.067	7.687	14.320	7.691	3.193	0.834	0.578
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:56:01	0.012	0.012	0.286	0.267	0.276	103.360%		
2	00:56:21	0.012	0.013	0.305	0.295	0.300	101.083%		
3	00:56:40	0.014	0.014	0.320	0.305	0.292	101.142%		
X		0.013	0.013	0.304	0.289	0.289	101.862%		
σ		0.001	0.001	0.017	0.020	0.012	1.297%		
%RSD		6.289	9.251	5.662	6.917	4.236	1.274		

MB 180-139080/1-A 4/28/2015 1:02:40 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:02:59	94.954%	-0.029	0.297	0.047	0.000	14.490	2.005	2.119
2	01:03:18	91.092%	-0.022	0.136	0.134	0.000	12.410	2.207	2.013
3	01:03:37	91.466%	-0.029	0.034	0.034	0.000	6.123	0.995	1.131
X		92.504%	-0.027	0.156	0.072	0.000	11.010	1.736	1.754
σ		2.130%	0.004	0.133	0.054	0.000	4.356	0.649	0.542
%RSD		2.303	16.220	85.140	75.710	0.000	39.570	37.410	30.930
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:02:59	0.255	-200.900	0.000	2.692	1.462	0.056	91.142%	-0.094
2	01:03:18	0.261	-205.900	0.000	3.079	-1.610	0.811	87.527%	-0.134
3	01:03:37	-0.150	-208.900	0.000	2.026	1.820	-0.237	85.680%	-0.116
X		0.122	-205.200	0.000	2.599	0.557	0.210	88.116%	-0.115
σ		0.236	4.008	0.000	0.533	1.885	0.541	2.778%	0.020
%RSD		193.200	1.953	0.000	20.500	338.200	257.400	3.153	17.780
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:02:59	-0.018	0.009	0.065	3.833	7.310	0.007	-0.013	-0.089
2	01:03:18	-0.079	-0.000	0.077	3.214	7.895	0.003	0.008	-0.093
3	01:03:37	-0.068	-0.000	0.054	2.546	5.645	0.002	-0.011	-0.104
X		-0.055	0.003	0.066	3.198	6.950	0.004	-0.005	-0.095
σ		0.033	0.005	0.012	0.644	1.167	0.003	0.011	0.008
%RSD		59.720	191.000	17.830	20.140	16.790	65.200	209.600	8.230
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:02:59	-0.079	-0.673	-0.620	0.054	-0.118	0.031	0.000	0.089
2	01:03:18	-0.072	-0.611	-0.704	0.035	-0.149	0.081	0.000	0.092
3	01:03:37	-0.059	-0.569	-0.692	0.115	-0.097	0.313	0.000	0.050
X		-0.070	-0.618	-0.672	0.068	-0.121	0.142	0.000	0.077
σ		0.010	0.053	0.045	0.042	0.026	0.150	0.000	0.024
%RSD		14.770	8.528	6.761	61.550	21.650	106.000	0.000	30.600
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:02:59	94.110%	0.023	0.025	96.513%	-0.088	-0.084	0.054	0.039
2	01:03:18	95.968%	0.030	0.021	97.915%	-0.090	-0.088	0.030	0.015
3	01:03:37	94.956%	0.019	0.029	97.129%	-0.088	-0.088	0.004	0.001
X		95.012%	0.024	0.025	97.186%	-0.089	-0.086	0.029	0.018
σ		0.930%	0.005	0.004	0.703%	0.001	0.002	0.025	0.020
%RSD		0.979	22.350	15.930	0.723	1.162	2.675	84.050	106.800
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:02:59	97.471%	1.235	-0.036	-0.040	0.033	0.040	100.842%	101.613%
2	01:03:18	98.919%	1.173	-0.036	-0.035	0.026	0.043	104.803%	104.099%
3	01:03:37	98.641%	1.069	-0.032	-0.032	-0.003	0.025	104.743%	105.114%
X		98.343%	1.159	-0.035	-0.036	0.018	0.036	103.463%	103.609%
σ		0.768%	0.084	0.003	0.004	0.019	0.009	2.270%	1.801%
%RSD		0.781	7.231	7.215	11.920	102.900	26.150	2.194	1.739
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:02:59	0.005	0.008	-0.020	-0.019	-0.020	115.395%		
2	01:03:18	0.006	0.007	-0.018	-0.019	-0.021	113.217%		
3	01:03:37	0.009	0.011	-0.025	-0.019	-0.023	110.941%		
X		0.007	0.009	-0.021	-0.019	-0.022	113.184%		
σ		0.002	0.002	0.004	0.000	0.001	2.227%		
%RSD		33.040	19.860	17.980	0.788	6.214	1.968		

LCS 180-139080/2-A 4/28/2015 1:06:27 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:06:47	65.846%	45.590	900.400	892.300	0.000	46530.000	46080.000	45670.000
2	01:07:06	59.393%	47.150	909.300	900.200	0.000	47930.000	47020.000	47280.000
3	01:07:25	60.542%	42.830	847.100	824.700	0.000	42980.000	42280.000	43960.000
X		61.927%	45.190	885.600	872.400	0.000	45810.000	45130.000	45640.000
σ		3.442%	2.186	33.640	41.480	0.000	2549.000	2513.000	1660.000
%RSD		5.559	4.837	3.799	4.754	0.000	5.564	5.570	3.637
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:06:47	1809.000	6377.000	0.000	49410.000	48050.000	51290.000	63.425%	953.900
2	01:07:06	1867.000	6383.000	0.000	50480.000	48850.000	52510.000	61.776%	964.400
3	01:07:25	1738.000	5914.000	0.000	47910.000	47680.000	52390.000	61.087%	944.600
X		1804.000	6225.000	0.000	49270.000	48200.000	52060.000	62.096%	954.300
σ		64.690	269.100	0.000	1291.000	599.200	670.200	1.201%	9.886
%RSD		3.585	4.323	0.000	2.621	1.243	1.287	1.935	1.036
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:06:47	509.000	197.200	528.700	1093.000	1112.000	529.100	492.600	243.200
2	01:07:06	523.200	197.200	530.300	1093.000	1079.000	501.000	462.500	234.700
3	01:07:25	510.300	201.600	527.500	1085.000	1086.000	508.700	461.500	229.900
X		514.200	198.700	528.800	1090.000	1093.000	512.900	472.200	235.900
σ		7.866	2.535	1.367	4.489	17.400	14.570	17.660	6.729
%RSD		1.530	1.276	0.259	0.412	1.593	2.840	3.740	2.852
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:06:47	245.100	467.100	471.300	36.030	8.510	9.203	0.000	1092.000
2	01:07:06	237.900	465.200	474.100	35.670	8.956	9.145	0.000	1106.000
3	01:07:25	233.700	456.300	461.900	34.890	8.864	8.919	0.000	1103.000
X		238.900	462.900	469.100	35.530	8.777	9.089	0.000	1101.000
σ		5.760	5.756	6.372	0.583	0.235	0.150	0.000	7.179
%RSD		2.411	1.244	1.358	1.642	2.679	1.650	0.000	0.652
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:06:47	66.286%	1057.000	1124.000	69.338%	48.380	47.870	47.990	39.170
2	01:07:06	65.979%	1052.000	1121.000	69.116%	48.400	47.450	48.060	39.470
3	01:07:25	65.846%	1110.000	1122.000	67.389%	48.930	48.140	49.570	40.100
X		66.037%	1073.000	1123.000	68.614%	48.570	47.820	48.540	39.580
σ		0.225%	32.130	1.417	1.067%	0.316	0.349	0.890	0.476
%RSD		0.341	2.995	0.126	1.556	0.650	0.731	1.834	1.203
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:06:47	76.970%	2067.000	477.700	480.300	1959.000	1940.000	91.173%	93.119%
2	01:07:06	77.122%	2051.000	475.700	457.800	1949.000	1935.000	91.147%	93.640%
3	01:07:25	76.035%	2085.000	479.800	481.200	1953.000	1940.000	91.497%	93.228%
X		76.709%	2068.000	477.700	473.100	1954.000	1938.000	91.272%	93.329%
σ		0.588%	17.020	2.032	13.280	4.938	2.845	0.195%	0.274%
%RSD		0.767	0.823	0.425	2.808	0.253	0.147	0.213	0.294
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:06:47	52.310	53.000	21.700	21.630	21.360	84.289%		
2	01:07:06	52.400	53.410	21.930	21.850	21.650	85.716%		
3	01:07:25	52.800	53.490	21.730	21.760	21.640	85.706%		
X		52.500	53.300	21.790	21.750	21.550	85.237%		
σ		0.260	0.263	0.126	0.109	0.165	0.821%		
%RSD		0.495	0.494	0.578	0.500	0.764	0.963		

180-42961-B-1-B 4/28/2015 1:10:15 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:10:35	65.768%	6.658	83.170	80.320	0.000	66050.000	28160.000	28070.000
2	01:10:54	61.393%	6.452	86.940	83.270	0.000	63800.000	27230.000	27610.000
3	01:11:13	57.984%	6.559	87.120	84.660	0.000	66840.000	28810.000	29140.000
X		61.715%	6.557	85.750	82.750	0.000	65560.000	28070.000	28270.000
σ		3.902%	0.103	2.229	2.216	0.000	1578.000	793.700	782.600
%RSD		6.322	1.572	2.599	2.678	0.000	2.406	2.828	2.768
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:10:35	75670.000	833.800	0.000	15590.000	9411.000	10100.000	78.137%	1593.000
2	01:10:54	75570.000	850.100	0.000	15130.000	9413.000	10370.000	75.725%	1569.000
3	01:11:13	78670.000	864.400	0.000	15740.000	9769.000	10460.000	73.349%	1596.000
X		76640.000	849.400	0.000	15490.000	9531.000	10310.000	75.737%	1586.000
σ		1759.000	15.340	0.000	320.800	205.700	188.000	2.394%	14.830
%RSD		2.295	1.805	0.000	2.072	2.159	1.824	3.161	0.935
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:10:35	280.500	413.600	4892.000	154600.000	156300.000	93.590	155.700	380.900
2	01:10:54	274.200	410.000	4803.000	153000.000	153600.000	90.720	148.000	368.000
3	01:11:13	280.000	416.100	4857.000	154600.000	155700.000	89.470	150.000	376.300
X		278.200	413.200	4850.000	154100.000	155200.000	91.260	151.200	375.100
σ		3.526	3.091	44.960	891.600	1420.000	2.113	4.025	6.527
%RSD		1.267	0.748	0.927	0.579	0.915	2.315	2.662	1.740
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:10:35	379.500	1081.000	1094.000	56.420	7.194	8.326	0.000	206.600
2	01:10:54	367.100	1077.000	1092.000	55.620	6.919	8.376	0.000	205.800
3	01:11:13	370.700	1094.000	1118.000	57.170	6.978	8.731	0.000	209.000
X		372.400	1084.000	1101.000	56.400	7.030	8.478	0.000	207.100
σ		6.369	9.226	14.350	0.775	0.145	0.221	0.000	1.632
%RSD		1.710	0.851	1.303	1.375	2.064	2.604	0.000	0.788
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:10:35	0.000	10.340	10.440	77.684%	2.192	2.096	4.574	3.907
2	01:10:54	0.000	9.791	9.567	77.376%	2.156	2.143	4.549	3.983
3	01:11:13	0.000	8.913	9.201	76.509%	2.141	2.118	4.764	3.942
X		0.000	9.681	9.735	77.190%	2.163	2.119	4.629	3.944
σ		0.000	0.718	0.636	0.609%	0.026	0.023	0.118	0.038
%RSD		0.000	7.421	6.534	0.789	1.217	1.097	2.542	0.960
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:10:35	83.748%	79.820	4.177	4.189	287.200	284.700	102.998%	104.104%
2	01:10:54	83.384%	80.490	4.086	4.133	290.300	286.700	102.934%	103.857%
3	01:11:13	83.301%	79.240	4.125	4.132	286.500	285.400	104.706%	105.448%
X		83.478%	79.850	4.129	4.151	288.000	285.600	103.546%	104.470%
σ		0.238%	0.627	0.046	0.033	2.035	1.017	1.005%	0.856%
%RSD		0.285	0.786	1.107	0.786	0.707	0.356	0.971	0.820
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:10:35	1.504	1.584	387.900	360.900	369.600	86.070%		
2	01:10:54	1.542	1.536	383.200	359.700	367.500	87.727%		
3	01:11:13	1.498	1.547	385.300	357.000	366.400	88.691%		
X		1.515	1.556	385.500	359.200	367.800	87.496%		
σ		0.024	0.025	2.315	1.989	1.665	1.326%		
%RSD		1.591	1.609	0.601	0.554	0.453	1.515		

CCV 1533080 4/28/2015 1:17:22 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:17:22	85.593%	102.400	98.280	92.230	0.000	49120.000	49900.000	48800.000
2	01:17:41	83.047%	99.480	93.370	93.600	0.000	48640.000	48160.000	48280.000
3	01:18:01	75.365%	105.500	95.160	93.240	0.000	50820.000	51610.000	50970.000
x		81.335%	102.455%	95.602%	93.023%	0.000	99.051%	99.783%	98.701%
σ		5.325%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		6.547	2.953	2.598	0.762	0.000	2.314	3.465	2.891
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:17:22	481.700	4631.000	0.000	50000.000	45990.000	49840.000	91.969%	94.140
2	01:17:41	487.400	4641.000	0.000	50040.000	46410.000	50520.000	89.640%	95.390
3	01:18:01	506.900	4738.000	0.000	51850.000	47870.000	51650.000	85.862%	95.880
x		98.400%	93.405%	0.000	101.257%	93.514%	101.343%	89.157%	95.138%
σ		n/a	n/a	0.000	n/a	n/a	n/a	3.082%	n/a
%RSD		2.682	1.270	0.000	2.082	2.115	1.798	3.457	0.948
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:17:22	96.820	96.670	501.800	25020.000	24800.000	95.550	98.850	98.820
2	01:17:41	96.130	97.970	509.600	25640.000	25420.000	98.150	98.680	99.200
3	01:18:01	97.740	99.680	519.700	26120.000	25690.000	97.860	97.920	100.900
x		96.896%	98.107%	102.074%	102.380%	101.216%	97.186%	98.482%	99.639%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.836	1.537	1.755	2.151	1.786	1.463	0.503	1.106
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:17:22	98.730	101.000	103.100	102.700	104.700	108.300	0.000	101.300
2	01:17:41	98.780	101.200	101.800	102.500	107.400	107.800	0.000	102.200
3	01:18:01	98.790	104.200	104.900	104.600	107.600	107.900	0.000	101.500
x		98.765%	102.138%	103.269%	103.278%	106.562%	107.995%	0.000	101.687%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.029	1.713	1.512	1.152	1.536	0.241	0.000	0.481
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:17:22	90.137%	94.090	94.840	89.397%	99.060	98.550	100.300	101.000
2	01:17:41	90.401%	97.470	99.090	87.518%	100.500	99.400	102.000	101.800
3	01:18:01	90.261%	97.970	100.400	87.038%	99.690	99.700	103.300	101.600
x		90.267%	96.507%	98.119%	87.984%	99.751%	99.219%	101.879%	101.463%
σ		0.132%	n/a	n/a	1.247%	n/a	n/a	n/a	n/a
%RSD		0.146	2.187	2.976	1.417	0.722	0.601	1.460	0.414
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:17:22	90.018%	96.980	98.950	98.440	97.500	98.130	94.831%	95.363%
2	01:17:41	90.865%	98.320	99.050	99.090	97.120	97.160	96.891%	97.018%
3	01:18:01	90.873%	96.650	98.930	98.440	97.160	97.210	97.030%	98.365%
x		90.586%	97.321%	98.979%	98.657%	97.262%	97.499%	96.250%	96.915%
σ		0.491%	n/a	n/a	n/a	n/a	n/a	1.232%	1.504%
%RSD		0.542	0.908	0.063	0.379	0.214	0.560	1.280	1.551
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:17:22	100.900	103.500	102.000	101.400	100.200	93.259%		
2	01:17:41	101.500	103.600	102.100	102.500	101.300	95.339%		
3	01:18:01	102.100	105.300	107.600	104.000	104.000	95.689%		
x		101.508%	104.100%	103.898%	102.648%	101.836%	94.763%		
σ		n/a	n/a	n/a	n/a	n/a	1.314%		
%RSD		0.576	0.969	3.112	1.292	1.885	1.386		

CCBS 4/28/2015 1:24:05 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:24:24	101.593%	-0.017	0.317	0.281	0.000	15.380	6.671	6.989
2	01:24:44	103.216%	-0.005	0.132	0.250	0.000	9.559	5.116	5.446
3	01:25:03	98.990%	0.003	0.375	0.265	0.000	5.060	3.363	3.521
X		101.266%	-0.007	0.274	0.265	0.000	9.999	5.050	5.319
σ		2.132%	0.010	0.127	0.016	0.000	5.173	1.655	1.738
%RSD		2.105	157.500	46.170	5.914	0.000	51.740	32.770	32.670
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:24:24	3.239	-214.300	0.000	11.100	8.145	5.370	98.105%	-0.028
2	01:24:44	2.169	-218.000	0.000	9.381	5.893	3.183	96.903%	-0.060
3	01:25:03	1.075	-218.400	0.000	7.482	3.049	1.734	95.138%	-0.093
X		2.161	-216.900	0.000	9.319	5.696	3.429	96.715%	-0.060
σ		1.082	2.249	0.000	1.807	2.554	1.830	1.493%	0.032
%RSD		50.080	1.037	0.000	19.390	44.830	53.390	1.543	53.730
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:24:24	0.040	0.033	0.279	20.270	18.600	0.021	0.029	-0.005
2	01:24:44	0.021	0.011	0.189	15.920	14.720	0.027	0.002	-0.011
3	01:25:03	0.015	-0.001	0.105	8.743	9.587	0.011	0.014	-0.031
X		0.026	0.014	0.191	14.980	14.300	0.020	0.015	-0.016
σ		0.013	0.018	0.087	5.821	4.520	0.008	0.013	0.013
%RSD		49.660	121.100	45.670	38.860	31.600	41.820	90.260	85.500
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:24:24	0.054	-0.296	-0.362	0.005	0.088	-0.030	0.000	0.131
2	01:24:44	-0.033	-0.401	-0.309	0.062	0.067	0.207	0.000	0.103
3	01:25:03	-0.047	-0.310	-0.378	0.031	-0.059	0.066	0.000	0.045
X		-0.009	-0.336	-0.349	0.033	0.032	0.081	0.000	0.093
σ		0.055	0.057	0.036	0.029	0.079	0.119	0.000	0.044
%RSD		626.000	16.900	10.420	88.150	250.200	146.500	0.000	47.440
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:24:24	101.387%	0.226	0.216	103.979%	-0.069	-0.069	0.063	0.051
2	01:24:44	102.911%	0.253	0.206	105.141%	-0.077	-0.070	0.090	0.063
3	01:25:03	104.017%	0.167	0.176	105.407%	-0.070	-0.074	0.054	0.038
X		102.772%	0.215	0.199	104.842%	-0.072	-0.071	0.069	0.051
σ		1.321%	0.044	0.021	0.759%	0.004	0.003	0.019	0.012
%RSD		1.285	20.350	10.490	0.724	5.480	4.177	27.190	24.070
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:24:24	101.960%	-0.133	0.036	0.029	0.067	0.112	102.688%	102.880%
2	01:24:44	102.962%	-0.160	0.025	0.025	0.065	0.073	105.094%	105.353%
3	01:25:03	104.599%	-0.162	0.018	0.015	0.011	0.039	107.351%	106.370%
X		103.174%	-0.152	0.026	0.023	0.048	0.075	105.044%	104.868%
σ		1.332%	0.016	0.009	0.007	0.032	0.036	2.332%	1.795%
%RSD		1.291	10.430	34.140	30.740	67.240	48.490	2.220	1.711
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:24:24	0.037	0.034	0.007	0.007	0.002	109.404%		
2	01:24:44	0.043	0.032	-0.003	0.002	-0.002	109.342%		
3	01:25:03	0.031	0.032	-0.015	-0.006	-0.007	109.411%		
X		0.037	0.033	-0.003	0.001	-0.002	109.386%		
σ		0.006	0.001	0.011	0.006	0.005	0.038%		
%RSD		16.700	3.477	313.600	510.600	220.800	0.035		

180-42961-B-2-B 4/28/2015 1:27:57 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:28:16	69.716%	6.803	116.300	116.900	0.000	69900.000	30990.000	30650.000
2	01:28:35	64.122%	6.937	117.600	113.500	0.000	68660.000	30820.000	31070.000
3	01:28:54	60.869%	6.739	130.400	123.400	0.000	73560.000	33000.000	32600.000
X		64.902%	6.826	121.400	117.900	0.000	70710.000	31600.000	31440.000
σ		4.475%	0.101	7.772	4.992	0.000	2548.000	1210.000	1026.000
%RSD		6.895	1.485	6.400	4.233	0.000	3.603	3.830	3.264
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:28:16	83870.000	801.400	0.000	16620.000	10090.000	11040.000	82.723%	1660.000
2	01:28:35	85730.000	796.500	0.000	16960.000	10370.000	11350.000	78.399%	1685.000
3	01:28:54	89500.000	812.000	0.000	17190.000	10530.000	11350.000	75.196%	1650.000
X		86360.000	803.300	0.000	16920.000	10330.000	11240.000	78.773%	1665.000
σ		2867.000	7.917	0.000	285.100	224.700	178.900	3.777%	17.920
%RSD		3.319	0.986	0.000	1.685	2.176	1.591	4.795	1.077
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:28:16	300.500	434.700	10570.000	171900.000	176500.000	110.100	165.200	308.600
2	01:28:35	304.700	431.900	10640.000	172200.000	173000.000	106.300	162.800	306.100
3	01:28:54	306.600	434.500	10510.000	172000.000	172800.000	105.800	160.500	305.600
X		303.900	433.700	10570.000	172000.000	174100.000	107.400	162.800	306.800
σ		3.095	1.584	61.710	161.800	2105.000	2.368	2.349	1.634
%RSD		1.018	0.365	0.584	0.094	1.209	2.205	1.442	0.533
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:28:16	312.500	1152.000	1160.000	66.480	6.264	8.238	0.000	251.000
2	01:28:35	303.300	1156.000	1171.000	65.180	6.269	8.563	0.000	253.800
3	01:28:54	305.600	1177.000	1188.000	65.410	6.133	8.358	0.000	256.800
X		307.100	1162.000	1173.000	65.690	6.222	8.386	0.000	253.800
σ		4.795	13.120	14.450	0.694	0.077	0.165	0.000	2.909
%RSD		1.561	1.129	1.232	1.056	1.236	1.964	0.000	1.146
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:28:16	0.000	8.611	8.576	80.735%	2.140	2.074	4.246	3.608
2	01:28:35	0.000	8.148	8.489	78.545%	2.061	2.173	4.127	3.729
3	01:28:54	0.000	8.405	8.622	77.632%	2.089	2.066	4.032	3.541
X		0.000	8.388	8.562	78.971%	2.096	2.105	4.135	3.626
σ		0.000	0.232	0.068	1.594%	0.040	0.060	0.108	0.095
%RSD		0.000	2.765	0.790	2.019	1.910	2.833	2.600	2.622
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:28:16	85.515%	88.100	5.088	5.194	284.800	283.800	103.376%	103.782%
2	01:28:35	84.260%	87.890	5.237	5.029	283.900	279.300	104.383%	104.771%
3	01:28:54	84.994%	86.420	5.072	5.138	281.100	277.000	104.752%	105.276%
X		84.923%	87.470	5.132	5.121	283.300	280.000	104.170%	104.610%
σ		0.630%	0.919	0.091	0.084	1.939	3.425	0.712%	0.760%
%RSD		0.742	1.050	1.770	1.640	0.684	1.223	0.683	0.727
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:28:16	1.305	1.375	384.100	357.100	367.000	89.121%		
2	01:28:35	1.351	1.361	389.400	363.400	372.100	89.285%		
3	01:28:54	1.367	1.388	394.300	367.300	375.500	89.839%		
X		1.341	1.375	389.200	362.600	371.500	89.415%		
σ		0.032	0.014	5.098	5.146	4.245	0.376%		
%RSD		2.401	0.983	1.310	1.419	1.142	0.421		

180-42961-B-3-B 4/28/2015 1:31:45 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:32:04	61.120%	6.516	127.700	123.000	0.000	69800.000	31630.000	31710.000
2	01:32:23	59.821%	6.699	131.200	123.900	0.000	71640.000	32580.000	31860.000
3	01:32:42	55.062%	6.946	138.700	128.500	0.000	73910.000	33140.000	32940.000
X		58.668%	6.721	132.600	125.100	0.000	71780.000	32450.000	32170.000
σ		3.190%	0.216	5.593	2.973	0.000	2063.000	762.300	669.600
%RSD		5.437	3.210	4.220	2.375	0.000	2.873	2.349	2.081
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:32:04	86320.000	976.600	0.000	17760.000	10890.000	11660.000	72.907%	1710.000
2	01:32:23	86770.000	994.200	0.000	18010.000	11000.000	11650.000	70.032%	1752.000
3	01:32:42	88080.000	1021.000	0.000	18300.000	10970.000	11970.000	69.362%	1710.000
X		87050.000	997.200	0.000	18020.000	10950.000	11760.000	70.767%	1724.000
σ		917.700	22.270	0.000	272.300	56.300	181.400	1.883%	24.260
%RSD		1.054	2.234	0.000	1.510	0.514	1.543	2.661	1.407
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:32:04	312.300	384.100	11970.000	184200.000	187000.000	116.700	167.700	251.400
2	01:32:23	310.100	376.200	11980.000	184700.000	185500.000	117.800	170.500	253.600
3	01:32:42	306.300	370.700	11520.000	176100.000	177700.000	112.100	159.400	241.700
X		309.500	377.000	11820.000	181700.000	183400.000	115.500	165.800	248.900
σ		3.011	6.747	259.300	4808.000	5004.000	3.009	5.753	6.358
%RSD		0.973	1.790	2.194	2.647	2.729	2.604	3.469	2.554
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:32:04	252.300	1167.000	1184.000	62.540	5.011	6.875	0.000	268.500
2	01:32:23	253.900	1183.000	1200.000	63.210	4.780	6.610	0.000	273.600
3	01:32:42	245.300	1170.000	1191.000	62.430	5.082	6.759	0.000	270.900
X		250.500	1173.000	1192.000	62.730	4.958	6.748	0.000	271.000
σ		4.586	8.529	7.806	0.421	0.158	0.133	0.000	2.571
%RSD		1.831	0.727	0.655	0.671	3.178	1.968	0.000	0.949
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:32:04	0.000	7.430	7.484	74.351%	2.089	2.031	4.012	3.438
2	01:32:23	0.000	7.507	7.655	73.457%	2.141	1.991	4.035	3.387
3	01:32:42	0.000	7.382	7.719	72.645%	2.103	1.996	3.800	3.406
X		0.000	7.439	7.619	73.484%	2.111	2.006	3.949	3.411
σ		0.000	0.063	0.121	0.853%	0.027	0.022	0.130	0.026
%RSD		0.000	0.850	1.591	1.161	1.284	1.099	3.286	0.749
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:32:04	81.194%	82.060	3.074	3.072	288.800	284.300	100.645%	101.371%
2	01:32:23	81.114%	82.950	3.077	3.071	287.100	286.300	101.743%	101.245%
3	01:32:42	81.080%	82.380	3.091	3.069	285.600	283.300	102.301%	102.458%
X		81.130%	82.460	3.080	3.071	287.200	284.600	101.563%	101.691%
σ		0.059%	0.455	0.009	0.002	1.597	1.561	0.843%	0.667%
%RSD		0.072	0.551	0.291	0.053	0.556	0.548	0.830	0.656
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:32:04	1.255	1.294	356.500	333.600	340.900	85.979%		
2	01:32:23	1.332	1.310	361.500	336.100	344.200	86.093%		
3	01:32:42	1.322	1.330	367.100	338.800	346.900	85.838%		
X		1.303	1.311	361.700	336.200	344.000	85.970%		
σ		0.042	0.018	5.285	2.576	3.036	0.128%		
%RSD		3.207	1.391	1.461	0.766	0.882	0.149		

180-42961-B-4-D 4/28/2015 1:35:34 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:35:53	55.939%	7.339	120.400	122.000	0.000	70240.000	32560.000	32890.000
2	01:36:12	53.545%	7.247	116.600	120.300	0.000	66830.000	31030.000	31300.000
3	01:36:31	53.128%	6.701	118.900	119.800	0.000	67730.000	31140.000	30700.000
X		54.204%	7.096	118.600	120.700	0.000	68270.000	31570.000	31630.000
σ		1.517%	0.345	1.939	1.166	0.000	1768.000	851.300	1133.000
%RSD		2.799	4.861	1.635	0.966	0.000	2.590	2.696	3.582
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:35:53	89990.000	945.800	0.000	17420.000	10280.000	11110.000	72.187%	1650.000
2	01:36:12	88490.000	904.600	0.000	17150.000	10460.000	11110.000	69.969%	1661.000
3	01:36:31	84850.000	853.200	0.000	17190.000	10220.000	11050.000	68.065%	1653.000
X		87780.000	901.200	0.000	17250.000	10320.000	11090.000	70.073%	1655.000
σ		2645.000	46.380	0.000	149.900	121.200	33.850	2.063%	5.753
%RSD		3.013	5.147	0.000	0.869	1.174	0.305	2.944	0.348
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:35:53	300.300	412.400	9486.000	171700.000	174800.000	121.700	159.200	287.100
2	01:36:12	299.900	410.700	9722.000	176300.000	177700.000	123.200	155.600	284.700
3	01:36:31	275.400	402.600	9668.000	170600.000	172000.000	122.900	157.100	279.500
X		291.900	408.600	9625.000	172800.000	174800.000	122.600	157.300	283.700
σ		14.290	5.242	123.700	3041.000	2842.000	0.796	1.829	3.898
%RSD		4.897	1.283	1.285	1.759	1.625	0.649	1.163	1.374
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:35:53	286.700	1161.000	1184.000	64.180	5.731	8.150	0.000	251.300
2	01:36:12	288.900	1169.000	1187.000	63.530	5.974	8.037	0.000	251.800
3	01:36:31	283.000	1170.000	1191.000	62.810	6.136	7.638	0.000	253.700
X		286.200	1167.000	1187.000	63.510	5.947	7.942	0.000	252.300
σ		2.971	5.063	3.211	0.688	0.204	0.269	0.000	1.300
%RSD		1.038	0.434	0.271	1.083	3.426	3.391	0.000	0.515
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:35:53	0.000	7.821	8.238	72.610%	2.186	2.188	4.296	3.539
2	01:36:12	0.000	8.004	8.307	71.469%	2.170	2.139	4.421	3.748
3	01:36:31	0.000	8.040	8.122	71.462%	2.162	2.069	4.232	3.684
X		0.000	7.955	8.222	71.847%	2.172	2.132	4.316	3.657
σ		0.000	0.118	0.093	0.661%	0.013	0.060	0.096	0.107
%RSD		0.000	1.480	1.136	0.920	0.576	2.792	2.228	2.929
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:35:53	80.526%	81.450	4.012	4.047	315.100	310.800	99.630%	100.616%
2	01:36:12	80.672%	81.650	4.000	3.944	317.600	310.400	101.195%	101.981%
3	01:36:31	80.143%	82.060	4.047	3.986	315.400	311.100	100.791%	101.896%
X		80.447%	81.720	4.019	3.992	316.000	310.800	100.539%	101.498%
σ		0.274%	0.311	0.024	0.052	1.371	0.385	0.812%	0.765%
%RSD		0.340	0.381	0.609	1.299	0.434	0.124	0.808	0.753
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:35:53	1.324	1.395	384.000	358.300	366.300	85.016%		
2	01:36:12	1.331	1.347	385.800	359.800	368.900	86.036%		
3	01:36:31	1.332	1.383	381.500	357.400	365.000	87.012%		
X		1.329	1.375	383.700	358.500	366.700	86.021%		
σ		0.004	0.025	2.165	1.213	2.030	0.998%		
%RSD		0.336	1.819	0.564	0.339	0.553	1.160		

180-42961-B-4-D SD@5 4/28/2015 1:39:23 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:39:42	65.133%	1.566	25.800	25.590	0.000	14030.000	6557.000	6673.000
2	01:40:01	67.637%	1.200	22.430	21.540	0.000	12570.000	5781.000	5721.000
3	01:40:20	62.314%	1.339	23.540	23.840	0.000	12780.000	6046.000	6240.000
X		65.028%	1.368	23.920	23.660	0.000	13130.000	6128.000	6212.000
σ		2.663%	0.185	1.717	2.031	0.000	787.600	394.300	476.600
%RSD		4.095	13.490	7.177	8.583	0.000	6.000	6.434	7.673
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:39:42	18220.000	33.980	0.000	3663.000	2309.000	2377.000	73.346%	354.300
2	01:40:01	15430.000	-4.758	0.000	3365.000	1953.000	2191.000	69.974%	320.900
3	01:40:20	17090.000	4.591	0.000	3487.000	2157.000	2308.000	70.256%	345.300
X		16910.000	11.270	0.000	3505.000	2139.000	2292.000	71.192%	340.200
σ		1406.000	20.210	0.000	149.800	178.700	93.620	1.871%	17.300
%RSD		8.311	179.400	0.000	4.274	8.353	4.084	2.627	5.086
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:39:42	57.180	81.050	1972.000	36410.000	36130.000	25.630	33.640	61.180
2	01:40:01	52.110	73.140	1829.000	34520.000	33420.000	23.780	31.880	57.530
3	01:40:20	55.570	78.130	1937.000	36190.000	35350.000	24.600	32.340	59.400
X		54.950	77.440	1913.000	35700.000	34970.000	24.670	32.620	59.370
σ		2.590	3.999	74.230	1034.000	1395.000	0.932	0.911	1.825
%RSD		4.713	5.164	3.881	2.895	3.989	3.776	2.793	3.074
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:39:42	61.680	249.800	251.200	12.570	0.783	1.287	0.000	39.560
2	01:40:01	57.850	233.200	233.400	10.830	0.576	1.087	0.000	35.730
3	01:40:20	59.020	242.700	245.400	11.810	0.672	1.294	0.000	39.000
X		59.520	241.900	243.400	11.740	0.677	1.223	0.000	38.100
σ		1.958	8.333	9.090	0.872	0.104	0.117	0.000	2.071
%RSD		3.290	3.445	3.735	7.428	15.330	9.606	0.000	5.437
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:39:42	98.021%	1.531	1.669	73.975%	0.444	0.411	0.921	0.811
2	01:40:01	102.532%	1.394	1.459	79.216%	0.344	0.363	0.862	0.709
3	01:40:20	98.431%	1.456	1.482	74.391%	0.389	0.388	1.018	0.873
X		99.661%	1.460	1.537	75.861%	0.393	0.387	0.934	0.798
σ		2.495%	0.069	0.115	2.913%	0.050	0.024	0.079	0.083
%RSD		2.503	4.701	7.475	3.840	12.790	6.174	8.452	10.390
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:39:42	84.125%	17.300	0.856	0.891	67.770	67.820	99.396%	102.415%
2	01:40:01	88.560%	14.920	0.771	0.807	58.890	57.970	107.761%	108.336%
3	01:40:20	85.328%	16.570	0.815	0.812	68.400	64.520	103.737%	104.878%
X		86.004%	16.260	0.814	0.837	65.020	63.440	103.631%	105.210%
σ		2.294%	1.220	0.043	0.047	5.319	5.013	4.184%	2.974%
%RSD		2.667	7.498	5.250	5.609	8.180	7.903	4.037	2.827
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:39:42	0.294	0.294	78.460	72.390	74.680	88.934%		
2	01:40:01	0.261	0.273	70.650	65.540	67.340	94.029%		
3	01:40:20	0.274	0.285	77.050	71.840	73.950	91.241%		
X		0.276	0.284	75.390	69.920	71.990	91.401%		
σ		0.017	0.010	4.161	3.804	4.043	2.551%		
%RSD		6.048	3.659	5.519	5.440	5.615	2.791		

180-42961-B-4-E MS 4/28/2015 1:43:12 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:43:32	57.291%	49.310	908.500	894.400	0.000	113300.000	74970.000	74600.000
2	01:43:51	52.990%	49.630	929.200	914.300	0.000	111700.000	74810.000	76750.000
3	01:44:11	50.024%	47.900	883.000	898.300	0.000	112500.000	76820.000	76980.000
x		53.435%	48.940	906.900	902.300	0.000	112500.000	75540.000	76110.000
σ		3.654%	0.922	23.160	10.570	0.000	822.400	1115.000	1314.000
%RSD		6.838	1.883	2.553	1.172	0.000	0.731	1.476	1.726
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:43:32	144800.000	2208.000	0.000	71120.000	53030.000	58500.000	68.360%	3315.000
2	01:43:51	149900.000	2219.000	0.000	71850.000	53110.000	59160.000	65.955%	3330.000
3	01:44:11	146700.000	2178.000	0.000	72600.000	54110.000	58840.000	64.898%	3367.000
x		147200.000	2202.000	0.000	71860.000	53420.000	58840.000	66.404%	3337.000
σ		2573.000	21.320	0.000	735.900	605.600	329.600	1.774%	26.880
%RSD		1.749	0.968	0.000	1.024	1.134	0.560	2.672	0.805
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:43:32	799.900	616.100	9163.000	176100.000	179800.000	556.700	577.500	512.000
2	01:43:51	806.300	616.800	9212.000	174200.000	178000.000	550.200	556.500	496.800
3	01:44:11	816.900	629.000	9420.000	177800.000	179500.000	547.400	561.800	493.100
x		807.700	620.600	9265.000	176000.000	179100.000	551.400	565.300	500.600
σ		8.595	7.281	136.500	1804.000	979.300	4.814	10.920	10.040
%RSD		1.064	1.173	1.473	1.025	0.547	0.873	1.932	2.004
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:43:32	513.900	1512.000	1541.000	93.430	13.640	15.820	0.000	1344.000
2	01:43:51	499.200	1529.000	1552.000	94.800	13.850	16.240	0.000	1380.000
3	01:44:11	502.800	1535.000	1557.000	93.700	13.890	15.970	0.000	1377.000
x		505.300	1525.000	1550.000	93.980	13.790	16.010	0.000	1367.000
σ		7.683	12.130	8.203	0.724	0.134	0.212	0.000	19.740
%RSD		1.520	0.795	0.529	0.770	0.968	1.328	0.000	1.444
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:43:32	0.000	989.400	1082.000	68.630%	46.970	45.960	48.600	40.140
2	01:43:51	0.000	1004.000	1089.000	66.891%	46.530	45.690	49.340	40.360
3	01:44:11	0.000	999.500	1098.000	64.829%	47.240	46.310	49.760	40.500
x		0.000	997.700	1090.000	66.783%	46.910	45.990	49.240	40.330
σ		0.000	7.556	7.760	1.903%	0.357	0.312	0.587	0.181
%RSD		0.000	0.757	0.712	2.850	0.761	0.679	1.191	0.449
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:43:32	76.037%	2049.000	295.800	293.400	2380.000	2361.000	92.621%	92.647%
2	01:43:51	75.386%	2062.000	296.800	294.500	2380.000	2353.000	93.054%	93.539%
3	01:44:11	74.754%	2059.000	296.400	293.000	2372.000	2339.000	93.999%	93.764%
x		75.392%	2057.000	296.300	293.700	2377.000	2351.000	93.224%	93.317%
σ		0.642%	6.844	0.488	0.763	4.376	10.970	0.704%	0.591%
%RSD		0.851	0.333	0.165	0.260	0.184	0.467	0.756	0.633
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:43:32	53.210	53.790	413.000	386.100	394.000	77.557%		
2	01:43:51	52.460	54.170	411.900	385.500	393.600	79.028%		
3	01:44:11	52.450	53.110	408.300	382.600	390.200	79.937%		
x		52.700	53.690	411.100	384.700	392.600	78.841%		
σ		0.435	0.540	2.463	1.879	2.076	1.201%		
%RSD		0.826	1.006	0.599	0.488	0.529	1.523		

180-42961-B-4-F MSD 4/28/2015 1:47:04 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:47:23	51.210%	49.040	898.300	847.200	0.000	108600.000	71840.000	70810.000
2	01:47:42	52.183%	46.500	863.300	849.700	0.000	105900.000	72590.000	70620.000
3	01:48:01	47.552%	46.400	902.000	843.200	0.000	102200.000	70790.000	72120.000
X		50.315%	47.320	887.900	846.700	0.000	105600.000	71740.000	71180.000
σ		2.441%	1.492	21.350	3.308	0.000	3174.000	906.700	818.700
%RSD		4.852	3.154	2.405	0.391	0.000	3.007	1.264	1.150
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:47:23	136400.000	2137.000	0.000	68740.000	51650.000	56920.000	63.297%	3259.000
2	01:47:42	134800.000	2076.000	0.000	70810.000	52890.000	56920.000	60.927%	3263.000
3	01:48:01	136100.000	2082.000	0.000	70280.000	53410.000	58690.000	59.951%	3215.000
X		135800.000	2099.000	0.000	69950.000	52650.000	57510.000	61.392%	3246.000
σ		841.300	33.500	0.000	1073.000	902.500	1019.000	1.720%	26.280
%RSD		0.620	1.596	0.000	1.534	1.714	1.771	2.802	0.810
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:47:23	798.700	588.800	8895.000	169600.000	170500.000	539.700	552.700	461.600
2	01:47:42	801.000	598.500	9064.000	171000.000	172500.000	553.200	558.400	473.800
3	01:48:01	776.200	605.500	9116.000	173800.000	176300.000	539.400	555.300	472.600
X		792.000	597.600	9025.000	171500.000	173100.000	544.100	555.500	469.300
σ		13.670	8.368	115.500	2167.000	2977.000	7.872	2.861	6.674
%RSD		1.726	1.400	1.279	1.264	1.720	1.447	0.515	1.422
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:47:23	467.100	1460.000	1476.000	87.080	12.930	15.820	0.000	1330.000
2	01:47:42	470.300	1490.000	1506.000	90.170	13.930	16.420	0.000	1350.000
3	01:48:01	471.100	1480.000	1494.000	89.030	13.800	15.770	0.000	1377.000
X		469.500	1477.000	1492.000	88.760	13.550	16.010	0.000	1352.000
σ		2.095	15.360	14.720	1.565	0.544	0.363	0.000	23.450
%RSD		0.446	1.040	0.987	1.763	4.014	2.267	0.000	1.735
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:47:23	0.000	976.100	1063.000	66.172%	44.940	44.080	47.760	38.930
2	01:47:42	0.000	982.200	1077.000	64.685%	45.210	44.400	48.420	39.350
3	01:48:01	0.000	988.700	1061.000	63.649%	45.180	44.410	48.360	38.640
X		0.000	982.400	1067.000	64.835%	45.110	44.300	48.180	38.970
σ		0.000	6.309	8.894	1.268%	0.149	0.186	0.365	0.361
%RSD		0.000	0.642	0.834	1.956	0.329	0.421	0.758	0.927
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:47:23	74.024%	2016.000	296.700	294.700	2315.000	2287.000	91.918%	91.549%
2	01:47:42	74.050%	2006.000	298.700	296.800	2317.000	2297.000	92.258%	93.179%
3	01:48:01	73.410%	2029.000	296.900	296.600	2322.000	2305.000	91.751%	93.475%
X		73.828%	2017.000	297.500	296.000	2318.000	2296.000	91.976%	92.734%
σ		0.362%	11.900	1.107	1.174	3.573	9.334	0.259%	1.037%
%RSD		0.491	0.590	0.372	0.397	0.154	0.406	0.281	1.118
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:47:23	52.030	52.800	371.300	344.500	363.900	76.933%		
2	01:47:42	51.330	52.560	386.500	342.000	363.900	78.736%		
3	01:48:01	51.890	52.780	386.700	362.100	370.500	79.156%		
X		51.750	52.710	381.500	349.600	366.100	78.275%		
σ		0.372	0.133	8.810	10.940	3.804	1.181%		
%RSD		0.719	0.253	2.309	3.131	1.039	1.509		

180-42961-B-4-D PDS 4/28/2015 1:50:54 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:51:13	52.717%	50.980	968.100	943.300	0.000	112600.000	76810.000	76760.000
2	01:51:32	48.846%	49.850	952.000	942.500	0.000	110300.000	74930.000	76380.000
3	01:51:51	48.333%	49.920	996.500	929.100	0.000	112700.000	77680.000	77840.000
x		49.966%	50.250	972.200	938.300	0.000	111900.000	76470.000	77000.000
σ		2.397%	0.637	22.520	8.000	0.000	1369.000	1409.000	757.600
%RSD		4.797	1.267	2.317	0.853	0.000	1.224	1.842	0.984
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:51:13	82850.000	9975.000	0.000	67550.000	59240.000	64520.000	62.558%	2612.000
2	01:51:32	82820.000	9905.000	0.000	67290.000	58810.000	66700.000	62.837%	2613.000
3	01:51:51	82390.000	9742.000	0.000	70310.000	61620.000	67000.000	59.023%	2653.000
x		82690.000	9874.000	0.000	68380.000	59890.000	66070.000	61.473%	2626.000
σ		261.100	119.300	0.000	1674.000	1512.000	1355.000	2.126%	23.030
%RSD		0.316	1.208	0.000	2.449	2.525	2.050	3.459	0.877
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:51:13	785.500	585.600	10190.000	174500.000	175600.000	632.800	607.800	500.400
2	01:51:32	785.300	597.000	9930.000	172400.000	174500.000	611.400	589.400	491.200
3	01:51:51	794.400	592.100	10240.000	176800.000	176600.000	620.900	602.500	503.500
x		788.400	591.600	10120.000	174600.000	175500.000	621.700	599.900	498.400
σ		5.219	5.693	166.900	2194.000	1063.000	10.740	9.471	6.395
%RSD		0.662	0.962	1.649	1.257	0.606	1.727	1.579	1.283
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:51:13	508.400	1596.000	1611.000	98.510	15.030	16.540	0.000	1428.000
2	01:51:32	494.100	1570.000	1600.000	97.200	14.870	16.920	0.000	1442.000
3	01:51:51	502.000	1619.000	1643.000	100.300	15.300	18.200	0.000	1467.000
x		501.500	1595.000	1618.000	98.660	15.070	17.220	0.000	1446.000
σ		7.178	24.680	22.620	1.542	0.218	0.871	0.000	20.020
%RSD		1.431	1.548	1.398	1.563	1.446	5.059	0.000	1.385
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:51:13	0.000	1299.000	1324.000	65.890%	47.020	46.280	54.470	43.480
2	01:51:32	0.000	1301.000	1327.000	63.869%	47.440	46.340	55.280	44.260
3	01:51:51	0.000	1218.000	1328.000	63.719%	46.470	45.940	54.350	43.340
x		0.000	1273.000	1326.000	64.493%	46.970	46.190	54.700	43.690
σ		0.000	47.260	2.218	1.212%	0.484	0.218	0.504	0.495
%RSD		0.000	3.713	0.167	1.880	1.030	0.472	0.922	1.134
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:51:13	73.852%	2485.000	584.100	549.400	2421.000	2385.000	94.119%	94.683%
2	01:51:32	72.450%	2514.000	577.700	551.900	2428.000	2420.000	93.116%	94.985%
3	01:51:51	74.302%	2460.000	571.600	548.600	2389.000	2348.000	95.292%	95.698%
x		73.535%	2486.000	577.800	550.000	2413.000	2384.000	94.176%	95.122%
σ		0.966%	27.070	6.279	1.740	20.460	35.830	1.089%	0.521%
%RSD		1.313	1.089	1.087	0.316	0.848	1.503	1.156	0.548
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:51:13	57.270	58.250	401.100	379.000	384.500	78.481%		
2	01:51:32	56.700	57.730	396.000	374.700	381.700	80.520%		
3	01:51:51	57.190	58.440	405.000	377.200	385.800	80.060%		
x		57.050	58.140	400.700	377.000	384.000	79.687%		
σ		0.311	0.367	4.526	2.185	2.108	1.069%		
%RSD		0.544	0.631	1.130	0.580	0.549	1.342		

180-42961-B-5-B 4/28/2015 1:54:43 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:55:02	52.595%	4.993	81.750	79.600	0.000	52780.000	22430.000	22330.000
2	01:55:21	51.700%	5.047	85.140	81.010	0.000	54230.000	23450.000	23520.000
3	01:55:40	47.824%	4.926	80.140	79.380	0.000	52010.000	21890.000	23130.000
X		50.706%	4.989	82.350	80.000	0.000	53000.000	22590.000	22990.000
σ		2.536%	0.060	2.551	0.886	0.000	1128.000	793.500	608.400
%RSD		5.001	1.210	3.099	1.108	0.000	2.127	3.513	2.646
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:55:02	63890.000	897.600	0.000	12740.000	8779.000	9336.000	63.621%	1697.000
2	01:55:21	64000.000	863.200	0.000	12820.000	8884.000	9504.000	59.645%	1680.000
3	01:55:40	66180.000	875.100	0.000	12680.000	9024.000	9494.000	61.830%	1652.000
X		64690.000	878.600	0.000	12750.000	8896.000	9445.000	61.699%	1676.000
σ		1289.000	17.490	0.000	70.630	123.100	94.390	1.991%	23.090
%RSD		1.993	1.991	0.000	0.554	1.384	1.000	3.227	1.377
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:55:02	223.500	388.200	5296.000	133700.000	134100.000	74.230	122.000	295.200
2	01:55:21	221.600	367.100	5348.000	135700.000	135900.000	74.350	125.800	305.400
3	01:55:40	223.900	387.000	5182.000	131500.000	130400.000	70.740	115.500	285.300
X		223.000	380.800	5275.000	133700.000	133500.000	73.100	121.100	295.300
σ		1.248	11.860	84.790	2106.000	2846.000	2.050	5.177	10.020
%RSD		0.560	3.116	1.607	1.576	2.132	2.805	4.275	3.393
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:55:02	293.400	928.700	945.700	47.240	5.498	7.023	0.000	183.700
2	01:55:21	306.000	954.600	969.700	48.190	5.641	7.582	0.000	189.300
3	01:55:40	288.600	929.800	948.900	47.610	5.614	6.776	0.000	188.600
X		296.000	937.700	954.700	47.680	5.584	7.127	0.000	187.200
σ		8.997	14.650	13.020	0.480	0.076	0.413	0.000	3.059
%RSD		3.039	1.563	1.364	1.006	1.364	5.790	0.000	1.634
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:55:02	0.000	9.126	9.154	69.786%	1.714	1.696	4.373	3.832
2	01:55:21	0.000	7.805	8.256	69.218%	1.752	1.701	4.339	3.676
3	01:55:40	0.000	7.474	7.490	66.949%	1.756	1.719	4.266	3.756
X		0.000	8.135	8.300	68.651%	1.741	1.705	4.326	3.755
σ		0.000	0.874	0.833	1.501%	0.023	0.012	0.055	0.078
%RSD		0.000	10.750	10.040	2.186	1.336	0.711	1.260	2.074
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:55:02	78.113%	80.660	4.265	4.360	269.100	266.300	97.944%	100.023%
2	01:55:21	78.006%	80.410	4.345	4.412	267.200	267.100	99.429%	102.557%
3	01:55:40	77.741%	80.020	4.063	4.143	267.000	264.600	99.641%	101.311%
X		77.953%	80.360	4.224	4.305	267.700	266.000	99.005%	101.297%
σ		0.191%	0.323	0.145	0.143	1.170	1.290	0.924%	1.267%
%RSD		0.245	0.402	3.446	3.318	0.437	0.485	0.934	1.251
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:55:02	1.414	1.439	317.200	293.300	309.200	87.110%		
2	01:55:21	1.394	1.444	322.600	300.400	314.500	87.440%		
3	01:55:40	1.385	1.404	320.400	294.500	310.400	89.636%		
X		1.397	1.429	320.100	296.100	311.400	88.062%		
σ		0.015	0.022	2.709	3.837	2.775	1.373%		
%RSD		1.057	1.520	0.846	1.296	0.891	1.559		

180-42961-B-6-B 4/28/2015 1:58:30 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:58:49	54.883%	5.843	110.900	104.500	0.000	63430.000	29960.000	29870.000
2	01:59:08	52.638%	5.792	106.800	101.000	0.000	64780.000	30390.000	30460.000
3	01:59:28	49.981%	6.063	107.700	102.300	0.000	63710.000	30290.000	30160.000
X		52.501%	5.899	108.500	102.600	0.000	63970.000	30210.000	30170.000
σ		2.454%	0.144	2.158	1.737	0.000	715.700	222.400	293.700
%RSD		4.674	2.440	1.989	1.693	0.000	1.119	0.736	0.974
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:58:49	75250.000	1022.000	0.000	14950.000	18320.000	19960.000	68.682%	1839.000
2	01:59:08	72650.000	984.700	0.000	15680.000	18830.000	20880.000	65.695%	1882.000
3	01:59:28	73550.000	937.700	0.000	15700.000	18520.000	20440.000	64.686%	1844.000
X		73820.000	981.400	0.000	15440.000	18560.000	20420.000	66.355%	1855.000
σ		1320.000	42.140	0.000	427.300	260.700	457.700	2.078%	23.580
%RSD		1.789	4.294	0.000	2.767	1.405	2.241	3.132	1.271
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:58:49	276.500	506.400	9563.000	169500.000	172200.000	91.130	150.400	439.400
2	01:59:08	272.300	521.200	9721.000	172500.000	175100.000	91.900	150.600	443.700
3	01:59:28	268.600	510.500	9598.000	171500.000	172300.000	90.460	149.600	439.200
X		272.500	512.700	9627.000	171200.000	173200.000	91.160	150.200	440.800
σ		3.949	7.636	82.720	1510.000	1650.000	0.719	0.546	2.532
%RSD		1.449	1.489	0.859	0.882	0.953	0.789	0.363	0.574
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:58:49	440.700	1375.000	1389.000	68.190	7.864	9.776	0.000	262.900
2	01:59:08	439.400	1403.000	1422.000	68.500	8.068	10.230	0.000	267.900
3	01:59:28	433.400	1399.000	1413.000	67.810	7.721	9.611	0.000	270.800
X		437.800	1392.000	1408.000	68.160	7.884	9.872	0.000	267.200
σ		3.878	15.540	16.890	0.345	0.174	0.320	0.000	4.025
%RSD		0.886	1.116	1.200	0.507	2.214	3.236	0.000	1.506
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:58:49	0.000	9.392	9.700	70.857%	2.269	2.261	7.458	6.867
2	01:59:08	0.000	9.360	9.560	71.002%	2.277	2.184	7.800	6.912
3	01:59:28	0.000	9.241	9.586	69.700%	2.224	2.165	7.847	6.790
X		0.000	9.331	9.615	70.520%	2.257	2.204	7.702	6.856
σ		0.000	0.080	0.075	0.713%	0.028	0.051	0.212	0.062
%RSD		0.000	0.854	0.777	1.012	1.253	2.309	2.755	0.898
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:58:49	79.351%	107.600	5.137	5.247	377.300	373.100	98.850%	100.437%
2	01:59:08	79.735%	109.100	5.245	5.320	377.100	376.600	101.046%	103.580%
3	01:59:28	79.434%	108.800	5.253	5.231	374.100	372.800	103.268%	103.627%
X		79.506%	108.500	5.212	5.266	376.200	374.200	101.054%	102.548%
σ		0.202%	0.795	0.065	0.047	1.819	2.088	2.209%	1.828%
%RSD		0.254	0.733	1.243	0.901	0.484	0.558	2.186	1.783
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:58:49	1.658	1.636	493.800	464.600	471.000	89.104%		
2	01:59:08	1.653	1.675	495.400	464.900	474.600	89.676%		
3	01:59:28	1.701	1.672	505.700	466.600	480.300	89.551%		
X		1.671	1.661	498.300	465.400	475.300	89.444%		
σ		0.026	0.022	6.482	1.068	4.675	0.301%		
%RSD		1.580	1.311	1.301	0.230	0.984	0.336		

180-42961-B-7-B 4/28/2015 2:02:18 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	02:02:37	54.293%	6.464	111.000	103.700	0.000	62190.000	31900.000	30970.000
2	02:02:56	52.407%	6.342	103.100	102.400	0.000	59260.000	30180.000	30410.000
3	02:03:16	49.692%	6.700	106.800	104.200	0.000	62340.000	31620.000	31200.000
x		52.131%	6.502	106.900	103.400	0.000	61260.000	31230.000	30860.000
σ		2.313%	0.182	3.964	0.909	0.000	1738.000	923.100	406.800
%RSD		4.438	2.804	3.707	0.879	0.000	2.837	2.955	1.318
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:02:37	93310.000	1145.000	0.000	19800.000	9755.000	10390.000	65.445%	1593.000
2	02:02:56	92760.000	1052.000	0.000	19360.000	9617.000	10340.000	63.457%	1562.000
3	02:03:16	95230.000	1110.000	0.000	20060.000	9796.000	10470.000	62.476%	1568.000
x		93770.000	1102.000	0.000	19740.000	9723.000	10400.000	63.793%	1575.000
σ		1295.000	46.870	0.000	354.900	93.670	68.150	1.513%	16.380
%RSD		1.381	4.252	0.000	1.798	0.963	0.655	2.371	1.040
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:02:37	251.200	381.300	3911.000	173200.000	171600.000	78.980	148.800	251.400
2	02:02:56	253.100	385.900	3860.000	172100.000	176000.000	78.570	147.400	253.200
3	02:03:16	249.700	374.400	3890.000	169800.000	172800.000	77.820	146.300	247.500
x		251.400	380.500	3887.000	171700.000	173500.000	78.460	147.500	250.700
σ		1.722	5.782	25.820	1715.000	2272.000	0.584	1.276	2.932
%RSD		0.685	1.520	0.664	0.999	1.310	0.745	0.865	1.169
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:02:37	251.200	845.500	848.600	48.130	5.623	7.437	0.000	213.200
2	02:02:56	256.500	848.100	858.200	48.660	5.605	6.795	0.000	215.800
3	02:03:16	243.800	838.100	851.500	48.410	5.373	6.950	0.000	215.100
x		250.500	843.900	852.800	48.400	5.534	7.061	0.000	214.700
σ		6.394	5.159	4.928	0.265	0.139	0.335	0.000	1.371
%RSD		2.553	0.611	0.578	0.547	2.519	4.743	0.000	0.638
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:02:37	0.000	10.910	11.270	70.227%	1.322	1.278	4.495	3.769
2	02:02:56	0.000	11.130	11.210	68.674%	1.320	1.231	4.710	4.067
3	02:03:16	0.000	11.340	11.380	67.821%	1.376	1.261	4.253	3.881
x		0.000	11.130	11.290	68.907%	1.339	1.257	4.486	3.906
σ		0.000	0.212	0.086	1.220%	0.032	0.024	0.228	0.151
%RSD		0.000	1.903	0.758	1.770	2.366	1.882	5.092	3.857
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:02:37	78.280%	64.750	2.800	2.734	290.600	288.700	100.980%	101.331%
2	02:02:56	77.796%	64.110	2.791	2.819	291.700	290.300	101.060%	101.622%
3	02:03:16	77.538%	65.240	2.695	2.803	292.100	289.800	101.266%	103.440%
x		77.871%	64.700	2.762	2.785	291.500	289.600	101.102%	102.131%
σ		0.377%	0.568	0.058	0.045	0.792	0.814	0.148%	1.143%
%RSD		0.484	0.878	2.091	1.617	0.272	0.281	0.146	1.119
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:02:37	1.508	1.540	299.100	275.400	292.400	88.013%		
2	02:02:56	1.562	1.574	308.000	283.200	301.300	86.636%		
3	02:03:16	1.531	1.599	303.500	279.300	296.000	88.769%		
x		1.533	1.571	303.500	279.300	296.600	87.806%		
σ		0.027	0.029	4.459	3.932	4.444	1.081%		
%RSD		1.772	1.856	1.469	1.408	1.498	1.232		

CCV 1533080 4/28/2015 2:09:25 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:09:25	71.195%	100.200	93.630	88.180	0.000	46570.000	46230.000	46080.000
2	02:09:44	62.819%	103.000	101.400	98.110	0.000	48990.000	50230.000	49880.000
3	02:10:03	62.934%	100.900	98.690	96.280	0.000	49830.000	49960.000	50450.000
X		65.649%	101.363%	97.907%	94.192%	0.000	96.927%	97.613%	97.608%
σ		4.803%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		7.316	1.410	4.025	5.609	0.000	3.495	4.588	4.870
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:09:25	473.200	4202.000	0.000	48050.000	44340.000	48820.000	77.416%	89.350
2	02:09:44	524.900	4526.000	0.000	50360.000	46640.000	51700.000	74.453%	94.680
3	02:10:03	514.100	4487.000	0.000	50720.000	47370.000	52310.000	72.458%	93.550
X		100.815%	88.096%	0.000	99.418%	92.236%	101.885%	74.776%	92.527%
σ		n/a	n/a	0.000	n/a	n/a	n/a	2.495%	n/a
%RSD		5.408	4.007	0.000	2.913	3.430	3.666	3.336	3.036
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:09:25	90.270	92.830	504.600	25180.000	25000.000	94.770	96.000	94.720
2	02:09:44	93.490	95.460	512.100	25030.000	24760.000	90.250	88.460	91.450
3	02:10:03	95.090	97.670	509.100	25410.000	25350.000	91.510	91.580	94.570
X		92.952%	95.320%	101.727%	100.835%	100.139%	92.180%	92.012%	93.579%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.643	2.540	0.739	0.760	1.195	2.529	4.121	1.969
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:09:25	93.310	100.700	100.900	98.390	106.300	104.900	0.000	100.600
2	02:09:44	93.250	101.800	102.400	99.960	107.600	105.000	0.000	102.600
3	02:10:03	94.200	103.500	103.500	99.660	108.000	105.800	0.000	101.600
X		93.583%	101.982%	102.289%	99.336%	107.299%	105.211%	0.000	101.584%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.570	1.374	1.244	0.841	0.815	0.457	0.000	0.964
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:09:25	83.039%	93.490	95.400	80.862%	97.700	96.900	101.500	100.900
2	02:09:44	81.091%	95.880	97.930	78.668%	98.590	98.750	104.200	102.500
3	02:10:03	80.773%	96.350	99.690	78.589%	98.820	98.950	103.200	102.600
X		81.634%	95.241%	97.673%	79.373%	98.369%	98.201%	102.988%	101.978%
σ		1.226%	n/a	n/a	1.290%	n/a	n/a	n/a	n/a
%RSD		1.502	1.607	2.208	1.625	0.601	1.149	1.296	0.911
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:09:25	84.960%	97.040	99.540	99.440	97.020	96.270	93.614%	95.410%
2	02:09:44	84.482%	99.460	99.800	101.700	97.880	97.060	94.954%	96.371%
3	02:10:03	84.742%	99.810	100.000	101.800	97.460	97.340	95.368%	96.434%
X		84.728%	98.770%	99.792%	100.975%	97.452%	96.890%	94.645%	96.072%
σ		0.239%	n/a	n/a	n/a	n/a	n/a	0.917%	0.574%
%RSD		0.282	1.525	0.255	1.319	0.437	0.572	0.969	0.597
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:09:25	98.940	103.500	100.200	100.200	98.600	95.632%		
2	02:09:44	101.100	104.700	107.600	102.600	102.900	96.835%		
3	02:10:03	101.600	105.200	103.500	104.000	102.800	96.417%		
X		100.561%	104.488%	103.752%	102.268%	101.430%	96.294%		
σ		n/a	n/a	n/a	n/a	n/a	0.611%		
%RSD		1.416	0.830	3.544	1.895	2.416	0.634		

CCB6 4/28/2015 2:16:07 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:16:26	90.221%	-0.036	0.599	0.388	0.000	16.520	10.770	10.260	
2	02:16:46	87.419%	-0.006	0.357	0.426	0.000	12.210	7.873	8.025	
3	02:17:06	81.136%	0.005	0.501	0.263	0.000	9.369	6.264	5.978	
x		86.259%	-0.012	0.486	0.359	0.000	12.700	8.304	8.089	
		σ	4.652%	0.021	0.122	0.085	0.000	3.598	2.286	2.144
		%RSD	5.393	171.700	25.060	23.790	0.000	28.340	27.520	26.500
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:16:26	14.940	-225.600	0.000	12.270	11.800	8.224	86.575%	0.302	
2	02:16:46	10.510	-226.700	0.000	10.490	10.990	6.621	83.584%	0.248	
3	02:17:06	6.944	-226.600	0.000	7.277	1.958	2.462	84.206%	0.077	
x		10.800	-226.300	0.000	10.010	8.248	5.769	84.788%	0.209	
		σ	4.003	0.595	0.000	2.533	5.462	2.974	1.578%	0.117
		%RSD	37.080	0.263	0.000	25.290	66.220	51.540	1.861	56.220
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:16:26	0.072	0.082	1.237	36.300	34.890	0.042	0.055	0.036	
2	02:16:46	0.036	0.071	0.938	27.520	27.640	0.034	0.023	0.008	
3	02:17:06	0.040	0.031	0.618	16.050	17.670	0.020	-0.015	-0.022	
x		0.049	0.061	0.931	26.620	26.730	0.032	0.021	0.007	
		σ	0.020	0.027	0.310	10.150	8.646	0.011	0.035	0.029
		%RSD	39.730	44.180	33.270	38.140	32.340	35.690	167.100	399.300
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:16:26	0.057	-0.090	-0.027	0.007	0.120	-0.032	0.000	0.117	
2	02:16:46	0.006	-0.122	-0.229	0.052	-0.056	0.163	0.000	0.094	
3	02:17:06	-0.018	-0.333	-0.260	0.079	0.042	0.233	0.000	0.059	
x		0.015	-0.182	-0.172	0.046	0.035	0.122	0.000	0.090	
		σ	0.038	0.132	0.126	0.037	0.088	0.137	0.000	0.029
		%RSD	252.200	72.330	73.380	79.920	250.900	113.000	0.000	32.550
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:16:26	95.055%	0.226	0.229	97.408%	-0.070	-0.065	0.057	0.037	
2	02:16:46	95.833%	0.228	0.223	97.218%	-0.081	-0.069	0.047	0.032	
3	02:17:06	96.067%	0.177	0.194	98.938%	-0.075	-0.071	0.045	0.030	
x		95.652%	0.210	0.215	97.855%	-0.075	-0.069	0.050	0.033	
		σ	0.530%	0.029	0.019	0.943%	0.005	0.003	0.006	0.003
		%RSD	0.554	13.860	8.772	0.963	7.266	4.278	12.380	10.530
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:16:26	99.032%	-0.098	0.025	0.047	0.173	0.159	103.888%	104.785%	
2	02:16:46	99.649%	-0.119	0.028	0.022	0.144	0.141	106.899%	107.409%	
3	02:17:06	102.399%	-0.150	0.016	0.016	0.094	0.088	108.680%	109.378%	
x		100.360%	-0.122	0.023	0.028	0.137	0.129	106.489%	107.191%	
		σ	1.793%	0.026	0.006	0.017	0.040	0.037	2.422%	2.304%
		%RSD	1.787	21.340	26.290	58.140	29.010	28.540	2.275	2.150
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	02:16:26	0.038	0.039	0.043	0.039	0.043	115.271%			
2	02:16:46	0.030	0.036	0.024	0.024	0.026	115.369%			
3	02:17:06	0.031	0.037	0.016	0.014	0.014	117.709%			
x		0.033	0.038	0.028	0.026	0.027	116.116%			
		σ	0.004	0.002	0.014	0.012	0.015	1.380%		
		%RSD	12.850	4.086	50.330	48.000	53.170	1.189		

180-42961-B-8-B 4/28/2015 2:19:59 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	02:20:18	64.257%	5.713	96.490	99.710	0.000	60860.000	29080.000	28540.000
2	02:20:37	56.869%	6.180	102.900	102.500	0.000	61820.000	30500.000	31040.000
3	02:20:56	54.495%	5.763	100.400	97.200	0.000	60700.000	29320.000	29560.000
X		58.540%	5.885	99.910	99.820	0.000	61130.000	29630.000	29710.000
σ		5.091%	0.257	3.208	2.672	0.000	606.800	760.300	1253.000
%RSD		8.697	4.360	3.211	2.677	0.000	0.993	2.566	4.218
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:20:18	81990.000	1241.000	0.000	16330.000	13330.000	14640.000	77.647%	1812.000
2	02:20:37	86720.000	1281.000	0.000	16950.000	13490.000	14960.000	74.817%	1790.000
3	02:20:56	82700.000	1220.000	0.000	16960.000	13640.000	14960.000	71.526%	1828.000
X		83800.000	1247.000	0.000	16750.000	13490.000	14850.000	74.663%	1810.000
σ		2554.000	31.010	0.000	363.500	153.000	186.400	3.064%	19.060
%RSD		3.047	2.486	0.000	2.170	1.135	1.255	4.103	1.053
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:20:18	272.700	433.200	5356.000	156900.000	158500.000	83.460	144.400	330.800
2	02:20:37	276.900	435.700	5332.000	157000.000	159000.000	79.200	137.800	325.000
3	02:20:56	278.500	437.000	5449.000	159400.000	158400.000	80.030	136.600	322.000
X		276.000	435.300	5379.000	157800.000	158600.000	80.900	139.600	325.900
σ		2.986	1.925	61.860	1417.000	329.500	2.258	4.219	4.479
%RSD		1.082	0.442	1.150	0.898	0.208	2.791	3.022	1.374
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:20:18	334.100	1045.000	1058.000	53.990	6.321	8.323	0.000	219.200
2	02:20:37	328.500	1061.000	1065.000	54.890	6.390	8.773	0.000	222.400
3	02:20:56	326.700	1065.000	1075.000	54.550	6.214	8.444	0.000	223.300
X		329.800	1057.000	1066.000	54.480	6.308	8.513	0.000	221.600
σ		3.855	10.170	8.145	0.452	0.089	0.233	0.000	2.153
%RSD		1.169	0.962	0.764	0.830	1.406	2.732	0.000	0.971
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:20:18	0.000	8.287	8.362	80.159%	1.804	1.744	5.859	5.276
2	02:20:37	0.000	7.959	8.114	77.196%	1.813	1.769	5.466	4.983
3	02:20:56	0.000	8.065	8.300	74.747%	1.845	1.712	5.630	5.125
X		0.000	8.104	8.259	77.368%	1.821	1.742	5.652	5.128
σ		0.000	0.167	0.129	2.710%	0.022	0.029	0.197	0.146
%RSD		0.000	2.064	1.563	3.503	1.200	1.643	3.493	2.852
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:20:18	85.677%	80.070	4.062	4.054	334.000	331.000	104.811%	105.353%
2	02:20:37	84.630%	80.860	3.971	3.990	336.100	333.200	104.963%	105.980%
3	02:20:56	83.762%	80.520	4.053	4.027	335.300	332.100	105.938%	106.679%
X		84.690%	80.490	4.028	4.024	335.100	332.100	105.237%	106.004%
σ		0.959%	0.395	0.050	0.032	1.042	1.114	0.611%	0.663%
%RSD		1.132	0.491	1.248	0.797	0.311	0.335	0.581	0.626
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:20:18	1.507	1.539	377.300	349.100	358.700	89.742%		
2	02:20:37	1.511	1.529	373.700	347.900	356.000	92.010%		
3	02:20:56	1.507	1.532	373.300	348.000	355.600	91.895%		
X		1.508	1.533	374.800	348.300	356.800	91.216%		
σ		0.002	0.005	2.229	0.683	1.693	1.278%		
%RSD		0.151	0.331	0.595	0.196	0.474	1.401		

180-43044-B-1-E 4/28/2015 2:23:47 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	02:24:06	39.819%	6.864	235.500	228.200	0.000	33760.000	63700.000	63090.000
2	02:24:26	36.591%	7.253	231.600	225.500	0.000	34200.000	64650.000	64010.000
3	02:24:45	37.400%	6.400	236.900	227.000	0.000	33110.000	63140.000	63410.000
X		37.936%	6.839	234.700	226.900	0.000	33690.000	63830.000	63500.000
σ		1.679%	0.427	2.730	1.332	0.000	547.700	764.800	462.600
%RSD		4.427	6.241	1.163	0.587	0.000	1.626	1.198	0.729
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:24:06	117000.000	1562.000	0.000	40710.000	500600.000	501600.000	56.587%	1263.000
2	02:24:26	121400.000	1588.000	0.000	41760.000	510000.000	511100.000	53.600%	1267.000
3	02:24:45	120700.000	1557.000	0.000	41970.000	523500.000	515200.000	52.406%	1251.000
X		119700.000	1569.000	0.000	41480.000	511400.000	509300.000	54.198%	1260.000
σ		2386.000	16.370	0.000	675.900	11470.000	6996.000	2.154%	8.599
%RSD		1.993	1.044	0.000	1.630	2.243	1.374	3.974	0.682
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:24:06	275.000	322.600	1809.000	278800.000	281700.000	66.110	153.600	67.180
2	02:24:26	270.600	320.500	1815.000	275000.000	277900.000	65.720	148.100	65.060
3	02:24:45	274.000	317.300	1805.000	277500.000	278400.000	65.020	146.900	65.820
X		273.200	320.100	1810.000	277100.000	279300.000	65.620	149.500	66.020
σ		2.323	2.677	5.167	1889.000	2063.000	0.552	3.561	1.074
%RSD		0.850	0.836	0.285	0.682	0.739	0.842	2.382	1.627
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:24:06	67.870	474.300	484.900	91.200	2.815	4.888	0.000	3484.000
2	02:24:26	67.040	489.200	498.000	91.700	2.911	5.220	0.000	3550.000
3	02:24:45	66.930	491.800	498.300	90.690	2.913	4.547	0.000	3569.000
X		67.280	485.100	493.800	91.190	2.880	4.885	0.000	3534.000
σ		0.512	9.413	7.665	0.506	0.056	0.337	0.000	44.670
%RSD		0.762	1.940	1.552	0.555	1.944	6.889	0.000	1.264
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:24:06	0.000	19.330	19.640	58.961%	0.361	0.190	3.061	2.320
2	02:24:26	0.000	18.530	19.440	58.058%	0.392	0.195	2.865	2.162
3	02:24:45	0.000	19.120	19.310	57.386%	0.374	0.180	2.776	2.207
X		0.000	18.990	19.460	58.135%	0.376	0.188	2.901	2.230
σ		0.000	0.415	0.168	0.790%	0.015	0.008	0.146	0.081
%RSD		0.000	2.185	0.861	1.359	4.122	3.997	5.030	3.646
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:24:06	67.921%	37.950	0.889	0.887	192.600	191.900	87.511%	86.398%
2	02:24:26	67.461%	38.280	0.841	0.922	195.300	192.500	87.174%	87.678%
3	02:24:45	67.950%	37.690	0.831	0.901	193.200	191.200	87.645%	88.141%
X		67.778%	37.970	0.854	0.903	193.700	191.900	87.443%	87.405%
σ		0.274%	0.298	0.031	0.018	1.392	0.684	0.242%	0.903%
%RSD		0.405	0.786	3.611	1.975	0.719	0.356	0.277	1.033
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:24:06	1.580	1.575	126.100	116.700	120.500	73.158%		
2	02:24:26	1.560	1.608	126.500	115.500	119.900	75.035%		
3	02:24:45	1.608	1.598	127.600	116.700	121.300	75.182%		
X		1.582	1.594	126.700	116.300	120.600	74.458%		
σ		0.024	0.017	0.750	0.734	0.669	1.128%		
%RSD		1.521	1.052	0.592	0.631	0.555	1.515		

180-43044-B-2-C 4/28/2015 2:27:35 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	02:27:54	41.375%	5.480	128.500	121.600	0.000	35970.000	34900.000	34780.000
2	02:28:13	36.743%	5.750	122.400	123.600	0.000	36040.000	35950.000	36780.000
3	02:28:33	35.454%	5.590	133.200	126.500	0.000	35460.000	36220.000	36980.000
X		37.858%	5.607	128.000	123.900	0.000	35820.000	35690.000	36180.000
σ		3.114%	0.136	5.410	2.458	0.000	313.300	694.500	1219.000
%RSD		8.225	2.417	4.225	1.984	0.000	0.875	1.946	3.371
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:27:54	84520.000	1319.000	0.000	22340.000	508100.000	509100.000	51.926%	2171.000
2	02:28:13	89020.000	1342.000	0.000	23310.000	540300.000	544200.000	47.394%	2273.000
3	02:28:33	90530.000	1307.000	0.000	23210.000	541200.000	543400.000	44.719%	2235.000
X		88020.000	1323.000	0.000	22950.000	529900.000	532200.000	48.013%	2226.000
σ		3127.000	17.280	0.000	535.700	18850.000	20010.000	3.643%	51.460
%RSD		3.553	1.306	0.000	2.334	3.557	3.760	7.588	2.312
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:27:54	255.300	225.000	2684.000	240200.000	244800.000	77.060	104.400	75.490
2	02:28:13	264.700	237.200	2762.000	252600.000	257200.000	78.220	104.900	74.230
3	02:28:33	265.100	238.800	2866.000	257700.000	262900.000	80.370	105.700	77.980
X		261.700	233.700	2771.000	250200.000	255000.000	78.550	105.000	75.900
σ		5.545	7.575	91.650	8988.000	9247.000	1.679	0.662	1.906
%RSD		2.119	3.242	3.308	3.592	3.626	2.138	0.630	2.511
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:27:54	76.460	358.000	363.100	99.550	2.120	3.646	0.000	4114.000
2	02:28:13	77.950	375.300	381.900	103.300	1.864	3.788	0.000	4277.000
3	02:28:33	79.670	380.600	383.100	105.300	1.887	4.139	0.000	4314.000
X		78.030	371.300	376.000	102.700	1.957	3.858	0.000	4235.000
σ		1.607	11.810	11.220	2.894	0.142	0.254	0.000	106.400
%RSD		2.059	3.180	2.984	2.818	7.238	6.580	0.000	2.512
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:27:54	0.000	13.660	13.950	57.471%	0.281	0.081	2.134	1.511
2	02:28:13	0.000	13.870	13.830	55.041%	0.240	0.107	2.039	1.475
3	02:28:33	0.000	13.870	14.120	54.634%	0.269	0.106	2.130	1.586
X		0.000	13.800	13.970	55.715%	0.263	0.098	2.101	1.524
σ		0.000	0.121	0.147	1.534%	0.021	0.015	0.054	0.057
%RSD		0.000	0.873	1.054	2.754	7.964	14.850	2.567	3.720
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:27:54	67.006%	36.120	1.035	1.140	352.900	347.800	87.766%	88.197%
2	02:28:13	67.046%	35.960	0.963	1.010	351.200	348.600	88.263%	89.601%
3	02:28:33	66.291%	36.020	0.962	1.026	351.400	349.100	87.877%	89.286%
X		66.781%	36.040	0.987	1.059	351.800	348.500	87.969%	89.028%
σ		0.425%	0.077	0.042	0.071	0.959	0.657	0.261%	0.737%
%RSD		0.636	0.215	4.228	6.700	0.273	0.189	0.297	0.827
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:27:54	1.441	1.466	97.810	89.160	92.710	74.617%		
2	02:28:13	1.464	1.483	97.460	89.800	92.950	75.935%		
3	02:28:33	1.501	1.483	98.300	91.060	93.900	75.657%		
X		1.469	1.477	97.860	90.000	93.190	75.403%		
σ		0.030	0.010	0.419	0.966	0.627	0.694%		
%RSD		2.056	0.650	0.429	1.074	0.673	0.921		

180-43044-B-3-E 4/28/2015 2:31:23 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:31:43	31.069%	5.575	228.500	218.600	0.000	38120.000	57930.000	57050.000
2	02:32:02	27.864%	5.431	217.000	219.300	0.000	35310.000	54350.000	55760.000
3	02:32:21	27.741%	5.442	211.300	206.400	0.000	35460.000	51950.000	53470.000
x		28.891%	5.483	218.900	214.800	0.000	36290.000	54740.000	55430.000
σ		1.887%	0.080	8.779	7.229	0.000	1580.000	3007.000	1811.000
%RSD		6.532	1.464	4.010	3.366	0.000	4.353	5.493	3.268
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:31:43	85110.000	1534.000	0.000	35640.000	1462000.000	1476000.000	37.979%	1287.000
2	02:32:02	85930.000	1540.000	0.000	36110.000	1483000.000	1479000.000	37.627%	1271.000
3	02:32:21	84720.000	1480.000	0.000	35300.000	1448000.000	1437000.000	36.326%	1259.000
x		85260.000	1518.000	0.000	35680.000	1464000.000	1464000.000	37.311%	1272.000
σ		620.100	33.190	0.000	405.400	17510.000	23390.000	0.870%	13.830
%RSD		0.727	2.186	0.000	1.136	1.196	1.598	2.333	1.087
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:31:43	296.000	259.400	1957.000	262500.000	259600.000	47.260	81.780	34.820
2	02:32:02	297.400	260.800	1961.000	254600.000	254600.000	46.210	76.970	32.800
3	02:32:21	286.800	257.100	1937.000	252000.000	255500.000	46.330	75.360	32.430
x		293.400	259.100	1952.000	256400.000	256600.000	46.600	78.040	33.350
σ		5.752	1.899	12.990	5501.000	2619.000	0.577	3.342	1.288
%RSD		1.961	0.733	0.666	2.146	1.021	1.237	4.283	3.862
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:31:43	34.800	271.000	264.200	100.300	0.335	1.372	0.000	4661.000
2	02:32:02	33.460	266.900	263.500	101.000	0.197	1.434	0.000	4665.000
3	02:32:21	32.810	268.400	262.200	100.800	0.222	1.528	0.000	4662.000
x		33.690	268.800	263.300	100.700	0.252	1.445	0.000	4662.000
σ		1.018	2.066	1.007	0.388	0.074	0.079	0.000	1.969
%RSD		3.023	0.769	0.383	0.385	29.230	5.443	0.000	0.042
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:31:43	96.058%	10.250	12.550	45.014%	0.293	0.092	2.654	1.924
2	02:32:02	96.019%	10.150	12.040	44.527%	0.329	0.091	2.541	1.839
3	02:32:21	94.348%	10.210	12.430	42.919%	0.319	0.095	2.749	1.955
x		95.475%	10.200	12.340	44.153%	0.314	0.093	2.648	1.906
σ		0.977%	0.053	0.269	1.096%	0.019	0.002	0.104	0.060
%RSD		1.023	0.520	2.182	2.482	5.898	1.800	3.929	3.133
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:31:43	54.889%	36.170	0.990	1.157	213.200	212.100	70.982%	70.877%
2	02:32:02	55.223%	36.360	0.970	1.124	212.700	211.500	70.306%	71.225%
3	02:32:21	53.885%	37.350	1.095	1.135	214.100	212.300	70.977%	70.903%
x		54.666%	36.630	1.018	1.139	213.300	211.900	70.755%	71.001%
σ		0.696%	0.634	0.067	0.017	0.703	0.429	0.389%	0.194%
%RSD		1.274	1.732	6.599	1.488	0.330	0.202	0.549	0.273
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:31:43	1.157	1.162	105.300	96.230	99.440	61.105%		
2	02:32:02	1.170	1.162	105.800	97.260	100.100	61.511%		
3	02:32:21	1.155	1.189	104.800	96.620	99.730	62.247%		
x		1.161	1.171	105.300	96.700	99.760	61.621%		
σ		0.008	0.015	0.515	0.524	0.341	0.579%		
%RSD		0.714	1.300	0.489	0.541	0.342	0.939		

180-43044-B-4-C 4/28/2015 2:35:12 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	02:35:31	26.160%	5.254	217.600	211.100	0.000	42970.000	55640.000	55840.000
2	02:35:51	26.928%	5.806	208.700	209.300	0.000	42000.000	53860.000	55110.000
3	02:36:10	24.586%	5.260	204.700	207.600	0.000	41120.000	53500.000	53100.000
x		25.891%	5.440	210.300	209.300	0.000	42030.000	54330.000	54690.000
σ		1.194%	0.317	6.622	1.747	0.000	924.400	1149.000	1417.000
%RSD		4.612	5.822	3.149	0.835	0.000	2.199	2.115	2.592
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:35:31	66810.000	1125.000	0.000	32370.000	1938000.000	1918000.000	35.129%	1156.000
2	02:35:51	67140.000	1108.000	0.000	31950.000	1889000.000	1890000.000	34.364%	1137.000
3	02:36:10	66160.000	1089.000	0.000	32600.000	1918000.000	1943000.000	32.732%	1167.000
x		66710.000	1107.000	0.000	32310.000	1915000.000	1917000.000	34.075%	1153.000
σ		498.700	18.100	0.000	331.100	24590.000	26600.000	1.225%	15.230
%RSD		0.748	1.635	0.000	1.025	1.284	1.388	3.594	1.320
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:35:31	310.600	238.300	2236.000	251900.000	250000.000	45.400	63.060	24.230
2	02:35:51	301.900	233.000	2223.000	246400.000	249700.000	45.100	59.840	24.180
3	02:36:10	308.700	235.400	2266.000	256200.000	253000.000	45.780	62.160	24.390
x		307.100	235.600	2242.000	251500.000	250900.000	45.420	61.690	24.260
σ		4.569	2.643	21.980	4906.000	1827.000	0.341	1.660	0.108
%RSD		1.488	1.122	0.981	1.951	0.728	0.750	2.691	0.446
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:35:31	24.650	230.800	227.800	156.300	0.209	1.131	0.000	6156.000
2	02:35:51	24.120	231.000	229.000	158.300	-0.136	1.347	0.000	6145.000
3	02:36:10	24.020	237.000	230.500	159.500	0.174	1.249	0.000	6229.000
x		24.260	233.000	229.100	158.000	0.082	1.243	0.000	6177.000
σ		0.338	3.537	1.318	1.648	0.190	0.108	0.000	45.490
%RSD		1.395	1.518	0.575	1.043	230.500	8.709	0.000	0.737
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:35:31	87.323%	7.401	8.911	41.460%	0.267	0.062	2.151	1.758
2	02:35:51	87.440%	7.137	8.648	40.955%	0.271	0.053	2.271	1.585
3	02:36:10	85.388%	7.389	8.752	40.109%	0.297	0.028	2.364	1.678
x		86.717%	7.309	8.770	40.842%	0.278	0.048	2.262	1.674
σ		1.153%	0.149	0.133	0.683%	0.016	0.017	0.107	0.087
%RSD		1.329	2.036	1.514	1.671	5.780	36.240	4.709	5.194
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:35:31	51.110%	36.960	1.100	1.345	229.800	230.300	65.275%	65.220%
2	02:35:51	51.239%	37.150	1.161	1.266	232.500	230.400	65.941%	65.958%
3	02:36:10	50.711%	36.590	1.086	1.375	235.700	230.500	65.991%	65.801%
x		51.020%	36.900	1.116	1.329	232.700	230.400	65.736%	65.660%
σ		0.275%	0.282	0.040	0.056	2.976	0.100	0.400%	0.389%
%RSD		0.540	0.765	3.589	4.238	1.279	0.043	0.609	0.592
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:35:31	0.914	0.924	95.950	88.350	91.130	57.602%		
2	02:35:51	0.883	0.936	98.170	89.720	93.160	57.735%		
3	02:36:10	0.970	0.957	97.040	88.600	92.080	58.372%		
x		0.922	0.939	97.050	88.890	92.130	57.903%		
σ		0.044	0.017	1.109	0.730	1.017	0.412%		
%RSD		4.783	1.799	1.143	0.822	1.104	0.711		

180-43044-B-5-C 4/28/2015 2:39:01 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:39:21	34.172%	6.764	122.300	124.300	0.000	32030.000	35120.000	36070.000
2	02:39:40	31.367%	7.255	122.900	120.100	0.000	33770.000	36460.000	35940.000
3	02:39:59	29.184%	6.749	135.100	120.600	0.000	33490.000	35800.000	35740.000
X		31.574%	6.923	126.800	121.700	0.000	33090.000	35790.000	35920.000
σ		2.501%	0.288	7.227	2.275	0.000	933.500	668.000	161.500
%RSD		7.920	4.163	5.701	1.870	0.000	2.821	1.866	0.450
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:39:21	91330.000	1295.000	0.000	21730.000	476400.000	476000.000	42.151%	2197.000
2	02:39:40	90760.000	1274.000	0.000	22570.000	477800.000	473700.000	41.889%	2204.000
3	02:39:59	88080.000	1185.000	0.000	22470.000	481000.000	480500.000	39.600%	2186.000
X		90060.000	1251.000	0.000	22260.000	478400.000	476700.000	41.213%	2195.000
σ		1735.000	58.120	0.000	457.600	2356.000	3455.000	1.403%	9.336
%RSD		1.927	4.644	0.000	2.056	0.492	0.725	3.405	0.425
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:39:21	304.100	268.000	2692.000	288700.000	295000.000	78.620	118.400	96.620
2	02:39:40	306.300	259.400	2672.000	281300.000	286000.000	76.130	115.300	93.770
3	02:39:59	308.400	267.000	2678.000	288300.000	286900.000	74.560	116.600	94.230
X		306.300	264.800	2681.000	286100.000	289300.000	76.440	116.800	94.870
σ		2.135	4.736	10.310	4131.000	4956.000	2.044	1.574	1.529
%RSD		0.697	1.788	0.385	1.444	1.713	2.674	1.348	1.612
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:39:21	98.020	398.200	400.400	118.100	1.961	3.837	0.000	3310.000
2	02:39:40	94.650	390.900	398.900	119.400	1.856	3.855	0.000	3352.000
3	02:39:59	94.340	395.200	401.000	117.500	2.291	3.483	0.000	3376.000
X		95.670	394.800	400.100	118.300	2.036	3.725	0.000	3346.000
σ		2.042	3.654	1.070	0.989	0.227	0.209	0.000	33.830
%RSD		2.135	0.926	0.267	0.836	11.140	5.620	0.000	1.011
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:39:21	0.000	14.540	14.880	51.478%	0.297	0.140	2.251	1.747
2	02:39:40	0.000	14.750	15.260	51.391%	0.317	0.105	2.431	1.785
3	02:39:59	0.000	14.540	15.140	51.079%	0.278	0.110	2.321	1.796
X		0.000	14.610	15.090	51.316%	0.297	0.118	2.334	1.776
σ		0.000	0.123	0.198	0.210%	0.020	0.019	0.091	0.026
%RSD		0.000	0.841	1.312	0.409	6.727	16.080	3.888	1.461
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:39:21	62.220%	36.440	1.276	1.255	325.100	319.900	85.392%	85.828%
2	02:39:40	62.728%	37.060	1.268	1.276	326.300	323.200	85.468%	87.043%
3	02:39:59	61.617%	36.900	1.249	1.292	324.900	321.100	86.461%	88.452%
X		62.189%	36.800	1.264	1.274	325.400	321.400	85.774%	87.108%
σ		0.556%	0.324	0.014	0.018	0.794	1.700	0.597%	1.313%
%RSD		0.894	0.879	1.071	1.433	0.244	0.529	0.696	1.507
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:39:21	1.581	1.562	120.200	111.000	115.000	72.699%		
2	02:39:40	1.562	1.566	119.500	110.700	114.500	75.134%		
3	02:39:59	1.591	1.587	121.000	111.400	115.100	75.247%		
X		1.578	1.572	120.200	111.000	114.900	74.360%		
σ		0.015	0.013	0.787	0.355	0.332	1.440%		
%RSD		0.932	0.857	0.655	0.320	0.289	1.936		

180-43114-B-1-C 4/28/2015 2:42:51 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:43:10	34.042%	5.358	217.800	219.800	0.000	30200.000	53920.000	55560.000
2	02:43:29	31.952%	6.246	213.700	203.800	0.000	28930.000	52930.000	53030.000
3	02:43:52	30.449%	5.320	221.900	216.000	0.000	27540.000	51170.000	51720.000
X		32.148%	5.641	217.800	213.200	0.000	28890.000	52670.000	53430.000
σ		1.804%	0.524	4.110	8.359	0.000	1331.000	1389.000	1954.000
%RSD		5.612	9.288	1.887	3.921	0.000	4.609	2.637	3.656
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:43:10	101400.000	1137.000	0.000	41900.000	848200.000	840300.000	38.354%	1306.000
2	02:43:29	92960.000	1049.000	0.000	41730.000	844700.000	841600.000	36.722%	1321.000
3	02:43:52	92160.000	955.600	0.000	41560.000	868300.000	870500.000	34.252%	1271.000
X		95490.000	1047.000	0.000	41730.000	853700.000	850800.000	36.442%	1299.000
σ		5091.000	90.560	0.000	170.100	12710.000	17080.000	2.065%	25.910
%RSD		5.332	8.648	0.000	0.407	1.489	2.008	5.667	1.994
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:43:10	281.700	300.300	1575.000	255800.000	256300.000	51.260	104.200	45.880
2	02:43:29	282.500	305.700	1617.000	265200.000	266600.000	53.830	107.700	46.690
3	02:43:52	280.200	304.100	1632.000	269900.000	270900.000	53.650	107.200	47.450
X		281.500	303.400	1608.000	263700.000	264600.000	52.910	106.400	46.670
σ		1.121	2.767	29.500	7179.000	7468.000	1.437	1.882	0.786
%RSD		0.398	0.912	1.834	2.723	2.822	2.716	1.769	1.684
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:43:10	45.010	334.000	325.900	73.720	0.532	1.906	0.000	2785.000
2	02:43:29	45.350	341.000	334.500	75.310	0.796	1.536	0.000	2784.000
3	02:43:52	47.010	345.400	342.400	74.110	0.836	1.710	0.000	2803.000
X		45.790	340.100	334.300	74.380	0.722	1.717	0.000	2791.000
σ		1.069	5.754	8.266	0.828	0.165	0.185	0.000	10.700
%RSD		2.334	1.692	2.473	1.113	22.900	10.780	0.000	0.384
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:43:10	97.689%	10.850	12.760	47.322%	0.333	0.133	2.845	2.095
2	02:43:29	96.252%	10.760	12.870	46.564%	0.334	0.169	2.686	2.113
3	02:43:52	94.784%	10.220	12.720	45.624%	0.321	0.129	2.646	2.029
X		96.242%	10.610	12.790	46.503%	0.329	0.143	2.726	2.079
σ		1.452%	0.341	0.080	0.851%	0.007	0.022	0.105	0.044
%RSD		1.509	3.210	0.624	1.829	2.222	15.580	3.851	2.139
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:43:10	57.389%	37.210	0.864	0.848	201.400	201.200	76.061%	76.461%
2	02:43:29	58.082%	36.510	0.825	0.880	201.700	198.700	77.764%	77.318%
3	02:43:52	57.000%	36.900	0.763	0.914	203.000	200.000	76.300%	77.592%
X		57.490%	36.880	0.817	0.880	202.000	200.000	76.708%	77.124%
σ		0.548%	0.350	0.051	0.033	0.823	1.262	0.922%	0.590%
%RSD		0.953	0.950	6.228	3.747	0.407	0.631	1.202	0.765
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:43:10	1.445	1.473	113.800	104.700	108.200	69.365%		
2	02:43:29	1.513	1.491	113.900	104.600	108.400	70.076%		
3	02:43:52	1.502	1.553	116.800	107.200	111.100	68.708%		
X		1.486	1.505	114.800	105.500	109.200	69.383%		
σ		0.037	0.042	1.696	1.492	1.595	0.684%		
%RSD		2.462	2.787	1.477	1.414	1.461	0.986		

180-43114-B-2-C 4/28/2015 2:46:44 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:47:03	36.302%	5.793	167.400	158.200	0.000	30690.000	50760.000	51580.000
2	02:47:22	37.113%	5.386	153.700	149.100	0.000	29440.000	48650.000	49390.000
3	02:47:42	32.388%	4.808	156.500	151.800	0.000	30180.000	50100.000	50690.000
X		35.268%	5.329	159.200	153.000	0.000	30100.000	49840.000	50550.000
σ		2.527%	0.495	7.248	4.644	0.000	630.200	1078.000	1100.000
%RSD		7.165	9.290	4.552	3.034	0.000	2.093	2.164	2.177
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:47:03	103000.000	1004.000	0.000	38740.000	559400.000	556900.000	39.908%	1093.000
2	02:47:22	98250.000	987.700	0.000	37880.000	541300.000	550400.000	39.189%	1107.000
3	02:47:42	97800.000	978.300	0.000	38760.000	557300.000	553900.000	37.842%	1101.000
X		99670.000	990.100	0.000	38460.000	552600.000	553700.000	38.980%	1100.000
σ		2862.000	13.180	0.000	504.700	9900.000	3220.000	1.048%	6.984
%RSD		2.871	1.331	0.000	1.312	1.791	0.581	2.690	0.635
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:47:03	253.300	293.500	1636.000	262700.000	263100.000	59.500	135.400	58.410
2	02:47:22	245.600	286.000	1635.000	262800.000	262600.000	59.570	134.600	57.680
3	02:47:42	247.200	287.500	1662.000	258500.000	263500.000	60.290	136.000	57.220
X		248.700	289.000	1644.000	261300.000	263100.000	59.780	135.300	57.770
σ		4.080	3.991	15.130	2452.000	467.000	0.436	0.726	0.600
%RSD		1.640	1.381	0.920	0.938	0.177	0.729	0.536	1.038
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:47:03	58.140	373.800	372.000	66.780	1.143	2.349	0.000	2113.000
2	02:47:22	57.130	372.900	368.800	67.040	1.186	2.152	0.000	2120.000
3	02:47:42	57.530	382.800	374.900	67.130	1.128	2.106	0.000	2119.000
X		57.600	376.500	371.900	66.980	1.152	2.203	0.000	2117.000
σ		0.505	5.481	3.044	0.180	0.030	0.129	0.000	3.953
%RSD		0.877	1.456	0.818	0.268	2.599	5.868	0.000	0.187
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:47:03	103.405%	14.950	17.550	50.520%	0.366	0.184	2.722	2.112
2	02:47:22	103.885%	14.840	17.970	50.215%	0.336	0.211	2.773	2.099
3	02:47:42	102.815%	15.070	18.140	49.061%	0.323	0.171	2.249	1.926
X		103.368%	14.950	17.890	49.932%	0.342	0.189	2.581	2.045
σ		0.536%	0.112	0.301	0.769%	0.022	0.020	0.289	0.104
%RSD		0.519	0.749	1.683	1.540	6.506	10.670	11.200	5.080
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:47:03	61.095%	38.850	0.768	0.850	198.600	197.300	81.746%	82.082%
2	02:47:22	61.427%	39.120	0.817	0.866	200.100	197.700	83.352%	83.480%
3	02:47:42	61.076%	38.820	0.885	0.841	196.300	196.400	83.270%	83.898%
X		61.199%	38.930	0.823	0.852	198.300	197.100	82.789%	83.154%
σ		0.197%	0.167	0.059	0.013	1.938	0.644	0.904%	0.951%
%RSD		0.323	0.429	7.139	1.497	0.977	0.327	1.092	1.144
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:47:03	1.527	1.560	130.900	120.500	124.700	73.280%		
2	02:47:22	1.550	1.555	129.500	119.300	123.800	74.969%		
3	02:47:42	1.548	1.542	129.700	120.400	124.500	75.515%		
X		1.541	1.552	130.000	120.100	124.300	74.588%		
σ		0.013	0.010	0.751	0.666	0.439	1.165%		
%RSD		0.825	0.616	0.578	0.555	0.353	1.562		

180-43149-F-1-A 4/28/2015 2:50:34 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	02:50:53	38.956%	5.883	253.000	247.000	0.000	63730.000	67250.000	68990.000
2	02:51:12	36.120%	7.208	259.800	257.900	0.000	68370.000	70220.000	70240.000
3	02:51:31	33.725%	5.789	276.500	258.400	0.000	66750.000	69810.000	70950.000
X		36.267%	6.294	263.100	254.500	0.000	66280.000	69090.000	70060.000
σ		2.619%	0.794	12.100	6.417	0.000	2355.000	1606.000	994.300
%RSD		7.220	12.610	4.598	2.522	0.000	3.553	2.325	1.419
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:50:53	131600.000	766.700	0.000	35930.000	54690.000	60370.000	60.330%	7840.000
2	02:51:12	128400.000	790.700	0.000	36870.000	55470.000	60430.000	58.031%	7899.000
3	02:51:31	132100.000	748.600	0.000	35940.000	55000.000	61210.000	56.349%	7758.000
X		130700.000	768.700	0.000	36250.000	55050.000	60670.000	58.237%	7832.000
σ		2002.000	21.140	0.000	539.200	395.500	467.700	1.999%	70.710
%RSD		1.531	2.751	0.000	1.488	0.718	0.771	3.432	0.903
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:50:53	472.400	494.200	3073.000	223300.000	225800.000	59.100	159.800	197.100
2	02:51:12	482.200	493.100	3101.000	224900.000	224100.000	58.910	157.300	194.600
3	02:51:31	470.900	486.500	3082.000	225500.000	224900.000	57.480	155.800	200.400
X		475.200	491.300	3085.000	224600.000	224900.000	58.490	157.600	197.400
σ		6.108	4.190	14.350	1133.000	853.300	0.885	1.990	2.899
%RSD		1.285	0.853	0.465	0.504	0.379	1.513	1.262	1.469
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:50:53	191.900	738.000	727.800	76.580	2.600	3.672	0.000	195.200
2	02:51:12	190.600	751.100	737.500	76.910	2.738	3.903	0.000	195.600
3	02:51:31	196.100	756.600	739.800	76.800	2.570	3.991	0.000	196.700
X		192.900	748.600	735.000	76.760	2.636	3.855	0.000	195.900
σ		2.848	9.541	6.337	0.164	0.089	0.165	0.000	0.788
%RSD		1.476	1.275	0.862	0.214	3.387	4.278	0.000	0.402
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:50:53	154.820%	11.710	14.110	66.846%	6.107	6.067	5.955	5.118
2	02:51:12	153.111%	11.760	14.170	65.117%	6.357	6.192	5.984	5.117
3	02:51:31	151.676%	11.910	14.360	65.003%	6.212	6.098	5.951	5.224
X		153.202%	11.790	14.210	65.655%	6.225	6.119	5.963	5.153
σ		1.574%	0.103	0.129	1.033%	0.125	0.065	0.018	0.062
%RSD		1.027	0.877	0.907	1.573	2.015	1.062	0.299	1.196
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:50:53	76.350%	75.000	1.761	1.777	409.800	404.900	100.972%	101.942%
2	02:51:12	76.503%	75.000	1.893	1.837	408.000	404.500	102.370%	102.585%
3	02:51:31	76.088%	75.240	1.810	1.764	409.900	403.400	101.648%	102.940%
X		76.314%	75.080	1.821	1.793	409.200	404.300	101.664%	102.489%
σ		0.210%	0.138	0.067	0.039	1.046	0.778	0.699%	0.506%
%RSD		0.275	0.184	3.680	2.173	0.256	0.193	0.687	0.494
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:50:53	2.377	2.375	575.200	535.100	548.000	88.037%		
2	02:51:12	2.419	2.420	583.000	536.200	550.800	89.586%		
3	02:51:31	2.460	2.496	587.600	547.100	559.600	88.802%		
X		2.419	2.430	582.000	539.500	552.800	88.808%		
σ		0.041	0.061	6.273	6.633	6.033	0.775%		
%RSD		1.710	2.522	1.078	1.230	1.091	0.872		

180-43149-F-2-A 4/28/2015 2:54:23 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:54:42	40.312%	3.703	165.800	159.500	0.000	54080.000	45770.000	45300.000
2	02:55:01	37.943%	4.198	159.700	156.500	0.000	56700.000	47480.000	45630.000
3	02:55:21	38.581%	3.979	147.500	140.000	0.000	51810.000	43600.000	43330.000
X		38.945%	3.960	157.700	152.000	0.000	54200.000	45620.000	44750.000
σ		1.226%	0.249	9.338	10.530	0.000	2447.000	1941.000	1243.000
%RSD		3.148	6.274	5.923	6.926	0.000	4.514	4.255	2.777
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:54:42	86230.000	577.300	0.000	23910.000	33100.000	36800.000	60.522%	5409.000
2	02:55:01	85720.000	598.200	0.000	24060.000	34210.000	36980.000	58.121%	5504.000
3	02:55:21	78440.000	504.800	0.000	23670.000	33840.000	37340.000	55.396%	5586.000
X		83470.000	560.100	0.000	23880.000	33710.000	37040.000	58.013%	5500.000
σ		4357.000	48.990	0.000	195.900	562.400	276.800	2.564%	88.180
%RSD		5.220	8.747	0.000	0.821	1.668	0.747	4.420	1.603
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:54:42	243.100	268.100	1472.000	144400.000	144000.000	40.360	105.800	108.600
2	02:55:01	249.100	275.200	1526.000	147300.000	144800.000	40.410	106.700	107.300
3	02:55:21	273.100	283.200	1576.000	151300.000	149200.000	41.680	111.300	113.300
X		255.100	275.500	1525.000	147700.000	146000.000	40.820	107.900	109.700
σ		15.860	7.564	52.130	3418.000	2824.000	0.747	2.961	3.162
%RSD		6.216	2.745	3.419	2.314	1.935	1.831	2.743	2.881
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:54:42	109.000	457.400	449.100	47.510	1.294	2.816	0.000	140.100
2	02:55:01	106.000	462.200	451.100	48.240	1.325	2.310	0.000	139.700
3	02:55:21	109.800	469.700	460.400	47.640	1.385	2.446	0.000	140.700
X		108.200	463.100	453.500	47.800	1.335	2.524	0.000	140.200
σ		2.006	6.192	6.046	0.388	0.046	0.262	0.000	0.486
%RSD		1.854	1.337	1.333	0.812	3.468	10.380	0.000	0.347
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:54:42	139.674%	10.180	11.880	71.573%	2.561	2.544	3.133	2.673
2	02:55:01	136.677%	10.090	11.990	69.207%	2.681	2.519	3.096	2.675
3	02:55:21	136.818%	10.250	12.010	69.007%	2.612	2.487	2.871	2.609
X		137.723%	10.170	11.960	69.929%	2.618	2.517	3.033	2.652
σ		1.691%	0.077	0.069	1.427%	0.060	0.029	0.141	0.037
%RSD		1.228	0.759	0.575	2.041	2.291	1.145	4.659	1.410
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:54:42	80.236%	54.970	0.743	0.728	243.300	241.900	104.712%	106.187%
2	02:55:01	79.749%	54.640	0.760	0.783	247.600	243.200	104.420%	106.512%
3	02:55:21	79.677%	55.340	0.803	0.820	244.600	243.300	105.339%	107.912%
X		79.888%	54.980	0.769	0.777	245.200	242.800	104.824%	106.870%
σ		0.304%	0.346	0.031	0.047	2.219	0.801	0.470%	0.917%
%RSD		0.381	0.630	4.077	5.988	0.905	0.330	0.448	0.858
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:54:42	1.725	1.680	234.600	213.500	228.700	93.576%		
2	02:55:01	1.663	1.689	232.400	212.800	226.900	96.133%		
3	02:55:21	1.727	1.713	235.400	214.200	229.700	95.471%		
X		1.705	1.694	234.100	213.500	228.400	95.060%		
σ		0.036	0.017	1.544	0.700	1.436	1.327%		
%RSD		2.135	1.020	0.660	0.328	0.629	1.396		

CCV 1533080 4/28/2015 3:01:29 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	03:01:29	58.496%	101.300	94.170	93.410	0.000	50750.000	50150.000	49300.000
2	03:01:49	53.543%	106.700	99.150	94.980	0.000	50110.000	50640.000	51030.000
3	03:02:08	55.526%	101.300	90.540	88.720	0.000	48590.000	48010.000	47760.000
x		55.855%	103.132%	94.620%	92.372%	0.000	99.631%	99.205%	98.729%
σ		2.493%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		4.463	3.019	4.566	3.529	0.000	2.218	2.816	3.310
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:01:29	515.200	4757.000	0.000	51630.000	46680.000	51220.000	74.079%	94.570
2	03:01:49	526.600	4663.000	0.000	53250.000	49260.000	54210.000	69.218%	99.090
3	03:02:08	472.100	4465.000	0.000	51910.000	48420.000	52980.000	67.994%	97.710
x		100.926%	92.571%	0.000	104.523%	96.238%	105.613%	70.430%	97.121%
σ		n/a	n/a	0.000	n/a	n/a	n/a	3.218%	n/a
%RSD		5.701	3.217	0.000	1.657	2.741	2.848	4.569	2.386
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:01:29	93.390	93.930	504.600	24990.000	24740.000	91.310	90.080	91.670
2	03:01:49	96.080	98.240	528.800	26490.000	25830.000	94.160	92.760	95.290
3	03:02:08	96.110	98.310	534.200	26440.000	26300.000	95.470	94.490	94.500
x		95.197%	96.826%	104.513%	103.903%	102.499%	93.650%	92.443%	93.821%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.640	2.586	3.014	3.286	3.108	2.270	2.399	2.030
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:01:29	94.140	100.400	101.000	99.780	106.700	106.300	0.000	101.500
2	03:01:49	95.400	104.100	104.500	102.400	108.300	106.300	0.000	104.000
3	03:02:08	95.220	104.600	103.900	101.900	107.500	107.600	0.000	103.700
x		94.919%	103.021%	103.140%	101.365%	107.490%	106.754%	0.000	103.046%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.720	2.216	1.794	1.387	0.742	0.687	0.000	1.314
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:01:29	83.161%	93.570	95.230	82.607%	97.240	96.770	101.000	99.520
2	03:01:49	81.643%	95.520	97.490	79.723%	98.080	97.030	102.500	102.600
3	03:02:08	81.515%	97.300	99.360	78.224%	99.170	97.680	104.400	103.000
x		82.106%	95.461%	97.363%	80.184%	98.161%	97.159%	102.628%	101.725%
σ		0.916%	n/a	n/a	2.228%	n/a	n/a	n/a	n/a
%RSD		1.115	1.954	2.124	2.778	0.987	0.480	1.674	1.883
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:01:29	87.634%	96.330	98.120	98.090	98.150	97.140	96.333%	97.768%
2	03:01:49	86.498%	98.470	100.500	101.500	99.110	97.860	97.934%	98.486%
3	03:02:08	86.971%	99.350	101.600	101.000	99.010	98.160	98.947%	101.197%
x		87.034%	98.051%	100.062%	100.197%	98.754%	97.721%	97.738%	99.150%
σ		0.571%	n/a	n/a	n/a	n/a	n/a	1.318%	1.809%
%RSD		0.656	1.586	1.776	1.845	0.535	0.534	1.349	1.824
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:01:29	98.470	102.700	105.700	99.620	99.780	101.208%		
2	03:01:49	100.600	104.000	108.300	102.100	102.200	100.013%		
3	03:02:08	101.400	106.200	109.900	104.000	103.600	101.028%		
x		100.158%	104.287%	107.978%	101.918%	101.858%	100.750%		
σ		n/a	n/a	n/a	n/a	n/a	0.644%		
%RSD		1.527	1.681	1.933	2.170	1.905	0.639		

CCB7 4/28/2015 3:08:11 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:08:30	89.657%	-0.021	0.343	0.463	0.000	9.752	11.080	10.820	
2	03:08:49	85.863%	-0.043	0.442	0.273	0.000	7.457	7.909	7.867	
3	03:09:08	85.875%	-0.035	0.281	0.283	0.000	4.676	5.313	5.468	
X		87.132%	-0.033	0.356	0.340	0.000	7.295	8.100	8.053	
		σ	0.011	0.081	0.107	0.000	2.542	2.887	2.683	
		%RSD	2.510	33.060	22.810	31.440	0.000	34.850	35.640	33.310
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:08:30	14.010	-231.600	0.000	4.571	56.980	72.940	91.059%	0.248	
2	03:08:49	10.560	-232.200	0.000	4.038	48.450	55.020	88.225%	0.224	
3	03:09:08	5.466	-233.300	0.000	0.006	30.380	29.240	88.985%	0.107	
X		10.010	-232.400	0.000	2.872	45.270	52.400	89.423%	0.193	
		σ	0.867	0.000	2.496	13.590	21.970	1.467%	0.076	
		%RSD	42.940	0.373	0.000	86.920	30.010	41.930	1.640	39.220
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:08:30	0.062	0.054	0.559	41.450	44.060	0.017	0.022	-0.035	
2	03:08:49	0.054	0.033	0.438	34.040	33.650	0.014	0.005	-0.034	
3	03:09:08	0.011	0.015	0.253	15.330	18.750	0.007	-0.002	-0.044	
X		0.042	0.034	0.417	30.280	32.160	0.013	0.008	-0.038	
		σ	0.020	0.154	13.460	12.720	0.005	0.013	0.006	
		%RSD	64.010	57.630	36.910	44.460	39.570	40.440	148.700	14.900
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:08:30	-0.018	-0.137	-0.208	0.052	0.093	0.050	0.000	0.565	
2	03:08:49	0.017	-0.248	-0.234	0.027	0.076	-0.010	0.000	0.413	
3	03:09:08	-0.053	-0.317	-0.301	-0.012	0.169	-0.099	0.000	0.216	
X		-0.018	-0.234	-0.248	0.022	0.113	-0.020	0.000	0.398	
		σ	0.091	0.048	0.032	0.050	0.075	0.000	0.175	
		%RSD	196.400	38.930	19.270	144.000	43.830	382.200	0.000	43.940
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:08:30	92.995%	0.184	0.182	96.837%	-0.069	-0.064	0.029	0.017	
2	03:08:49	94.434%	0.164	0.163	96.491%	-0.078	-0.075	0.033	0.023	
3	03:09:08	94.936%	0.097	0.137	97.405%	-0.084	-0.073	0.027	0.021	
X		94.122%	0.148	0.160	96.911%	-0.077	-0.071	0.029	0.021	
		σ	0.046	0.022	0.461%	0.007	0.006	0.003	0.003	
		%RSD	1.070	30.880	13.940	0.476	9.650	8.719	10.240	14.550
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:08:30	101.073%	-0.178	0.020	0.004	0.101	0.102	107.629%	108.865%	
2	03:08:49	101.848%	-0.196	0.010	-0.001	0.059	0.070	110.190%	111.278%	
3	03:09:08	102.628%	-0.198	-0.004	-0.004	0.038	0.048	112.652%	112.702%	
X		101.850%	-0.191	0.008	-0.000	0.066	0.074	110.157%	110.948%	
		σ	0.777%	0.011	0.012	0.004	0.032	0.027	2.512%	1.940%
		%RSD	0.763	5.729	143.300	7774.000	49.170	36.780	2.280	1.748
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	03:08:30	0.028	0.024	0.032	0.050	0.042	108.233%			
2	03:08:49	0.028	0.027	0.025	0.025	0.024	109.574%			
3	03:09:08	0.023	0.027	0.011	0.010	0.013	109.823%			
X		0.026	0.026	0.023	0.029	0.026	109.210%			
		σ	0.003	0.002	0.011	0.020	0.015	0.856%		
		%RSD	11.700	6.430	46.930	70.760	55.730	0.783		

180-43149-F-3-A 4/28/2015 3:12:02 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	03:12:21	44.964%	6.025	228.900	228.000	0.000	60460.000	61660.000	62010.000
2	03:12:40	44.938%	6.201	229.200	224.800	0.000	60590.000	61260.000	60950.000
3	03:13:00	41.561%	6.101	226.200	220.300	0.000	60130.000	61720.000	60880.000
X		43.821%	6.109	228.100	224.400	0.000	60390.000	61550.000	61280.000
σ		1.957%	0.088	1.633	3.883	0.000	238.400	247.400	633.200
%RSD		4.467	1.447	0.716	1.731	0.000	0.395	0.402	1.033
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:12:21	127100.000	740.500	0.000	32980.000	33530.000	37240.000	67.992%	7254.000
2	03:12:40	123000.000	723.900	0.000	33390.000	34370.000	37800.000	64.353%	7340.000
3	03:13:00	122900.000	696.500	0.000	33300.000	34170.000	37530.000	61.928%	7419.000
X		124300.000	720.300	0.000	33220.000	34020.000	37520.000	64.758%	7338.000
σ		2383.000	22.250	0.000	213.600	439.300	280.200	3.052%	82.540
%RSD		1.917	3.089	0.000	0.643	1.291	0.747	4.713	1.125
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:12:21	424.400	468.600	2612.000	239400.000	247600.000	71.320	194.200	219.200
2	03:12:40	429.000	470.000	2648.000	243200.000	247700.000	71.490	196.000	223.400
3	03:13:00	427.400	472.000	2634.000	240400.000	247800.000	72.460	190.700	216.700
X		426.900	470.200	2631.000	241000.000	247700.000	71.760	193.600	219.800
σ		2.346	1.703	17.870	1979.000	102.100	0.616	2.712	3.359
%RSD		0.549	0.362	0.679	0.821	0.041	0.859	1.401	1.529
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:12:21	223.600	1023.000	1034.000	96.180	5.593	7.216	0.000	362.300
2	03:12:40	225.000	1038.000	1043.000	98.250	5.595	7.784	0.000	369.700
3	03:13:00	220.100	1039.000	1044.000	97.360	5.410	7.562	0.000	377.900
X		222.900	1033.000	1040.000	97.260	5.533	7.520	0.000	370.000
σ		2.539	8.896	5.524	1.040	0.106	0.286	0.000	7.772
%RSD		1.139	0.861	0.531	1.069	1.913	3.805	0.000	2.101
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:12:21	0.000	19.170	19.640	73.254%	4.221	4.056	8.188	7.394
2	03:12:40	0.000	19.880	19.690	72.492%	4.241	4.125	8.167	7.419
3	03:13:00	0.000	19.640	19.980	70.449%	4.214	4.120	7.742	7.228
X		0.000	19.560	19.770	72.065%	4.225	4.100	8.032	7.347
σ		0.000	0.364	0.183	1.451%	0.014	0.039	0.252	0.104
%RSD		0.000	1.861	0.928	2.013	0.337	0.941	3.133	1.412
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:12:21	81.131%	68.530	1.430	1.409	371.900	368.800	104.076%	104.278%
2	03:12:40	80.462%	69.530	1.478	1.457	373.700	368.400	105.014%	107.118%
3	03:13:00	80.727%	67.850	1.390	1.375	369.600	366.900	106.412%	107.132%
X		80.773%	68.640	1.433	1.414	371.700	368.000	105.167%	106.176%
σ		0.337%	0.844	0.044	0.041	2.049	1.003	1.175%	1.644%
%RSD		0.417	1.229	3.064	2.892	0.551	0.273	1.118	1.548
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:12:21	2.232	2.267	428.000	397.800	407.800	91.581%		
2	03:12:40	2.416	2.322	446.100	410.800	419.000	89.769%		
3	03:13:00	2.304	2.333	439.500	403.400	416.500	91.929%		
X		2.317	2.307	437.900	404.000	414.400	91.093%		
σ		0.093	0.036	9.143	6.555	5.905	1.160%		
%RSD		3.999	1.548	2.088	1.622	1.425	1.273		

180-43149-F-4-A 4/28/2015 3:15:50 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	03:16:09	44.507%	5.171	183.400	183.400	0.000	58300.000	50440.000	50340.000
2	03:16:28	41.925%	5.453	167.700	169.800	0.000	53850.000	48530.000	49040.000
3	03:16:48	39.141%	5.859	178.900	173.800	0.000	55630.000	49900.000	48610.000
X		41.857%	5.494	176.700	175.700	0.000	55930.000	49620.000	49330.000
σ		2.683%	0.346	8.048	6.998	0.000	2239.000	984.600	900.400
%RSD		6.411	6.302	4.556	3.984	0.000	4.003	1.984	1.825
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:16:09	106500.000	739.000	0.000	28510.000	29550.000	32840.000	62.656%	6540.000
2	03:16:28	104200.000	687.300	0.000	28510.000	30080.000	33110.000	60.752%	6537.000
3	03:16:48	101900.000	711.900	0.000	28560.000	29780.000	33200.000	59.788%	6613.000
X		104200.000	712.700	0.000	28530.000	29800.000	33050.000	61.066%	6563.000
σ		2328.000	25.850	0.000	31.020	262.200	188.500	1.460%	42.990
%RSD		2.235	3.627	0.000	0.109	0.880	0.571	2.390	0.655
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:16:09	377.900	413.000	1852.000	200600.000	201900.000	64.060	175.700	210.800
2	03:16:28	383.000	421.700	1860.000	205700.000	207900.000	63.640	175.900	212.200
3	03:16:48	382.200	423.100	1894.000	205900.000	207800.000	65.090	177.700	209.200
X		381.000	419.300	1868.000	204100.000	205900.000	64.260	176.400	210.700
σ		2.768	5.448	22.400	3019.000	3430.000	0.745	1.098	1.496
%RSD		0.726	1.299	1.199	1.480	1.666	1.160	0.622	0.710
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:16:09	211.900	950.600	966.200	93.930	4.917	6.435	0.000	308.800
2	03:16:28	214.100	968.300	971.100	95.270	4.959	6.649	0.000	318.600
3	03:16:48	212.800	965.200	985.400	97.040	4.768	6.901	0.000	322.400
X		213.000	961.300	974.200	95.410	4.881	6.662	0.000	316.600
σ		1.119	9.477	9.950	1.561	0.100	0.234	0.000	7.050
%RSD		0.526	0.986	1.021	1.636	2.055	3.504	0.000	2.227
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:16:09	0.000	15.800	16.070	71.556%	4.080	4.020	5.622	4.979
2	03:16:28	0.000	15.850	16.320	70.277%	4.171	4.044	5.323	4.859
3	03:16:48	0.000	16.120	16.500	68.922%	4.163	4.052	5.507	4.983
X		0.000	15.920	16.300	70.252%	4.138	4.039	5.484	4.940
σ		0.000	0.173	0.218	1.317%	0.050	0.017	0.151	0.071
%RSD		0.000	1.089	1.335	1.875	1.211	0.411	2.758	1.431
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:16:09	79.883%	64.030	1.153	1.122	314.000	311.400	103.537%	104.594%
2	03:16:28	80.142%	63.290	1.144	1.117	311.800	306.700	105.052%	106.353%
3	03:16:48	79.723%	63.420	1.081	1.104	315.200	309.900	105.672%	105.674%
X		79.916%	63.580	1.126	1.114	313.700	309.300	104.754%	105.540%
σ		0.211%	0.394	0.039	0.009	1.741	2.414	1.098%	0.887%
%RSD		0.264	0.620	3.498	0.803	0.555	0.780	1.048	0.840
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:16:09	2.083	2.124	377.200	342.700	354.700	92.825%		
2	03:16:28	2.130	2.244	381.000	351.200	361.200	92.986%		
3	03:16:48	2.222	2.170	380.500	351.400	359.500	93.280%		
X		2.145	2.180	379.500	348.400	358.500	93.030%		
σ		0.071	0.060	2.057	4.972	3.391	0.231%		
%RSD		3.309	2.774	0.542	1.427	0.946	0.248		

MB 180-139089/1-A 4/28/2015 3:23:07 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	03:23:26	77.442%	-0.035	0.319	0.392	0.000	6.732	8.390	8.773
2	03:23:46	72.120%	-0.043	0.567	0.360	0.000	3.852	6.752	7.208
3	03:24:05	76.008%	-0.043	0.297	0.338	0.000	0.684	3.367	3.628
X		75.190%	-0.040	0.394	0.363	0.000	3.756	6.169	6.536
σ		2.754%	0.005	0.150	0.027	0.000	3.025	2.561	2.637
%RSD		3.662	11.900	38.090	7.394	0.000	80.550	41.520	40.350
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:23:26	16.330	-229.300	0.000	3.007	39.590	36.700	87.982%	0.822
2	03:23:46	13.320	-229.600	0.000	1.057	33.640	26.670	85.018%	0.857
3	03:24:05	6.922	-231.100	0.000	-0.936	24.080	12.950	84.448%	0.363
X		12.190	-230.000	0.000	1.043	32.430	25.440	85.816%	0.681
σ		4.804	0.946	0.000	1.972	7.821	11.920	1.897%	0.276
%RSD		39.410	0.411	0.000	189.100	24.110	46.850	2.211	40.520
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:23:26	0.028	0.195	0.488	47.030	44.950	0.012	0.035	-0.053
2	03:23:46	-0.124	0.151	0.375	38.990	36.720	0.011	0.015	-0.043
3	03:24:05	-0.093	0.163	0.208	18.850	20.800	0.004	0.007	-0.101
X		-0.063	0.170	0.357	34.960	34.150	0.009	0.019	-0.066
σ		0.080	0.023	0.141	14.520	12.280	0.004	0.014	0.031
%RSD		128.100	13.260	39.500	41.530	35.940	43.610	75.770	46.920
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:23:26	-0.034	-0.596	-0.530	0.048	0.158	-0.004	0.000	0.323
2	03:23:46	-0.027	-0.491	-0.509	0.017	0.377	0.159	0.000	0.227
3	03:24:05	-0.035	-0.726	-0.614	-0.055	0.231	0.073	0.000	0.135
X		-0.032	-0.604	-0.551	0.003	0.255	0.076	0.000	0.228
σ		0.004	0.117	0.056	0.053	0.111	0.081	0.000	0.094
%RSD		14.130	19.410	10.150	1649.000	43.660	106.900	0.000	41.130
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:23:26	94.476%	0.007	0.029	95.785%	-0.088	-0.085	-0.001	-0.019
2	03:23:46	94.790%	0.012	0.029	95.053%	-0.086	-0.087	-0.040	-0.032
3	03:24:05	94.664%	0.020	0.015	95.795%	-0.089	-0.088	-0.025	-0.043
X		94.643%	0.013	0.025	95.544%	-0.088	-0.087	-0.022	-0.031
σ		0.158%	0.006	0.008	0.426%	0.001	0.002	0.020	0.012
%RSD		0.167	49.180	33.840	0.445	1.456	2.004	90.100	39.110
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:23:26	102.360%	2.559	-0.044	-0.041	0.085	0.077	111.835%	113.091%
2	03:23:46	103.802%	2.696	-0.034	-0.046	0.024	0.053	114.200%	114.391%
3	03:24:05	103.183%	2.540	-0.041	-0.044	0.029	0.014	115.413%	116.385%
X		103.115%	2.599	-0.040	-0.043	0.046	0.048	113.816%	114.622%
σ		0.723%	0.085	0.005	0.002	0.034	0.032	1.820%	1.659%
%RSD		0.701	3.276	13.430	5.759	73.210	65.780	1.599	1.448
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:23:26	0.010	0.009	0.061	0.049	0.055	115.294%		
2	03:23:46	0.009	0.009	0.034	0.032	0.038	110.607%		
3	03:24:05	0.003	0.009	0.010	0.024	0.016	109.509%		
X		0.007	0.009	0.035	0.035	0.036	111.803%		
σ		0.004	0.000	0.025	0.013	0.020	3.073%		
%RSD		52.900	3.567	72.360	37.300	54.940	2.748		

LCS 180-139089/2-A 4/28/2015 3:26:56 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:27:15	42.133%	42.400	816.300	784.600	0.000	40480.000	40260.000	40450.000
2	03:27:34	40.461%	41.750	794.700	806.200	0.000	42560.000	40830.000	42270.000
3	03:27:53	36.703%	40.930	811.200	798.400	0.000	41210.000	40210.000	41430.000
X		39.765%	41.690	807.400	796.400	0.000	41420.000	40430.000	41380.000
σ		2.781%	0.734	11.310	10.930	0.000	1052.000	344.800	913.700
%RSD		6.993	1.761	1.401	1.372	0.000	2.539	0.853	2.208
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:27:15	1638.000	6373.000	0.000	48800.000	47760.000	52260.000	43.702%	958.500
2	03:27:34	1746.000	6492.000	0.000	50130.000	49550.000	53810.000	40.774%	952.100
3	03:27:53	1685.000	6463.000	0.000	49520.000	49190.000	54230.000	40.931%	956.000
X		1690.000	6443.000	0.000	49490.000	48830.000	53430.000	41.803%	955.500
σ		53.800	62.290	0.000	665.900	948.300	1038.000	1.647%	3.221
%RSD		3.184	0.967	0.000	1.346	1.942	1.943	3.940	0.337
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:27:15	510.600	191.100	538.100	1123.000	1103.000	495.700	456.900	222.700
2	03:27:34	498.500	188.100	528.500	1096.000	1090.000	487.400	444.200	223.600
3	03:27:53	494.700	190.400	531.700	1077.000	1064.000	484.300	431.300	215.200
X		501.300	189.900	532.800	1099.000	1086.000	489.100	444.100	220.500
σ		8.285	1.549	4.921	23.470	19.880	5.927	12.770	4.615
%RSD		1.653	0.816	0.924	2.136	1.832	1.212	2.876	2.093
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:27:15	222.100	442.400	445.600	32.700	8.805	8.892	0.000	1104.000
2	03:27:34	227.800	450.900	457.800	33.290	8.399	9.102	0.000	1105.000
3	03:27:53	220.500	449.600	453.500	34.120	8.972	8.870	0.000	1120.000
X		223.500	447.600	452.300	33.370	8.726	8.955	0.000	1110.000
σ		3.827	4.542	6.201	0.711	0.295	0.128	0.000	8.675
%RSD		1.712	1.015	1.371	2.131	3.377	1.431	0.000	0.782
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:27:15	55.717%	1022.000	1112.000	59.570%	45.820	45.340	46.540	37.430
2	03:27:34	55.404%	1025.000	1107.000	59.288%	45.660	44.840	46.370	36.010
3	03:27:53	54.397%	1028.000	1119.000	57.764%	45.950	45.320	46.870	37.030
X		55.172%	1025.000	1113.000	58.874%	45.810	45.160	46.600	36.820
σ		0.689%	3.174	6.046	0.971%	0.144	0.284	0.254	0.733
%RSD		1.250	0.310	0.543	1.650	0.315	0.629	0.545	1.990
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:27:15	69.205%	2092.000	488.000	453.000	1960.000	1945.000	89.015%	92.075%
2	03:27:34	69.199%	2078.000	480.600	458.500	1958.000	1948.000	90.305%	93.551%
3	03:27:53	68.336%	2073.000	457.300	455.200	1953.000	1937.000	90.181%	92.620%
X		68.913%	2081.000	475.300	455.600	1957.000	1944.000	89.834%	92.748%
σ		0.500%	9.708	16.040	2.763	3.417	5.705	0.711%	0.746%
%RSD		0.726	0.467	3.375	0.607	0.175	0.293	0.792	0.805
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:27:15	48.840	50.000	20.570	20.390	20.310	88.854%		
2	03:27:34	50.360	51.370	20.760	20.940	20.690	88.514%		
3	03:27:53	49.900	51.050	20.750	20.780	20.540	89.657%		
X		49.700	50.810	20.690	20.700	20.510	89.008%		
σ		0.778	0.720	0.105	0.283	0.193	0.587%		
%RSD		1.566	1.418	0.507	1.368	0.939	0.659		

180-42906-C-1-A 4/28/2015 3:30:44 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:31:03	44.731%	1.350	90.070	91.250	0.000	33490.000	11480.000	11520.000	
2	03:31:22	42.701%	1.689	90.340	90.230	0.000	32350.000	11330.000	11520.000	
3	03:31:42	41.071%	1.617	88.210	89.450	0.000	32980.000	11790.000	11880.000	
X		42.834%	1.552	89.540	90.310	0.000	32940.000	11530.000	11640.000	
		σ	1.833%	0.179	1.158	0.903	0.000	570.000	233.700	210.400
		%RSD	4.280	11.510	1.293	1.000	0.000	1.731	2.026	1.807
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:31:03	24200.000	1581.000	0.000	10970.000	34470.000	38570.000	50.791%	403.400	
2	03:31:22	23930.000	1544.000	0.000	11370.000	36050.000	39790.000	47.678%	400.300	
3	03:31:42	24660.000	1591.000	0.000	11680.000	37440.000	41430.000	45.853%	410.300	
X		24260.000	1572.000	0.000	11340.000	35990.000	39930.000	48.107%	404.600	
		σ	366.600	24.900	0.000	355.200	1489.000	1436.000	2.497%	5.109
		%RSD	1.511	1.584	0.000	3.132	4.138	3.595	5.190	1.262
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:31:03	86.670	23.330	355.500	32390.000	32110.000	18.650	21.360	27.410	
2	03:31:22	87.870	23.910	364.300	34390.000	33640.000	18.870	22.020	28.830	
3	03:31:42	89.100	24.640	372.200	34560.000	34230.000	19.470	21.210	28.370	
X		87.880	23.960	364.000	33780.000	33320.000	19.000	21.530	28.210	
		σ	1.215	0.656	8.331	1208.000	1095.000	0.422	0.432	0.724
		%RSD	1.383	2.740	2.289	3.576	3.285	2.223	2.007	2.567
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:31:03	27.840	117.300	117.500	28.970	1.836	2.933	0.000	174.600	
2	03:31:22	28.140	118.600	121.800	29.510	2.053	2.989	0.000	180.000	
3	03:31:42	28.580	121.800	125.300	29.460	2.034	3.102	0.000	181.500	
X		28.190	119.200	121.500	29.310	1.974	3.008	0.000	178.700	
		σ	0.377	2.336	3.902	0.299	0.120	0.086	0.000	3.626
		%RSD	1.336	1.959	3.212	1.019	6.088	2.859	0.000	2.029
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:31:03	0.000	10.850	10.940	63.922%	0.161	0.113	1.789	1.623	
2	03:31:22	0.000	10.540	10.630	64.064%	0.149	0.119	1.822	1.636	
3	03:31:42	0.000	10.590	10.520	64.673%	0.136	0.117	1.956	1.647	
X		0.000	10.660	10.700	64.219%	0.149	0.116	1.856	1.635	
		σ	0.000	0.165	0.215	0.399%	0.013	0.003	0.088	0.012
		%RSD	0.000	1.543	2.011	0.621	8.469	2.862	4.757	0.734
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:31:03	73.527%	33.960	1.062	0.956	144.700	142.800	97.879%	100.346%	
2	03:31:22	74.535%	33.690	0.985	1.082	144.600	143.400	99.534%	102.066%	
3	03:31:42	75.372%	33.580	1.022	0.972	146.000	142.900	100.097%	103.046%	
X		74.478%	33.740	1.023	1.003	145.100	143.000	99.170%	101.819%	
		σ	0.924%	0.196	0.039	0.068	0.756	0.347	1.153%	1.367%
		%RSD	1.241	0.580	3.764	6.821	0.521	0.243	1.163	1.343
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	03:31:03	1.715	1.709	43.500	39.660	41.170	95.464%			
2	03:31:22	1.737	1.782	44.690	40.940	42.360	94.384%			
3	03:31:42	1.741	1.745	44.260	40.650	42.340	96.391%			
X		1.731	1.745	44.150	40.420	41.960	95.413%			
		σ	0.014	0.036	0.600	0.667	0.681	1.005%		
		%RSD	0.812	2.082	1.360	1.651	1.622	1.053		

180-42906-C-2-A 4/28/2015 3:34:32 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	03:34:52	42.831%	1.886	116.200	116.300	0.000	18660.000	9722.000	9623.000
2	03:35:11	43.079%	1.489	112.900	107.900	0.000	16920.000	8934.000	9164.000
3	03:35:30	39.036%	1.688	116.400	110.900	0.000	17190.000	9153.000	9142.000
x		41.648%	1.688	115.200	111.700	0.000	17590.000	9270.000	9309.000
σ		2.266%	0.198	1.951	4.265	0.000	938.200	406.700	271.300
%RSD		5.441	11.750	1.694	3.817	0.000	5.333	4.387	2.915
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:34:52	30290.000	2084.000	0.000	10930.000	79530.000	87180.000	45.516%	523.400
2	03:35:11	29800.000	2015.000	0.000	10300.000	77980.000	86700.000	44.149%	509.400
3	03:35:30	29180.000	1948.000	0.000	10650.000	79610.000	88490.000	43.279%	520.600
x		29760.000	2015.000	0.000	10630.000	79040.000	87460.000	44.315%	517.800
σ		558.300	67.870	0.000	316.200	922.700	923.600	1.128%	7.428
%RSD		1.876	3.368	0.000	2.975	1.167	1.056	2.545	1.435
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:34:52	135.700	32.180	563.200	42870.000	41670.000	26.810	34.480	36.320
2	03:35:11	132.000	32.270	564.100	42940.000	42410.000	26.800	34.770	36.100
3	03:35:30	135.900	32.360	570.500	42990.000	41740.000	26.050	33.940	35.670
x		134.500	32.270	565.900	42930.000	41940.000	26.550	34.400	36.030
σ		2.169	0.089	3.941	59.240	407.700	0.436	0.419	0.326
%RSD		1.612	0.276	0.696	0.138	0.972	1.641	1.220	0.905
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:34:52	35.740	237.600	235.400	40.790	14.910	15.100	0.000	230.300
2	03:35:11	35.300	242.000	237.700	40.580	15.110	16.070	0.000	231.700
3	03:35:30	35.030	239.300	238.100	39.600	14.740	14.640	0.000	232.000
x		35.360	239.600	237.100	40.320	14.920	15.270	0.000	231.300
σ		0.359	2.193	1.459	0.637	0.184	0.733	0.000	0.891
%RSD		1.015	0.915	0.615	1.580	1.234	4.798	0.000	0.385
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:34:52	99.109%	9.276	10.860	62.871%	0.990	0.883	4.352	3.952
2	03:35:11	97.582%	9.484	10.820	61.451%	0.893	0.875	4.272	4.066
3	03:35:30	97.605%	9.492	10.760	61.758%	0.946	0.866	4.494	4.178
x		98.098%	9.417	10.810	62.026%	0.943	0.875	4.373	4.065
σ		0.875%	0.123	0.047	0.747%	0.049	0.009	0.113	0.113
%RSD		0.892	1.303	0.438	1.204	5.176	0.990	2.580	2.771
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:34:52	72.508%	36.780	1.504	1.428	646.500	643.000	95.902%	96.637%
2	03:35:11	71.622%	38.040	1.513	1.529	653.400	650.000	96.260%	98.282%
3	03:35:30	72.955%	37.250	1.507	1.501	647.000	647.300	96.790%	99.495%
x		72.362%	37.360	1.508	1.486	649.000	646.800	96.318%	98.138%
σ		0.678%	0.639	0.004	0.052	3.834	3.560	0.447%	1.434%
%RSD		0.937	1.710	0.295	3.513	0.591	0.550	0.464	1.462
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:34:52	1.709	1.758	68.890	63.510	65.320	88.812%		
2	03:35:11	1.770	1.823	68.830	63.000	65.360	89.987%		
3	03:35:30	1.708	1.770	67.380	62.900	64.590	92.336%		
x		1.729	1.784	68.370	63.140	65.090	90.378%		
σ		0.036	0.035	0.851	0.330	0.431	1.795%		
%RSD		2.054	1.934	1.244	0.522	0.663	1.986		

180-42906-C-4-A 4/28/2015 3:38:21 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	03:38:40	36.999%	2.338	106.200	100.800	0.000	45940.000	22350.000	23130.000
2	03:39:00	35.179%	1.982	105.400	104.400	0.000	47370.000	23070.000	23590.000
3	03:39:19	34.923%	2.081	99.790	96.490	0.000	45530.000	21920.000	22170.000
X		35.700%	2.134	103.800	100.600	0.000	46280.000	22450.000	22960.000
σ		1.131%	0.184	3.495	3.956	0.000	967.600	582.000	726.100
%RSD		3.169	8.622	3.367	3.934	0.000	2.091	2.593	3.162
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:38:40	36420.000	2037.000	0.000	16340.000	128900.000	144100.000	41.369%	439.300
2	03:39:00	37890.000	2026.000	0.000	16570.000	128600.000	143300.000	40.479%	428.900
3	03:39:19	35450.000	1880.000	0.000	16320.000	127700.000	141100.000	37.599%	441.700
X		36590.000	1981.000	0.000	16410.000	128400.000	142800.000	39.815%	436.700
σ		1225.000	87.750	0.000	140.400	631.900	1573.000	1.970%	6.785
%RSD		3.348	4.429	0.000	0.855	0.492	1.101	4.949	1.554
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:38:40	111.300	32.860	609.600	48230.000	47380.000	29.040	29.050	33.990
2	03:39:00	108.200	32.240	596.700	46680.000	45740.000	27.660	28.830	33.110
3	03:39:19	108.400	31.630	615.100	47630.000	46520.000	28.770	30.070	34.380
X		109.300	32.240	607.100	47510.000	46550.000	28.490	29.320	33.830
σ		1.771	0.619	9.435	784.000	820.600	0.730	0.664	0.653
%RSD		1.620	1.918	1.554	1.650	1.763	2.562	2.267	1.931
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:38:40	34.500	133.500	133.000	39.370	2.480	3.840	0.000	406.200
2	03:39:00	34.430	130.600	132.800	39.120	2.129	3.340	0.000	406.400
3	03:39:19	35.440	133.600	136.200	40.740	2.297	3.438	0.000	417.700
X		34.790	132.600	134.000	39.740	2.302	3.539	0.000	410.100
σ		0.566	1.725	1.941	0.874	0.176	0.265	0.000	6.568
%RSD		1.626	1.301	1.449	2.200	7.632	7.489	0.000	1.601
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:38:40	0.000	5.227	5.573	56.392%	0.208	0.130	2.048	1.773
2	03:39:00	0.000	5.179	5.399	56.647%	0.223	0.150	2.076	1.655
3	03:39:19	0.000	5.344	5.387	54.890%	0.202	0.140	1.830	1.559
X		0.000	5.250	5.453	55.976%	0.211	0.140	1.985	1.662
σ		0.000	0.085	0.105	0.949%	0.011	0.010	0.135	0.107
%RSD		0.000	1.623	1.917	1.696	5.167	7.436	6.804	6.447
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:38:40	66.494%	37.740	1.025	1.036	141.800	139.400	90.857%	92.997%
2	03:39:00	66.907%	37.720	0.974	0.983	142.100	139.200	92.486%	95.220%
3	03:39:19	66.979%	37.470	0.999	1.018	139.000	139.300	92.289%	94.067%
X		66.793%	37.650	0.999	1.012	141.000	139.300	91.877%	94.095%
σ		0.262%	0.149	0.026	0.027	1.711	0.137	0.889%	1.112%
%RSD		0.392	0.395	2.585	2.689	1.213	0.099	0.968	1.182
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:38:40	2.450	2.494	55.950	52.190	53.640	83.335%		
2	03:39:00	2.455	2.544	56.910	52.140	53.950	85.450%		
3	03:39:19	2.440	2.535	56.430	51.770	53.840	85.873%		
X		2.449	2.524	56.430	52.030	53.810	84.886%		
σ		0.008	0.027	0.480	0.232	0.153	1.359%		
%RSD		0.312	1.072	0.852	0.445	0.285	1.601		

180-42906-C-5-A 4/28/2015 3:42:10 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	03:42:30	39.674%	1.850	100.800	98.570	0.000	57960.000	26930.000	27030.000
2	03:42:49	35.527%	2.079	100.600	102.600	0.000	54690.000	25920.000	26710.000
3	03:43:08	36.539%	1.955	101.600	103.500	0.000	54920.000	25310.000	26020.000
X		37.247%	1.961	101.000	101.500	0.000	55850.000	26050.000	26590.000
σ		2.162%	0.115	0.550	2.619	0.000	1825.000	818.900	517.200
%RSD		5.805	5.849	0.545	2.580	0.000	3.267	3.143	1.945
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:42:30	37950.000	2998.000	0.000	17940.000	144500.000	159200.000	40.502%	435.600
2	03:42:49	38520.000	2979.000	0.000	18070.000	146200.000	161600.000	38.658%	436.300
3	03:43:08	37450.000	2767.000	0.000	17820.000	144800.000	159900.000	38.251%	425.400
X		37970.000	2915.000	0.000	17940.000	145200.000	160200.000	39.137%	432.400
σ		537.200	128.300	0.000	129.300	877.900	1207.000	1.199%	6.075
%RSD		1.415	4.402	0.000	0.720	0.605	0.753	3.064	1.405
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:42:30	123.400	32.090	583.400	43780.000	42600.000	25.310	26.950	27.680
2	03:42:49	119.200	31.220	574.100	42850.000	41860.000	24.620	26.430	27.020
3	03:43:08	122.700	31.990	577.900	43710.000	42820.000	25.190	26.620	27.820
X		121.800	31.770	578.400	43450.000	42430.000	25.040	26.670	27.510
σ		2.279	0.474	4.681	518.300	502.500	0.371	0.267	0.425
%RSD		1.871	1.493	0.809	1.193	1.184	1.481	1.002	1.547
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:42:30	27.380	78.280	78.070	25.840	0.306	1.619	0.000	196.200
2	03:42:49	26.850	80.000	78.430	24.570	0.614	1.396	0.000	194.700
3	03:43:08	27.880	79.590	77.900	24.120	0.553	1.622	0.000	195.600
X		27.370	79.290	78.130	24.840	0.491	1.546	0.000	195.500
σ		0.517	0.898	0.269	0.896	0.163	0.130	0.000	0.766
%RSD		1.890	1.133	0.344	3.606	33.230	8.377	0.000	0.392
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:42:30	101.601%	4.333	5.187	55.822%	0.171	0.099	1.808	1.491
2	03:42:49	101.394%	4.536	5.254	55.560%	0.176	0.125	2.049	1.549
3	03:43:08	101.210%	4.458	5.166	54.894%	0.186	0.102	1.895	1.504
X		101.402%	4.442	5.202	55.425%	0.178	0.109	1.917	1.515
σ		0.195%	0.103	0.046	0.479%	0.007	0.014	0.122	0.030
%RSD		0.193	2.309	0.891	0.864	4.143	12.970	6.386	2.013
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:42:30	66.036%	40.150	1.014	1.066	121.100	119.600	89.318%	91.413%
2	03:42:49	66.068%	39.740	1.020	1.016	119.500	120.400	90.193%	91.979%
3	03:43:08	66.021%	39.870	1.048	1.065	120.700	119.100	91.435%	92.673%
X		66.042%	39.920	1.028	1.049	120.400	119.700	90.315%	92.022%
σ		0.024%	0.207	0.018	0.029	0.838	0.667	1.064%	0.631%
%RSD		0.036	0.518	1.781	2.743	0.696	0.557	1.178	0.686
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:42:30	2.644	2.815	54.050	49.270	50.950	80.518%		
2	03:42:49	2.598	2.729	53.080	48.360	50.340	83.305%		
3	03:43:08	2.653	2.780	54.540	49.620	51.440	82.018%		
X		2.632	2.775	53.890	49.080	50.910	81.947%		
σ		0.029	0.044	0.741	0.653	0.553	1.395%		
%RSD		1.111	1.571	1.374	1.331	1.087	1.703		

180-42906-C-6-A 4/28/2015 3:46:00 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	03:46:19	39.283%	1.725	105.900	111.900	0.000	47350.000	23800.000	23630.000
2	03:46:38	35.785%	2.069	111.300	112.000	0.000	46140.000	23410.000	23670.000
3	03:46:58	34.289%	2.027	108.000	102.000	0.000	45090.000	22190.000	22590.000
X		36.452%	1.941	108.400	108.600	0.000	46190.000	23130.000	23300.000
σ		2.563%	0.188	2.738	5.715	0.000	1136.000	842.900	614.200
%RSD		7.031	9.670	2.526	5.260	0.000	2.459	3.644	2.637
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:46:19	36270.000	1924.000	0.000	16340.000	59510.000	65170.000	43.870%	402.700
2	03:46:38	36810.000	1889.000	0.000	16470.000	59760.000	67020.000	42.409%	386.000
3	03:46:58	35200.000	1847.000	0.000	16510.000	59100.000	65840.000	41.780%	388.700
X		36090.000	1887.000	0.000	16440.000	59460.000	66010.000	42.686%	392.500
σ		822.800	38.290	0.000	84.680	335.600	934.500	1.072%	8.965
%RSD		2.280	2.030	0.000	0.515	0.564	1.416	2.511	2.284
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:46:19	103.800	30.100	473.800	42090.000	40780.000	25.170	26.730	29.030
2	03:46:38	103.600	29.810	464.400	41030.000	40100.000	24.430	25.360	27.960
3	03:46:58	102.300	29.340	469.200	40960.000	39530.000	24.090	25.180	27.770
X		103.200	29.750	469.100	41360.000	40130.000	24.560	25.760	28.250
σ		0.834	0.380	4.706	635.300	624.200	0.554	0.848	0.680
%RSD		0.808	1.277	1.003	1.536	1.555	2.255	3.292	2.408
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:46:19	28.530	101.500	99.500	27.040	0.712	1.519	0.000	149.500
2	03:46:38	27.270	101.900	99.410	27.090	0.688	1.421	0.000	149.000
3	03:46:58	26.890	100.500	99.930	27.560	0.678	1.531	0.000	150.900
X		27.560	101.300	99.620	27.230	0.693	1.491	0.000	149.800
σ		0.861	0.710	0.279	0.284	0.017	0.061	0.000	0.981
%RSD		3.124	0.701	0.280	1.045	2.516	4.062	0.000	0.655
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:46:19	95.103%	3.945	4.551	59.268%	0.180	0.138	1.663	1.256
2	03:46:38	95.079%	3.779	4.314	58.386%	0.195	0.146	1.715	1.419
3	03:46:58	93.531%	3.812	4.413	56.816%	0.169	0.128	1.465	1.244
X		94.571%	3.846	4.426	58.157%	0.182	0.137	1.614	1.307
σ		0.901%	0.088	0.119	1.242%	0.013	0.009	0.132	0.098
%RSD		0.952	2.294	2.684	2.136	7.173	6.511	8.193	7.489
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:46:19	67.749%	38.170	1.059	0.996	156.200	155.100	91.970%	94.309%
2	03:46:38	68.804%	38.520	0.997	0.943	154.000	154.000	92.899%	95.626%
3	03:46:58	69.103%	38.080	0.969	0.994	155.500	153.600	94.166%	96.223%
X		68.552%	38.260	1.008	0.978	155.200	154.200	93.012%	95.386%
σ		0.711%	0.233	0.046	0.030	1.153	0.737	1.102%	0.979%
%RSD		1.038	0.610	4.570	3.097	0.743	0.478	1.185	1.026
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:46:19	2.444	2.468	53.750	49.270	50.870	88.001%		
2	03:46:38	2.438	2.538	54.570	49.910	51.740	88.861%		
3	03:46:58	2.409	2.496	53.990	49.400	51.200	90.690%		
X		2.431	2.501	54.100	49.530	51.270	89.184%		
σ		0.019	0.035	0.418	0.340	0.439	1.374%		
%RSD		0.767	1.417	0.773	0.686	0.857	1.540		

180-42906-C-7-G 4/28/2015 3:49:50 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	03:50:09	39.489%	1.925	105.600	103.200	0.000	38310.000	21830.000	22350.000
2	03:50:28	37.121%	1.769	108.000	102.900	0.000	38300.000	21860.000	22260.000
3	03:50:47	37.473%	1.637	96.790	101.200	0.000	38860.000	21260.000	21220.000
X		38.028%	1.777	103.500	102.400	0.000	38490.000	21650.000	21940.000
σ		1.278%	0.144	5.889	1.051	0.000	318.800	339.700	625.600
%RSD		3.360	8.099	5.692	1.026	0.000	0.828	1.569	2.851
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:50:09	32930.000	1840.000	0.000	15230.000	53050.000	59190.000	45.110%	367.600
2	03:50:28	33070.000	1774.000	0.000	15480.000	53860.000	59390.000	43.948%	368.300
3	03:50:47	31210.000	1686.000	0.000	15530.000	53600.000	58030.000	42.507%	373.100
X		32400.000	1766.000	0.000	15410.000	53500.000	58870.000	43.855%	369.600
σ		1038.000	77.170	0.000	161.100	411.300	735.000	1.304%	2.985
%RSD		3.204	4.368	0.000	1.045	0.769	1.249	2.974	0.808
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:50:09	101.700	29.540	379.600	39350.000	38760.000	27.910	26.570	31.700
2	03:50:28	99.610	29.240	383.100	39340.000	38020.000	27.570	26.330	31.860
3	03:50:47	96.720	28.420	384.200	39290.000	38500.000	28.650	26.730	32.050
X		99.330	29.070	382.300	39330.000	38430.000	28.040	26.540	31.870
σ		2.478	0.582	2.387	29.570	377.800	0.554	0.203	0.174
%RSD		2.494	2.002	0.624	0.075	0.983	1.976	0.763	0.545
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:50:09	30.880	125.800	124.400	28.990	0.901	1.935	0.000	145.600
2	03:50:28	31.380	126.500	125.900	29.370	1.019	1.972	0.000	146.900
3	03:50:47	31.520	127.100	125.400	29.270	1.074	1.920	0.000	147.600
X		31.260	126.500	125.200	29.210	0.998	1.942	0.000	146.700
σ		0.332	0.632	0.742	0.200	0.089	0.026	0.000	1.003
%RSD		1.063	0.500	0.593	0.684	8.878	1.360	0.000	0.684
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:50:09	95.107%	3.581	4.044	60.724%	0.312	0.268	1.693	1.592
2	03:50:28	94.861%	3.597	3.894	60.311%	0.278	0.257	1.795	1.552
3	03:50:47	93.308%	3.531	4.089	59.795%	0.305	0.259	1.678	1.456
X		94.426%	3.570	4.009	60.277%	0.298	0.261	1.722	1.533
σ		0.975%	0.035	0.102	0.466%	0.018	0.006	0.064	0.070
%RSD		1.033	0.971	2.544	0.773	5.987	2.228	3.696	4.548
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:50:09	70.618%	37.220	1.136	1.055	157.800	156.700	93.274%	95.070%
2	03:50:28	71.530%	36.860	1.120	1.109	156.800	155.700	93.783%	97.759%
3	03:50:47	71.141%	36.880	1.115	1.113	158.900	155.700	94.983%	97.432%
X		71.097%	36.990	1.123	1.092	157.800	156.000	94.013%	96.754%
σ		0.458%	0.199	0.011	0.033	1.045	0.565	0.878%	1.467%
%RSD		0.644	0.539	0.975	2.977	0.662	0.362	0.933	1.516
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:50:09	2.655	2.710	56.140	51.890	53.720	88.486%		
2	03:50:28	2.758	2.773	56.650	52.080	53.690	89.942%		
3	03:50:47	2.713	2.771	56.600	51.530	53.540	90.617%		
X		2.709	2.751	56.460	51.830	53.650	89.682%		
σ		0.052	0.036	0.282	0.280	0.093	1.089%		
%RSD		1.909	1.295	0.500	0.540	0.173	1.215		

CCV 1533080 4/28/2015 3:56:58 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	03:56:58	70.917%	103.500	97.570	95.400	0.000	49160.000	47990.000	49110.000
2	03:57:17	62.828%	107.800	97.460	95.280	0.000	51210.000	51800.000	51370.000
3	03:57:37	61.282%	104.600	104.200	93.950	0.000	51650.000	51250.000	51090.000
X		65.009%	105.316%	99.741%	94.877%	0.000	101.342%	100.691%	101.046%
σ		5.175%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		7.960	2.148	3.863	0.849	0.000	2.614	4.093	2.445
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:56:58	510.300	4660.000	0.000	51190.000	46090.000	51180.000	82.879%	94.350
2	03:57:17	515.100	4703.000	0.000	52330.000	47560.000	52300.000	76.240%	98.560
3	03:57:37	519.000	4688.000	0.000	53900.000	48710.000	54060.000	70.993%	97.630
X		102.957%	93.681%	0.000	104.946%	94.903%	105.024%	76.704%	96.847%
σ		n/a	n/a	0.000	n/a	n/a	n/a	5.956%	n/a
%RSD		0.846	0.469	0.000	2.600	2.766	2.769	7.765	2.284
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:56:58	93.920	96.400	512.800	25750.000	25620.000	95.910	95.040	96.300
2	03:57:17	96.220	98.110	529.300	26540.000	26140.000	96.960	97.790	97.740
3	03:57:37	99.090	99.280	548.200	27170.000	27030.000	99.830	100.300	100.600
X		96.413%	97.928%	106.024%	105.944%	105.065%	97.563%	97.717%	98.197%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.689	1.479	3.338	2.686	2.721	2.081	2.706	2.203
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:56:58	97.210	99.710	99.850	102.900	106.900	107.200	0.000	102.000
2	03:57:17	97.370	102.000	102.900	102.100	108.600	107.100	0.000	103.700
3	03:57:37	98.870	105.900	105.800	103.900	108.300	106.800	0.000	103.400
X		97.815%	102.547%	102.860%	102.962%	107.914%	107.006%	0.000	103.028%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.935	3.057	2.900	0.913	0.823	0.172	0.000	0.896
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:56:58	89.430%	94.280	94.690	87.866%	97.400	96.930	99.970	100.900
2	03:57:17	87.428%	94.800	97.880	86.038%	97.640	97.600	102.900	101.800
3	03:57:37	85.975%	96.430	98.560	84.527%	97.500	96.900	102.800	103.100
X		87.611%	95.169%	97.044%	86.144%	97.513%	97.144%	101.885%	101.942%
σ		1.735%	n/a	n/a	1.672%	n/a	n/a	n/a	n/a
%RSD		1.980	1.181	2.131	1.941	0.124	0.408	1.627	1.051
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:56:58	91.564%	98.050	99.310	99.180	99.620	98.730	100.045%	100.601%
2	03:57:17	90.548%	99.070	102.100	101.700	98.970	98.420	100.698%	101.505%
3	03:57:37	88.614%	99.820	103.800	103.500	100.300	99.640	100.777%	101.298%
X		90.242%	98.979%	101.728%	101.466%	99.633%	98.928%	100.507%	101.134%
σ		1.499%	n/a	n/a	n/a	n/a	n/a	0.402%	0.474%
%RSD		1.661	0.897	2.211	2.128	0.668	0.645	0.400	0.468
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:56:58	100.600	106.700	108.800	100.800	101.800	100.122%		
2	03:57:17	101.500	107.000	110.400	102.900	103.300	101.206%		
3	03:57:37	102.400	107.300	103.500	103.500	102.600	101.903%		
X		101.517%	107.007%	107.548%	102.382%	102.579%	101.077%		
σ		n/a	n/a	n/a	n/a	n/a	0.898%		
%RSD		0.854	0.259	3.334	1.403	0.745	0.888		

CCB8 4/28/2015 4:03:39 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	04:03:59	96.006%	-0.023	0.268	0.196	0.000	10.650	8.586	8.071
2	04:04:18	92.801%	-0.015	0.457	0.336	0.000	7.453	5.599	6.961
3	04:04:37	87.663%	-0.036	0.459	0.241	0.000	5.360	4.956	4.996
X		92.157%	-0.024	0.395	0.258	0.000	7.822	6.380	6.676
σ		4.209%	0.010	0.110	0.072	0.000	2.666	1.937	1.558
%RSD		4.567	42.800	27.740	27.770	0.000	34.080	30.350	23.330
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:03:59	8.025	-233.900	0.000	4.563	38.650	34.230	93.203%	0.128
2	04:04:18	5.851	-235.300	0.000	4.579	27.550	25.960	87.326%	0.005
3	04:04:37	3.926	-236.500	0.000	2.796	15.610	17.730	87.631%	-0.050
X		5.934	-235.200	0.000	3.980	27.270	25.970	89.387%	0.028
σ		2.051	1.307	0.000	1.025	11.520	8.248	3.308%	0.091
%RSD		34.560	0.555	0.000	25.750	42.250	31.750	3.701	330.100
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:03:59	0.026	0.022	0.319	19.390	21.020	0.022	-0.002	-0.049
2	04:04:18	0.041	0.026	0.261	15.320	18.490	0.017	0.014	-0.040
3	04:04:37	0.011	-0.008	0.182	8.797	12.670	0.012	0.018	-0.066
X		0.026	0.013	0.254	14.500	17.400	0.017	0.010	-0.052
σ		0.015	0.019	0.069	5.342	4.280	0.005	0.010	0.013
%RSD		56.860	137.600	27.110	36.840	24.600	29.910	102.600	25.770
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:03:59	-0.044	-0.331	-0.350	0.009	0.047	0.023	0.000	0.251
2	04:04:18	-0.052	-0.300	-0.262	-0.031	0.179	-0.099	0.000	0.175
3	04:04:37	-0.037	-0.274	-0.325	0.024	0.121	-0.056	0.000	0.118
X		-0.045	-0.302	-0.312	0.000	0.116	-0.044	0.000	0.181
σ		0.007	0.028	0.045	0.028	0.066	0.062	0.000	0.066
%RSD		16.440	9.401	14.540	7154.000	57.380	141.800	0.000	36.590
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:03:59	94.944%	0.154	0.199	100.487%	-0.080	-0.071	0.087	0.060
2	04:04:18	96.010%	0.171	0.166	99.103%	-0.067	-0.074	0.036	0.023
3	04:04:37	95.325%	0.139	0.126	99.479%	-0.075	-0.072	0.038	0.026
X		95.427%	0.155	0.164	99.690%	-0.074	-0.072	0.054	0.036
σ		0.540%	0.016	0.036	0.715%	0.006	0.001	0.029	0.020
%RSD		0.566	10.440	22.130	0.718	8.475	1.981	54.010	55.720
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:03:59	102.579%	-0.174	0.007	0.013	0.074	0.097	109.565%	109.789%
2	04:04:18	102.970%	-0.196	0.015	0.007	0.070	0.047	112.023%	112.771%
3	04:04:37	104.233%	-0.202	-0.001	0.002	0.046	0.061	113.737%	115.350%
X		103.261%	-0.191	0.007	0.007	0.063	0.068	111.775%	112.637%
σ		0.864%	0.015	0.008	0.006	0.015	0.026	2.097%	2.783%
%RSD		0.837	7.740	110.600	79.550	23.320	37.960	1.876	2.471
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:03:59	0.026	0.028	0.023	0.025	0.022	110.786%		
2	04:04:18	0.025	0.027	0.020	0.017	0.017	111.626%		
3	04:04:37	0.024	0.025	0.012	0.021	0.013	112.737%		
X		0.025	0.027	0.018	0.021	0.017	111.716%		
σ		0.001	0.001	0.006	0.004	0.004	0.979%		
%RSD		3.960	5.447	31.550	18.900	25.380	0.876		

180-42906-C-3-A 4/28/2015 4:07:31 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	04:07:50	40.244%	2.505	111.600	110.600	0.000	45110.000	21180.000	21370.000
2	04:08:09	39.135%	2.351	112.200	106.700	0.000	42910.000	20470.000	20930.000
3	04:08:29	37.958%	2.273	106.000	111.700	0.000	46740.000	21440.000	21330.000
x		39.112%	2.376	110.000	109.700	0.000	44920.000	21030.000	21210.000
σ		1.143%	0.118	3.404	2.603	0.000	1919.000	499.200	243.500
%RSD		2.923	4.967	3.096	2.374	0.000	4.272	2.374	1.148
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:07:50	38530.000	1433.000	0.000	16760.000	160600.000	175500.000	43.378%	351.700
2	04:08:09	38150.000	1398.000	0.000	17000.000	164900.000	181900.000	41.001%	353.500
3	04:08:29	38560.000	1395.000	0.000	17310.000	166700.000	184300.000	39.656%	356.300
x		38420.000	1409.000	0.000	17020.000	164100.000	180600.000	41.345%	353.900
σ		227.600	20.890	0.000	277.700	3137.000	4578.000	1.885%	2.331
%RSD		0.592	1.483	0.000	1.632	1.912	2.535	4.559	0.659
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:07:50	108.900	34.070	642.200	48890.000	48210.000	30.140	30.350	39.500
2	04:08:09	111.200	34.620	638.800	49230.000	49110.000	29.940	31.140	40.210
3	04:08:29	110.100	34.560	660.100	49920.000	49220.000	29.960	30.490	40.360
x		110.100	34.420	647.000	49350.000	48850.000	30.020	30.660	40.020
σ		1.144	0.300	11.460	524.000	559.600	0.111	0.423	0.460
%RSD		1.040	0.871	1.771	1.062	1.146	0.369	1.379	1.150
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:07:50	39.800	657.900	664.200	39.800	2.710	4.386	0.000	344.500
2	04:08:09	40.070	665.600	667.300	40.770	2.745	3.944	0.000	347.300
3	04:08:29	40.930	673.100	678.400	40.220	3.069	4.042	0.000	358.200
x		40.270	665.500	670.000	40.260	2.841	4.124	0.000	350.000
σ		0.585	7.627	7.455	0.491	0.198	0.232	0.000	7.206
%RSD		1.454	1.146	1.113	1.219	6.968	5.623	0.000	2.059
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:07:50	0.000	4.593	4.739	57.224%	0.356	0.329	24.190	22.820
2	04:08:09	0.000	4.645	4.727	56.597%	0.405	0.302	23.540	23.380
3	04:08:29	0.000	4.527	4.859	55.274%	0.383	0.287	23.440	23.380
x		0.000	4.588	4.775	56.365%	0.381	0.306	23.720	23.190
σ		0.000	0.059	0.073	0.995%	0.024	0.021	0.408	0.321
%RSD		0.000	1.282	1.522	1.766	6.341	6.930	1.718	1.384
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:07:50	66.497%	37.200	1.078	1.030	334.300	329.500	92.773%	93.823%
2	04:08:09	67.133%	37.100	1.056	1.088	334.300	327.200	92.710%	96.103%
3	04:08:29	66.110%	37.270	1.068	0.989	333.700	329.400	93.184%	95.434%
x		66.580%	37.190	1.067	1.036	334.100	328.700	92.889%	95.120%
σ		0.516%	0.090	0.011	0.050	0.356	1.321	0.257%	1.172%
%RSD		0.776	0.241	1.062	4.840	0.106	0.402	0.277	1.232
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:07:50	2.252	2.317	88.060	82.140	84.170	86.241%		
2	04:08:09	2.412	2.403	90.800	83.820	86.480	85.625%		
3	04:08:29	2.306	2.394	90.070	83.530	86.320	86.458%		
x		2.323	2.371	89.640	83.160	85.650	86.108%		
σ		0.082	0.047	1.420	0.899	1.291	0.432%		
%RSD		3.512	1.989	1.584	1.081	1.507	0.501		

180-42906-C-3-A SD@5 4/28/2015 4:11:20 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	04:11:39	53.775%	0.678	24.140	23.990	0.000	9959.000	4567.000	4699.000
2	04:11:58	50.304%	0.406	26.050	24.580	0.000	9550.000	4728.000	4748.000
3	04:12:18	48.027%	0.465	23.230	24.400	0.000	9441.000	4329.000	4630.000
X		50.702%	0.516	24.470	24.320	0.000	9650.000	4541.000	4692.000
σ		2.894%	0.143	1.438	0.302	0.000	272.900	201.200	59.320
%RSD		5.708	27.770	5.874	1.244	0.000	2.828	4.429	1.264
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:11:39	8371.000	151.000	0.000	3619.000	33490.000	36640.000	55.699%	69.970
2	04:11:58	8539.000	155.000	0.000	3550.000	33440.000	37130.000	53.795%	71.070
3	04:12:18	8315.000	136.400	0.000	3647.000	33320.000	36910.000	55.015%	70.530
X		8409.000	147.500	0.000	3605.000	33420.000	36900.000	54.836%	70.520
σ		116.400	9.810	0.000	49.840	89.650	247.100	0.965%	0.550
%RSD		1.384	6.651	0.000	1.382	0.268	0.670	1.759	0.780
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:11:39	22.640	7.118	115.300	9858.000	9115.000	6.010	6.384	8.635
2	04:11:58	22.100	7.080	116.300	9821.000	9287.000	5.943	6.446	8.425
3	04:12:18	22.800	7.056	115.900	9677.000	9079.000	5.587	5.977	7.985
X		22.510	7.085	115.900	9785.000	9161.000	5.846	6.269	8.348
σ		0.365	0.032	0.502	95.510	111.300	0.228	0.255	0.331
%RSD		1.623	0.447	0.434	0.976	1.215	3.890	4.063	3.970
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:11:39	8.483	138.000	139.300	7.859	0.228	0.738	0.000	52.540
2	04:11:58	8.621	140.900	139.600	8.021	0.312	0.687	0.000	52.690
3	04:12:18	7.793	135.900	138.200	7.328	0.246	0.617	0.000	52.610
X		8.299	138.300	139.100	7.736	0.262	0.680	0.000	52.610
σ		0.444	2.485	0.744	0.362	0.044	0.061	0.000	0.076
%RSD		5.348	1.798	0.535	4.687	16.800	8.933	0.000	0.144
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:11:39	84.670%	0.830	0.847	75.281%	0.007	0.006	5.131	5.187
2	04:11:58	84.552%	0.774	0.812	74.948%	-0.003	0.012	5.095	4.967
3	04:12:18	83.210%	0.804	0.850	73.435%	0.003	0.007	4.908	5.021
X		84.144%	0.802	0.836	74.554%	0.002	0.008	5.045	5.058
σ		0.811%	0.028	0.021	0.984%	0.005	0.003	0.120	0.114
%RSD		0.964	3.461	2.520	1.320	215.200	37.630	2.368	2.259
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:11:39	79.517%	7.437	0.205	0.172	69.750	68.910	99.242%	101.336%
2	04:11:58	80.256%	7.463	0.196	0.174	69.620	68.820	100.911%	103.530%
3	04:12:18	80.899%	7.515	0.198	0.182	69.530	68.810	100.964%	103.847%
X		80.224%	7.472	0.200	0.176	69.630	68.850	100.372%	102.904%
σ		0.691%	0.040	0.005	0.005	0.111	0.054	0.979%	1.367%
%RSD		0.862	0.532	2.473	2.996	0.159	0.078	0.975	1.329
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:11:39	0.427	0.439	16.860	15.420	15.780	106.875%		
2	04:11:58	0.453	0.449	17.040	15.840	16.210	106.823%		
3	04:12:18	0.451	0.452	17.540	15.960	16.490	105.574%		
X		0.444	0.446	17.150	15.740	16.160	106.424%		
σ		0.014	0.007	0.350	0.281	0.362	0.737%		
%RSD		3.239	1.506	2.044	1.787	2.243	0.692		

180-42906-C-3-B MS 4/28/2015 4:15:08 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	04:15:28	37.862%	40.610	916.100	869.500	0.000	89890.000	68690.000	69780.000
2	04:15:47	36.584%	39.350	869.500	859.600	0.000	93460.000	68890.000	66990.000
3	04:16:06	38.789%	37.610	870.000	812.600	0.000	85410.000	65260.000	64620.000
X		37.745%	39.190	885.200	847.200	0.000	89590.000	67610.000	67130.000
σ		1.107%	1.508	26.750	30.390	0.000	4032.000	2037.000	2586.000
%RSD		2.933	3.848	3.022	3.587	0.000	4.501	3.013	3.853
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:15:28	89960.000	3387.000	0.000	72380.000	128600.000	141300.000	44.186%	2035.000
2	04:15:47	86760.000	3419.000	0.000	73360.000	127800.000	141500.000	42.837%	2042.000
3	04:16:06	82500.000	3164.000	0.000	70630.000	128000.000	140400.000	41.611%	1998.000
X		86410.000	3323.000	0.000	72120.000	128100.000	141000.000	42.878%	2025.000
σ		3741.000	138.700	0.000	1382.000	425.000	572.500	1.288%	23.790
%RSD		4.329	4.174	0.000	1.917	0.332	0.406	3.004	1.175
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:15:28	661.500	241.900	1110.000	68200.000	67480.000	491.700	442.000	246.300
2	04:15:47	642.500	233.900	1089.000	66560.000	65570.000	482.800	433.000	238.300
3	04:16:06	648.600	238.100	1122.000	68510.000	67700.000	457.700	444.700	247.200
X		650.900	238.000	1107.000	67760.000	66910.000	477.400	439.900	243.900
σ		9.686	3.965	16.960	1047.000	1171.000	17.620	6.146	4.882
%RSD		1.488	1.666	1.532	1.545	1.751	3.691	1.397	2.002
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:15:28	245.900	940.000	949.000	68.780	10.220	11.310	0.000	1755.000
2	04:15:47	241.500	927.100	939.900	68.070	10.300	11.670	0.000	1782.000
3	04:16:06	245.100	938.300	939.600	68.330	10.570	12.010	0.000	1812.000
X		244.200	935.100	942.800	68.390	10.360	11.660	0.000	1783.000
σ		2.319	7.033	5.329	0.360	0.185	0.345	0.000	28.100
%RSD		0.950	0.752	0.565	0.527	1.784	2.962	0.000	1.576
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:15:28	0.000	977.900	1083.000	56.729%	43.350	43.020	58.260	50.190
2	04:15:47	0.000	989.900	1086.000	55.570%	43.840	43.420	60.220	49.390
3	04:16:06	0.000	1006.000	1100.000	55.144%	43.400	42.670	59.830	50.450
X		0.000	991.100	1090.000	55.814%	43.530	43.040	59.440	50.010
σ		0.000	13.840	9.315	0.820%	0.272	0.374	1.038	0.550
%RSD		0.000	1.397	0.855	1.469	0.624	0.870	1.747	1.099
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:15:28	66.567%	2014.000	327.600	335.300	2432.000	2399.000	86.631%	88.722%
2	04:15:47	66.211%	2019.000	331.700	334.300	2428.000	2406.000	88.600%	90.390%
3	04:16:06	66.558%	2026.000	336.900	340.000	2440.000	2408.000	89.159%	91.702%
X		66.446%	2019.000	332.100	336.500	2433.000	2405.000	88.130%	90.272%
σ		0.203%	5.872	4.691	3.025	6.217	4.772	1.328%	1.494%
%RSD		0.306	0.291	1.413	0.899	0.256	0.198	1.507	1.655
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:15:28	50.690	52.070	179.600	168.500	179.200	82.971%		
2	04:15:47	50.610	51.950	178.600	167.000	177.400	85.008%		
3	04:16:06	52.410	53.060	183.400	170.900	181.800	82.379%		
X		51.240	52.360	180.500	168.800	179.500	83.452%		
σ		1.014	0.610	2.514	2.005	2.223	1.379%		
%RSD		1.980	1.165	1.393	1.188	1.238	1.653		

180-42906-C-3-C MSD 4/28/2015 4:18:57 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:19:16	38.977%	37.890	885.500	884.800	0.000	87700.000	67460.000	67790.000
2	04:19:35	37.285%	39.640	844.200	806.800	0.000	83290.000	63780.000	63690.000
3	04:19:54	37.948%	37.380	844.400	820.200	0.000	83560.000	62760.000	63080.000
X		38.070%	38.300	858.000	837.300	0.000	84850.000	64670.000	64850.000
σ		0.852%	1.185	23.780	41.730	0.000	2470.000	2472.000	2561.000
%RSD		2.238	3.093	2.771	4.985	0.000	2.911	3.823	3.949
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:19:16	90050.000	4455.000	0.000	71650.000	134400.000	149000.000	43.635%	1981.000
2	04:19:35	84160.000	4179.000	0.000	72080.000	134900.000	149300.000	42.093%	2008.000
3	04:19:54	83250.000	4104.000	0.000	71070.000	134900.000	148500.000	40.265%	1986.000
X		85820.000	4246.000	0.000	71600.000	134700.000	148900.000	41.998%	1991.000
σ		3690.000	184.700	0.000	507.100	262.300	402.500	1.687%	14.460
%RSD		4.299	4.351	0.000	0.708	0.195	0.270	4.017	0.726
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:19:16	651.600	241.200	1106.000	69660.000	69190.000	497.000	442.200	243.500
2	04:19:35	650.000	237.300	1111.000	70750.000	69100.000	492.600	442.600	243.400
3	04:19:54	641.800	239.200	1128.000	70490.000	69630.000	505.100	444.600	245.100
X		647.800	239.200	1115.000	70300.000	69310.000	498.200	443.100	244.000
σ		5.237	1.940	11.430	565.600	286.300	6.381	1.277	0.928
%RSD		0.808	0.811	1.025	0.805	0.413	1.281	0.288	0.380
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:19:16	246.800	663.300	674.300	64.980	10.040	11.090	0.000	1526.000
2	04:19:35	243.000	661.400	670.300	65.480	9.993	11.180	0.000	1548.000
3	04:19:54	245.100	668.600	681.000	65.540	10.480	10.650	0.000	1557.000
X		245.000	664.400	675.200	65.340	10.170	10.970	0.000	1544.000
σ		1.904	3.744	5.406	0.307	0.266	0.286	0.000	16.110
%RSD		0.777	0.564	0.801	0.470	2.617	2.608	0.000	1.044
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:19:16	0.000	989.300	1085.000	57.014%	43.080	41.660	47.600	37.670
2	04:19:35	0.000	991.300	1091.000	55.596%	43.000	41.940	47.190	37.190
3	04:19:54	0.000	995.300	1093.000	54.920%	42.710	41.710	47.830	36.870
X		0.000	992.000	1090.000	55.843%	42.930	41.770	47.540	37.240
σ		0.000	3.068	3.877	1.069%	0.195	0.149	0.323	0.405
%RSD		0.000	0.309	0.356	1.913	0.454	0.358	0.679	1.088
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:19:16	66.808%	1996.000	332.900	332.700	2239.000	2217.000	88.070%	89.082%
2	04:19:35	66.303%	1987.000	338.600	332.000	2223.000	2212.000	87.283%	89.104%
3	04:19:54	65.728%	2010.000	336.600	336.700	2231.000	2207.000	88.319%	89.449%
X		66.280%	1998.000	336.000	333.800	2231.000	2212.000	87.891%	89.212%
σ		0.540%	11.480	2.899	2.550	8.230	5.083	0.541%	0.206%
%RSD		0.815	0.575	0.863	0.764	0.369	0.230	0.616	0.231
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:19:16	50.750	52.090	86.430	81.470	83.340	83.013%		
2	04:19:35	51.620	52.700	88.000	81.910	84.390	82.659%		
3	04:19:54	52.060	53.060	88.690	82.910	84.910	82.487%		
X		51.480	52.620	87.700	82.090	84.210	82.719%		
σ		0.665	0.492	1.159	0.738	0.798	0.268%		
%RSD		1.292	0.935	1.322	0.899	0.948	0.324		

180-42906-C-3-A PDS 4/28/2015 4:22:45 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	04:23:04	35.041%	46.180	954.100	942.900	0.000	90700.000	68120.000	69120.000
2	04:23:23	35.268%	43.440	908.000	919.700	0.000	86650.000	64420.000	65990.000
3	04:23:42	35.208%	43.120	884.700	872.100	0.000	82450.000	60410.000	62470.000
X		35.172%	44.250	915.600	911.600	0.000	86600.000	64320.000	65860.000
σ		0.117%	1.678	35.310	36.100	0.000	4124.000	3859.000	3327.000
%RSD		0.334	3.793	3.857	3.961	0.000	4.762	6.000	5.052
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:23:04	41700.000	10860.000	0.000	73680.000	238500.000	239800.000	41.048%	1425.000
2	04:23:23	41070.000	10570.000	0.000	72070.000	233800.000	236500.000	40.788%	1425.000
3	04:23:42	37520.000	9784.000	0.000	69050.000	229800.000	231200.000	38.876%	1413.000
X		40100.000	10400.000	0.000	71600.000	234000.000	235800.000	40.238%	1421.000
σ		2254.000	555.900	0.000	2351.000	4387.000	4354.000	1.186%	7.322
%RSD		5.622	5.343	0.000	3.283	1.875	1.846	2.947	0.515
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:23:04	661.200	238.800	1204.000	49060.000	48630.000	554.700	498.700	270.600
2	04:23:23	652.700	232.500	1187.000	47400.000	46980.000	530.400	469.400	259.900
3	04:23:42	656.100	234.500	1205.000	48480.000	47920.000	545.400	483.200	264.700
X		656.700	235.300	1199.000	48310.000	47840.000	543.500	483.800	265.100
σ		4.302	3.186	10.060	842.600	828.000	12.290	14.650	5.351
%RSD		0.655	1.354	0.839	1.744	1.731	2.261	3.028	2.019
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:23:04	271.900	1125.000	1138.000	77.520	12.850	13.650	0.000	1629.000
2	04:23:23	261.200	1106.000	1124.000	76.760	12.130	14.100	0.000	1631.000
3	04:23:42	271.800	1119.000	1144.000	77.920	12.720	14.200	0.000	1656.000
X		268.300	1117.000	1135.000	77.400	12.570	13.980	0.000	1639.000
σ		6.137	9.634	10.240	0.590	0.382	0.294	0.000	15.420
%RSD		2.287	0.863	0.902	0.762	3.043	2.100	0.000	0.941
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:23:04	0.000	1232.000	1356.000	53.803%	45.620	45.090	74.740	62.310
2	04:23:23	0.000	1242.000	1352.000	52.877%	45.680	44.720	75.550	62.350
3	04:23:42	0.000	1247.000	1358.000	52.582%	45.860	44.830	74.470	61.820
X		0.000	1240.000	1355.000	53.087%	45.720	44.880	74.920	62.160
σ		0.000	7.941	3.127	0.637%	0.126	0.191	0.562	0.293
%RSD		0.000	0.640	0.231	1.200	0.276	0.425	0.750	0.471
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:23:04	63.613%	2481.000	573.400	551.100	2525.000	2472.000	89.896%	93.099%
2	04:23:23	63.466%	2490.000	580.000	548.300	2486.000	2468.000	90.848%	93.272%
3	04:23:42	63.638%	2490.000	581.900	552.600	2503.000	2465.000	90.976%	93.344%
X		63.572%	2487.000	578.400	550.600	2505.000	2468.000	90.573%	93.239%
σ		0.093%	5.318	4.446	2.181	19.370	3.504	0.590%	0.126%
%RSD		0.146	0.214	0.769	0.396	0.773	0.142	0.652	0.135
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:23:04	57.950	59.620	113.100	106.800	109.200	80.227%		
2	04:23:23	56.900	58.810	110.600	104.700	107.300	83.001%		
3	04:23:42	58.620	59.380	111.300	105.400	108.100	82.076%		
X		57.830	59.270	111.600	105.600	108.200	81.768%		
σ		0.866	0.417	1.282	1.079	0.972	1.413%		
%RSD		1.497	0.704	1.148	1.022	0.898	1.728		

180-42906-B-8-G 4/28/2015 4:26:34 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	04:26:53	38.044%	1.782	99.260	97.470	0.000	34580.000	20760.000	20800.000
2	04:27:12	38.801%	2.022	96.890	94.160	0.000	33190.000	20360.000	20280.000
3	04:27:31	34.994%	1.755	95.630	94.110	0.000	33540.000	20160.000	20580.000
	X	37.280%	1.853	97.260	95.250	0.000	33770.000	20430.000	20550.000
	σ	2.015%	0.147	1.843	1.928	0.000	722.500	307.000	260.900
	%RSD	5.406	7.922	1.895	2.025	0.000	2.139	1.503	1.270
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:26:53	32220.000	1977.000	0.000	15150.000	100600.000	109800.000	42.724%	410.100
2	04:27:12	31550.000	1844.000	0.000	15100.000	100600.000	110900.000	40.699%	411.500
3	04:27:31	31940.000	1894.000	0.000	14600.000	99590.000	109800.000	40.126%	405.200
	X	31900.000	1905.000	0.000	14950.000	100300.000	110200.000	41.183%	408.900
	σ	338.000	67.450	0.000	306.900	580.400	628.700	1.365%	3.296
	%RSD	1.060	3.541	0.000	2.053	0.579	0.571	3.314	0.806
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:26:53	100.500	32.270	617.300	41260.000	39960.000	28.620	27.440	54.010
2	04:27:12	99.080	31.960	619.900	41390.000	40740.000	28.760	27.510	54.990
3	04:27:31	95.460	32.040	623.000	41090.000	40390.000	28.310	26.920	53.650
	X	98.330	32.090	620.100	41240.000	40360.000	28.560	27.290	54.220
	σ	2.584	0.162	2.819	150.400	387.200	0.229	0.320	0.694
	%RSD	2.628	0.505	0.455	0.365	0.959	0.802	1.173	1.280
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:26:53	56.030	259.900	265.200	33.350	2.990	4.354	0.000	505.400
2	04:27:12	55.740	269.000	268.500	33.440	3.236	4.201	0.000	512.800
3	04:27:31	53.940	262.500	269.400	33.080	3.274	3.935	0.000	515.100
	X	55.240	263.800	267.700	33.290	3.167	4.163	0.000	511.100
	σ	1.131	4.721	2.232	0.186	0.154	0.212	0.000	5.030
	%RSD	2.047	1.790	0.834	0.559	4.867	5.087	0.000	0.984
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:26:53	0.000	8.629	9.198	58.053%	0.333	0.272	2.967	2.604
2	04:27:12	0.000	8.131	8.073	57.680%	0.295	0.256	2.922	2.620
3	04:27:31	0.000	7.338	7.579	57.048%	0.306	0.257	2.896	2.635
	X	0.000	8.033	8.283	57.594%	0.311	0.261	2.928	2.620
	σ	0.000	0.651	0.830	0.508%	0.019	0.009	0.036	0.015
	%RSD	0.000	8.106	10.010	0.882	6.122	3.342	1.235	0.591
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:26:53	67.797%	40.750	1.986	2.010	398.100	397.100	90.575%	93.396%
2	04:27:12	68.815%	40.390	1.823	1.817	397.300	395.600	92.877%	95.230%
3	04:27:31	68.398%	39.920	1.612	1.553	397.300	395.400	92.447%	94.896%
	X	68.337%	40.350	1.807	1.794	397.600	396.000	91.966%	94.507%
	σ	0.512%	0.419	0.188	0.229	0.489	0.955	1.224%	0.977%
	%RSD	0.749	1.037	10.380	12.790	0.123	0.241	1.331	1.034
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:26:53	2.741	2.757	69.960	64.200	66.440	88.556%		
2	04:27:12	2.816	2.801	71.550	65.580	67.720	88.099%		
3	04:27:31	2.682	2.766	70.580	64.340	66.970	90.180%		
	X	2.746	2.775	70.700	64.710	67.040	88.945%		
	σ	0.067	0.023	0.802	0.764	0.641	1.094%		
	%RSD	2.437	0.827	1.135	1.181	0.957	1.230		

180-42906-C-9-A 4/28/2015 4:30:22 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	04:30:41	35.532%	0.954	44.590	44.400	0.000	24020.000	9107.000	9324.000
2	04:31:00	33.210%	1.101	40.100	44.110	0.000	24830.000	9048.000	8979.000
3	04:31:20	35.075%	1.028	43.950	41.460	0.000	23480.000	8648.000	8600.000
X		34.606%	1.028	42.880	43.330	0.000	24110.000	8934.000	8968.000
σ		1.230%	0.074	2.428	1.619	0.000	679.000	249.600	362.200
%RSD		3.554	7.175	5.664	3.738	0.000	2.816	2.793	4.039
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:30:41	13880.000	2491.000	0.000	6479.000	414800.000	414500.000	39.041%	375.000
2	04:31:00	13270.000	2418.000	0.000	6434.000	410000.000	410000.000	36.394%	374.900
3	04:31:20	12610.000	2274.000	0.000	6414.000	417200.000	421400.000	35.654%	377.700
X		13250.000	2394.000	0.000	6442.000	414000.000	415300.000	37.030%	375.900
σ		637.800	110.400	0.000	33.510	3648.000	5747.000	1.781%	1.571
%RSD		4.812	4.610	0.000	0.520	0.881	1.384	4.809	0.418
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:30:41	66.360	24.040	478.700	21420.000	21480.000	17.170	11.730	138.500
2	04:31:00	63.700	23.070	493.000	21360.000	21470.000	17.360	12.590	143.200
3	04:31:20	64.520	22.970	488.300	21710.000	21370.000	17.570	11.790	138.500
X		64.860	23.360	486.700	21500.000	21440.000	17.360	12.040	140.000
σ		1.364	0.592	7.289	188.700	60.680	0.199	0.480	2.752
%RSD		2.103	2.533	1.498	0.878	0.283	1.146	3.991	1.965
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:30:41	140.700	2490.000	2535.000	23.980	44.090	46.100	0.000	1058.000
2	04:31:00	146.500	2573.000	2612.000	25.630	46.220	47.240	0.000	1084.000
3	04:31:20	142.300	2568.000	2598.000	25.890	46.580	49.140	0.000	1101.000
X		143.200	2543.000	2582.000	25.170	45.630	47.490	0.000	1081.000
σ		3.008	46.750	41.090	1.038	1.349	1.537	0.000	21.620
%RSD		2.101	1.838	1.592	4.124	2.957	3.236	0.000	2.000
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:30:41	0.000	3.591	3.747	52.515%	3.514	3.407	61.110	59.770
2	04:31:00	0.000	3.464	3.637	51.129%	3.442	3.344	61.200	59.770
3	04:31:20	0.000	3.625	3.710	49.681%	3.528	3.425	62.490	60.250
X		0.000	3.560	3.698	51.108%	3.495	3.392	61.600	59.930
σ		0.000	0.085	0.056	1.417%	0.046	0.043	0.773	0.278
%RSD		0.000	2.388	1.512	2.772	1.316	1.256	1.255	0.463
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:30:41	62.113%	37.880	2.421	2.467	3079.000	3031.000	89.432%	94.810%
2	04:31:00	62.502%	38.340	2.475	2.466	3061.000	3038.000	91.777%	95.636%
3	04:31:20	61.565%	38.070	2.514	2.376	3054.000	3030.000	91.246%	96.468%
X		62.060%	38.100	2.470	2.436	3065.000	3033.000	90.819%	95.638%
σ		0.470%	0.231	0.047	0.052	12.600	4.330	1.230%	0.829%
%RSD		0.758	0.605	1.902	2.147	0.411	0.143	1.354	0.867
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:30:41	1.623	1.586	397.700	375.200	382.700	80.533%		
2	04:31:00	1.521	1.573	400.000	373.200	382.700	81.691%		
3	04:31:20	1.554	1.582	400.200	376.700	384.900	80.750%		
X		1.566	1.580	399.300	375.100	383.400	80.992%		
σ		0.052	0.006	1.419	1.727	1.277	0.616%		
%RSD		3.303	0.399	0.355	0.460	0.333	0.760		

180-42906-B-10-A 4/28/2015 4:34:10 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	04:34:29	35.685%	2.835	116.600	115.200	0.000	47020.000	27740.000	28660.000
2	04:34:49	33.252%	2.245	117.900	115.800	0.000	45240.000	28650.000	28480.000
3	04:35:08	31.539%	2.239	108.200	104.600	0.000	42420.000	26330.000	26980.000
X		33.492%	2.440	114.200	111.900	0.000	44890.000	27570.000	28040.000
σ		2.083%	0.342	5.244	6.326	0.000	2323.000	1169.000	920.400
%RSD		6.221	14.030	4.591	5.655	0.000	5.175	4.241	3.282
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:34:29	41510.000	1803.000	0.000	17890.000	118600.000	131600.000	37.603%	435.500
2	04:34:49	40610.000	1736.000	0.000	18020.000	121500.000	135000.000	35.857%	434.600
3	04:35:08	39670.000	1704.000	0.000	17800.000	119900.000	132300.000	35.671%	442.400
X		40600.000	1748.000	0.000	17900.000	120000.000	133000.000	36.377%	437.500
σ		919.800	50.630	0.000	107.900	1462.000	1804.000	1.065%	4.279
%RSD		2.266	2.897	0.000	0.603	1.218	1.356	2.929	0.978
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:34:29	130.000	34.790	761.700	48380.000	47450.000	30.580	31.760	35.270
2	04:34:49	132.100	35.930	776.700	50570.000	48770.000	30.680	31.760	36.630
3	04:35:08	130.800	35.820	759.900	49370.000	48920.000	30.440	31.080	35.660
X		131.000	35.510	766.100	49440.000	48380.000	30.570	31.540	35.850
σ		1.048	0.627	9.210	1099.000	810.200	0.124	0.394	0.698
%RSD		0.800	1.766	1.202	2.224	1.675	0.406	1.251	1.948
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:34:29	36.600	117.500	118.000	41.020	2.538	3.192	0.000	448.900
2	04:34:49	36.520	117.400	119.300	41.280	2.076	3.311	0.000	454.200
3	04:35:08	36.400	119.000	119.500	42.210	2.560	3.073	0.000	456.800
X		36.510	118.000	118.900	41.500	2.391	3.192	0.000	453.300
σ		0.101	0.923	0.850	0.628	0.274	0.119	0.000	4.022
%RSD		0.277	0.782	0.715	1.514	11.450	3.730	0.000	0.887
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:34:29	0.000	6.629	6.791	52.560%	0.176	0.122	1.691	1.298
2	04:34:49	0.000	6.774	6.732	51.491%	0.190	0.158	1.464	1.303
3	04:35:08	0.000	6.468	6.836	50.548%	0.205	0.146	1.492	1.177
X		0.000	6.624	6.787	51.533%	0.190	0.142	1.549	1.259
σ		0.000	0.153	0.052	1.007%	0.014	0.019	0.124	0.071
%RSD		0.000	2.315	0.767	1.954	7.566	13.040	7.974	5.634
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:34:29	61.709%	37.770	1.331	1.265	260.300	260.000	85.488%	88.218%
2	04:34:49	61.664%	37.900	1.306	1.257	264.300	260.500	86.280%	89.666%
3	04:35:08	62.412%	37.100	1.286	1.319	260.100	258.800	86.157%	89.602%
X		61.928%	37.590	1.308	1.281	261.600	259.800	85.975%	89.162%
σ		0.419%	0.429	0.022	0.034	2.384	0.869	0.426%	0.818%
%RSD		0.677	1.142	1.716	2.628	0.911	0.335	0.496	0.918
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:34:29	2.566	2.649	54.650	49.390	51.490	86.012%		
2	04:34:49	2.683	2.739	56.290	52.050	53.540	83.537%		
3	04:35:08	2.654	2.673	55.010	50.700	52.550	85.759%		
X		2.634	2.687	55.320	50.720	52.530	85.103%		
σ		0.061	0.047	0.857	1.332	1.020	1.362%		
%RSD		2.301	1.746	1.549	2.626	1.943	1.600		

180-42906-C-11-G 4/28/2015 4:37:59 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	04:38:18	35.377%	2.201	91.180	90.550	0.000	36130.000	23050.000	23240.000
2	04:38:37	32.693%	2.361	96.000	93.170	0.000	37170.000	23820.000	23930.000
3	04:38:56	31.127%	1.900	91.130	85.530	0.000	35870.000	22840.000	22610.000
X		33.066%	2.154	92.770	89.750	0.000	36390.000	23240.000	23260.000
σ		2.149%	0.234	2.799	3.881	0.000	685.200	518.800	664.300
%RSD		6.500	10.870	3.017	4.325	0.000	1.883	2.233	2.856
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:38:18	32890.000	1830.000	0.000	14490.000	339900.000	351000.000	37.671%	393.300
2	04:38:37	33370.000	1889.000	0.000	14960.000	351000.000	349800.000	35.633%	406.100
3	04:38:56	31730.000	1780.000	0.000	15030.000	348400.000	353900.000	34.591%	410.700
X		32660.000	1833.000	0.000	14830.000	346400.000	351600.000	35.965%	403.400
σ		841.700	54.210	0.000	296.500	5824.000	2058.000	1.566%	9.044
%RSD		2.577	2.957	0.000	2.000	1.681	0.585	4.356	2.242
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:38:18	119.400	30.960	759.200	41160.000	41240.000	31.570	28.740	42.000
2	04:38:37	125.700	31.730	789.700	42430.000	41150.000	31.830	28.660	41.790
3	04:38:56	123.000	31.510	792.500	42060.000	41360.000	30.420	28.050	40.640
X		122.700	31.400	780.400	41880.000	41250.000	31.270	28.480	41.480
σ		3.183	0.394	18.470	650.300	106.700	0.746	0.381	0.731
%RSD		2.595	1.255	2.367	1.553	0.259	2.387	1.336	1.762
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:38:18	42.060	206.200	208.800	45.240	3.461	5.182	0.000	609.300
2	04:38:37	42.990	209.900	212.700	45.450	3.205	4.669	0.000	618.700
3	04:38:56	40.370	209.200	213.100	47.810	3.397	4.627	0.000	622.800
X		41.800	208.500	211.500	46.170	3.355	4.826	0.000	616.900
σ		1.329	1.959	2.399	1.429	0.133	0.309	0.000	6.930
%RSD		3.180	0.940	1.134	3.095	3.971	6.406	0.000	1.123
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:38:18	0.000	6.046	6.325	50.972%	0.357	0.274	2.727	2.475
2	04:38:37	0.000	6.469	6.314	51.454%	0.364	0.267	2.623	2.338
3	04:38:56	0.000	6.052	6.275	50.385%	0.331	0.279	2.931	2.482
X		0.000	6.189	6.305	50.937%	0.351	0.273	2.760	2.432
σ		0.000	0.242	0.026	0.536%	0.017	0.006	0.156	0.081
%RSD		0.000	3.916	0.417	1.051	4.877	2.183	5.660	3.343
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:38:18	61.432%	39.060	1.540	1.583	466.300	460.500	87.078%	89.868%
2	04:38:37	61.680%	39.460	1.572	1.561	465.200	458.300	88.174%	90.471%
3	04:38:56	61.374%	39.420	1.547	1.452	464.100	460.600	87.678%	90.090%
X		61.496%	39.310	1.553	1.532	465.200	459.800	87.643%	90.143%
σ		0.162%	0.224	0.017	0.070	1.109	1.280	0.549%	0.305%
%RSD		0.264	0.570	1.082	4.600	0.238	0.278	0.626	0.338
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:38:18	2.576	2.644	73.940	68.390	70.320	78.453%		
2	04:38:37	2.574	2.616	73.980	68.070	70.080	80.563%		
3	04:38:56	2.547	2.621	72.940	66.460	69.310	82.158%		
X		2.566	2.627	73.620	67.640	69.910	80.391%		
σ		0.016	0.015	0.586	1.035	0.526	1.858%		
%RSD		0.620	0.573	0.796	1.531	0.752	2.312		

180-42815-F-1-H 4/28/2015 4:41:48 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	04:42:07	39.113%	5.148	142.200	142.200	0.000	44600.000	58410.000	58720.000
2	04:42:26	36.347%	5.358	147.200	143.600	0.000	45570.000	60120.000	59100.000
3	04:42:46	37.280%	5.196	141.900	137.100	0.000	42220.000	58190.000	57780.000
X		37.580%	5.234	143.800	141.000	0.000	44130.000	58910.000	58530.000
σ		1.407%	0.111	2.979	3.462	0.000	1722.000	1058.000	676.100
%RSD		3.744	2.111	2.073	2.456	0.000	3.901	1.797	1.155
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:42:07	101400.000	1492.000	0.000	25310.000	49250.000	54120.000	54.384%	3583.000
2	04:42:26	99640.000	1460.000	0.000	25680.000	49890.000	55050.000	52.157%	3574.000
3	04:42:46	97120.000	1349.000	0.000	25150.000	48490.000	54310.000	52.333%	3549.000
X		99370.000	1434.000	0.000	25380.000	49210.000	54490.000	52.958%	3569.000
σ		2131.000	75.220	0.000	274.200	702.300	491.900	1.238%	17.650
%RSD		2.145	5.245	0.000	1.080	1.427	0.903	2.337	0.495
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:42:07	254.900	211.200	2243.000	200700.000	204300.000	63.120	123.100	50.160
2	04:42:26	262.100	212.800	2330.000	210900.000	210200.000	65.060	126.000	50.980
3	04:42:46	262.500	220.900	2356.000	212800.000	214800.000	65.410	126.000	50.640
X		259.800	215.000	2310.000	208100.000	209700.000	64.530	125.000	50.590
σ		4.277	5.176	58.970	6523.000	5263.000	1.231	1.685	0.411
%RSD		1.646	2.408	2.553	3.134	2.510	1.908	1.348	0.813
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:42:07	50.260	371.300	373.500	51.980	2.033	4.050	0.000	317.800
2	04:42:26	51.180	379.100	384.900	52.870	2.559	3.998	0.000	323.500
3	04:42:46	51.420	382.500	387.800	52.880	2.055	3.860	0.000	327.900
X		50.960	377.600	382.100	52.580	2.216	3.969	0.000	323.100
σ		0.613	5.739	7.563	0.515	0.298	0.098	0.000	5.039
%RSD		1.204	1.520	1.979	0.979	13.430	2.475	0.000	1.560
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:42:07	0.000	9.233	9.481	66.222%	0.185	0.115	1.425	0.966
2	04:42:26	0.000	9.450	9.701	65.730%	0.175	0.120	1.316	0.943
3	04:42:46	0.000	9.680	9.964	65.596%	0.175	0.116	1.305	0.967
X		0.000	9.454	9.715	65.849%	0.178	0.117	1.348	0.959
σ		0.000	0.224	0.242	0.330%	0.006	0.003	0.066	0.014
%RSD		0.000	2.367	2.490	0.500	3.171	2.517	4.916	1.414
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:42:07	74.267%	43.320	0.531	0.507	221.900	219.700	101.694%	103.518%
2	04:42:26	75.602%	43.140	0.515	0.474	221.500	220.800	105.136%	105.792%
3	04:42:46	76.233%	43.530	0.537	0.540	223.600	221.800	104.389%	106.989%
X		75.368%	43.330	0.528	0.507	222.300	220.800	103.740%	105.433%
σ		1.004%	0.199	0.011	0.033	1.095	1.019	1.811%	1.763%
%RSD		1.332	0.460	2.134	6.524	0.492	0.462	1.745	1.672
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:42:07	1.347	1.389	87.100	78.080	81.980	89.504%		
2	04:42:26	1.375	1.389	88.220	79.100	82.940	90.255%		
3	04:42:46	1.365	1.405	86.530	78.360	82.020	91.727%		
X		1.363	1.394	87.280	78.510	82.320	90.495%		
σ		0.014	0.009	0.856	0.529	0.545	1.131%		
%RSD		1.057	0.661	0.981	0.673	0.662	1.250		

CCV 1533080 4/28/2015 4:48:54 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	04:48:54	63.623%	101.800	98.980	96.230	0.000	49260.000	49060.000	48850.000
2	04:49:13	58.558%	104.500	102.500	92.330	0.000	50590.000	49990.000	49180.000
3	04:49:33	58.216%	100.600	94.120	91.700	0.000	49280.000	47930.000	47800.000
X		60.133%	102.308%	98.518%	93.422%	0.000	99.418%	97.986%	97.218%
σ		3.028%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		5.035	1.978	4.253	2.628	0.000	1.527	2.102	1.488
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:48:54	512.900	4648.000	0.000	51030.000	46690.000	51030.000	74.127%	93.610
2	04:49:13	506.400	4472.000	0.000	52150.000	48310.000	52860.000	68.024%	97.190
3	04:49:33	494.400	4472.000	0.000	51770.000	47550.000	52930.000	66.469%	97.970
X		100.921%	90.610%	0.000	103.298%	95.033%	104.554%	69.540%	96.259%
σ		n/a	n/a	0.000	n/a	n/a	n/a	4.047%	n/a
%RSD		1.860	2.238	0.000	1.097	1.697	2.061	5.820	2.415
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:48:54	90.630	93.580	507.000	25290.000	25270.000	93.980	92.000	93.250
2	04:49:13	96.730	96.070	535.900	26710.000	26360.000	96.750	98.000	97.620
3	04:49:33	96.200	97.590	538.200	26600.000	26070.000	94.010	96.080	96.620
X		94.520%	95.746%	105.406%	104.796%	103.598%	94.913%	95.358%	95.831%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		3.577	2.116	3.306	3.011	2.171	1.675	3.213	2.393
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:48:54	95.460	100.700	102.700	101.500	106.800	106.200	0.000	101.900
2	04:49:13	96.880	104.500	106.200	103.900	110.500	108.700	0.000	104.000
3	04:49:33	94.800	103.700	102.800	101.000	107.800	105.700	0.000	103.700
X		95.712%	102.969%	103.914%	102.142%	108.353%	106.860%	0.000	103.208%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.113	1.944	1.922	1.500	1.738	1.492	0.000	1.091
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:48:54	83.186%	94.050	95.640	83.197%	97.930	96.570	100.500	101.200
2	04:49:13	81.567%	95.670	98.060	80.617%	97.920	98.010	103.900	102.400
3	04:49:33	81.453%	97.880	99.570	79.626%	97.420	96.870	103.100	102.600
X		82.069%	95.869%	97.755%	81.147%	97.759%	97.150%	102.520%	102.054%
σ		0.970%	n/a	n/a	1.843%	n/a	n/a	n/a	n/a
%RSD		1.181	2.009	2.029	2.271	0.296	0.780	1.737	0.690
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:48:54	87.296%	97.710	99.850	99.740	97.960	98.020	98.056%	100.314%
2	04:49:13	86.506%	99.180	102.900	102.800	99.670	99.100	99.149%	100.632%
3	04:49:33	87.383%	99.080	102.400	101.900	99.250	98.540	99.685%	100.820%
X		87.062%	98.654%	101.721%	101.503%	98.961%	98.555%	98.964%	100.588%
σ		0.483%	n/a	n/a	n/a	n/a	n/a	0.830%	0.256%
%RSD		0.555	0.832	1.608	1.562	0.903	0.547	0.839	0.254
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:48:54	97.490	103.700	97.930	98.050	97.090	103.809%		
2	04:49:13	101.200	106.200	102.500	101.800	100.700	102.244%		
3	04:49:33	101.600	108.000	104.000	104.000	102.400	102.041%		
X		100.101%	105.945%	101.478%	101.273%	100.065%	102.698%		
σ		n/a	n/a	n/a	n/a	n/a	0.968%		
%RSD		2.268	2.042	3.104	2.955	2.712	0.942		

CCB9 4/28/2015 4:55:36 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	04:55:55	87.842%	-0.043	0.748	0.386	0.000	11.160	8.610	9.182
2	04:56:15	81.834%	-0.027	0.383	0.362	0.000	7.559	6.513	6.491
3	04:56:34	81.404%	-0.035	0.386	0.377	0.000	5.100	4.382	5.063
X		83.693%	-0.035	0.506	0.375	0.000	7.941	6.502	6.912
σ		3.599%	0.008	0.210	0.012	0.000	3.051	2.114	2.092
%RSD		4.301	22.460	41.550	3.169	0.000	38.410	32.520	30.260
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:55:55	8.985	-235.600	0.000	6.251	31.580	33.420	85.732%	0.057
2	04:56:15	5.818	-235.900	0.000	2.868	22.390	20.780	87.429%	0.043
3	04:56:34	3.609	-237.500	0.000	2.291	12.850	14.320	85.007%	0.019
X		6.137	-236.300	0.000	3.803	22.270	22.840	86.056%	0.040
σ		2.702	1.058	0.000	2.139	9.365	9.719	1.243%	0.019
%RSD		44.030	0.448	0.000	56.250	42.050	42.560	1.445	47.560
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:55:55	0.062	-0.001	0.284	19.800	19.810	0.026	0.018	-0.053
2	04:56:15	0.038	0.013	0.178	10.280	14.690	0.023	-0.001	-0.069
3	04:56:34	0.039	0.004	0.147	7.312	9.877	0.012	0.012	-0.048
X		0.046	0.005	0.203	12.460	14.790	0.020	0.010	-0.057
σ		0.014	0.007	0.072	6.522	4.969	0.008	0.009	0.011
%RSD		29.940	138.300	35.520	52.340	33.590	37.840	96.260	19.090
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:55:55	0.005	-0.250	-0.169	0.007	0.048	-0.008	0.000	0.163
2	04:56:15	0.034	-0.244	-0.231	0.020	0.107	0.147	0.000	0.114
3	04:56:34	-0.002	-0.292	-0.268	0.043	0.126	0.083	0.000	0.080
X		0.012	-0.262	-0.223	0.023	0.094	0.074	0.000	0.119
σ		0.019	0.026	0.050	0.019	0.041	0.078	0.000	0.042
%RSD		155.700	9.893	22.460	79.370	43.730	105.500	0.000	35.190
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:55:55	91.850%	0.232	0.227	95.521%	-0.067	-0.066	0.086	0.054
2	04:56:15	92.021%	0.142	0.187	94.499%	-0.074	-0.070	0.035	0.019
3	04:56:34	91.947%	0.149	0.162	94.644%	-0.077	-0.072	-0.010	-0.009
X		91.939%	0.174	0.192	94.888%	-0.073	-0.070	0.037	0.021
σ		0.086%	0.050	0.033	0.553%	0.005	0.003	0.048	0.032
%RSD		0.093	28.750	17.100	0.583	7.436	4.211	129.500	149.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:55:55	99.024%	-0.133	0.034	0.033	0.226	0.178	108.286%	108.127%
2	04:56:15	104.367%	-0.154	0.022	0.026	0.123	0.098	109.606%	110.515%
3	04:56:34	100.744%	-0.182	0.025	0.006	0.086	0.074	112.095%	112.940%
X		101.379%	-0.156	0.027	0.022	0.145	0.117	109.996%	110.527%
σ		2.728%	0.025	0.006	0.014	0.073	0.055	1.934%	2.406%
%RSD		2.690	15.880	23.490	65.220	50.070	46.710	1.759	2.177
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:55:55	0.035	0.035	0.025	0.025	0.025	111.079%		
2	04:56:15	0.035	0.029	0.023	0.020	0.021	113.634%		
3	04:56:34	0.030	0.036	0.008	0.016	0.013	113.955%		
X		0.034	0.033	0.019	0.020	0.020	112.889%		
σ		0.003	0.003	0.009	0.005	0.006	1.576%		
%RSD		8.673	10.030	49.200	23.390	31.960	1.396		

180-42815-F-2-H 4/28/2015 4:59:28 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:59:47	38.709%	2.964	101.100	100.100	0.000	35240.000	41770.000	42420.000
2	05:00:07	36.901%	3.337	99.490	100.900	0.000	35100.000	39200.000	40180.000
3	05:00:26	33.783%	3.032	101.800	100.100	0.000	37090.000	43030.000	42490.000
X		36.464%	3.111	100.800	100.400	0.000	35810.000	41330.000	41700.000
σ		2.492%	0.199	1.176	0.507	0.000	1113.000	1954.000	1314.000
%RSD		6.833	6.383	1.167	0.505	0.000	3.107	4.728	3.150
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:59:47	65960.000	1146.000	0.000	20650.000	191900.000	191500.000	43.276%	3399.000
2	05:00:07	62330.000	1104.000	0.000	20430.000	172100.000	189600.000	41.481%	3413.000
3	05:00:26	64860.000	1146.000	0.000	20790.000	174700.000	195700.000	39.533%	3438.000
X		64380.000	1132.000	0.000	20620.000	179500.000	192300.000	41.430%	3417.000
σ		1864.000	24.670	0.000	179.600	10760.000	3100.000	1.872%	19.740
%RSD		2.895	2.179	0.000	0.871	5.991	1.612	4.519	0.578
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:59:47	213.400	154.100	1882.000	157500.000	159000.000	46.990	90.800	51.860
2	05:00:07	212.500	158.300	1958.000	160100.000	160900.000	48.590	95.350	52.830
3	05:00:26	212.800	153.600	1944.000	160000.000	158400.000	48.010	93.100	52.290
X		212.900	155.300	1928.000	159200.000	159400.000	47.870	93.090	52.330
σ		0.436	2.559	40.480	1457.000	1281.000	0.810	2.274	0.484
%RSD		0.205	1.647	2.099	0.915	0.803	1.691	2.443	0.926
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:59:47	52.690	387.900	390.700	41.440	2.119	3.342	0.000	954.300
2	05:00:07	54.890	397.400	405.800	42.050	2.162	3.443	0.000	974.800
3	05:00:26	52.660	396.800	398.900	41.150	2.053	3.102	0.000	986.400
X		53.410	394.000	398.500	41.550	2.111	3.295	0.000	971.800
σ		1.275	5.316	7.534	0.461	0.055	0.175	0.000	16.230
%RSD		2.388	1.349	1.891	1.110	2.596	5.316	0.000	1.670
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:59:47	0.000	8.653	8.677	57.040%	0.421	0.355	1.342	1.095
2	05:00:07	0.000	8.571	8.658	55.669%	0.374	0.330	1.381	1.119
3	05:00:26	0.000	8.843	8.860	55.177%	0.381	0.312	1.532	1.091
X		0.000	8.689	8.732	55.962%	0.392	0.332	1.418	1.101
σ		0.000	0.140	0.112	0.965%	0.025	0.022	0.100	0.015
%RSD		0.000	1.609	1.278	1.725	6.402	6.563	7.073	1.372
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:59:47	66.739%	39.880	0.691	0.734	266.300	266.800	89.797%	92.306%
2	05:00:07	66.219%	40.030	0.662	0.699	269.300	267.400	90.683%	93.180%
3	05:00:26	65.491%	40.630	0.715	0.718	271.700	266.200	91.250%	93.799%
X		66.149%	40.180	0.689	0.717	269.100	266.800	90.577%	93.095%
σ		0.627%	0.394	0.026	0.018	2.706	0.568	0.732%	0.750%
%RSD		0.948	0.982	3.785	2.463	1.005	0.213	0.809	0.806
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:59:47	1.046	1.094	88.200	80.070	83.520	86.680%		
2	05:00:07	1.118	1.172	89.740	82.410	85.130	86.616%		
3	05:00:26	1.100	1.152	91.380	83.660	86.370	86.153%		
X		1.088	1.139	89.770	82.050	85.000	86.483%		
σ		0.037	0.040	1.591	1.823	1.431	0.287%		
%RSD		3.419	3.535	1.773	2.222	1.684	0.332		

180-42815-F-3-F 4/28/2015 5:03:18 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	05:03:37	49.854%	1.755	38.880	41.400	0.000	26250.000	10870.000	10870.000
2	05:03:56	47.187%	1.797	41.620	42.650	0.000	25500.000	10520.000	10740.000
3	05:04:15	47.663%	1.798	44.490	42.980	0.000	25120.000	10740.000	10650.000
x		48.234%	1.783	41.660	42.350	0.000	25630.000	10710.000	10750.000
σ		1.422%	0.024	2.805	0.832	0.000	574.200	178.100	110.800
%RSD		2.948	1.368	6.733	1.964	0.000	2.241	1.664	1.030
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:03:37	23360.000	1970.000	0.000	6017.000	8340.000	9188.000	59.460%	1289.000
2	05:03:56	23700.000	1940.000	0.000	5947.000	8394.000	9109.000	59.091%	1304.000
3	05:04:15	23750.000	1900.000	0.000	6092.000	8416.000	9214.000	56.599%	1274.000
x		23600.000	1937.000	0.000	6019.000	8383.000	9170.000	58.383%	1289.000
σ		214.600	35.370	0.000	72.520	39.470	54.380	1.556%	15.320
%RSD		0.909	1.827	0.000	1.205	0.471	0.593	2.666	1.189
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:03:37	77.670	63.800	443.000	56940.000	55710.000	17.630	38.440	20.910
2	05:03:56	77.830	65.020	439.700	56400.000	56110.000	16.990	36.280	20.810
3	05:04:15	77.570	64.980	449.600	57610.000	57270.000	17.520	37.240	21.570
x		77.690	64.600	444.100	56980.000	56370.000	17.380	37.320	21.100
σ		0.127	0.692	5.035	609.200	810.600	0.342	1.084	0.411
%RSD		0.163	1.072	1.134	1.069	1.438	1.968	2.904	1.947
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:03:37	21.050	101.800	103.500	22.290	0.748	1.132	0.000	77.810
2	05:03:56	21.300	99.300	101.900	21.350	0.529	1.046	0.000	79.100
3	05:04:15	21.990	104.200	104.100	21.780	0.840	1.283	0.000	80.860
x		21.450	101.800	103.200	21.810	0.706	1.154	0.000	79.260
σ		0.489	2.445	1.155	0.472	0.160	0.120	0.000	1.534
%RSD		2.279	2.403	1.119	2.163	22.640	10.420	0.000	1.935
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:03:37	0.000	2.985	2.976	76.610%	0.008	-0.007	0.296	0.134
2	05:03:56	0.000	2.915	3.104	76.545%	0.004	-0.014	0.368	0.253
3	05:04:15	0.000	3.006	2.994	74.927%	0.019	-0.004	0.313	0.113
x		0.000	2.969	3.025	76.027%	0.010	-0.008	0.326	0.167
σ		0.000	0.048	0.069	0.953%	0.008	0.005	0.038	0.076
%RSD		0.000	1.616	2.279	1.254	76.830	56.650	11.540	45.380
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:03:37	84.969%	36.780	0.550	0.464	60.210	60.290	108.184%	109.531%
2	05:03:56	85.749%	36.980	0.500	0.495	60.710	60.270	108.745%	111.057%
3	05:04:15	86.045%	36.840	0.519	0.496	60.880	59.680	109.440%	111.450%
x		85.588%	36.860	0.523	0.485	60.600	60.080	108.790%	110.679%
σ		0.556%	0.101	0.025	0.018	0.345	0.346	0.629%	1.014%
%RSD		0.650	0.273	4.821	3.739	0.570	0.576	0.579	0.916
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:03:37	0.347	0.343	31.690	28.690	29.920	102.602%		
2	05:03:56	0.334	0.329	31.540	28.780	29.980	104.705%		
3	05:04:15	0.328	0.345	31.710	28.950	30.210	104.791%		
x		0.336	0.339	31.650	28.810	30.040	104.033%		
σ		0.010	0.009	0.092	0.134	0.151	1.240%		
%RSD		2.979	2.661	0.292	0.465	0.504	1.192		

180-42815-E-4-B 4/28/2015 5:07:07 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	05:07:26	52.022%	1.412	33.680	34.140	0.000	27290.000	7595.000	7499.000
2	05:07:46	45.984%	1.204	35.040	34.130	0.000	26890.000	7463.000	7644.000
3	05:08:05	45.520%	1.724	31.550	33.510	0.000	27310.000	7530.000	7435.000
X		47.842%	1.447	33.420	33.930	0.000	27160.000	7529.000	7526.000
σ		3.627%	0.261	1.755	0.358	0.000	238.500	66.180	106.900
%RSD		7.582	18.070	5.251	1.056	0.000	0.878	0.879	1.420
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:07:26	15430.000	1928.000	0.000	4263.000	21550.000	24030.000	60.414%	884.500
2	05:07:46	15700.000	1994.000	0.000	4326.000	21830.000	24420.000	59.150%	890.100
3	05:08:05	15110.000	1887.000	0.000	4320.000	21950.000	24270.000	57.132%	885.900
X		15410.000	1936.000	0.000	4303.000	21780.000	24240.000	58.899%	886.800
σ		294.500	54.150	0.000	34.640	209.300	193.900	1.655%	2.926
%RSD		1.911	2.796	0.000	0.805	0.961	0.800	2.811	0.330
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:07:26	53.370	47.980	407.200	46250.000	45680.000	14.230	29.620	17.260
2	05:07:46	52.860	48.970	411.600	46420.000	45890.000	14.450	29.930	17.060
3	05:08:05	54.410	48.280	415.900	46650.000	46000.000	14.390	28.850	17.060
X		53.550	48.410	411.600	46440.000	45850.000	14.360	29.470	17.130
σ		0.790	0.507	4.333	203.000	162.600	0.111	0.558	0.116
%RSD		1.475	1.047	1.053	0.437	0.355	0.776	1.892	0.674
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:07:26	16.960	72.390	71.680	19.000	0.456	0.820	0.000	155.900
2	05:07:46	17.290	73.290	72.520	19.380	0.521	1.007	0.000	159.600
3	05:08:05	17.560	72.400	72.500	18.950	0.500	1.042	0.000	160.800
X		17.270	72.690	72.240	19.110	0.492	0.956	0.000	158.700
σ		0.299	0.514	0.480	0.237	0.033	0.119	0.000	2.545
%RSD		1.731	0.707	0.664	1.238	6.740	12.460	0.000	1.603
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:07:26	0.000	3.391	3.511	77.206%	0.009	-0.015	0.339	0.170
2	05:07:46	0.000	3.607	3.520	75.256%	-0.004	-0.000	0.395	0.172
3	05:08:05	0.000	3.479	3.530	75.652%	-0.015	-0.019	0.375	0.220
X		0.000	3.492	3.520	76.038%	-0.003	-0.012	0.370	0.187
σ		0.000	0.109	0.009	1.031%	0.012	0.010	0.028	0.028
%RSD		0.000	3.109	0.259	1.355	368.200	84.950	7.606	15.220
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:07:26	86.204%	35.340	0.345	0.345	55.200	55.380	107.172%	108.929%
2	05:07:46	86.096%	35.630	0.384	0.356	55.810	55.190	107.204%	109.853%
3	05:08:05	85.629%	35.200	0.364	0.375	56.000	55.270	109.684%	111.175%
X		85.976%	35.390	0.365	0.358	55.670	55.280	108.020%	109.986%
σ		0.305%	0.220	0.019	0.015	0.422	0.095	1.441%	1.129%
%RSD		0.355	0.621	5.337	4.264	0.757	0.172	1.334	1.026
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:07:26	0.198	0.219	26.160	23.880	24.980	102.077%		
2	05:07:46	0.215	0.215	26.090	23.480	24.730	105.272%		
3	05:08:05	0.226	0.214	26.560	23.940	25.110	105.330%		
X		0.213	0.216	26.270	23.760	24.940	104.226%		
σ		0.014	0.003	0.252	0.249	0.192	1.862%		
%RSD		6.674	1.210	0.958	1.048	0.771	1.786		

180-42815-E-5-C 4/28/2015 5:10:56 AM

User Pre-dilution: 1.000

Run	Time	6Li ppb	9Be ppb	10B ppb	11B ppb	13C ppb	23Na ppb	25Mg ppb	26Mg ppb
1	05:11:16	50.702%	1.802	36.170	34.310	0.000	24750.000	7939.000	8036.000
2	05:11:35	48.415%	2.286	33.120	35.980	0.000	25300.000	8575.000	8729.000
3	05:11:54	46.583%	2.125	38.480	35.810	0.000	26070.000	8517.000	8628.000
X		48.567%	2.071	35.920	35.370	0.000	25370.000	8344.000	8464.000
σ		2.064%	0.247	2.689	0.919	0.000	664.300	351.500	374.800
%RSD		4.249	11.910	7.486	2.599	0.000	2.618	4.213	4.428
Run	Time	27Al ppb	28Si ppb	37Cl ppb	39K ppb	43Ca ppb	44Ca ppb	45Sc ppb	47Ti ppb
1	05:11:16	20060.000	1811.000	0.000	4666.000	12120.000	13640.000	66.931%	1332.000
2	05:11:35	20610.000	1925.000	0.000	5098.000	12960.000	14450.000	62.651%	1453.000
3	05:11:54	20770.000	1900.000	0.000	5125.000	13460.000	14650.000	63.221%	1445.000
X		20480.000	1878.000	0.000	4963.000	12850.000	14250.000	64.268%	1410.000
σ		370.000	59.940	0.000	257.300	677.700	531.900	2.324%	67.950
%RSD		1.807	3.191	0.000	5.184	5.274	3.734	3.617	4.818
Run	Time	51V ppb	52Cr ppb	55Mn ppb	56Fe ppb	57Fe ppb	59Co ppb	60Ni ppb	63Cu ppb
1	05:11:16	60.190	55.360	323.200	49770.000	49340.000	24.170	38.700	24.850
2	05:11:35	67.240	59.690	350.000	53460.000	51870.000	24.980	42.340	26.820
3	05:11:54	68.770	59.720	344.300	52580.000	51600.000	24.500	40.570	26.140
X		65.400	58.260	339.200	51930.000	50940.000	24.550	40.530	25.940
σ		4.577	2.510	14.140	1929.000	1392.000	0.409	1.817	1.000
%RSD		6.998	4.308	4.168	3.714	2.733	1.667	4.483	3.856
Run	Time	65Cu ppb	66Zn ppb	68Zn ppb	75As ppb	78Se ppb	82Se ppb	83Kr ppb	88Sr ppb
1	05:11:16	25.290	102.100	102.900	22.170	0.656	0.863	0.000	120.300
2	05:11:35	26.580	105.700	107.400	22.310	0.707	1.097	0.000	125.800
3	05:11:54	26.050	106.900	108.600	22.950	0.447	0.828	0.000	127.800
X		25.970	104.900	106.300	22.480	0.603	0.930	0.000	124.600
σ		0.652	2.479	2.965	0.414	0.138	0.146	0.000	3.886
%RSD		2.510	2.363	2.790	1.844	22.800	15.750	0.000	3.119
Run	Time	89Y ppb	95Mo ppb	98Mo ppb	103Rh ppb	107Ag ppb	109Ag ppb	111Cd ppb	114Cd ppb
1	05:11:16	0.000	3.261	3.490	82.928%	-0.020	-0.034	0.342	0.193
2	05:11:35	0.000	3.484	3.565	83.390%	-0.022	-0.034	0.412	0.197
3	05:11:54	0.000	3.333	3.568	81.728%	-0.025	-0.023	0.342	0.182
X		0.000	3.359	3.541	82.682%	-0.022	-0.030	0.365	0.191
σ		0.000	0.114	0.044	0.858%	0.003	0.006	0.041	0.008
%RSD		0.000	3.392	1.246	1.038	11.500	21.410	11.090	4.134
Run	Time	115In ppb	118Sn ppb	121Sb ppb	123Sb ppb	135Ba ppb	137Ba ppb	159Tb ppb	165Ho ppb
1	05:11:16	92.573%	35.080	0.538	0.545	53.000	52.830	114.809%	117.176%
2	05:11:35	93.312%	35.670	0.508	0.515	54.400	53.920	116.679%	119.294%
3	05:11:54	93.002%	35.980	0.512	0.542	55.010	53.900	117.111%	118.744%
X		92.962%	35.570	0.519	0.534	54.130	53.550	116.200%	118.405%
σ		0.371%	0.458	0.017	0.017	1.030	0.622	1.224%	1.099%
%RSD		0.399	1.288	3.195	3.123	1.903	1.162	1.053	0.928
Run	Time	203Tl ppb	205Tl ppb	206Pb ppb	207Pb ppb	208Pb ppb	209Bi ppb		
1	05:11:16	0.224	0.227	33.790	30.830	31.980	118.407%		
2	05:11:35	0.239	0.250	36.520	33.310	34.370	113.495%		
3	05:11:54	0.250	0.253	37.020	33.570	34.950	113.127%		
X		0.238	0.243	35.780	32.570	33.770	115.010%		
σ		0.013	0.014	1.735	1.511	1.576	2.948%		
%RSD		5.405	5.911	4.850	4.639	4.667	2.563		

180-42815-E-6-J 4/28/2015 5:14:45 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	05:15:04	55.218%	-0.032	0.919	1.001	0.000	160.100	59.220	65.130
2	05:15:23	58.794%	1.072	34.290	34.440	0.000	8604.000	8987.000	9030.000
3	05:15:43	28.812%	4.794	146.800	132.400	0.000	36330.000	36410.000	36800.000
	x	47.608%	1.945	60.690	55.940	0.000	15030.000	15150.000	15300.000
	σ	16.376%	2.528	76.460	68.270	0.000	18920.000	18940.000	19150.000
	%RSD	34.398	130.000	126.000	122.100	0.000	125.900	125.000	125.200
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:15:04	172.900	-49.380	0.000	31.160	151.200	134.100	77.764%	13.220
2	05:15:23	12940.000	407.300	0.000	4540.000	146300.000	149600.000	92.409%	372.600
3	05:15:43	51420.000	1467.000	0.000	20360.000	658400.000	663200.000	41.231%	1483.000
	x	21510.000	608.400	0.000	8310.000	268300.000	271000.000	70.468%	622.800
	σ	26680.000	778.100	0.000	10670.000	345700.000	347800.000	26.358%	766.100
	%RSD	124.000	127.900	0.000	128.500	128.800	128.300	37.404	123.000
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:15:04	0.490	0.431	2.708	443.500	409.500	0.188	0.309	0.098
2	05:15:23	48.180	46.060	705.000	70020.000	71210.000	13.330	19.750	8.968
3	05:15:43	203.700	186.000	3000.000	287500.000	290900.000	51.880	74.570	33.630
	x	84.130	77.510	1236.000	119300.000	120800.000	21.800	31.540	14.230
	σ	106.300	96.720	1568.000	149700.000	151500.000	26.870	38.510	17.370
	%RSD	126.300	124.800	126.800	125.500	125.300	123.200	122.100	122.100
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:15:04	0.155	0.988	0.968	0.447	0.268	0.790	0.000	1.017
2	05:15:23	9.033	72.650	75.290	25.810	0.231	1.037	0.000	1289.000
3	05:15:43	35.030	284.800	291.100	100.100	1.461	3.423	0.000	5236.000
	x	14.740	119.500	122.500	42.120	0.653	1.750	0.000	2175.000
	σ	18.120	147.600	150.700	51.800	0.700	1.454	0.000	2728.000
	%RSD	123.000	123.500	123.100	123.000	107.100	83.100	0.000	125.400
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:15:04	0.000	0.102	0.120	126.549%	-0.089	-0.065	-0.094	-0.069
2	05:15:23	0.000	3.314	3.362	95.683%	-0.009	-0.014	0.560	0.391
3	05:15:43	0.000	13.000	13.190	49.346%	0.204	0.061	2.104	1.499
	x	0.000	5.472	5.559	90.526%	0.036	-0.006	0.857	0.607
	σ	0.000	6.714	6.808	38.859%	0.152	0.063	1.129	0.806
	%RSD	0.000	122.700	122.500	42.925	424.900	1076.000	131.800	132.800
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:15:04	152.534%	0.003	0.065	0.122	0.525	0.495	197.821%	201.017%
2	05:15:23	119.124%	9.617	0.335	0.314	109.100	107.300	147.167%	145.987%
3	05:15:43	61.059%	36.950	0.982	1.147	405.000	403.800	87.465%	87.159%
	x	110.906%	15.520	0.460	0.528	171.600	170.500	144.151%	144.721%
	σ	46.288%	19.170	0.471	0.545	209.400	209.000	55.240%	56.940%
	%RSD	41.736	123.500	102.400	103.300	122.000	122.500	38.321	39.344
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:15:04	0.060	0.056	0.297	0.263	0.289	152.057%		
2	05:15:23	0.105	0.109	9.575	8.506	8.591	293.257%		
3	05:15:43	0.788	0.804	64.940	58.820	61.010	87.100%		
	x	0.318	0.323	24.940	22.530	23.300	177.471%		
	σ	0.408	0.417	34.950	31.700	32.920	105.402%		
	%RSD	128.400	129.200	140.200	140.700	141.300	59.391		

CRI 1525173 4/28/2015 7:53:00 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	07:53:19	79.305%	1.021	20.080	20.120	0.000	504.700	480.000	481.100
2	07:53:38	74.931%	1.030	22.360	20.140	0.000	530.700	508.300	510.800
3	07:53:59	76.150%	1.064	19.820	19.700	0.000	514.400	482.700	491.100
x		76.795%	103.836%	415.090%	399.693%	0.000	516.591%	490.325%	494.314%
σ		2.257%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.939	2.201	6.730	1.248	0.000	2.548	3.193	3.064
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:53:19	32.480	253.100	0.000	529.400	510.500	515.700	96.847%	5.206
2	07:53:38	34.060	275.500	0.000	554.100	524.300	516.900	95.104%	5.408
3	07:53:59	33.830	255.800	0.000	541.500	460.400	521.900	94.344%	5.235
x		111.522%	52.294%	0.000	541.672%	498.404%	518.158%	95.432%	105.659%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.283%	n/a
%RSD		2.545	4.669	0.000	2.286	6.741	0.642	1.345	2.066
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:53:19	1.191	2.045	5.287	54.700	54.190	0.521	1.041	2.175
2	07:53:38	1.108	2.130	5.278	55.230	55.280	0.512	1.127	2.106
3	07:53:59	1.096	2.101	5.327	52.540	53.230	0.512	1.075	2.109
x		113.172%	104.615%	105.945%	108.319%	108.468%	103.049%	108.073%	106.507%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		4.584	2.079	0.494	2.632	1.895	0.955	4.003	1.825
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:53:19	2.079	5.728	5.810	1.066	5.911	5.697	0.000	5.095
2	07:53:38	2.206	5.992	5.711	1.259	6.100	5.913	0.000	5.191
3	07:53:59	2.113	5.407	5.393	1.221	5.699	6.030	0.000	5.162
x		106.636%	114.183%	112.759%	118.182%	118.069%	117.603%	0.000	102.989%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		3.077	5.129	3.867	8.635	3.399	2.870	0.000	0.957
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:53:19	106.749%	4.576	4.531	109.604%	1.044	1.014	1.197	1.143
2	07:53:38	106.698%	4.584	4.657	108.816%	0.996	1.028	1.238	1.229
3	07:53:59	108.123%	4.619	4.762	110.290%	1.068	1.072	1.135	1.194
x		107.190%	91.862%	93.000%	109.570%	103.575%	103.772%	119.016%	118.868%
σ		0.808%	n/a	n/a	0.738%	n/a	n/a	n/a	n/a
%RSD		0.754	0.497	2.493	0.673	3.549	2.894	4.369	3.634
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:53:19	102.763%	5.343	2.147	2.091	10.590	11.050	106.718%	106.480%
2	07:53:38	102.200%	5.259	2.213	2.185	11.080	10.780	109.338%	109.348%
3	07:53:59	103.014%	5.616	2.074	2.105	10.860	11.010	111.268%	110.829%
x		102.659%	108.124%	107.213%	106.367%	108.434%	109.480%	109.108%	108.886%
σ		0.417%	n/a	n/a	n/a	n/a	n/a	2.284%	2.211%
%RSD		0.406	3.451	3.243	2.384	2.271	1.373	2.093	2.031
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	07:53:19	1.072	1.070	1.112	1.177	1.140	111.560%		
2	07:53:38	1.126	1.114	1.206	1.200	1.184	113.273%		
3	07:53:59	1.127	1.127	1.199	1.179	1.169	112.267%		
x		110.826%	110.382%	117.207%	118.531%	116.446%	112.367%		
σ		n/a	n/a	n/a	n/a	n/a	0.861%		
%RSD		2.851	2.715	4.470	1.069	1.896	0.766		

CCV 1533080 4/28/2015 7:56:53 AM QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:57:12	80.348%	103.100	99.350	97.580	0.000	51770.000	50930.000	51790.000
2	07:57:31	79.429%	102.900	97.770	93.630	0.000	49040.000	49600.000	51240.000
3	07:57:51	77.247%	102.600	94.370	87.690	0.000	50740.000	49470.000	49680.000
x		79.008%	102.878%	97.161%	92.968%	0.000	101.035%	100.005%	101.806%
σ		1.593%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.016	0.241	2.619	5.353	0.000	2.727	1.611	2.148
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:57:12	530.700	5095.000	0.000	53890.000	47570.000	53650.000	91.440%	102.000
2	07:57:31	521.300	4957.000	0.000	53430.000	48220.000	54340.000	88.471%	98.950
3	07:57:51	496.000	4747.000	0.000	53850.000	48750.000	54060.000	85.398%	99.050
x		103.198%	98.662%	0.000	107.451%	96.360%	108.034%	88.436%	99.998%
σ		n/a	n/a	0.000	n/a	n/a	n/a	3.021%	n/a
%RSD		3.482	3.555	0.000	0.474	1.224	0.641	3.416	1.729
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:57:12	100.400	101.000	532.100	26550.000	26690.000	99.230	96.880	97.950
2	07:57:31	99.970	102.400	531.000	26700.000	26640.000	97.710	98.880	98.350
3	07:57:51	100.300	101.100	544.900	27370.000	26890.000	99.540	100.200	97.830
x		100.222%	101.521%	107.202%	107.492%	106.955%	98.826%	98.670%	98.045%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.217	0.793	1.434	1.631	0.487	0.990	1.717	0.279
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:57:12	98.270	102.400	102.800	104.000	107.600	105.700	0.000	101.800
2	07:57:31	99.800	102.500	101.900	103.400	107.600	107.300	0.000	101.800
3	07:57:51	98.340	103.400	102.600	102.300	106.500	106.200	0.000	101.700
x		98.804%	102.778%	102.439%	103.222%	107.193%	106.405%	0.000	101.739%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.876	0.531	0.487	0.801	0.590	0.795	0.000	0.068
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:57:12	97.509%	99.760	100.500	94.739%	101.500	102.200	106.400	105.900
2	07:57:31	97.964%	99.370	100.900	94.512%	100.700	101.900	105.600	107.200
3	07:57:51	97.414%	100.100	102.500	91.823%	101.500	101.000	107.000	106.700
x		97.629%	99.735%	101.314%	93.691%	101.230%	101.691%	106.304%	106.614%
σ		0.294%	n/a	n/a	1.622%	n/a	n/a	n/a	n/a
%RSD		0.301	0.356	1.019	1.731	0.457	0.605	0.659	0.609
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:57:12	94.363%	104.200	103.200	103.300	104.400	104.300	102.859%	103.573%
2	07:57:31	94.488%	104.100	105.900	106.500	105.900	105.200	104.135%	105.111%
3	07:57:51	94.504%	104.700	107.400	107.500	104.300	104.800	105.740%	107.491%
x		94.452%	104.336%	105.503%	105.786%	104.884%	104.763%	104.245%	105.392%
σ		0.078%	n/a	n/a	n/a	n/a	n/a	1.444%	1.974%
%RSD		0.082	0.336	2.007	2.053	0.869	0.442	1.385	1.873
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	07:57:12	95.320	100.900	95.010	94.750	93.080	118.966%		
2	07:57:31	97.780	103.100	97.640	97.300	96.070	117.734%		
3	07:57:51	98.350	103.600	99.040	98.240	96.880	117.233%		
x		97.152%	102.507%	97.232%	96.764%	95.340%	117.978%		
σ		n/a	n/a	n/a	n/a	n/a	0.892%		
%RSD		1.659	1.422	2.106	1.865	2.099	0.756		

CCB11 4/28/2015 8:03:01 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:03:20	82.627%	-0.027	0.266	0.167	0.000	6.071	3.906	4.272
2	08:03:39	80.183%	-0.019	0.248	0.186	0.000	5.687	4.117	4.606
3	08:03:58	80.064%	-0.035	0.163	0.159	0.000	6.090	4.213	4.286
X		80.958%	-0.027	0.226	0.171	0.000	5.949	4.079	4.388
σ		1.447%	0.008	0.055	0.014	0.000	0.227	0.157	0.189
%RSD		1.787	29.600	24.340	8.339	0.000	3.818	3.854	4.313
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:03:20	1.761	-230.100	0.000	6.971	16.340	12.640	90.613%	-0.108
2	08:03:39	1.925	-230.600	0.000	7.218	21.290	11.300	89.092%	-0.174
3	08:03:58	1.783	-230.300	0.000	6.137	19.180	11.200	89.702%	-0.099
X		1.823	-230.400	0.000	6.775	18.940	11.710	89.803%	-0.127
σ		0.089	0.261	0.000	0.566	2.485	0.805	0.765%	0.041
%RSD		4.869	0.113	0.000	8.356	13.120	6.877	0.852	32.110
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:03:20	0.029	0.006	0.144	12.800	10.200	0.003	0.007	-0.036
2	08:03:39	0.028	0.021	0.138	10.980	11.280	0.008	-0.013	-0.038
3	08:03:58	0.013	0.001	0.139	8.995	9.450	0.004	-0.005	-0.053
X		0.023	0.009	0.141	10.930	10.310	0.005	-0.003	-0.042
σ		0.009	0.011	0.003	1.905	0.919	0.003	0.010	0.009
%RSD		38.920	114.800	2.468	17.440	8.919	54.920	294.400	22.210
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:03:20	-0.066	-0.008	-0.032	0.013	0.141	-0.006	0.000	0.073
2	08:03:39	-0.036	0.028	-0.065	0.025	0.191	0.048	0.000	0.088
3	08:03:58	-0.027	-0.024	-0.021	0.014	0.141	0.172	0.000	0.065
X		-0.043	-0.001	-0.039	0.017	0.158	0.071	0.000	0.076
σ		0.020	0.027	0.023	0.007	0.029	0.091	0.000	0.012
%RSD		46.830	1973.000	57.960	38.030	18.300	128.300	0.000	15.500
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:03:20	98.257%	0.147	0.146	103.203%	-0.072	-0.076	0.069	0.043
2	08:03:39	98.707%	0.098	0.128	102.915%	-0.077	-0.075	0.081	0.054
3	08:03:58	99.905%	0.104	0.122	103.145%	-0.071	-0.066	0.093	0.054
X		98.956%	0.116	0.132	103.087%	-0.073	-0.072	0.081	0.051
σ		0.851%	0.027	0.012	0.152%	0.003	0.006	0.012	0.006
%RSD		0.860	22.900	9.404	0.148	4.370	8.061	14.970	12.180
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:03:20	103.757%	-0.199	0.008	0.012	0.015	0.039	110.050%	110.654%
2	08:03:39	105.707%	-0.177	0.013	-0.004	0.022	0.023	111.618%	113.284%
3	08:03:58	106.470%	-0.187	0.003	0.009	-0.001	0.033	113.716%	114.379%
X		105.311%	-0.188	0.008	0.006	0.012	0.031	111.795%	112.772%
σ		1.399%	0.011	0.005	0.008	0.012	0.008	1.839%	1.915%
%RSD		1.329	5.983	61.650	148.200	94.960	26.010	1.645	1.698
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	08:03:20	0.013	0.015	0.017	0.012	0.008	113.344%		
2	08:03:39	0.015	0.016	-0.002	0.004	0.004	114.122%		
3	08:03:58	0.019	0.016	0.007	0.007	0.003	114.376%		
X		0.016	0.016	0.007	0.008	0.005	113.947%		
σ		0.003	0.001	0.009	0.004	0.002	0.538%		
%RSD		19.370	4.366	123.800	50.880	45.830	0.472		

Performance Report

Sample details

Sample name : ITUNE

Acquired at : 4/27/2015 5:04:55 PM

Report name : EPA ILMO5.2/6020A 2.1 [3/15/2013 11:49:53 AM]

Mass Calibration verification

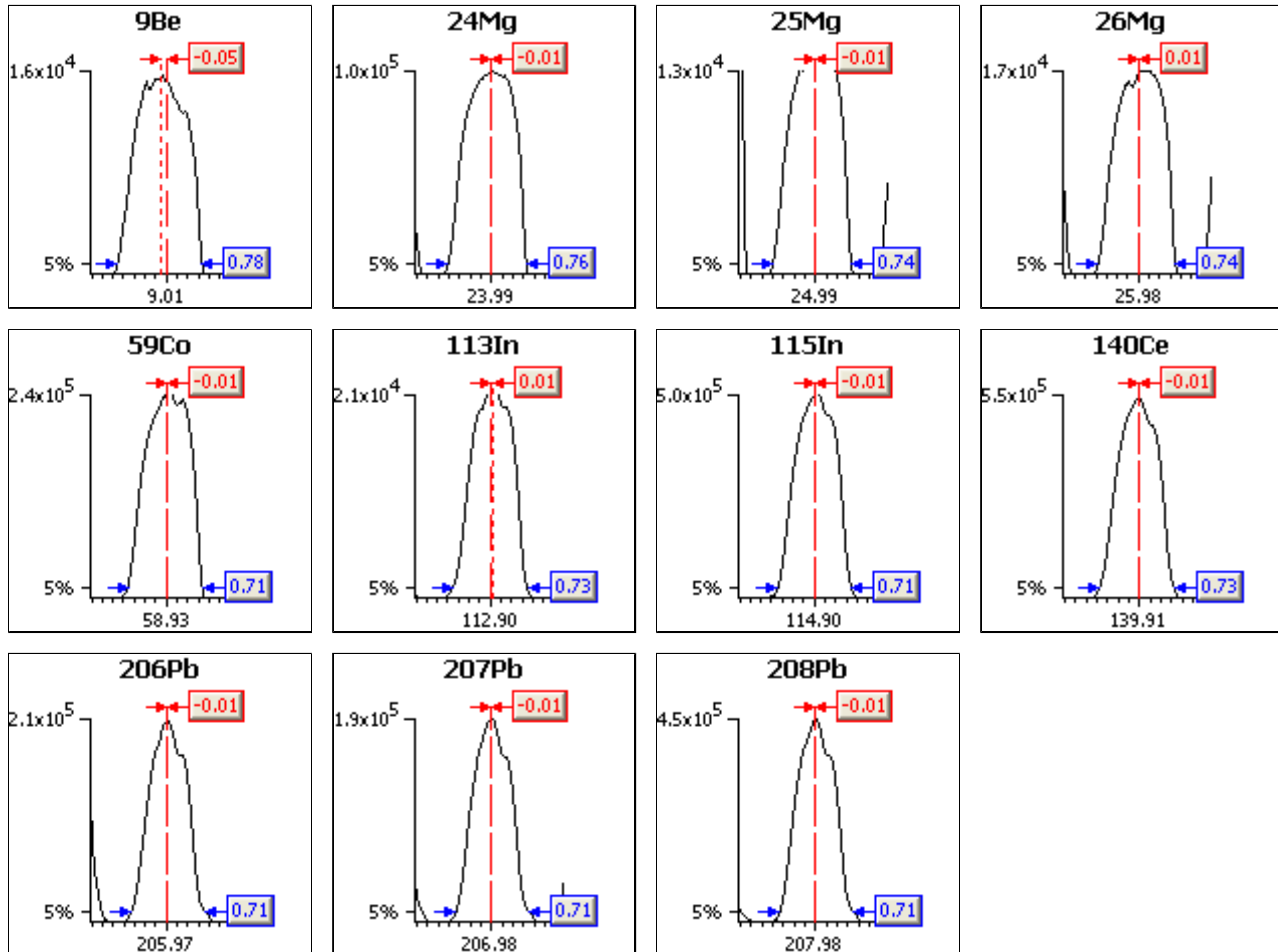
Acquisition parameters

Sweeps : 25

Dwell : 2.0 mSecs

Point spacing : 0.02 amu

Peak width measured at 5% of the peak maximum



Analyte	Limits			Results	
	Max. width	Min. width	Max. error	Peak width	Peak error
9Be	0.90	0.45	0.10	0.78	-0.05
24Mg	0.90	0.45	0.10	0.76	-0.01
25Mg	0.90	0.45	0.10	0.74	-0.01
26Mg	0.90	0.45	0.10	0.74	0.01
59Co	0.90	0.45	0.10	0.71	-0.01
113In	0.90	0.45	0.10	0.73	0.01
115In	0.90	0.45	0.10	0.71	-0.01
140Ce	0.90	0.45	0.10	0.73	-0.01
206Pb	0.90	0.45	0.10	0.71	-0.01
207Pb	0.90	0.45	0.10	0.71	-0.01
208Pb	0.90	0.45	0.10	0.71	-0.01

Sample details

Sample name : ITUNE

Acquired at : 4/27/2015 5:04:55 PM

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	5:05:45 PM	0	14508	103179	13631	16690	606951	235549	10
2	5:07:13 PM	0	14261	103717	13934	16647	615137	237362	5
3	5:08:39 PM	0	14112	102333	13575	16223	601563	234857	9
4	5:10:06 PM	0	14022	103602	13685	16767	599320	235944	10
5	5:11:32 PM	0	14332	103440	14033	16657	602670	236351	12
x		0	14247	103254	13772	16597	605128	236013	9
σ		0.04	190.14	553.39	200.27	214.31	6244.58	934.30	2.45
%RSD		39.123	1.335	0.536	1.454	1.291	1.032	0.396	26.245

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	5:05:45 PM	69	0	21734	505585	3661	556350	6432	210034
2	5:07:13 PM	56	0	21922	511322	3632	564307	6486	212253
3	5:08:39 PM	63	0	21687	511633	3807	563559	6314	212941
4	5:10:06 PM	69	0	22220	516707	4067	571318	6560	214463
5	5:11:32 PM	78	0	22387	517800	4159	573256	6472	215418
x		67	0	21990	512609	3865	565758	6453	213022
σ		8.37	0.07	305.21	4891.00	237.77	6756.33	90.24	2082.31
%RSD		12.493	49.793	1.388	0.954	6.152	1.194	1.398	0.978

Run	Time	207Pb	208Pb	220Bkg
Dwell (mSecs)		0.0	0.0	0.0
Limits	%RSD	5.0%	5.0%	-
	Countrate	>500	>500	<2500
1	5:05:45 PM	191796	459632	0
2	5:07:13 PM	193053	462818	0
3	5:08:39 PM	193623	463842	0
4	5:10:06 PM	195261	469434	0
5	5:11:32 PM	195320	467745	0
x		193811	464694	0
σ		1504.03	3925.88	0.14
%RSD		0.776	0.845	79.756

Ratio results

Run	Time	156Ce O/140Ce
Ratio limits		<0.0500
1	5:05:45 PM	0
2	5:07:13 PM	0

3	5:08:39 PM	0
4	5:10:06 PM	0
5	5:11:32 PM	0
\bar{x}		0.0114
σ		0.00
%RSD		1.3274

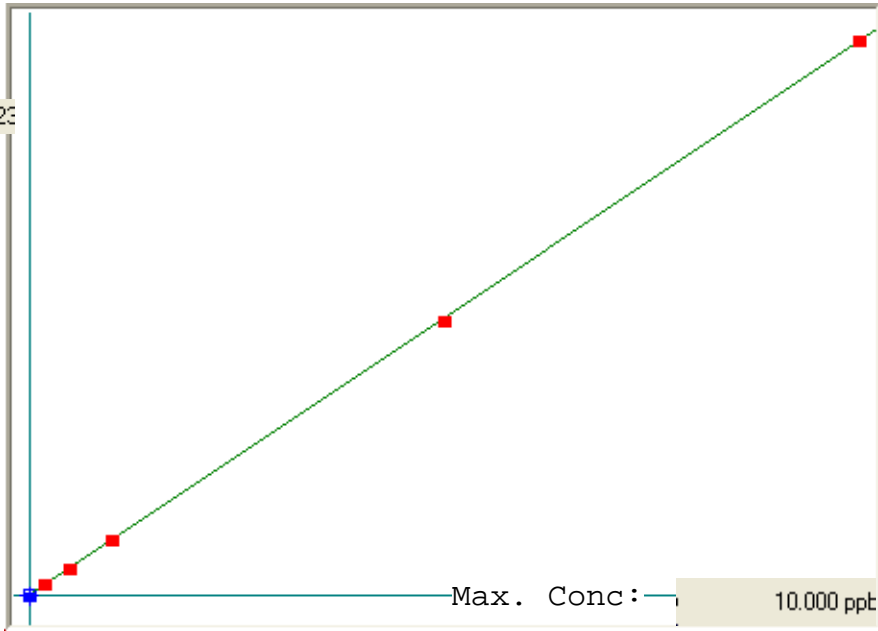
Result : The performance report passed.

METHG

Linear

μ Abs. :

56723



A= 0.0000e+000

B= 1.7658e-004

C= -1.7310e-004

Rho= 0.9999871

Accept = Accepted

Accepted Date=

04/27/15 14:36

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
blank	0.000	0.003	0.003	18	0.000	18				
.2ppb	0.200	0.216	0.016	1223	0.0 %	1223				
.5ppb	0.500	0.487	-0.013	2759	0.0 %	2759				
1.0ppb	1.000	1.013	0.013	5736	0.0 %	5736				
5.0ppb	5.000	4.965	-0.035	28119	0.0 %	28119				
10.0ppb	10.000	10.016	0.016	56723	0.0 %	56723				

R50427B

Method: METHG Operator: Admin Date of Analysis: 27 Apr 2015 13:58:17

Seq ID	Type	Sample ID	Extended ID	Date	Conc.	Units	Std Conc	μ Abs.	Method	Chapter
696	Std	blank - 1		27 Apr 2015 14:24:53	-	ppb	0.0000	18	METHG	R50427B
697	Std	.2ppb - 1		27 Apr 2015 14:26:46	-	ppb	0.2000	1223	METHG	R50427B
698	Std	.5ppb - 1		27 Apr 2015 14:28:39	-	ppb	0.5000	2759	METHG	R50427B
699	Std	1.0ppb - 1		27 Apr 2015 14:30:33	-	ppb	1.0000	5736	METHG	R50427B
700	Std	5.0ppb - 1		27 Apr 2015 14:32:28	-	ppb	5.0000	28119	METHG	R50427B
701	Std	10.0ppb - 1		27 Apr 2015 14:34:22	-	ppb	10.0000	56723	METHG	R50427B
702	CK STND	ICV - 1		27 Apr 2015 14:36:35	98.3%	2.4582		13922	METHG	R50427B
703	CK STND	ICB - 1		27 Apr 2015 14:38:55	-0.0657	ppb		-371	METHG	R50427B
704	CK STND	CRA - 1		27 Apr 2015 14:41:03	96.3%	0.1927		1092	METHG	R50427B
705	CK STND	CCV - 1		27 Apr 2015 14:42:57	94.9%	4.7457		26876	METHG	R50427B
706	CK STND	CCB - 1		27 Apr 2015 14:44:52	-0.0788	ppb		-445	METHG	R50427B
707	SMPL	MB 180-139730/1-A - 1		27 Apr 2015 14:47:08	0.0023	ppb		14	METHG	R50427B
708	SMPL	LCS 180-139730/2-A - 1		27 Apr 2015 14:49:00	2.8148	ppb		15941	METHG	R50427B
709	SMPL	180-43417-D-5-B - 1		27 Apr 2015 14:50:52	1.8713	ppb		10598	METHG	R50427B
710	SMPL	180-43150-H-2-B - 1		27 Apr 2015 14:52:52	-0.0530	ppb		-299	METHG	R50427B
711	SMPL	180-43150-H-3-B - 1		27 Apr 2015 14:54:49	0.0811	ppb		460	METHG	R50427B
712	SMPL	180-43150-H-4-D - 1		27 Apr 2015 14:56:40	0.0138	ppb		79	METHG	R50427B
713	SMPL	180-43150-H-4-E MS - 1		27 Apr 2015 14:58:32	1.1688	ppb		6620	METHG	R50427B
714	SMPL	180-43150-H-4-F MSD - 1		27 Apr 2015 15:00:24	1.1678	ppb		6614	METHG	R50427B
715	SMPL	180-42903-H-1-B - 1		27 Apr 2015 15:02:18	-0.0281	ppb		-158	METHG	R50427B
716	SMPL	180-42903-H-2-B - 1		27 Apr 2015 15:04:13	0.0168	ppb		96	METHG	R50427B
717	CK STND	CCV - 1		27 Apr 2015 15:06:06	94.7%	4.7353		26817	METHG	R50427B
718	CK STND	CCB - 1		27 Apr 2015 15:07:58	-0.0814	ppb		-460	METHG	R50427B
719	SMPL	180-42903-H-3-B - 1		27 Apr 2015 15:10:12	0.0071	ppb		41	METHG	R50427B
720	SMPL	180-42903-H-4-B - 1		27 Apr 2015 15:12:05	0.0120	ppb		69	METHG	R50427B
721	SMPL	180-42903-H-5-B - 1		27 Apr 2015 15:13:58	0.0111	ppb		64	METHG	R50427B
722	SMPL	180-42903-H-6-B - 1		27 Apr 2015 15:15:49	0.0113	ppb		65	METHG	R50427B
723	SMPL	180-42903-H-7-B - 1		27 Apr 2015 15:17:41	0.0152	ppb		87	METHG	R50427B
724	SMPL	180-42903-H-8-B - 1		27 Apr 2015 15:19:33	0.0125	ppb		72	METHG	R50427B
725	SMPL	180-42903-H-9-B - 1		27 Apr 2015 15:21:25	0.0185	ppb		106	METHG	R50427B
726	SMPL	180-42903-H-10-D - 1		27 Apr 2015 15:23:17	0.0219	ppb		125	METHG	R50427B
727	SMPL	180-42903-H-11-B - 1		27 Apr 2015 15:25:08	0.0060	ppb		35	METHG	R50427B
728	SMPL	180-43297-J-5-D - 1		27 Apr 2015 15:27:00	0.0025	ppb		15	METHG	R50427B
729	CK STND	CCV - 1		27 Apr 2015 15:28:52	92.3%	4.6142		26131	METHG	R50427B
730	CK STND	CCB - 1		27 Apr 2015 15:30:44	-0.0675	ppb		-381	METHG	R50427B
731	SMPL	180-43187-F-1-B - 1		27 Apr 2015 15:33:00	0.3528	ppb		1999	METHG	R50427B
732	SMPL	180-43365-A-1-A - 1		27 Apr 2015 15:34:52	-0.0062	ppb		-34	METHG	R50427B
733	SMPL	180-43206-I-14-B - 1		27 Apr 2015 15:36:46	0.0071	ppb		41	METHG	R50427B
734	SMPL	180-43392-A-1-B - 1		27 Apr 2015 15:38:38	0.3576	ppb		2026	METHG	R50427B
735	SMPL	MB 180-139734/1-A - 1		27 Apr 2015 15:40:31	-0.0129	ppb		-72	METHG	R50427B
736	SMPL	LCS 180-139734/2-A - 1		27 Apr 2015 15:42:25	2.7757	ppb		15720	METHG	R50427B
737	SMPL	180-43292-B-1-D - 1		27 Apr 2015 15:44:16	3.5031	ppb		19839	METHG	R50427B
738	SMPL	180-43292-B-2-B - 1		27 Apr 2015 15:46:19	2.7319	ppb		15472	METHG	R50427B
739	SMPL	180-43292-B-2-C MS - 1		27 Apr 2015 15:48:26	3.6883	ppb		20888	METHG	R50427B
740	SMPL	180-43292-B-2-D MSD - 1		27 Apr 2015 15:50:29	3.7180	ppb		21056	METHG	R50427B
741	CK STND	CCV - 1		27 Apr 2015 15:52:38	91.7%	4.5827		25953	METHG	R50427B
742	CK STND	CCB - 1		27 Apr 2015 15:54:45	-0.0690	ppb		-390	METHG	R50427B
743	SMPL	180-43292-B-3-B - 1		27 Apr 2015 15:57:01	2.5031	ppb		14176	METHG	R50427B
744	SMPL	180-43292-B-4-B - 1		27 Apr 2015 15:58:53	1.7281	ppb		9787	METHG	R50427B
745	SMPL	180-43292-B-5-B - 1		27 Apr 2015 16:00:57	1.7724	ppb		10038	METHG	R50427B
746	SMPL	180-43292-B-6-B - 1		27 Apr 2015 16:02:56	1.8891	ppb		10699	METHG	R50427B
747	SMPL	180-43292-B-7-B - 1		27 Apr 2015 16:04:56	1.9262	ppb		10909	METHG	R50427B
748	SMPL	180-43292-B-8-B - 1		27 Apr 2015 16:06:56	1.9998	ppb		11326	METHG	R50427B
749	SMPL	180-43292-B-9-B - 1		27 Apr 2015 16:08:55	1.7372	ppb		9839	METHG	R50427B
750	SMPL	180-43292-B-10-B - 1		27 Apr 2015 16:10:52	3.4503	ppb		19540	METHG	R50427B
751	SMPL	180-43292-B-11-B - 1		27 Apr 2015 16:12:51	3.6154	ppb		20475	METHG	R50427B
752	SMPL	180-43292-B-12-B - 1		27 Apr 2015 16:14:55	3.1247	ppb		17696	METHG	R50427B

R50427B

Method: METHG Operator: Admin Date of Analysis: 27 Apr 2015 13:58:17

Seq ID	Type	Sample ID	Extended ID	Date	Conc.	Units	Std Conc	µ Abs	Method	Chapter
753	CK STND	CCV - 1		27 Apr 2015 16:16:59	(L)89.2%	4.4602		25259	METHG	R50427B
754	CK STND	CCB - 1		27 Apr 2015 16:19:02	-0.0750			-424	METHG	R50427B
755	SMPL	180-43292-B-13-B - 1		27 Apr 2015 16:21:16	1.7236			9762	METHG	R50427B
756	SMPL	180-43292-B-14-B - 1		27 Apr 2015 16:23:08	0.1510			856	METHG	R50427B
757	SMPL	180-43292-B-15-B - 1		27 Apr 2015 16:25:04	0.2253			1277	METHG	R50427B
758	SMPL	180-43292-B-16-B - 1		27 Apr 2015 16:26:57	0.2511			1423	METHG	R50427B
759	SMPL	180-43292-B-17-B - 1		27 Apr 2015 16:28:50	0.5501			3116	METHG	R50427B
760	SMPL	180-43292-B-18-B - 1		27 Apr 2015 16:30:44	0.4122			2335	METHG	R50427B
761	SMPL	180-43292-B-19-B - 1		27 Apr 2015 16:32:39	0.6437			3646	METHG	R50427B
762	SMPL	180-43292-B-20-B - 1		27 Apr 2015 16:34:34	0.1798			1019	METHG	R50427B
763	SMPL	MB 180-139736/1-A - 1		27 Apr 2015 16:36:29	-0.0041			-22	METHG	R50427B
764	SMPL	LCS 180-139736/2-A - 1		27 Apr 2015 16:38:22	2.4867			14083	METHG	R50427B
765	CK STND	CCV - 1		27 Apr 2015 16:40:14	90.7%	4.5361		25689	METHG	R50427B
766	CK STND	CCB - 1		27 Apr 2015 16:42:18	-0.0810			-458	METHG	R50427B
767	SMPL	180-42943-C-1-B - 1		27 Apr 2015 16:44:32	0.0016			10	METHG	R50427B
768	SMPL	180-42943-C-2-B - 1		27 Apr 2015 16:46:25	0.0048			28	METHG	R50427B
769	SMPL	180-42943-C-4-B - 1		27 Apr 2015 16:48:18	0.0064			37	METHG	R50427B
770	SMPL	180-42943-C-5-D - 1		27 Apr 2015 16:50:10	0.0057			33	METHG	R50427B
771	SMPL	180-42943-C-5-E MS - 1		27 Apr 2015 16:52:02	1.0238			5799	METHG	R50427B
772	SMPL	180-42943-C-5-F MSD - 1		27 Apr 2015 16:53:54	0.9638			5459	METHG	R50427B
773	SMPL	180-42943-C-6-B - 1		27 Apr 2015 16:55:49	-0.0491			-277	METHG	R50427B
774	SMPL	180-42943-C-7-B - 1		27 Apr 2015 16:57:45	0.0009			6	METHG	R50427B
775	SMPL	180-42943-C-8-B - 1		27 Apr 2015 16:59:37	0.1536			871	METHG	R50427B
776	SMPL	180-42943-C-9-B - 1		27 Apr 2015 17:01:30	-0.0026			-14	METHG	R50427B
777	CK STND	CCV - 1		27 Apr 2015 17:03:24	93.3%	4.6664		26427	METHG	R50427B
778	CK STND	CCB - 1		27 Apr 2015 17:05:16	-0.0754			-426	METHG	R50427B
779	SMPL	180-42943-C-10-B - 1		27 Apr 2015 17:07:31	0.0044			26	METHG	R50427B
780	SMPL	180-42943-C-11-B - 1		27 Apr 2015 17:09:23	0.1891			1072	METHG	R50427B
781	SMPL	180-42943-D-1-B - 1		27 Apr 2015 17:11:16	-0.0060			-33	METHG	R50427B
782	SMPL	180-42943-D-2-B - 1		27 Apr 2015 17:13:08	0.0037			22	METHG	R50427B
783	SMPL	180-42943-D-4-B - 1		27 Apr 2015 17:15:01	0.0046			27	METHG	R50427B
784	SMPL	180-42943-D-5-D - 1		27 Apr 2015 17:16:54	0.0076			44	METHG	R50427B
785	SMPL	180-42943-D-5-E MS - 1		27 Apr 2015 17:18:47	0.9776			5537	METHG	R50427B
786	SMPL	180-42943-D-5-F MSD - 1		27 Apr 2015 17:20:39	0.9751			5523	METHG	R50427B
787	SMPL	180-42943-D-6-B - 1		27 Apr 2015 17:22:34	-0.0471			-266	METHG	R50427B
788	SMPL	180-42943-D-7-B - 1		27 Apr 2015 17:24:29	0.0041			24	METHG	R50427B
789	CK STND	CCV - 1		27 Apr 2015 17:26:22	93.7%	4.6853		26534	METHG	R50427B
790	CK STND	CCB - 1		27 Apr 2015 17:28:13	-0.0703			-397	METHG	R50427B
791	SMPL	180-42943-D-8-B - 1		27 Apr 2015 17:30:29	0.2599			1473	METHG	R50427B
792	SMPL	180-42943-D-9-B - 1		27 Apr 2015 17:32:22	-0.0086			-48	METHG	R50427B
793	SMPL	180-42943-D-10-B - 1		27 Apr 2015 17:34:16	0.0037			22	METHG	R50427B
794	SMPL	180-42943-D-11-B - 1		27 Apr 2015 17:36:09	0.2975			1686	METHG	R50427B
795	SMPL	MB 180-139732/1-A - 1		27 Apr 2015 17:38:02	-0.0111			-62	METHG	R50427B
796	SMPL	LCS 180-139732/2-A - 1		27 Apr 2015 17:39:56	2.6486			15000	METHG	R50427B
797	SMPL	180-42893-D-7-B - 1		27 Apr 2015 17:41:49	-0.0528			-298	METHG	R50427B
798	SMPL	180-42893-D-8-B - 1		27 Apr 2015 17:43:52	0.0021			13	METHG	R50427B
799	SMPL	180-42893-D-9-D - 1		27 Apr 2015 17:45:45	0.0058			34	METHG	R50427B
800	SMPL	180-42893-D-9-E MS - 1		27 Apr 2015 17:47:37	0.9744			5519	METHG	R50427B
801	CK STND	CCV - 1		27 Apr 2015 17:49:29	(L)89.9%	4.4950		25456	METHG	R50427B
802	CK STND	CCB - 1		27 Apr 2015 17:51:24	-0.0779			-440	METHG	R50427B
803	SMPL	180-42893-D-9-F MSD - 1		27 Apr 2015 17:53:38	0.9936			5628	METHG	R50427B
804	SMPL	180-42893-D-10-B - 1		27 Apr 2015 17:55:31	-0.0410			-231	METHG	R50427B
805	SMPL	180-42893-D-11-B - 1		27 Apr 2015 17:57:26	0.0016			10	METHG	R50427B
806	SMPL	180-42893-D-12-B - 1		27 Apr 2015 17:59:18	0.0030			18	METHG	R50427B
807	SMPL	180-42893-D-18-B - 1		27 Apr 2015 18:01:11	0.0046			27	METHG	R50427B
808	SMPL	180-42893-D-19-B - 1		27 Apr 2015 18:03:04	0.0065			38	METHG	R50427B
809	SMPL	180-42893-D-20-B - 1		27 Apr 2015 18:04:56	0.0042			25	METHG	R50427B

Seq ID	Type	Sample ID	Extended ID	Date	Conc.	Units	Std Conc	μ Abs	Method	Chapter
810	SMPL	180-42893-D-21-B - 1		27 Apr 2015 18:06:49	0.0046	ppb			27METHG	R50427B
811	SMPL	180-42893-D-22-B - 1		27 Apr 2015 18:08:42	0.0099	ppb			57METHG	R50427B
812	SMPL	180-43317-B-1-B - 1		27 Apr 2015 18:10:35	0.0057	ppb			33METHG	R50427B
813	CK STND	CCV - 1		27 Apr 2015 18:12:28	90.6% 4.5283	ppb		25645	METHG	R50427B
814	CK STND	CCB - 1		27 Apr 2015 18:14:21	-0.0743	ppb		-420	METHG	R50427B
815	SMPL	180-43317-B-2-B - 1		27 Apr 2015 18:16:36	0.0037	ppb		22	METHG	R50427B
816	SMPL	180-43317-A-6-B - 1		27 Apr 2015 18:18:29	0.0037	ppb		22	METHG	R50427B
817	SMPL	180-43317-A-7-B - 1		27 Apr 2015 18:20:22	0.0057	ppb		33	METHG	R50427B
818	SMPL	180-43317-A-8-B - 1		27 Apr 2015 18:22:15	0.0044	ppb		26	METHG	R50427B
819	SMPL	180-43317-A-9-B - 1		27 Apr 2015 18:24:08	0.0071	ppb		41	METHG	R50427B
820	SMPL	180-43317-B-10-B - 1		27 Apr 2015 18:26:01	0.0067	ppb		39	METHG	R50427B
821	SMPL	180-43317-B-12-B - 1		27 Apr 2015 18:27:54	0.0064	ppb		37	METHG	R50427B
822	SMPL	180-42982-D-1-B - 1		27 Apr 2015 18:29:46	0.0072	ppb		42	METHG	R50427B
823	SMPL	MB 180-139738/1-A - 1		27 Apr 2015 18:31:40	0.0048	ppb		28	METHG	R50427B
824	SMPL	LCS 180-139738/2-A - 1		27 Apr 2015 18:33:33	2.4671	ppb		13972	METHG	R50427B
825	CK STND	CCV - 1		27 Apr 2015 18:35:26	90.7% 4.5343	ppb		25679	METHG	R50427B
826	CK STND	CCB - 1		27 Apr 2015 18:37:30	-0.0770	ppb		-435	METHG	R50427B
827	SMPL	LCSD 180-139738/3-A - 1		27 Apr 2015 18:39:45	2.5619	ppb		14509	METHG	R50427B
828	SMPL	LB 180-139459/4-D - 1		27 Apr 2015 18:41:38	-0.0500	ppb		-282	METHG	R50427B
829	SMPL	180-43316-A-1-E - 1		27 Apr 2015 18:43:41	0.0182	ppb		104	METHG	R50427B
830	SMPL	180-43332-A-1-C - 1		27 Apr 2015 18:45:34	0.0002	ppb		2	METHG	R50427B
831	SMPL	180-43332-A-2-D - 1		27 Apr 2015 18:47:27	0.0049	ppb		29	METHG	R50427B
832	SMPL	LB 180-139460/2-C - 1		27 Apr 2015 18:49:20	0.0037	ppb		22	METHG	R50427B
833	SMPL	180-43332-A-3-C - 1		27 Apr 2015 18:51:13	7.7570	ppb		43929	METHG	R50427B
834	SMPL	MB 180-139777/1-A - 1		27 Apr 2015 18:53:05	-0.0756	ppb		-427	METHG	R50427B
835	SMPL	LCS 180-139777/2-A - 1		27 Apr 2015 18:55:19	2.5283	ppb		14319	METHG	R50427B
836	SMPL	LCSD 180-139777/3-A - 1		27 Apr 2015 18:57:12	2.4189	ppb		13699	METHG	R50427B
837	CK STND	CCV - 1		27 Apr 2015 18:59:15	(L)88.9% 4.4469	ppb		25184	METHG	R50427B
838	CK STND	CCB - 1		27 Apr 2015 19:01:19	-0.0694	ppb		-392	METHG	R50427B
839	SMPL	LB 180-139448/5-D - 1		27 Apr 2015 19:03:36	0.0012	ppb		8	METHG	R50427B
840	SMPL	180-43232-A-1-E - 1		27 Apr 2015 19:05:29	0.0065	ppb		38	METHG	R50427B
841	SMPL	180-43232-A-2-E - 1		27 Apr 2015 19:07:22	0.0055	ppb		32	METHG	R50427B
842	SMPL	180-43232-A-3-E - 1		27 Apr 2015 19:09:15	0.0039	ppb		23	METHG	R50427B
843	SMPL	180-43232-A-4-E - 1		27 Apr 2015 19:11:08	0.0046	ppb		27	METHG	R50427B
844	SMPL	MB 180-139737/1-A - 1		27 Apr 2015 19:13:01	0.0039	ppb		23	METHG	R50427B
845	SMPL	LCS 180-139737/2-A - 1		27 Apr 2015 19:14:53	2.6138	ppb		14803	METHG	R50427B
846	SMPL	LCSD 180-139737/3-A - 1		27 Apr 2015 19:16:47	2.5396	ppb		14383	METHG	R50427B
847	SMPL	180-43287-A-1-E - 1		27 Apr 2015 19:18:50	-0.0701	ppb		-396	METHG	R50427B
848	SMPL	180-43292-B-3-B - 1		27 Apr 2015 19:20:52	2.3053	ppb		13056	METHG	R50427B
849	CK STND	CCV - 1		27 Apr 2015 19:22:45	(L)88.5% 4.4238	ppb		25053	METHG	R50427B
850	CK STND	CCB - 1		27 Apr 2015 19:24:49	-0.0724	ppb		-409	METHG	R50427B
851	SMPL	180-43292-B-4-B - 1		27 Apr 2015 19:27:04	1.6940	ppb		9594	METHG	R50427B
852	SMPL	180-43292-B-5-B - 1		27 Apr 2015 19:28:57	1.7252	ppb		9771	METHG	R50427B
853	SMPL	180-43292-B-6-B - 1		27 Apr 2015 19:30:59	1.8241	ppb		10331	METHG	R50427B
854	SMPL	180-43292-B-7-B - 1		27 Apr 2015 19:32:59	1.9039	ppb		10783	METHG	R50427B
855	SMPL	180-43292-B-8-B - 1		27 Apr 2015 19:35:01	1.9712	ppb		11164	METHG	R50427B
856	SMPL	180-43292-B-9-B - 1		27 Apr 2015 19:37:01	1.6396	ppb		9286	METHG	R50427B
857	SMPL	180-43292-B-10-B - 1		27 Apr 2015 19:39:02	3.3652	ppb		19058	METHG	R50427B
858	SMPL	180-43292-B-11-B - 1		27 Apr 2015 19:41:02	3.5183	ppb		19925	METHG	R50427B
859	SMPL	180-43292-B-12-B - 1		27 Apr 2015 19:43:08	2.9135	ppb		16500	METHG	R50427B
860	SMPL	180-43292-B-13-B - 1		27 Apr 2015 19:45:12	1.6037	ppb		9083	METHG	R50427B
861	CK STND	CCV - 1		27 Apr 2015 19:47:17	(L)87.6% 4.3807	ppb		24809	METHG	R50427B
862	CK STND	CCB - 1		27 Apr 2015 19:49:16	-0.0915	ppb		-517	METHG	R50427B
863	SMPL	180-43292-B-14-B - 1		27 Apr 2015 19:51:30	0.2048	ppb		1161	METHG	R50427B
864	SMPL	180-43292-B-15-B - 1		27 Apr 2015 19:53:23	0.2213	ppb		1254	METHG	R50427B
865	SMPL	180-43292-B-16-B - 1		27 Apr 2015 19:55:18	0.2400	ppb		1360	METHG	R50427B
866	SMPL	180-43292-B-17-B - 1		27 Apr 2015 19:57:13	0.5374	ppb		3044	METHG	R50427B

Page 488 of 541

R50427B

Method: METHG

Operator: Admin

Date of Analysis: 27 Apr 2015 13:58:17

Seq ID	Type	Sample ID	Extended ID	Date	Conc.	Units	Std Conc	μ Abs	Method	Chapter
867	SMPL	180-43292-B-18-B - 1		27 Apr 2015 19:59:07	0.3964	ppb		2246	METHG	R50427B
868	SMPL	180-43292-B-19-B - 1		27 Apr 2015 20:01:03	0.6214	ppb		3520	METHG	R50427B
869	SMPL	180-43292-B-20-B - 1		27 Apr 2015 20:02:59	0.1727	ppb		979	METHG	R50427B
870	SMPL	MB 180-139736/1-A - 1		27 Apr 2015 20:04:54	-0.0065	ppb		-36	METHG	R50427B
871	SMPL	LCS 180-139736/2-A - 1		27 Apr 2015 20:06:48	2.4061	ppb		13627	METHG	R50427B
872	CK STND	CCV - 1		27 Apr 2015 20:08:42	(L)85.5% 4.2758	ppb		24215	METHG	R50427B
873	CK STND	CCB - 1		27 Apr 2015 20:10:46	-0.0749	ppb		-423	METHG	R50427B

Rack	Cup	Sample ID	Extended ID	Wt.	Vol.
1	1	MB 180-139730/1-A		1.0000	1.0000
1	2	LCS 180-139730/2-A		1.0000	1.0000
1	3	180-43417-D-5-B		1.0000	1.0000
1	4	180-43150-H-2-B		1.0000	1.0000
1	5	180-43150-H-3-B		1.0000	1.0000
1	6	180-43150-H-4-D		1.0000	1.0000
1	7	180-43150-H-4-E MS		1.0000	1.0000
1	8	180-43150-H-4-F MSD		1.0000	1.0000
1	9	180-42903-H-1-B		1.0000	1.0000
1	10	180-42903-H-2-B		1.0000	1.0000
1	11	180-42903-H-3-B		1.0000	1.0000
1	12	180-42903-H-4-B		1.0000	1.0000
1	13	180-42903-H-5-B		1.0000	1.0000
1	14	180-42903-H-6-B		1.0000	1.0000
1	15	180-42903-H-7-B		1.0000	1.0000
1	16	180-42903-H-8-B		1.0000	1.0000
1	17	180-42903-H-9-B		1.0000	1.0000
1	18	180-42903-H-10-D		1.0000	1.0000
1	19	180-42903-H-11-B		1.0000	1.0000
1	20	180-43297-J-5-D		1.0000	1.0000
1	21	180-43187-F-1-B		1.0000	1.0000
1	22	180-43365-A-1-A		1.0000	1.0000
1	23	180-43206-I-14-B		1.0000	1.0000
1	24	180-43392-A-1-B		1.0000	1.0000
1	25	MB 180-139734/1-A		1.0000	1.0000
1	26	LCS 180-139734/2-A		1.0000	1.0000
1	27	180-43292-B-1-D		1.0000	1.0000
1	28	180-43292-B-2-B		1.0000	1.0000
1	29	180-43292-B-2-C MS		1.0000	1.0000
1	30	180-43292-B-2-D MSD		1.0000	1.0000
1	31	180-43292-B-3-B		1.0000	1.0000
1	32	180-43292-B-4-B		1.0000	1.0000
1	33	180-43292-B-5-B		1.0000	1.0000
1	34	180-43292-B-6-B		1.0000	1.0000
1	35	180-43292-B-7-B		1.0000	1.0000
1	36	180-43292-B-8-B		1.0000	1.0000
1	37	180-43292-B-9-B		1.0000	1.0000
1	38	180-43292-B-10-B		1.0000	1.0000
1	39	180-43292-B-11-B		1.0000	1.0000
1	40	180-43292-B-12-B		1.0000	1.0000
1	41	180-43292-B-13-B		1.0000	1.0000

Rack	Cup	Sample ID	Extended ID	Wt.	Vol.
1	42	180-43292-B-14-B		1.0000	1.0000
1	43	180-43292-B-15-B		1.0000	1.0000
1	44	180-43292-B-16-B		1.0000	1.0000
1	45	180-43292-B-17-B		1.0000	1.0000
1	46	180-43292-B-18-B		1.0000	1.0000
1	47	180-43292-B-19-B		1.0000	1.0000
1	48	180-43292-B-20-B		1.0000	1.0000
1	49	MB 180-139736/1-A		1.0000	1.0000
1	50	LCS 180-139736/2-A		1.0000	1.0000
1	51	180-42943-C-1-B		1.0000	1.0000
1	52	180-42943-C-2-B		1.0000	1.0000
1	53	180-42943-C-4-B		1.0000	1.0000
1	54	180-42943-C-5-D		1.0000	1.0000
1	55	180-42943-C-5-E MS		1.0000	1.0000
1	56	180-42943-C-5-F MSD		1.0000	1.0000
1	57	180-42943-C-6-B		1.0000	1.0000
1	58	180-42943-C-7-B		1.0000	1.0000
1	59	180-42943-C-8-B		1.0000	1.0000
1	60	180-42943-C-9-B		1.0000	1.0000
2	1	180-42943-C-10-B		1.0000	1.0000
2	2	180-42943-C-11-B		1.0000	1.0000
2	3	180-42943-D-1-B		1.0000	1.0000
2	4	180-42943-D-2-B		1.0000	1.0000
2	5	180-42943-D-4-B		1.0000	1.0000
2	6	180-42943-D-5-D		1.0000	1.0000
2	7	180-42943-D-5-E MS		1.0000	1.0000
2	8	180-42943-D-5-F MSD		1.0000	1.0000
2	9	180-42943-D-6-B		1.0000	1.0000
2	10	180-42943-D-7-B		1.0000	1.0000
2	11	180-42943-D-8-B		1.0000	1.0000
2	12	180-42943-D-9-B		1.0000	1.0000
2	13	180-42943-D-10-B		1.0000	1.0000
2	14	180-42943-D-11-B		1.0000	1.0000
2	15	MB 180-139732/1-A		1.0000	1.0000
2	16	LCS 180-139732/2-A		1.0000	1.0000
2	17	180-42893-D-7-B		1.0000	1.0000
2	18	180-42893-D-8-B		1.0000	1.0000
2	19	180-42893-D-9-D		1.0000	1.0000
2	20	180-42893-D-9-E MS		1.0000	1.0000
2	21	180-42893-D-9-F MSD		1.0000	1.0000
2	22	180-42893-D-10-B		1.0000	1.0000

Rack	Cup	Sample ID	Extended ID	Wt.	Vol.
2	23	180-42893-D-11-B		1.0000	1.0000
2	24	180-42893-D-12-B		1.0000	1.0000
2	25	180-42893-D-18-B		1.0000	1.0000
2	26	180-42893-D-19-B		1.0000	1.0000
2	27	180-42893-D-20-B		1.0000	1.0000
2	28	180-42893-D-21-B		1.0000	1.0000
2	29	180-42893-D-22-B		1.0000	1.0000
2	30	180-43317-B-1-B		1.0000	1.0000
2	31	180-43317-B-2-B		1.0000	1.0000
2	32	180-43317-A-6-B		1.0000	1.0000
2	33	180-43317-A-7-B		1.0000	1.0000
2	34	180-43317-A-8-B		1.0000	1.0000
2	35	180-43317-A-9-B		1.0000	1.0000
2	36	180-43317-B-10-B		1.0000	1.0000
2	37	180-43317-B-12-B		1.0000	1.0000
2	38	180-42982-D-1-B		1.0000	1.0000
2	39	MB 180-139738/1-A		1.0000	1.0000
2	40	LCS 180-139738/2-A		1.0000	1.0000
2	41	LCSD 180-139738/3-A		1.0000	1.0000
2	42	LB 180-139459/4-D		1.0000	1.0000
2	43	180-43316-A-1-E		1.0000	1.0000
2	44	180-43332-A-1-C		1.0000	1.0000
2	45	180-43332-A-2-D		1.0000	1.0000
2	46	LB 180-139460/2-C		1.0000	1.0000
2	47	180-43332-A-3-C		1.0000	1.0000
2	48	MB 180-139777/1-A		1.0000	1.0000
2	49	LCS 180-139777/2-A		1.0000	1.0000
2	50	LCSD 180-139777/3-A		1.0000	1.0000
2	51	LB 180-139448/5-D		1.0000	1.0000
2	52	180-43232-A-1-E		1.0000	1.0000
2	53	180-43232-A-2-E		1.0000	1.0000
2	54	180-43232-A-3-E		1.0000	1.0000
2	55	180-43232-A-4-E		1.0000	1.0000
2	56	MB 180-139737/1-A		1.0000	1.0000
2	57	LCS 180-139737/2-A		1.0000	1.0000
2	58	LCSD 180-139737/3-A		1.0000	1.0000
2	59	180-43287-A-1-E		1.0000	1.0000
2	60	180-43292-B-3-B		1.0000	1.0000
3	1	180-43292-B-4-B		1.0000	1.0000
3	2	180-43292-B-5-B		1.0000	1.0000
3	3	180-43292-B-6-B		1.0000	1.0000

Rack	Cup	Sample ID	Extended ID	Wt.	Vol.
3	4	180-43292-B-7-B		1.0000	1.0000
3	5	180-43292-B-8-B		1.0000	1.0000
3	6	180-43292-B-9-B		1.0000	1.0000
3	7	180-43292-B-10-B		1.0000	1.0000
3	8	180-43292-B-11-B		1.0000	1.0000
3	9	180-43292-B-12-B		1.0000	1.0000
3	10	180-43292-B-13-B		1.0000	1.0000
3	11	180-43292-B-14-B		1.0000	1.0000
3	12	180-43292-B-15-B		1.0000	1.0000
3	13	180-43292-B-16-B		1.0000	1.0000
3	14	180-43292-B-17-B		1.0000	1.0000
3	15	180-43292-B-18-B		1.0000	1.0000
3	16	180-43292-B-19-B		1.0000	1.0000
3	17	180-43292-B-20-B		1.0000	1.0000
3	18	MB 180-139736/1-A		1.0000	1.0000
3	19	LCS 180-139736/2-A		1.0000	1.0000
3	20			1.0000	1.0000
3	21			1.0000	1.0000
3	22			1.0000	1.0000
3	23			1.0000	1.0000
3	24			1.0000	1.0000
3	25			1.0000	1.0000
3	26			1.0000	1.0000
3	27			1.0000	1.0000
3	28			1.0000	1.0000
3	29			1.0000	1.0000
3	30			1.0000	1.0000
3	31			1.0000	1.0000
3	32			1.0000	1.0000
3	33			1.0000	1.0000
3	34			1.0000	1.0000
3	35			1.0000	1.0000
3	36			1.0000	1.0000
3	37			1.0000	1.0000
3	38			1.0000	1.0000
3	39			1.0000	1.0000
3	40			1.0000	1.0000
3	41			1.0000	1.0000
3	42			1.0000	1.0000
3	43			1.0000	1.0000
3	44			1.0000	1.0000

METALS BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Batch Number: 139759 Batch Start Date: 04/27/15 12:15 Batch Analyst: Baikadi, Ashwin

Batch Method: 3005A Batch End Date: 04/27/15 16:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAPITTCPMS 00020	MTAPITTMISA 00023	MTAPITTMISC 00029	
MB 180-139759/1		3005A, 6020A		50 mL	50 mL				
LCS 180-139759/2		3005A, 6020A		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
180-42982-D-1	PW-C01	3005A, 6020A	R	50 mL	50 mL				
180-42982-D-2	PW-B01	3005A, 6020A	R	50 mL	50 mL				
180-42982-D-3	PW-A01	3005A, 6020A	R	50 mL	50 mL				

Batch Notes	
Batch Comment	METALS D4
First End time	16:00
Lot # of hydrochloric acid	2.5ML 1452464
Lot # of Nitric Acid	1ML 1513887
Hot Block ID number	HB1
Oven, Bath or Block Temperature 1	95
Pipette ID	L1201611U
Person who witnessed spiking	AB
First Start time	12:00
ID number of the thermometer	IP1-14 CF0.0 F4
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.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Batch Number: 139732 Batch Start Date: 04/27/15 11:30 Batch Analyst: Freeman, Michele L

Batch Method: 7470A Batch End Date: 04/27/15 13:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MHgworkingCal 01031			
MB 180-139732/1		7470A, 7470A		50 mL	50 mL				
LCS 180-139732/2		7470A, 7470A		50 mL	50 mL	1.25 mL			
180-42982-D-1	PW-C01	7470A, 7470A	T	50 mL	50 mL				

Batch Notes	
Hydroxylamine Hydrochloride Lot	3mL 1541342 HG-DISP-C6
Batch Comment	HG-DISP-05C4676 H2O
Sulfuric Acid Lot Number	2.5mL 1541822 HG-DISP-7N8924
Lot # of Nitric Acid	1.25mL 1541821 HG-DISP-N1
Hot Block ID number	HB3
Potassium Persulfate Lot Number	4mL 1544253 HG-DISP-KS4
Potassium Permanganate Lot Number	7.5mL 1550486 HG-DISP-KMNO4
Pipette ID	L1201611U
Stannous Chloride Lot Number	1548819
Person who witnessed spiking	MLF
Temperature	95C
ID number of the thermometer	IP33-14 0.0 E2
Digestion Tube/Cup Lot #	ENV.EXPRESS 1406020

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Batch Number: 139774 Batch Start Date: 04/27/15 11:30 Batch Analyst: Freeman, Michele L

Batch Method: 7470A Batch End Date: 04/27/15 13:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MHgworkingCal 01031	MHgWorkingicv 01002		
ICV 180-139774/7		7470A, 7470A		50 mL	50 mL		1.25 mL		
ICB 180-139774/8		7470A, 7470A		50 mL	50 mL				
CRA 180-139774/9		7470A, 7470A		50 mL	50 mL	0.1 mL			
CCV 180-139774/10		7470A, 7470A		50 mL	50 mL	2.5 mL			
CCB 180-139774/11		7470A, 7470A		50 mL	50 mL				

Batch Notes	
Hydroxylamine Hydrochloride Lot	3mL 1541342 HG-DISP-C6
Batch Comment	HG-DISP-05C4676 H2O
Sulfuric Acid Lot Number	2.5mL 1541822 HG-DISP-7N899
Lot # of Nitric Acid	1.25mL 1541821 HG-DISP-N1
Hot Block ID number	HB1
Potassium Persulfate Lot Number	4mL 1544253 HG-DISP-KS4
Potassium Permanganate Lot Number	7.5mL 1550486 HG-DISP-KMNO4
Pipette ID	L1201611U
Stannous Chloride Lot Number	1548819
Person who witnessed spiking	MLF
Temperature	95C
ID number of the thermometer	IP30-14 0.0 E2
Digestion Tube/Cup Lot #	ENV.EXPRESS 1406020

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-42982-1

SDG No.: _____

Project: Sparrows Point Trust Offshore Investigat

Client Sample ID	Lab Sample ID
<u>PW-C01</u>	<u>180-42982-1</u>
<u>PW-B01</u>	<u>180-42982-2</u>
<u>PW-A01</u>	<u>180-42982-3</u>

Comments:

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: PW-C01

Lab Sample ID: 180-42982-1

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/10/2015 15:54

Reporting Basis: WET

Date Received: 04/11/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Hardness as calcium carbonate	1300	25	7.7	mg/L			1	SM 2340C

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PW-C01

Lab Sample ID: 180-42982-1

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/10/2015 15:54

Reporting Basis: WET

Date Received: 04/11/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Duplicate	1.2	1.0	0.14	mg/L			1	SM 5310C

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: PW-B01

Lab Sample ID: 180-42982-2

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/10/2015 14:20

Reporting Basis: WET

Date Received: 04/11/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Hardness as calcium carbonate	2100	130	38	mg/L			1	SM 2340C

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PW-B01

Lab Sample ID: 180-42982-2

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/10/2015 14:20

Reporting Basis: WET

Date Received: 04/11/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Duplicate	1.0	1.0	0.14	mg/L			1	SM 5310C

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: PW-A01

Lab Sample ID: 180-42982-3

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/10/2015 12:45

Reporting Basis: WET

Date Received: 04/11/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Hardness as calcium carbonate	1700	50	15	mg/L			1	SM 2340C

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PW-A01

Lab Sample ID: 180-42982-3

Lab Name: TestAmerica Pittsburgh

Job No.: 180-42982-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/10/2015 12:45

Reporting Basis: WET

Date Received: 04/11/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Duplicate	0.96	1.0	0.14	mg/L	J		1	SM 5310C

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Analyst: CAK Batch Start Date: 04/29/2015

Reporting Units: mg/L Analytical Batch No.: 140054

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
11	CCV	13:45	Hardness as calcium carbonate	50.0	50.0	100	90-110		WHdCaCO3P_00006
12	CCB	13:48	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.: 180-42982-1
 SDG No.: _____
 Analyst: CLL Batch Start Date: 04/29/2015
 Reporting Units: mg/L Analytical Batch No.: 140019

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
2	ICV	06:30	Dissolved Organic Carbon - Duplicate	38.7	40.0	97	90-110		ICV 40 PPM_00618
3	ICB	06:49	Dissolved Organic Carbon - Duplicate	ND					
10	CCV	08:56	Dissolved Organic Carbon - Duplicate	9.88	10.0	99	90-110		10 PPM TOC/CC 00485
11	CCB	09:14	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.: 180-42982-1

SDG No.: _____

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 140054 Date: 04/29/2015 13:15							
SM 2340C	MB 180-140054/2	Hardness as calcium carbonate	ND		mg/L	5.0	1
Batch ID: 140019 Date: 04/29/2015 07:43							
SM 5310C	MB 180-140019/6	Dissolved Organic Carbon - Duplicate	ND		mg/L	1.0	1

7A-IN
 LAB CONTROL SAMPLE
 GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 140054		Date: 04/29/2015 13:12									
						LCS Source: WHdCaCO3P_00006					
SM 2340C	LCS 180-140054/1	Hardness as calcium carbonate	50.0		mg/L	50.0	100	90-110			
Batch ID: 140019		Date: 04/29/2015 07:07									
						LCS Source: LCS 20 PPM_00614					
SM 5310C	LCS 180-140019/4	Dissolved Organic Carbon - Duplicate	19.7		mg/L	20.0	99	80-120	4	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.: 180-42982-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 140019		Date: 04/29/2015 07:25									
						LCSD Source: LCS 20 PPM_00614					
SM	LCSD	Dissolved Organic	19.0		mg/L	20.0	95	80-120	4	20	
5310C	180-140019/5	Carbon - Duplicate									

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: 180-42982-1
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: 180-42982-1
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: 180-42982-1
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: 180-42982-1
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

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Instrument ID: NOEQUIP Analysis Method: SM 2340C

Start Date: 04/29/2015 13:12 End Date: 04/29/2015 13:48

Lab Sample Id	D/F	T y p e	Time	Analytes																											
				H a r d C C																											
LCS 180-140054/1	1	T	13:12	X																											
MB 180-140054/2	1	T	13:15	X																											
ZZZZZZ			13:18																												
ZZZZZZ			13:22																												
ZZZZZZ			13:25																												
ZZZZZZ			13:28																												
ZZZZZZ			13:32																												
180-42982-1	1	T	13:35	X																											
180-42982-2	1	T	13:38	X																											
180-42982-3	1	T	13:42	X																											
CCV 180-140054/11	1		13:45	X																											
CCB 180-140054/12	1		13:48	X																											

Prep Types: _____
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Instrument ID: TOC1030 Analysis Method: SM 5310C

Start Date: 04/29/2015 06:11 End Date: 04/29/2015 09:14

Lab Sample Id	D/F	Type	Time	Analytes																											
				D	O	C	D																								
ZZZZZZ			06:11																												
ICV 180-140019/2	1		06:30	X																											
ICB 180-140019/3	1		06:49	X																											
LCS 180-140019/4	1	D	07:07	X																											
LCSD 180-140019/5	1	D	07:25	X																											
MB 180-140019/6	1	D	07:43	X																											
180-42982-1	1	D	08:01	X																											
180-42982-2	1	D	08:20	X																											
180-42982-3	1	D	08:38	X																											
CCV 180-140019/10	1		08:56	X																											
CCB 180-140019/11	1		09:14	X																											

Prep Types: _____
D = Dissolved

OI Corporation
151 Graham Rd
College Station, TX
77845
USA

Date Prepared: 04/29/2015 By: *TOC*
Date Approved: By: *B#-140019*

Sample Results Summary

Spl Vial #	Sample ID	Num Act Rep	Method	Type	Dil	Cust ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	BLANK	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Sample	1:1	00000000	TOC	1,039	0.204	0.085	553	53.23	Pass
2	ICV 40 PPM	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Chk	1:1	00000000	TOC	258,135	92.963	38.734	936	1.14	Fail
3	ICB	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Standard	1:1	00000000	TOC	702	0.025	0.011	185	26.37	Fail
4	LCS 20 PPM	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Chk	1:1	00000000	TOC	131,751	47.325	19.719	247	0.95	Fail
5	LCSD 20 PPM	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Standard	1:1	00000000	TOC	127,129	45.656	19.023	460	0.91	Fail
6	MB	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Chk	1:1	00000000	TOC	630	0.008	0.004	154	24.45	Fail
7	180-42982-b-1-a	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Sample	1:1	00000000	TOC	8,708	2.973	1.238	55	0.63	Pass
8	180-42982-b-2-a	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Sample	1:1	00000000	TOC	7,428	2.511	1.046	200	2.70	Pass
9	180-42982-b-3-a	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Sample	1:1	00000000	TOC	6,839	2.298	0.958	69	1.01	Pass
10	CCV 10 PPM	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Chk	1:1	00000000	TOC	66,350	23.709	9.879	962	1.00	Fail
11	CCB	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Standard	1:1	00000000	TOC	686	0.030	0.013	248	36.15	Fail

Handwritten signature and scribble



O-I Corporation
151 Graham Rd
College Station, TX
77845
USA

Date Prepared: 04/29/2015 By:
Date Approved: By:

TOC

Sample Results

Spl #: 1 Sample ID: BLANK Type: Sample Date: 04/29/2015 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	6:11 am	-	-	-	1,431	0.345	0.144
2	6:19 am	-	-	-	648	0.063	0.026
Avg.		-	-	-	1,039	0.204	0.085
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	-	-	-

53.23

Spl #: 2 Sample ID: IGV 40 PPM Type: Chk Standard Date: 04/29/2015 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	6:30 am	-	-	-	266,059	92.213	38.422
2	6:39 am	-	-	-	260,212	93.713	39.046
Avg.		-	-	-	258,135	92.963	38.734
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	-	-	-

1.14

Spl #: 3 Sample ID: ICB Type: Chk Standard Date: 04/29/2015 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	6:49 am	-	-	-	833	0.051	0.021
2	6:57 am	-	-	-	571	0.000	0.000
Avg.		-	-	-	702	0.025	0.011
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	-	-	-

26.37



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77845
USA

Date Prepared: 04/29/2015 By: **TOC**
Date Approved: By:

Spl #: 4 Sample ID: LCS 20 PPM Type: Chk Standard Date: 04/29/2015 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	7:07 am	-	-	-	130,869	47.007	19.586
2	7:15 am	-	-	-	132,633	47.644	19.852
Avg.		-	-	-	131,751	47.325	19.719
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	0.95	-	-

Spl #: 5 Sample ID: LCSD 20 PPM Type: Chk Standard Date: 04/29/2015 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	7:26 am	-	-	-	126,309	45.360	18.900
2	7:34 am	-	-	-	127,949	45.952	19.147
Avg.		-	-	-	127,129	45.656	19.023
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	0.91	-	-

Spl #: 6 Sample ID: MB Type: Chk Standard Date: 04/29/2015 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	7:43 am	-	-	-	739	0.017	0.007
2	7:51 am	-	-	-	521	0.000	0.000
Avg.		-	-	-	630	0.008	0.004
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	24.45	-	-



OI Corporation
151 Graham Rd
College Station, TX
77845
USA

Date Prepared: 04/29/2015 By: **TOC**
Date Approved: By:

Spl #: 7 Sample ID: 180-42982-b-1-a Type: Sample Date: 04/29/2015 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	8:01 am	-	-	-	8,669	2,959	1,232
2	8:10 am	-	-	-	8,746	2,987	1,245
Avg.		-	-	-	8,708	2,973	1,238
Std.Dev.		-	-	-	0.63	-	-
% RSD.		-	-	-	-	-	-

Spl #: 8 Sample ID: 180-42982-b-2-a Type: Sample Date: 04/29/2015 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	8:20 am	-	-	-	7,286	2,460	1,024
2	8:28 am	-	-	-	7,570	2,562	1,068
Avg.		-	-	-	7,428	2,511	1,046
Std.Dev.		-	-	-	2.70	-	-
% RSD.		-	-	-	-	-	-

Spl #: 9 Sample ID: 180-42982-b-3-a Type: Sample Date: 04/29/2015 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	8:38 am	-	-	-	6,790	2,281	0,950
2	8:46 am	-	-	-	6,888	2,316	0,965
Avg.		-	-	-	6,839	2,298	0,958
Std.Dev.		-	-	-	1.01	-	-
% RSD.		-	-	-	-	-	-



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Date Prepared: 04/29/2015 By:
 Date Approved: By:

TOC

Spl #: 10 Sample ID: CCV 10 PPM Type: Chk Standard Date: 04/29/2015 Status: Fail
 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	8:56 am	-	-	-	65,882	23,540	9,808
2	9:05 am	-	-	-	66,818	23,878	9,949

Avg. - - - 66,350 23,709 9,879
 Std.Dev. - - -
 % RSD. 1.00

Spl #: 11 Sample ID: CCB Type: Chk Standard Date: 04/29/2015 Status: Fail
 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	9:14 am	-	-	-	861	0.061	0.025
2	9:22 am	-	-	-	511	0.000	0.000

Avg. - - - 686 0.030 0.013
 Std.Dev. - - -
 % RSD. 36.15



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Date Prepared: 04/29/2015 By:
 Date Approved: By:

TOC

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

Analysis Mode: NPOC Only
 Sparging Mode: Internal
 Pre-Acid Volume (mL): 1.000
 Sparge Time (mm:ss): 02:00

Volumes
 Sample Volume (mL): 2.400
 Acid Volume (mL): 1.000
 Persulfate Volume(mL): 1.500

Other
 SysPressure: 20.00

Pre-Processing

Sample Dilution: Disabled
 Dilution Mode: Automatic
 Dilution Factor: 1 : 1

Times	React	Detect	Temp	React	Detect
TIC	01:30	03:00	TIC	70	70
TOC	01:30	03:00	TOC	98	98

Outlier Removal Criteria

Enabled: No
 Additional Replicates: 1
 Max. % RSD: 10.00

Rinses

Rinse Volume (mL): 10.000
 Rinses Per Sample: 1
 Rinses Per Replicate: 0

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
RE (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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 77845
 USA

Date Prepared: 04/29/2015 By:
 Date Approved: By:

TOC

Calibration Details

Calibration Mode: TOC
 Date Calibrated: 04/16/2015
 Time Calibrated: 2:22 pm
 Calibrated By: toc
 RF (ugC/k-cts): 0.3611
 R2: 0.9999
 R: 0.9999
 QC Blank(cts): 1,540
 Offset (cts): 708
 Offset (ugC): -0.256
 Reagent Blank (cts): 474
 Units of Measure: PPM->mg/L C

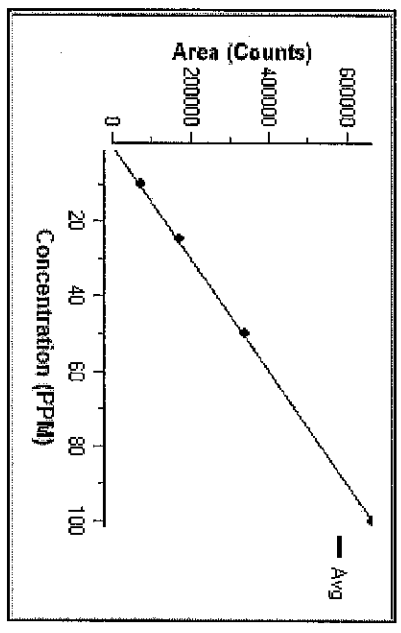
Calibration Settings

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:

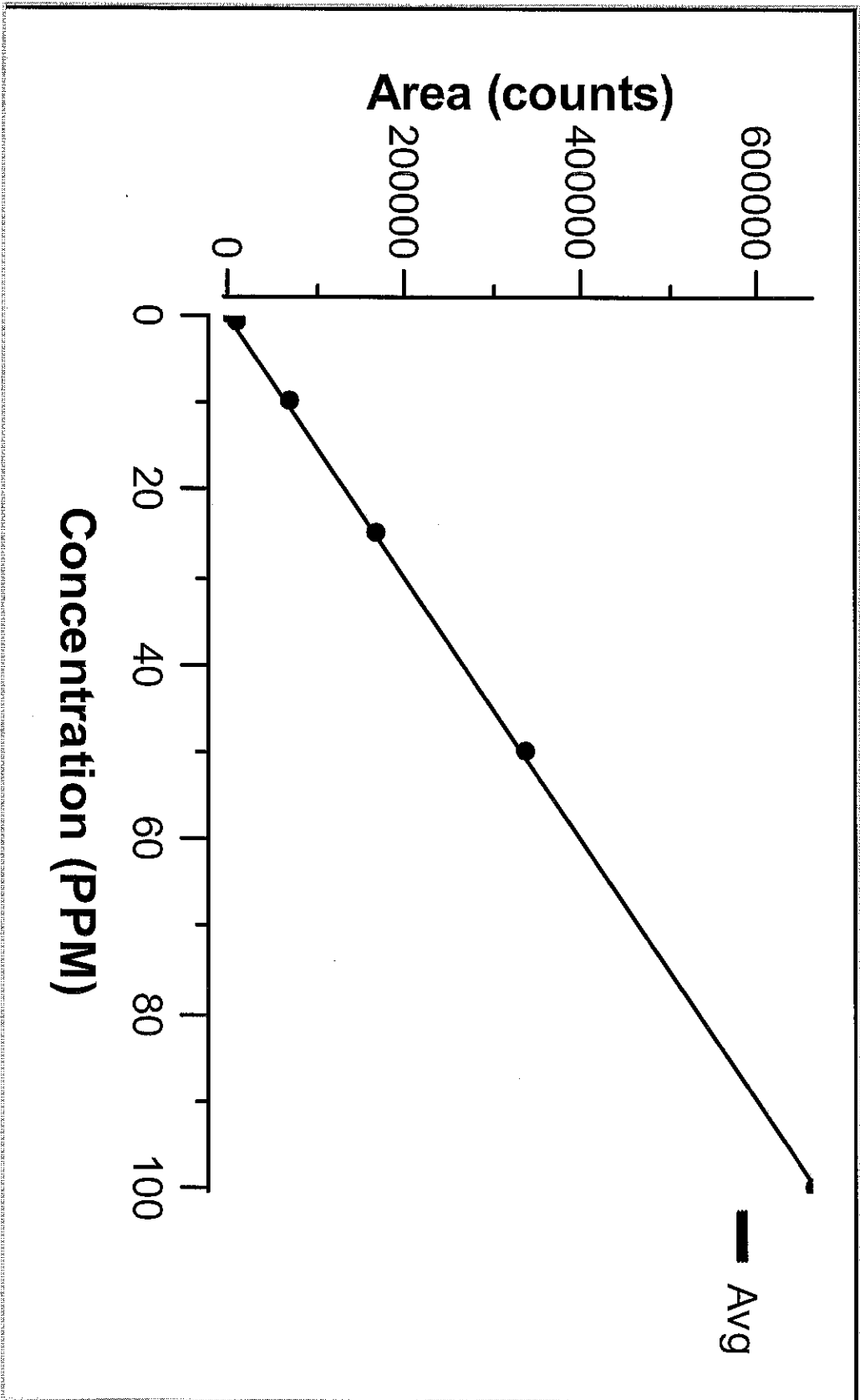
$$\text{Concentration} = \frac{\text{RF} \times \text{Area}}{\text{Volume}}$$

Samples: Area = Area_{peak} - Area_{Offset} or Area = Area_{peak} - Area_{avg}
 CHK Stds: Area = Area_{peak} - Area_{Offset} or Area = Area_{peak} - Area_{RW}
 QC Samples: Area = Area_{peak} - Area_{QCBlank}



$$y = m \times x + b$$

$$y \Rightarrow \text{Area} \quad m \Rightarrow \frac{10000}{\text{RF} \times \text{volume}} \quad b \Rightarrow 0$$



User ID: toc	Name: Total Organic Carbon
Title: Mr	Dept: OIC-TOC

Calibration - Quick View - TOC

Revision: 37-TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM

Modified By: toc

Date Created: 2013/07/18; 11:10 AM

Last Modified: 2015/04/16; 02:11 PM

Last Calibrated: 2015/04/16; 02:11 PM

RF(ugC/k-ct): 0.3611

R2: 0.9999

Reagent Blank(cts): 474

Offset Area(cts): 708

Offset Mass(ugC): -0.26

Std #	Conc (PPM)	Volume (mL)	# Reps	Area	Std. Dev	%RSD	Date Analysed
RW	0.000	2.400	2	693	107	15.44	2015-04-16; 12:48PM
1	1.000	2.400	2	7,893	372	4.71	2015-04-16; 01:10PM
2	10.000	2.400	2	68,819	911	1.32	2015-04-16; 01:24PM
3	25.000	2.400	2	167,582	1,030	0.61	2015-04-16; 01:37PM
4	50.000	2.400	2	333,520	3,618	1.08	2015-04-16; 01:50PM
5	100.000	2.400	2	662,101	1,414	0.21	2015-04-16; 02:04PM



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Date Prepared: 04/17/2015 By: TOC
 Date Approved: By:

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	1,008	0.001	0.001	283	28.14	Pass
2	2	TOC-RW	2	3	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Std	1:1	00000000	TOC	693	0.000	0.000	107	15.44	
3	3	TOC-Std#1-1,000 PPM	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Std	1:1	00000000	TOC	7,893	2.400	1,000	372	4.71	
4	4	TOC-Std#2-10,000 PPM	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Std	1:1	00000000	TOC	68,819	24.000	10,000	911	1.32	
5	5	TOC-Std#3-25,000 PPM	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Std	1:1	00000000	TOC	167,582	60.000	25,000	1,030	0.61	
6	6	TOC-Std#4-50,000 PPM	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Std	1:1	00000000	TOC	333,520	120.000	50,000	3,618	1.08	
7	7	TOC-Std#5-100,000 PPM	2	2	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Std	1:1	00000000	TOC	662,101	240.000	100,000	1,414	0.21	
8	8	QC BLANK	1	1	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	QC Blank	1:1	00000000	TOC	1,541	0.000	0.000	0	0.00	

041615 TOC CAL



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Date Prepared: 04/17/2015
 Date Approved:

By: *TOC*
 By:

Sample Results

Spl #: 1 Sample ID: BLANK Type: Sample Date: 04/16/2015 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	11:53 am	-	-	-	1,208	0.002	0.001
2	11:59 am	-	-	-	807	0.000	0.000
Avg.		-	-	-	1,008	0.001	0.001
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	28.11	-	-

Spl #: 3 Sample ID: TOC-RW Type: Std Date: 04/16/2015 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	12:48 pm	-	-	-	769	0.000	0.000
2	12:54 pm	-	-	-	617	0.000	0.000
3	1:03 pm	-	-	-	693	0.000	0.000
Avg.		-	-	-	693	0.000	0.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	15.44	-	-

Spl #: 4 Sample ID: TOC-Std#1-1,000 PPM Type: Std Date: 04/16/2015 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	1:10 pm	-	-	-	8,156	2.400	1.000
2	1:16 pm	-	-	-	7,630	2.400	1.000
Avg.		-	-	-	7,893	2.400	1.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	4.71	-	-



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USA

Date Prepared: 04/17/2015
By:
Date Approved:
By:

TOC

Spl #: 5 Sample ID: TOC-Std#2-10,000 PPM Type: Std Status:
Vial #: 4 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	1:24 pm	-	-	-	69,463	24,000	10,000
2	1:30 pm	-	-	-	68,175	24,000	10,000
Avg.		-	-	-	68,819	24,000	10,000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	-	-	1.32

Spl #: 6 Sample ID: TOC-Std#3-25,000 PPM Type: Std Status:
Vial #: 5 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	1:37 pm	-	-	-	168,311	60,000	25,000
2	1:43 pm	-	-	-	166,854	60,000	25,000
Avg.		-	-	-	167,582	60,000	25,000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	-	-	0.61

Spl #: 7 Sample ID: TOC-Std#4-50,000 PPM Type: Std Status:
Vial #: 6 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	1:50 pm	-	-	-	336,078	120,000	50,000
2	1:56 pm	-	-	-	330,962	120,000	50,000
Avg.		-	-	-	333,520	120,000	50,000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	-	-	1.08



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Date Prepared: 04/17/2015
 Date Approved:

By: **TOC**
 By:

Spl #: 8 Sample ID: TOC-Std#5-100.000 PPM Type: Std Date: 04/16/2015 Status:
 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	2:04 pm	-	-	-	663,101	240,000	100,000
2	2:10 pm	-	-	-	661,102	240,000	100,000
Avg.		-	-	-	662,101	240,000	100,000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	-	-	0.21

Spl #: 9 Sample ID: QC BLANK Type: QC Blank Date: 04/16/2015 Status:
 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	2:21 pm	-	-	-	1,541	0,000	0,000
Avg.		-	-	-	1,541	0,000	0,000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	-	-	0.00



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College Station, TX
77845
USA

Date Prepared: 04/17/2015 By: **TOC**
Date Approved: By:

Method Summary

Method Details		Pre-Processing		Times		Temp	
Method Name:	TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM	Sample Dilution:	Disabled	React	Detect	React	Detect
Date Created:	07/18/2013	Dilution Mode:	Automatic	TIC	03:00	TIC	70
Time Created:	11:10	Dilution Factor:	1 : 1	TOC	03:00	TOC	98
Created By:	toc						
Analysis Mode:	NPOC Only	Outlier Removal Criteria	Enabled:	No			
Sparging Mode:	Internal	Additional Replicates:	Max. % RSD.	1			
Pre-Acid Volume (mL):	1.000						
Spurge Time (mm:ss):	02:00						
Volumes		Rinses					
Sample Volume (mL):	2.400	Rinse Volume (mL):		10.000			
Acid Volume (mL):	1.000	Rinses Per Sample:		1			
Persulfate Volume(mL):	1.500	Rinses Per Replicate:		0			
Other		Max. Std. Dev.		100		Use Modified Oxidant:	No
Sys/Pressure:	20.00						

Calibration Summary

Calibration Generation		Calibration Pass/Fail Criteria				
Generation Mode:	Manual	Parameter	Enabled	Low	High	Failure
# of Stds:	5	R ₂ (ugC/K-cis)	Yes	0.1000	0.3000	Continue
Dilution Factor:	10 : 1		Yes	0.995	1.000	Continue
Dilution Volume (mL):	1.000	Offset (area) (cis)	No	-	-	-
Add Zero as Std #1:	No	Offset (mass) (ugC)	No	-	-	-
		QC Blank(cis)	No	-	-	-
Calibration Mode		Checks, QC's and Actions				
Primary Mode:	TOC	Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
User for ALL Modes:	Enabled	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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College Station, TX
77845
USA

Date Prepared: 04/17/2015 By:
Date Approved: By:

TOC

Calibration Details

Calibration Mode: TOC
Date Calibrated: 04/11/2015
Time Calibrated: 3:20 pm
Calibrated By: toc
RF (ugC/k-cts): 0.3559
R2: 0.9996
R: 0.9998
QC Blank(cts): 3.184
Offset (cts): 1222
Offset (ugC): -0.435
Reagent Blank (cts): 1.201
Units of Measure: PPM->mg/L C

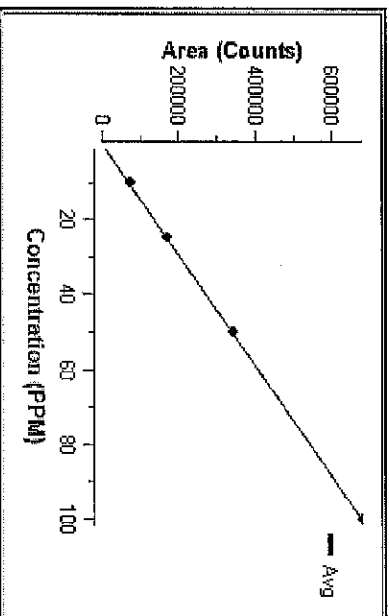
Calibration Settings

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_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{QCB}
 CHK STDs: Area = Area_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{RW}
 QC Samples: Area = Area_{Peak} - Area_{QCB} or Area = Area_{Peak} - Area_{RW}



$$y = m \times x + b$$

$$y \Rightarrow \text{Area} \quad m \Rightarrow \frac{1000}{RF \times \text{volume}} \quad b \Rightarrow 0$$



OI Corporation
151 Graham Rd
College Station, TX
77845
USA

Date Prepared: 04/17/2015
Date Approved:
By:

TOC

Calibration Details

Calibration Mode: TOC
Date Calibrated: 04/16/2015
Time Calibrated: 2:11 pm
Calibrated By: toc
RF (ugC/k-cts): 0.3611
R2: 0.9989
R: 0.9999
QC Blank(cts): 0
Offset (cts): 708
Offset (ugC): -0.256
Reagent Blank (cts): 474
Units of Measure: PPM->mg/L C

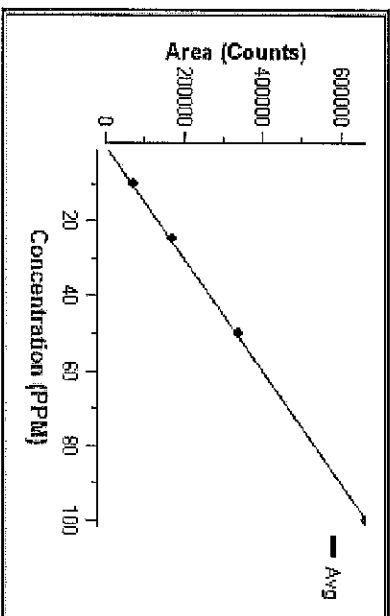
Calibration Settings

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:

$$\text{Concentration} = \frac{RF \times \text{Area}}{\text{Volume}}$$

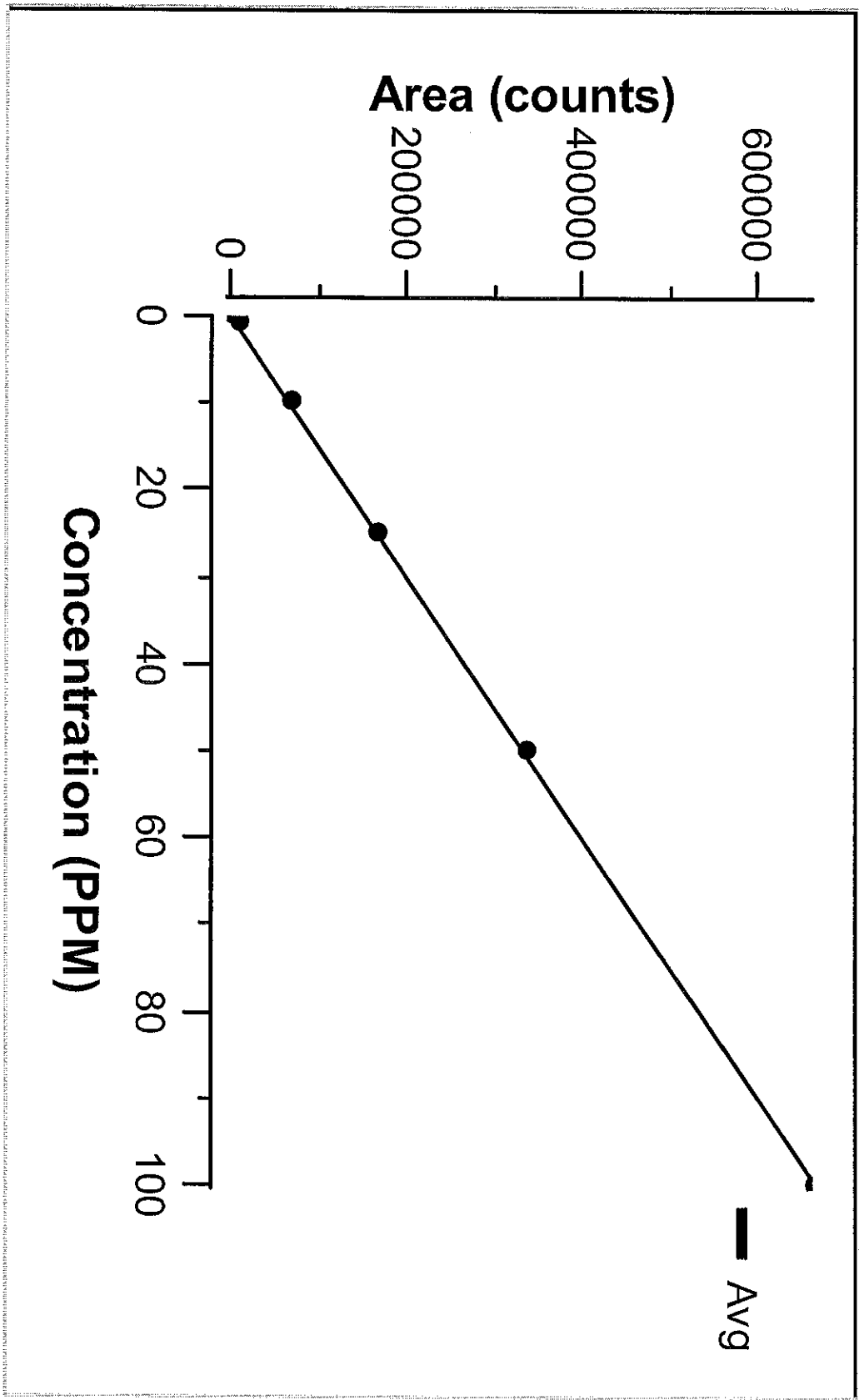
Samples: Area = Area_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{avg}
CHK Stds: Area = Area_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{RW}
QC Samples: Area = Area_{Peak} - Area_{QCBlank}



$$y = m \times x + b$$

$$y \Rightarrow \text{Area} \quad m \Rightarrow \frac{10000}{RF \times \text{volume}}$$

$$b \Rightarrow 0$$



User ID:toc	Name:Total Organic Carbon
Title:Mr	Dept:OIC-TOC

Calibration - Quick View -TOC

Revision: 37-TOC JULY 2013 - Jul 18, 2013; 11-10-39 AM

Modified By: toc

Date Created: 2013/07/18; 11:10 AM

Last Modified: 2015/04/16; 02:11 PM

Last Calibrated: 2015/04/16; 02:11 PM

RF(ugC/k-ent): 0.3611

R2: 0.9999

Reagent Blank(cts): 474

Offset Area(cts): 708

Offset Mass(ugC): -0.26

Std #	Conc (PPM)	Volume (mL)	# Reps	Area	Std. Dev	%RSD	Date Analysed
RW	0.000	2.400	2	693	107	15.44	2015-04-16; 12:48PM
1	1.000	2.400	2	7,893	372	4.71	2015-04-16; 01:10PM
2	10.000	2.400	2	68,819	911	1.32	2015-04-16; 01:24PM
3	25.000	2.400	2	167,582	1,030	0.61	2015-04-16; 01:37PM
4	50.000	2.400	2	333,520	3,618	1.08	2015-04-16; 01:50PM
5	100.000	2.400	2	662,101	1,414	0.21	2015-04-16; 02:04PM

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Batch Number: 140054 Batch Start Date: 04/29/15 13:12 Batch Analyst: Kieda, Chuck

Batch Method: SM 2340C Batch End Date: 04/29/15 13:52

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	AdjustedpH	BuretStart1	BuretStop1
LCS 180-140054/1		SM 2340C		50 mL	50 mL	N/A SU	10-11	0.0 mL	2.5 mL
MB 180-140054/2		SM 2340C		50 mL	50 mL	N/A SU	10-11	0.0 mL	0.0 mL
180-42982-D-1	PW-C01	SM 2340C	T	10 mL	50 mL	<2 SU	10-11	0.0 mL	13.2 mL
180-42982-D-2	PW-B01	SM 2340C	T	2 mL	50 mL	<2 SU	10-11	0.0 mL	4.1 mL
180-42982-D-3	PW-A01	SM 2340C	T	5 mL	50 mL	<2 SU	10-11	0.0 mL	8.6 mL
CCV 180-140054/11		SM 2340C		50 mL	50 mL	<2 SU	10-11	0.0 mL	2.5 mL
CCB 180-140054/12		SM 2340C		50 mL	50 mL	<2 SU	10-11	0.0 mL	0.0 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	TitrantVolume1	CalcMsg	WHdCaCO3P 00006			
LCS 180-140054/1		SM 2340C		2.5 mL	OK	2.5 mL			
MB 180-140054/2		SM 2340C		0 mL	OK				
180-42982-D-1	PW-C01	SM 2340C	T	13.2 mL	OK				
180-42982-D-2	PW-B01	SM 2340C	T	4.1 mL	OK				
180-42982-D-3	PW-A01	SM 2340C	T	8.6 mL	OK				
CCV 180-140054/11		SM 2340C		2.5 mL	OK	2.5 mL			
CCB 180-140054/12		SM 2340C		0 mL	OK				

Batch Notes	
Buffer Lot #	1335684
EDTA Lot Number	1553362
Indicator Lot	1440692
Ammonium Hydroxide Lot #	1376295
Nominal Amount Used	50 mL
Pipette ID	D1203165U
Perform Calculation (0=No, 1=Yes)	1
Normality of first Titrant	0.02 N
Titrant Standardization Date	4/29/15

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.: 180-42982-1

SDG No.: _____

Batch Number: 140054 Batch Start Date: 04/29/15 13:12 Batch Analyst: Kieda, Chuck

Batch Method: SM 2340C Batch End Date: 04/29/15 13:52

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42982-1

SDG No.: _____

Batch Number: 140019 Batch Start Date: 04/29/15 06:11 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 00485	ICV 40 PPM 00618	LCS 20 PPM 00614
ICV 180-140019/2		SM 5310C		40 mL	40 mL			40 mL	
LCS 180-140019/4		SM 5310C		40 mL	40 mL				40 mL
LCSD 180-140019/5		SM 5310C		40 mL	40 mL				40 mL
180-42982-B-1-A	PW-C01	SM 5310C	D			<2 SU			
180-42982-B-2-A	PW-B01	SM 5310C	D			<2 SU			
180-42982-B-3-A	PW-A01	SM 5310C	D			<2 SU			
CCV 180-140019/10		SM 5310C		40 mL	40 mL		40 mL		

Batch Notes	
Batch Comment	PH STRIPS LOT# HC256691
Lot # of Phosphoric Acid	1551923
Sodium Persulfate Reagent ID Number	1551924

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		Parameters/Method Numbers for Analysis PPL SVOCs/PAHs (SW846 8270C) <input checked="" type="checkbox"/> PPL Metals (SW846 6020A) <input checked="" type="checkbox"/> Mercury (SW846 7471B) <input checked="" type="checkbox"/> Cyanide (SW846 9014) <input checked="" type="checkbox"/> Hardness (SW846 6010C/SM 2340B) <input checked="" type="checkbox"/> Dissolved Organic Carbon (SM 5310C) <input checked="" type="checkbox"/>		Remarks SEE PROJECT SPECIFIC ANALYTE LIST SVOCs (bis(2-ethylhexyl)phthalate only)	
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		Parameters/Method Numbers for Analysis PPL SVOCs/PAHs (SW846 8270C) <input checked="" type="checkbox"/> PPL Metals (SW846 6020A) <input checked="" type="checkbox"/> Mercury (SW846 7471B) <input checked="" type="checkbox"/> Cyanide (SW846 9014) <input checked="" type="checkbox"/> Hardness (SW846 6010C/SM 2340B) <input checked="" type="checkbox"/> Dissolved Organic Carbon (SM 5310C) <input checked="" type="checkbox"/>		Remarks SEE PROJECT SPECIFIC ANALYTE LIST SVOCs (bis(2-ethylhexyl)phthalate only)			
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180-42982 Chain of Custody

POREWATER
SPARROWS POINT

FedEx NEW Package Express **US Airbill**
 FedEx Tracking Number **8070 6983 0162**

1 From 4/10/15
 Date
Sender's Name John T. Harris Phone 401 439-1031
Company EA Engineering, Science and Tech
Address 225 Scilling Circle Suite 400
 Dept./Floor/Suite/Room
City Hunt Valley State MD ZIP 21031

2 Your Internal Billing Reference
To Recipients Name Carrie Gamber Phone 412 963-2428
Company Test America - Pittsburgh
Address 301 Alpha Drive
 Dept./Floor/Suite/Room
City Pittsburgh State PA ZIP 15238

3 **Address** We cannot deliver to P.O. boxes or P.O. ZIP codes.
 HOLD Weekday: FedEx location address REQUIRED. NOT available for FedEx First Overnight.
 HOLD Saturday: FedEx location address ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.
 Use this line for the HOLD location address or for continuation of your shipping address.
City Pittsburgh State PA ZIP 15238

Uncorrected temp 27 °C
 Thermometer ID #6
 CF 020 Initials mc.

PT-WI-SR-001 effective 7/26/13



180-42962 Waybill

fedex.com 1.800.GoFedEx 1.800.463.3339

4 Express Package Service
 NOTE: Service order has changed. Please select carefully.
 To most locations:
 Packages up to 150 lbs. For most locations, FedEx Express Freight US Airbill.
 Next Business Day: Monday unless SATURDAY Delivery is selected.
 FedEx First Overnight: Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
 FedEx Priority Overnight: Next business morning. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
 FedEx Standard Overnight: Next business afternoon. Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
 FedEx Express Saver: Third business day. Saturday Delivery NOT available.
 Packages up to 150 lbs. For most locations, FedEx Express Freight US Airbill.

5 Packaging *Declared value limit \$500
 FedEx Envelope* FedEx Pak* FedEx Box FedEx Tube Other

6 Special Handling and Delivery Signature Options
 SATURDAY Delivery: NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.
 No Signature Required: Package may be left without obtaining a signature for delivery. Fee applies.
 Direct Signature: Someone at recipient's address may sign for delivery. Fee applies.
 Indirect Signature: If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.
 Does this shipment contain dangerous goods?
 No: As per attached Shipper's Description. Shipper's Description not required.
 Yes: Shipper's Description not required.
 Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.
 One box must be checked.
 Yes: Shipper's Description not required.
 No: As per attached Shipper's Description. Shipper's Description not required.

7 Payment Bill for: Sender's Name in Section 1, Recipient, Third Party, or Cash/Check
 Emer. FedEx Acct. No. or Credit Card No. below.
 Obtain recip. Acct. No. Cash/Check Credit Card Credit Card Auth.
 Total Packages 1 Total Weight 40 lbs.
 644

Your liability is limited to US\$100 unless you declare a higher value. See the current FedEx Service Guide for details.

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fedex.com 1.800.GoFedEx 1.800.463.3339

Login Sample Receipt Checklist

Client: EA Engineering, Science, and Technology

Job Number: 180-42982-1

Login Number: 42982
List Number: 1
Creator: Lonzo, Michael A

List Source: TestAmerica Pittsburgh

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